
DIRECTOR'S ORDER (DRAFT)

Issued under the authority of the *Environmental Protection Act*, R.S.O. 1990, c. E.19, Sections 18, 196 and 197

Order Number XXXXX

Owner: **Amherstburg Land Holdings Limited**

66 Wellington Street West
Suite #4100
Toronto Ontario
Canada M5K 1B7

Site: 381 Front Road North, Town of Amherstburg, Ontario N9V 2V5
Legal Description of Site: See Schedule "C" to this Order

Part 1: Interpretation

For the purposes of this Order the following terms shall have the meaning as 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**” means the following soil and/ groundwater criteria:

- For the pH Area of the Property: **Table 1: Full Depth Background Site Condition for Residential/Parkland/Institutional/Industrial/ Commercial/Community Property Use** 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 the Main Area and Northern Area of the Property: **Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition for Industrial/Commercial Property Use (medium to fine grained soils)** 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 the Docklands Area of the Property: **Table 9: Generic Site Condition Standards for Use within 30m of a Water Body in a Non-Potable Groundwater 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 .

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

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

“**Capping Soil**” means:

- Unimpacted Soil; or
- soil that meets the Target Capping Soil concentrations identified in Schedule ‘A’, Tables 2A to 2D for the pH Area, Main Area, Northern Area and Docklands Area, respectively, which are attached to and form part of this Order.

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

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

“**Contaminant of Concern**” and “**COC**” has the meaning as set out in Item 3.2 of the Order, namely the Contaminants on, in, or under the Property that are present either above the Applicable Site Condition Standards or for which there are no such standards, are set out in the Risk Assessment.

“**Director**” means the undersigned director or any other person appointed as a director for the purposes of this Order.

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

“**Environmental Compliance Approval**” has the same meaning as set out in the Act, namely an approval issued under Part II.1 of the Act.

“**Fill Material**” means loose, granular material from an Ontario Ministry of Natural Resources licensed quarry or other non-soil material or commercial products such as compost bark chips, concrete, unshrinkable fill, crushed concrete, concrete-based materials or equivalent.

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

“**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.

“**OHSA**” means the *Occupational Health and Safety Act*, R.S.O. 1990, c. O.1.

“**Order**” means this Order number YYYY-ZZZZ as may be amended from time to time.

“**Owner**” means Amherstburg Land Holdings Limited, the current owner of the Property, and any future owner(s) of the Property.

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

“**Property**” means the site that is the subject of this Order and more particularly described under Schedule ‘C’: Legal Description of the Property with the boundaries thereof approximated and shown (not to scale) in Figures 1A, 1B and 1C of Schedule ‘A’ to this Order. The Property is divided into four (4) risk management areas, namely the “Main Area”, “Northern Area”, “Docklands Area” and “pH Area”, each of which are described in Table 1 of Schedule ‘C’ to this Order.

“**Property Specific Standards**” and “**PSS**” means the property specific standards established for the Contaminants of Concern set out in the Risk Assessment and Tables 1A to 1D and 3A to 3C of **Schedule ‘A’** to this Order.

"**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 O. Reg. 153/04 made under the Act.

"**Risk Assessment**" and "**RA**" means the risk assessment accepted by the Director dated August 2019, and set out in the following final documents:

- "Amherstburg Land Holdings Limited, Property Risk Assessment", prepared by CH2M Hill Canada Limited, dated September 2016;
- "Amherstburg Land Holdings Limited, Property Risk Assessment", prepared by CH2M Hill Canada Limited, revised October 2018;
- "Amherstburg Land Holdings Limited, Property Risk Assessment", prepared by CH2M Hill Canada Limited, revised August 2019; and,
- "FW: Amherstburg Land Holdings Limited Supporting Information for CPU – 381 Front Road North, Amherstburg, Ontario" e-mails received from James Kroetsch, Jacobs (formerly CH2M), received by the ministry on November 18, 2019 and April 23, 2020 with the following documents attached:
 - *WeirFoulds Letter for ALHL CPU – Amherstburg Si...pdf*
 - *B001 Vesting Order dated April 7, 2011 and registered as Instrument Nos...pdf*
 - *PIN 01544-1367 (LT) updated November 14, 2019.pdf*
 - *PIN 01544-1558 (LT) updated November 14, 2019.pdf*
 - *PIN 01544-1570 (LT) updated November 14, 2019.pdf*
 - *PIN 01544-1571 (LT) updated November 14, 2019.pdf*
 - *PIN 01544-1577 (LT) updated November 14, 2019.pdf*
 - *PIN 01544-1583 (LT) updated November 14, 2019.pdf*
 - *PIN 01544-1690 (R) updated November 14, 2019.pdf*
 - *PIN 01544-2365 (LT) updated November 14, 2019.pdf*
 - *ALHL – Certificate of Compliance-Conformite.pdf*
 - *Amherstburg Land Holdings Limited – Federal Profile.pdf*
 - *Amherstburg Land Holdings Limited – OBN EP profile.pdf*
 - *ALH_RA_2019_PSS_Summary.xlsx*
 - *ALH_RA_ManagementAreas_LegalSurvey_Oct29.pdf*
 - *12R26451_Pg1_ColCoded.pdf*
 - *12R26451_Pg2_ColCoded.pdf*

"**Risk Management Measures**" or "**RMMs**" means the risk management measures and work items described in Part 4 of this Order.

"**Tribunal**" has the same meaning as in the Act; namely, the Environmental Review Tribunal.

"**Unimpacted Soil**" means soil that meets the Applicable Site Condition Standards.

Part 2: Legal Authority and Reasons for the Order

2.1 Pursuant to subsection 1(1) of the Act, "contaminant" means 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.

Preventative Measures Orders

2.2 Subsection 18(1) of the Act provides that the Director may, by order, require a person who owns or owned or who has or had management or control of an undertaking or property to do any one or more of the following:

- a) To have available at all times, or during such periods of time as are specified in the order, the equipment, material and personnel specified in the order at the locations specified in the order.
- b) To obtain, construct and install or modify the devices, equipment and facilities specified in the order at the locations and in the manner specified in the order.
- c) To implement procedures specified in the order.
- d) To take all steps necessary so that procedures specified in the order will be implemented in the event that a contaminant is discharged into the natural environment from the undertaking or property.
- e) To monitor and record the discharge into the natural environment of a contaminant specified in the order and to report thereon to the Director.
- f) To study and to report to the Director upon:
 - i. measures to control the discharge into the natural environment of a contaminant specified in the order.
 - ii. the effects of the discharge into the natural environment of a contaminant specified in the order.
 - iii. the natural environment into which a contaminant specified in the order is likely to be discharged.

2.3 Subsection 18(2) of the Act provides that the Director may make an order under subsection 18(1) where the Director is of the opinion, based on reasonable and probable grounds,

- a) that the nature of the undertaking or of anything on or in the property is such that if a contaminant is discharged into the natural environment from the undertaking or from or on the property, the contaminant will result or is likely to result in an effect mentioned in the definition of “contaminant” in subsection 1(1); and
- b) that the requirements specified in the order are necessary or advisory so as,
 - iv. to prevent or reduce the risk or the discharge of the contaminant into the natural environment from the undertaking or from or on the property, or
 - v. to prevent, decrease or eliminate an effect mentioned in the definition of “contaminant” in subsection 1(1) that will result or that is likely to result from the discharge of the contaminant into the natural environment from the undertaking or from or on the property.

Order Binding on Successors or Assigns

2.4 Subsection 19(1) of the Act provides that an order under this Act 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.

Consequential Authority

2.5 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.

Disclosure and Registration of the Order

- 2.6 Subsection 197(1) of the Act provides that a person who has authority under the Act to make an order or decision affecting real property also has authority to prohibit any person with an interest in the property from dealing with the property in any way without first giving a copy of the order or decision to each person acquiring an interest in the property as a result of the dealing.
- 2.7 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.
- 2.8 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.
- 2.9 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.
- 2.10I am of the opinion, based on reasonable and probable grounds namely the statements made by the consultants and the owner in the Risk Assessment, that the failure to maintain the Risk Management Measures and receptor characteristics described in the Risk Assessment and the failure to maintain and operate appropriate Risk Management Measures may result in the discharge of contaminants.

Director's Reasons for the Order

- 2.11I am of the opinion, based on reasonable and probable grounds, that the requirements set out in this Order are necessary or advisable so as to (a) prevent or reduce the risk of the discharge of a contaminant into the natural environment from the Property or (b) to prevent, decrease or eliminate an Adverse Effect that may result from the presence or discharge of a contaminant in, on or under the Property.

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 the 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 following intended uses: **industrial or commercial use**, as defined in O. Reg. 153/04.
- 3.2 The Contaminants of Concern on, in, or under the Property that are present either above **the Applicable Site Condition Standards** or for which there are no such standards, are set out in the Risk Assessment. The Property Specific Standards for these Contaminants of Concern are set out in the Risk Assessment and **Tables 1A to 1D and 3A to 3C of Schedule 'A'** of the Order.
- 3.3 The Risk Assessment indicates the presence of Contaminants of Concern in soil and groundwater which requires on-going restriction of land use and pathway elimination. As such, it is necessary to restrict the use of the Property and impose building restrictions and implement Risk Management Measures as set out in the Risk Assessment and in Part 4 of the Order.

Part 4: Director Requirements

Pursuant to the authority vested in me under Sections 18, 196(1) and 197 of the Act, I hereby order the Owner to do or cause to be done the following:

Risk Management Measures

- 4.1 Upon service of this Order, implement, and thereafter maintain or cause to be maintained, the risk management measures specific to the Property as described in the Risk Assessment. In the event of a conflict between the measures described in the Risk Assessment and a requirement in this Order, the requirements of this Order take precedence.
- 4.2 Upon service of this Order, without restricting the generality of the work described in Item 4.1, the Owner shall carry out or cause to be carried out the following key risk management measures:

Hard cap and fill cap barriers:

- a) The existing barriers, and new hard cap and or fill cap barriers that are to be installed, are required over the entire pH Area and Main Area and portions of the Docklands Area, as shown on Figure 6 of Schedule 'A', so as to prevent exposure to the Contaminants of Concern identified on the Property and shall be maintained for as long as the COCs are present on the Property at concentrations that exceed the Target Capping Soil concentrations identified in Tables 2A to 2D as determined by a Qualified Person.

a.1) New hard cap barrier and the fill cap barriers shall consist of the following, at minimum:

- i. Any new hard cap and fill cap barriers shall be installed in accordance with Section 7.2.1 of the RA and Appendix I, Section I.1 and Figures I-1, I-2 and I-3 of the RA.
- ii. The hard cap barrier (s) shall consist of a cover of asphalt, concrete, compacted granular aggregate, cobbles, paving stones, armour stones, rubberized surfaces or equivalent, a building slab (or building foundation and floor slab) consisting of at least 150 millimeters (mm) of Granular "A" or equivalent material overlain by at least 75 mm of hot mix asphalt, concrete, compacted granular aggregate, cobbles, paving stones, armour stones, rubberized surfaces or equivalent or a combination thereof with a minimum combined thickness of 225 mm as detailed in Figure 2 of Schedule 'A' (Figure 2), which is attached to and forms part of this Order.
- iii. The fill cap barrier(s) shall consist of either:
 - a minimum of 300 to 500 mm thick cover of Capping Soil, Fill Material, or a combination thereof for *landscaped areas of lawn/ grass* as detailed in Figure 3 of Schedule 'A' (Figure 3), which is attached to and forms part of this Order;
 - a minimum of 1000 mm thick cover of Capping Soil, Fill Material, or a combination thereof for *landscaped areas with shrubs and wildflowers* as detailed in Figure 3;
 - a minimum of 1000 mm to 1500 mm thick cover of Capping Soil, Fill Material, or a combination thereof for *landscaped areas that include the planting of new trees*. Thickness may be adjusted by landscape architect to reflect specific tree/vegetation type as detailed in Figure 4 of Schedule 'A' (Figure 4) which is attached to and forms part of this Order; and, or
 - For *landscaped areas for existing treed areas* as detailed in Figure 4, the barrier shall be a minimum of 100 mm thick permeable cover of river stone, pavers, grates, or other materials as specified by the RA atop the surficial roots and site soils. The adjacent areas outside of the drip line shall consist of a minimum of 225 mm to 1500 mm thick cover of Capping Soil, Fill Material, or a combination thereof.

- b) Within 90 days of completion of the installation of any new hard cap and or fill cap barriers on the Property or portion of 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 7.2.1 of the RA and Appendix I, Section I.1 and Figures I-1, I-2 and I-3 of the RA and Item 4.2(a)(i) and 4.2 (a)(ii) of this Order along with final design specifications/drawings and or as built drawings.
- c) Within 90 days of completion of the installation of any new hard cap and or fill cap barriers on the Property or portion(s) of the Property, the Owner shall submit to the Director a site plan that clearly identifies the final location of each of the different barriers.
- d) In relation to Item 4.2 (a) of this Order, areas of the Property that are *not in use* or *not under development*, hard cap and fill cap barriers are not required as long as exposure to the COCs at concentrations that exceed the Target Capping Soil concentrations, as determined by a Qualified Person, as specified in Tables 2A to 2D 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.
- e) An inspection and maintenance program shall be implemented to ensure the continuing integrity of the *existing barriers* and any new hard cap and fill cap barriers as long as the COCs are present on the Property at concentrations that exceed the Target Capping Soil concentrations, as determined by a Qualified Person, specified in Tables 2A to 2D for the respective areas. The inspection program shall include annual (spring) inspections of the barrier's integrity in accordance with the inspection and maintenance program as detailed in Section 7.4.1 of the RA. Any barrier deficiencies shall be repaired within a reasonable period of time in accordance with Section 7.4.1 of the RA. If cracks, breaches or any loss of integrity in the barriers cannot be repaired or addressed in a timely manner, contingency measures shall be implemented to ensure that no exposure to the COCs that have been observed on the Property at concentrations that exceed the Target Capping Soil concentrations (as determined by a Qualified Person) specified in Tables 2A to 2D occurs. For the restoration of any damaged portions of the *existing barriers*, restoration shall meet the original design specifications, at minimum, for *newly installed barriers*, restoration shall meet the design specifications as detailed in Section 7.2.1 and Appendix I, Section I.1 and Figures I-1, I-2 and I-3 of the RA along with Item 4.2 (a)(i) and (a)(ii) of this Order. For significant breaches that are identified to potentially expose the COCs that are present on the Property at concentrations that exceed the Target Capping Soil concentrations (as determined by a Qualified Person) specified in Tables 2A to 2D, the Owner shall submit to the Director written confirmation prepared and signed by a Licensed Professional Engineer, in consultation with a Qualified Person, that the barriers have been repaired in accordance with the applicable requirements of this Order. The written confirmation shall also include a description of any contingency measures put in place and shall be submitted to the Director within 30 days of the completion of any barrier repairs and/or restorations. The Owner shall keep records of the inspections and maintenance and make them available for review by the Ministry upon request.

New Enclosed Building (s) (new building):

- f) The construction of any new Building (s) on, in or under the Property is **prohibited in the pH Area and Main Area, subject** to the following conditions:
 - i. any new Building (s) is constructed after a soil vapour intrusion assessment is completed in accordance with Section 7.2.2 of the RA and Section 4.2 (g) and (h) of this Order, in which the Owner has received written approval of the final report from the Director, that documents soil vapour concentrations are below the Target Soil Vapour concentrations for the respective areas as identified in Tables 5A and 5B of Schedule 'A' (Table 5A and Table 5B) which is attached to and forms part of this Order; or
 - ii. any new Building (s) is constructed with a vapour mitigation system in accordance with Section 7.2.2 and Appendix I, Section I.1.2 of the RA and Item 4.2(i) of this Order.
- g) Prior to the implementation of a soil vapour intrusion assessment identified in Item 4.2 (f)(i) above, the Owner shall submit to the Director, for review and approval, a draft soil vapour intrusion assessment plan prepared by a Qualified Person in accordance with Section 7.2.2 of the RA. Specifically, the soil vapour intrusion assessment shall include, but not be limited to, the following key components:

- i. be overseen by a Qualified Person;
 - ii. include the area of the proposed building footprint (s) plus the area within 30 m of the proposed building foot print (s);
 - iii. the completion of a minimum of two rounds of consecutive soil vapour sampling separated by a minimum of a 3 month time period with one round being required to be completed under winter-like conditions (i.e. under frozen ground conditions);
 - iv. the number, location and installation depths of the soil vapour probes to be installed. A detailed rationale must be provided that clearly indicates that sufficient data will be collected to support the future building scenario (i.e. design/type of Building to be constructed must be known and taken into consideration in preparing the plan); and,
 - v. any other work as deemed necessary by the Qualified Person.
- h) Upon receiving written approval from the Director, the Owner shall implement the soil vapour intrusion assessment prepared in accordance with Section 4.2 (g) of this Order. Within 90 calendar days of the completion of the soil vapour intrusion assessment, the Owner shall submit a final report for approval of the Director, prepared by a Qualified Person, documenting the completion of the soil vapour intrusion assessment. The final report shall include, but not be limited to, the following key components:
- (a) Soil vapour probe installation details, locations and logs;
 - (b) Laboratory results and laboratory certificates of analysis;
 - (c) All field logs, leak testing results and documentation of QA/QC;
 - (d) Discussion and interpretation of the results in comparison to the respective Target Soil Vapour Concentration as listed in **Tables 5A and 5B as applicable**; and,
 - (e) Conclusions and recommendations with respect to the need for additional and/or continued monitoring as may be warranted.
- i) As specified in Item 4.2 (f) (ii), any new Building (s) constructed on the Property that requires a vapour mitigation system shall be constructed in accordance with Section 7.2.2 and Appendix I, Section I.1.2 of the RA. The vapour mitigation system shall be designed by an appropriately qualified Licensed Professional Engineer in consultation with a Qualified Person in accordance with the *applicable conceptual design* as detailed in Section 7.2.2, Table 7-4 and Appendix I, Section I.1.2 of the RA, as determined by the building-type and location, and shall also include the following components:
- i. The design of the vapour mitigation system shall be specific to the type of Building to be constructed and consistent with the approaches as detailed in Schedule 'A': Figure 7 - Vapour Intrusion RMM – Design, Construction and Monitoring & Maintenance Process (**Figure 7**) and Schedule 'A': Table 8 - Building Types and Applicable Mitigation Approaches (**Table 8**), which are attached to and form part of this Order;
 - ii. The Owner shall obtain an Environmental Compliance Approval, as necessary, and any other permits or approvals as may be required;
 - iii. The installation of the vapour mitigation system shall be completed under the supervision of a qualified Licensed Professional Engineer and a Qualified Person;
 - iv. In the event that a passive vapour mitigation system design has been selected, the passive system shall be designed and installed such that it can easily be converted to an active system; and,
 - v. 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 a qualified Licensed Professional Engineer and Qualified Person.
- j) Within 90 calendar days of the installation of the vapour mitigation system as detailed in Section 7.2.2 and Appendix I, Section I.1.2 of the RA and Item 4.2 (i) of this Order, in any new Building (s) on the Property, the

Owner shall submit to the Director as-built drawings and detailed design specifications of the vapour mitigation system, 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 of Section 7.2.2 and Appendix I, Section I.1.2 of the RA and Item 4.2 (i) of this Order.

- k) The vapour mitigation system detailed in Section 7.2.2 and Appendix I, Section I.1.2 of the RA and Item 4.2 (i) of this Order shall be operated, monitored and maintained by the Owner for as long as the COCs are present on the Property. As detailed in Section 7.4.2 the RA, the qualified Licensed Professional Engineer that designed the vapour mitigation system shall prepare an operation, monitoring, and maintenance program, including a contingency plan, 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.
- l) An inspection, monitoring and maintenance program specified in Section 7.4.2 of the RA and Item 4.2 (k) of this Order 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 will be conducted semi-annually for the first year and annually thereafter. The inspection program shall include, at minimum, inspections of the integrity of the building floor slab and monitoring of the vapour mitigation system in accordance with the monitoring and maintenance program specified in Item 4.2 (k) of this Order. Any 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 Professional Engineer, as specified in Item 4.2 (k) of this Order, are implemented. All repairs 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 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 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 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.
- m) The Owner shall ensure that all individuals/contractors intending to undertake work which could potentially come into contact with or interfere with the vapour mitigation system specified in Section 7.2.2 and Appendix I, Section I.1.2 of the RA and Item 4.2 (i) of this Order 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 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, as specified in Item 4.2 (k) of this Order 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 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 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.
- n) Once the final design of the vapour mitigation system is completed as specified in Section 7.2.2 and Appendix I, Section I.1.2 of the RA and Item 4.2 (i) of this Order, the Owner shall submit to the Director, for review and

approval, an indoor air performance monitoring program. The indoor air performance monitoring program shall be prepared by a qualified Licensed Professional Engineer in consultation with an appropriately Qualified Person in accordance with Section 7.4.2.1 and Table 7-8 of the RA. Specifically, the indoor air performance monitoring program shall include the following minimum requirements:

- i. Be overseen by a qualified Licensed Professional Engineer;
 - ii. Monitoring approach shall be consistent with Table 7-8 of the RA, which has been attached as Table 9, in Schedule 'A' (**Table 9**) and forms part of this Order;
 - iii. The indoor air and sub-slab vapour samples, as required, shall be sent to an accredited laboratory and analyzed for the Indoor Air Target Analytes for the **pH Area and Main Area** as listed in **Tables 4A and 4B**, respectively, of Schedule 'A' (**Table 4A, Table 4B**) which are attached to and form part of this Order;
 - iv. An annual report documenting the indoor air performance monitoring program shall be prepared by a qualified Licensed Professional Engineer and submitted to the Director on or before **March 31st** following each year of monitoring until written approval to discontinue the program is received by the Owner from the Director. The annual report shall include, but not be limited to:
 - (a) Laboratory results and laboratory certificates of analysis;
 - (b) Field logs, leak testing (as necessary) and documentation of QA/QC;
 - (c) Discussion and interpretation of the results in comparison to the respective Target Indoor Air Concentration as listed in **Tables 4A and 4B**; and,
 - (d) Conclusions and recommendations with respect to the need for additional and/or continued monitoring as may be warranted.
- o) Upon completion of the installation of the vapour mitigation system as specified in Item 4.2 (i) of this Order, and prior to first occupancy, the Owner shall implement the indoor air performance monitoring program, that has been approved in writing by the Director, as required by Item 4.2 (n) of this Order for a minimum of two years and until the Owner receives written approval from the Director to discontinue the program. Any changes to the indoor air performance monitoring program as required by Item 4.2 (n) of this Order, (i.e. sampling frequency, locations, methodology etc.) must be requested in writing by a qualified Licensed Professional Engineer and these changes shall only be implemented upon the Owner receiving written approval from the Director.
- p) In the event that the indoor air performance monitoring program detailed in Item 4.2 (n) of this Order identifies one or more of the Target Analytes at concentrations above the Target Indoor Air concentrations in **Tables 4A and 4B**, respectively, *and where the concentrations of the observed Target Analytes are determined by the qualified Licensed Professional Engineer to be a result of soil vapour intrusion*, the Owner shall implement the contingency measures detailed in Section 7.4.2.3 of the RA and as follows:
- i. Written notice shall be submitted to the Director by the Owner within 14 calendar days of the Owner's receipt of the laboratory analysis. This written notice shall include the indoor air and sub-slab vapour sampling results (as necessary), the laboratory certificates of analysis and the anticipated timeline for the implementation of the confirmatory sampling program along with any additional work as may be deemed necessary by a qualified Licensed Professional Engineer. Confirmatory sampling shall occur within 14 calendar days from the date of the Owner's receipt of the laboratory analysis and be completed by a qualified Licensed Professional Engineer.
 - ii. In the event that the confirmatory indoor air sampling verifies the exceedances of one or more of the Target Analytes concentrations above the Target Indoor Air Concentration in **Tables 4A and 4B** for the pH Area and Main Area, respectively, the Owner shall:
 - (a) Submit written notice to the Director within 14 calendar days of the Owner's receipt of the laboratory analysis. This written notice shall include the confirmatory indoor air results, the laboratory certificates of analysis and the details of, and the anticipated timeline to implement contingency measures consistent with Section 7.4.2.3 of the RA along with the implementation of further evaluation/assessment of the vapour mitigation system as may be deemed necessary by a qualified Licensed Professional Engineer. The implementation of contingency measures, along with the implementation of a confirmatory indoor air sampling program shall occur within 14 calendar days of the Owner's submission of the written notice of the exceedance to the Director;
 - (b) Within 30 calendar days of the implementation of the contingency plan, the Owner shall submit to the Director an update report prepared by a qualified Licensed Professional Engineer documenting

the implementation of contingency measures, results of the implementation of the confirmatory indoor air sampling program along with the details and timelines for the implementation of performance indoor air and or sub-slab vapour monitoring program. The update report shall include, but not be limited to:

- i. Laboratory results and laboratory certificates of analysis;
- ii. Field logs, leak testing (as necessary) and documentation of QA/QC;
- iii. Discussion and interpretation of the results in comparison to the respective Target Indoor Air Concentrations as listed in **Tables 4A and 4B**; and,
- iv. Conclusions and recommendations with respect to the performance of the vapour mitigation system along with the need for additional work and/or continued monitoring as may be deemed warranted.

Groundwater Control and Management:

- q) In the event that any new Building(s) is constructed on the Property where the Building's foundation is constructed at or below the groundwater table, in accordance with the Building Code, a Groundwater Control and Management Plan shall be developed by a qualified Licensed Professional Engineer and implemented by the Owner in accordance with Section 7.2.3.3 of the RA.

Groundwater Monitoring Program:

- r) Within 90 calendar days of the issuance of this Order, the groundwater monitoring program specified in Section 7.4.3 of the RA shall be implemented by the Owner in order to monitor the groundwater quality at the select locations on the Property. The groundwater monitoring program shall be subject to the following minimum requirements:
- i. Be overseen by a Qualified Person.
 - ii. Consist of the measurement of groundwater levels, the monitoring for residual nonaqueous phase liquid (NAPL) and sampling from the proposed groundwater monitoring network i.e. MWRA-01 to MWRA-05 as detailed in Section 7.4.3.1 of the RA, as identified in Figure 5 of Schedule 'A' (Figure 5), which is attached to and forms part of this Order, and as specified in Schedule 'A': Table 7: Proposed Groundwater Monitoring Program Summary (**Table 7**) or suitable replacement (s) as deemed appropriate by a Qualified Person and approved by the Director.
 - iii. The measurement of groundwater levels, the monitoring for NAPL and the collection of groundwater samples shall occur quarterly (every three months) for the first year and semi-annually (i.e. spring and fall) thereafter.
 - iv. Groundwater samples shall be sent to an accredited laboratory and analyzed for the Target Analytes specified in **Tables 6A and 6B** of Schedule 'A' (**Tables 6A and 6B**) for the pH Area and the Main Area, respectively.
 - v. The groundwater monitoring program shall occur for a minimum of two years and until written approval to reduce or discontinue the groundwater sampling program from the Director is received by the Owner.
 - vi. An annual report detailing the sample results, sample locations, borehole logs/monitoring well construction details along with an evaluation of the temporal trends in groundwater quality and an assessment of the potential for off-property migration of impacted groundwater shall be submitted to the Director on or before **March 31st** following each year of monitoring until written approval to discontinue the program from the Director is received by the Owner.
 - vii. Any changes to the groundwater monitoring program as specified in Section 7.4.3 of the RA must be requested in writing by the Qualified Person and these changes shall only be implemented by the Owner upon receiving approval from the Director.

- viii. The contingency plan detailed in Section 7.4.3 of the RA shall be implemented, at minimum, in accordance with the following:
- (a) In the event that the groundwater monitoring program identifies one or more of the Target Analytes at concentrations above the Target Groundwater Quality Concentrations in **Table 6A or 6B** as applicable, the presence of NAPL is observed or one or more of the Target Analytes are observed at a concentration above the applicable PSS for groundwater in **Tables 3A to 3C** as applicable, the Owner shall notify the Director in writing within 5 business days of the Owner receiving the laboratory analysis. Written notification shall be prepared by a Qualified Person and include the groundwater data, laboratory certificates of analysis and timeline for the implementation of the confirmatory groundwater sampling program.
 - (b) Within 15 business days of the Owner receiving the laboratory analysis, the confirmatory groundwater sampling program shall be implemented by a Qualified Person.
 - (c) In the event that the groundwater concentrations continue to be observed to exceed their respective Target Groundwater Quality Concentrations in **Tables 6A or 6B**, NAPL continues to be present or the groundwater concentrations continue to be observed to exceed the applicable PSS in **Tables 3A, 3B or 3C**, the Owner shall notify the Director in writing within 10 business days of the Owner receiving the laboratory analysis. Written notification shall be prepared by a Qualified Person and include the groundwater data, laboratory certificates of analysis and timeline for the submission of a proposed groundwater action plan.
 - (d) Within 40 business days of the Owner receiving the confirmatory laboratory analysis, the Owner shall submit to the Director a proposed groundwater action plan for review and approval. The proposed groundwater action plan shall be prepared by a Qualified Person and include, but not be limited to, a detailed interpretation of the available data collected to date along with recommendations for any additional investigation/ monitoring as may be required such as installation of additional monitoring or soil vapour wells, and or recommendations for the completion of a groundwater remedial option feasibility study and or the implementation of a groundwater remedial action plan which may include the implementation of additional remedial/mitigation measures as may be necessary.
 - (e) Upon the Owner receiving written approval from the Director, the Owner shall implement the approved groundwater action plan.
 - (f) Within 60 business days of implementation of the groundwater action plan, the Owner shall submit written confirmation, along with supporting documentation, prepared by a Qualified Person that the groundwater action plan has been implemented.

Soil and Groundwater Management Plan:

- s) A property-specific soil and groundwater management plan (“Plan”) shall be developed for the Property and implemented during all future intrusive activities potentially in contact with or exposing COCs in soil that exceed the Target Capping Soil Concentrations (as determined by a Qualified Person) specified in Tables 2A to 2D, or COCs in groundwater that exceed the Applicable Site Condition Standards on the Property as detailed in Section 7.2.3.2 of the RA. A copy of the 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 Plan prior to undertaking the short term emergency repairs. For planned intrusive activities, this Plan shall be submitted to the Director by the Owner at least 14 calendar days prior to the first of any such intrusive activities being undertaken and shall be consistent with the measures specified in Section 7.2.3.2 of the RA. The Plan shall be overseen by a Qualified Person and shall include, but not be limited to, the following key components as deemed necessary by a Qualified Person:
 - i. dust control measures and prevention of soils tracking by vehicles and personnel from the Property;

- ii. odour control measures including, weather monitoring (temperature, humidity, wind), monitoring with a photoionization detector (PID), ambient air quality sampling (depending on the extent and duration of the excavation activities), specifications regarding the size of open excavations, wetting of soil with potable water, implementation of atomization equipment or foam suppression, tarping odourous soil, or ceasing work to reassess the source of odour and to evaluate the appropriate control measure;
 - 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, and such measures shall include, but not be limited to, silt fences and filter socks on catch-basins and utility covers as necessary;
 - v. characterization of excavated excess soils and groundwater, to determine if the excavated excess soils or groundwater exceed the Property Specific Standards listed in Tables 1A to 1D and Tables 3A to 3C of Schedule 'A' attached to this Order and/or the applicable generic site condition standards for parameters other than those identified in Tables 1A to 1D and Tables 3A to 3C of Schedule 'A' attached to this Order and require off-site disposal in accordance with the provisions of Ontario Regulation 347, as amended, made under the Act;
 - vi. characterization and management of groundwater as a result of dewatering activities, where characterization of groundwater as a result of dewatering shall include, but not be limited to, adequate groundwater sampling prior to dewatering activities along with appropriate sampling of the groundwater collected during dewatering activities. Where dewatering is required, dewatering activities shall be conducted in accordance with Section 7.2.3.3 of the RA and the requirements of Ontario Regulation 63/16 made under the Act.
- s.1) The Plan shall include record keeping, which includes, but is not to be limited to, dates and duration of work, weather and site conditions, location and depth of excavation activities/dewatering activities, dust control measures, odour control measures, stockpile management and drainage, NAPL management and disposal, all soil and groundwater characterization results obtained as part of the soil and groundwater management plan, names of the Qualified Persons, contractors, haulers and receiving sites for any excavated excess soils, groundwater, as a result of dewatering activities, and NAPL removed from the property and any complaints received relating to site activities.
- s.2) A copy of the Plan and any amendments and the records kept thereunder shall be made available for review by the Ministry upon request.

Health and Safety Plan:

- t) A property specific Health and Safety Plan shall be developed for the Property and implemented during all planned intrusive activities undertaken potentially in contact with COCs in soil and groundwater that have been identified in the RA at concentrations that exceed either the Applicable Site Condition Standards for groundwater or the Target Capping Soil concentrations, as determined by a Qualified Person, specified in Tables 2A to 2D as detailed in Section 7.2.1 (Fill Caps and Hard Caps) and Section 7.2.3.1 (Health and Safety Plan) of the RA and a copy shall be maintained on the Property for the duration of all intrusive activities. The Owner shall ensure that the Health and Safety 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 Health and Safety plan shall be prepared in accordance with applicable health and safety legislation administered by the Minister of Labour, along with all potential risks identified in the RA and include, but not limited to, occupational hygiene requirements, personal protective equipment, contingency plans and contact information. Prior to initiation of any Project (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 soils and or groundwater on the Property. The Health and Safety 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.

Utility Corridors:

- u) The Owner shall ensure that any new utilities/ utility corridors or subsurface infrastructure (“utilities”) that are excavated for installation or maintenance are excavated and backfilled with the Capping Soil or Fill Material that is appropriate material for structural purposes as detailed in Appendix I, Section I.1.1.4 of the RA. Where new utilities are to be installed, or existing utilities repaired on the Property in areas where COCs are found in soil that exceed the Target Capping Soil concentrations (as determined by a Qualified Person) in Tables 2A to 2D as applicable, in groundwater above the Applicable Site Condition Standard, one or more of the following mitigation measures as may be applicable and, as determined by a qualified Licensed Professional Engineer, shall be implemented:
- i. Trench Plugs: consisting of low-permeability materials such as compacted clay or bentonite, or other low permeable material such as concrete or unshrinkable fill, shall be installed across the trench cross-section so as to prevent migration of COCs into the permeable backfill material along any buried piping, cable or duct banks. Clay seals (plugs) are required to be installed where utilities are to be installed near or below the groundwater table and shall consist of clay compacted at appropriate moisture contents that is extended for a minimum of 750 mm along the utility trench, across the full width and extend to the base of the overlying cap barrier;
 - ii. Anti-seep Collars: barriers made of any ridged impermeable material (e.g. concrete, steel or geomembranes);
 - iii. Trench Liners: impermeable liner placed at the bottom and sides of the utility trench
 - iv. Watertight Shoring: shoring at the trench walls be supplemented by lining the bottom of the trench with impermeable liner or low-permeability materials;
 - v. Slurry or Controlled, Low-Strength Material (Flowable Fill) Trench Backfill: The entire trench to be filled with slurry consisting of fine aggregates, water and cementitious material; and or,
 - vi. Concrete Structure of a Box Culvert as a Utility Corridor: Entry to the Concrete Structure or Box Culvert will require confined space entry equipment however would provide a corridor for utility installation and maintenance free of COCs.

Prohibition of Potable Groundwater Wells

4.3 The Owner shall,

- a) refrain from using groundwater in or under the Property as a source of water;
- b) properly abandon any wells on the Property, as defined in section 35. (1) of O. Reg. 153/04, according to R.R.O. 1990, Regulation 903 (Wells), made under the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40; and
- c) refrain from constructing on the Property any wells as defined in section 35. (1) of O. Reg. 153/04.

Property Use Restrictions

4.4 The Owner shall refrain from using the Property for any type of property use specified in O. Reg. 153/04, other than Commercial and/or Industrial uses.

Site Changes

4.5 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, the Owner shall 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 Order 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

- 4.6 Retain a copy of any reports required under the Order, the Risk Assessment and any reports referred to in the Risk Assessment (until otherwise notified by the Director) and within 15 business 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

- 4.7 Upon service of this Order, the Owner and any other person with an interest in the Property shall, before dealing with the Property in any way, give a copy of this Order, including any amendments thereto, to every person who will acquire an interest in the Property, as a result of the dealing.

Certificate of Requirement

- 4.8 Within thirty (30) business days from the date of receipt of a certificate of requirement, issued under subsection 197(2) of the Act, completed as outlined in Schedule 'B', register the certificate of requirement on title to the Property in the appropriate Land Registry Office.
- 4.9 Within five (5) business 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 registrations has been completed.

Owner / Occupant Change

- 4.10 While the Order is in effect, forthwith report in writing to the Director any changes of ownership of the Property or any part of the Property.

Part 5: General

- 5.1 The requirements of this Order are severable. If any requirement of this Order 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 Order.
- 5.2 Any request to change a requirement in this Order shall be made in writing to the Director with reasons for the request.
- 5.3 The requirements of this Order are minimum requirements only, and do not relieve you from:
- a) complying with any other applicable order, statute, regulation, municipal, provincial or federal law; and
 - b) obtaining any approvals or consents not specified in this Order.
- 5.4 Subsection 19(1) of the Act provides that an order of the Director is binding upon the successor or assignee of the person to whom it is directed.
- 5.5 Subsection 186(2) of the Act provides that non-compliance with the requirements of this Order constitutes an offence.
- 5.6 Notwithstanding the issuance of this Order, further requirements or other orders may be issued and imposed in accordance with the 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 Order 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 may be adjusted in a manner defined by the Director. The Owner shall immediately notify the Director 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 Any failure to comply with a requirement of the Order by the date specified does not relieve the Owner(s) from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.

Part 6: Hearing before the Environmental Review Tribunal

- 6.1 Pursuant to section 140 of the Act, you may require a hearing before the Environmental Review Tribunal (the "Tribunal") if, within fifteen (15) days after service on you of a copy of this Order, 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 Order 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 Order 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 address, email address and fax numbers of the Director and the Tribunal are:

The Secretary

Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, ON, M5G 1E5
Fax: (416) 326-5370
Fax Toll Free: 1(844) 213-3474
Email: ERTTribunalSecretary@ontario.ca

and

Sean Morrison, Director
Ministry of the Environment, Conservation and Parks
1094 London Rd.
Sarnia, ON
N7S 1P1
Fax: 519-383-3780
Email: sean.morrison@ontario.ca

- 6.4 Unless stayed by application to the Tribunal under section 143 of the Act, the Order 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 EBR registry. The notice must include a brief description of the Order (sufficient to identify it) and a brief description of the grounds of appeal.

The notice must be delivered to the Ministry 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 777 Bay Street, 5th Floor, Toronto, Ontario M7A 2J3 by the earlier of:

6.5.1 two (2) days after the day on which the appeal before the Tribunal was commenced; and

6.5.2 fifteen (15) days after service on you of a copy of the Order.

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 the Order may seek leave to appeal the Order. Under section 40 of the EBR, the application for leave to appeal must be made to the Tribunal by the earlier of:

6.7.1 fifteen (15) days after the day on which notice of the issuance of the Order is given in the Environmental Registry of Ontario.

; and

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

Issued at Sarnia this <<<<<< day of <<<<<<<. 2020.

Original Signed By

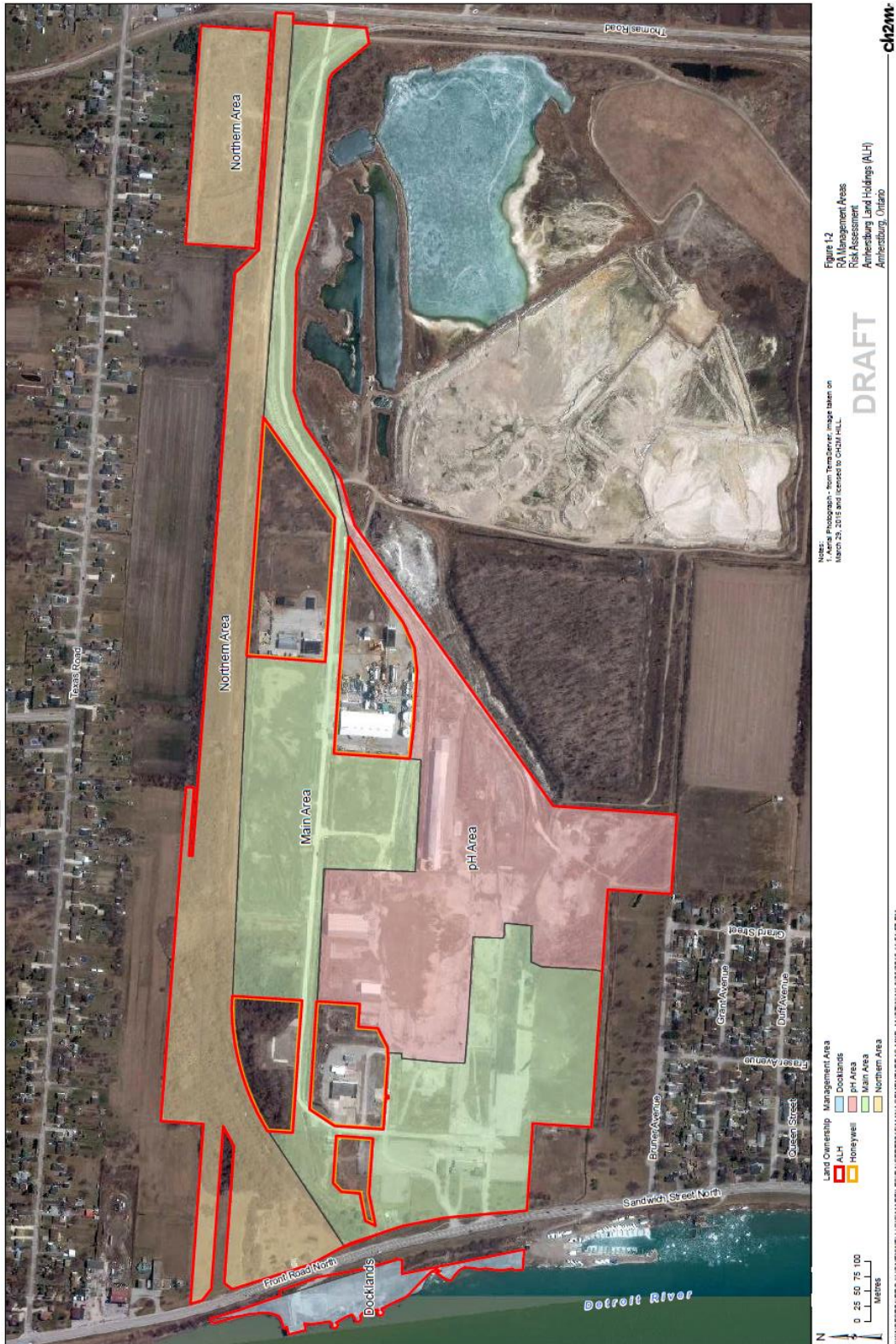
DRAFT

Sean Morrison,
Director, Sections 18, 196 and 197 of the Act

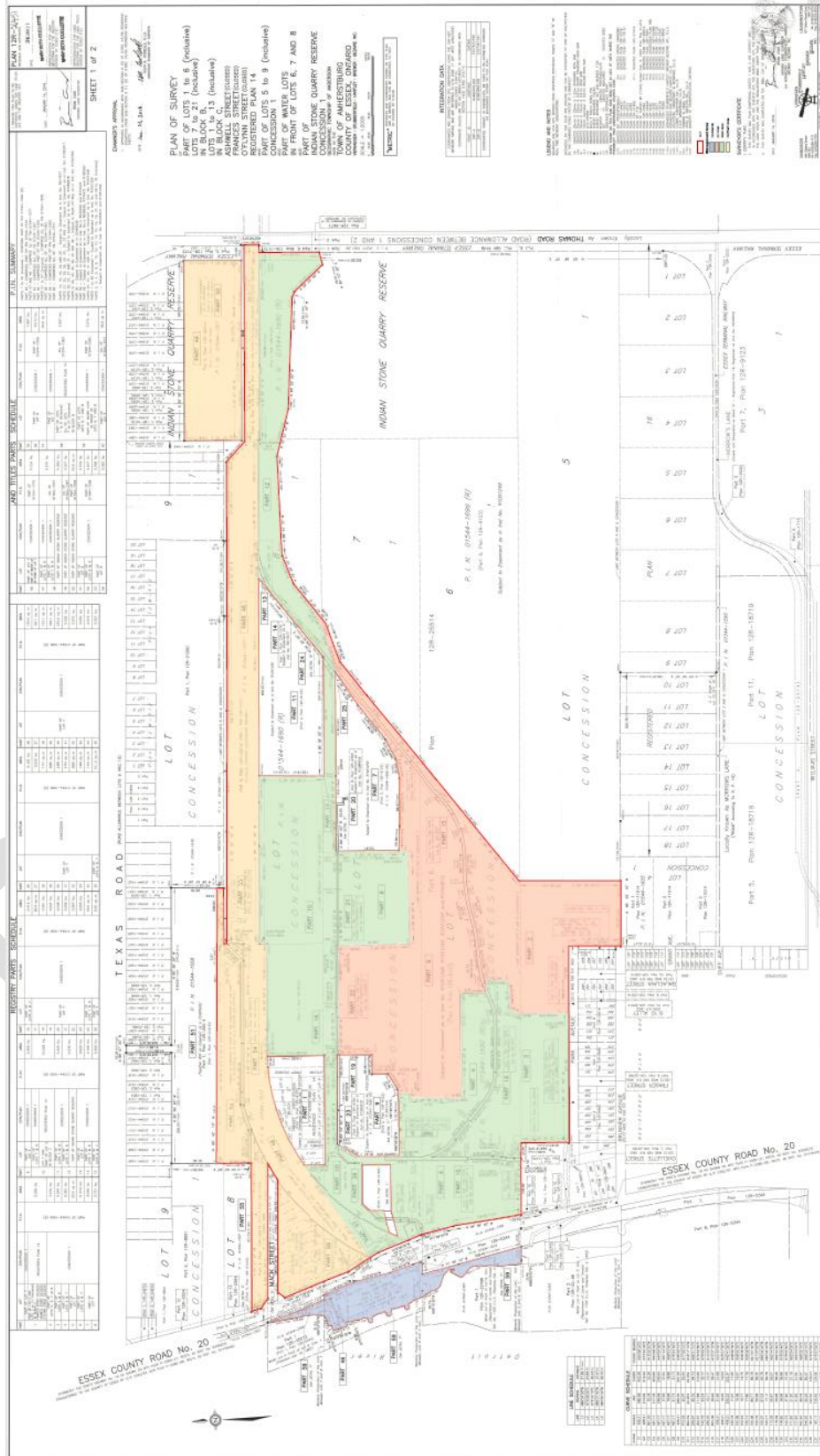
Schedule 'A': Figure 1A- Site Plan (not to scale)



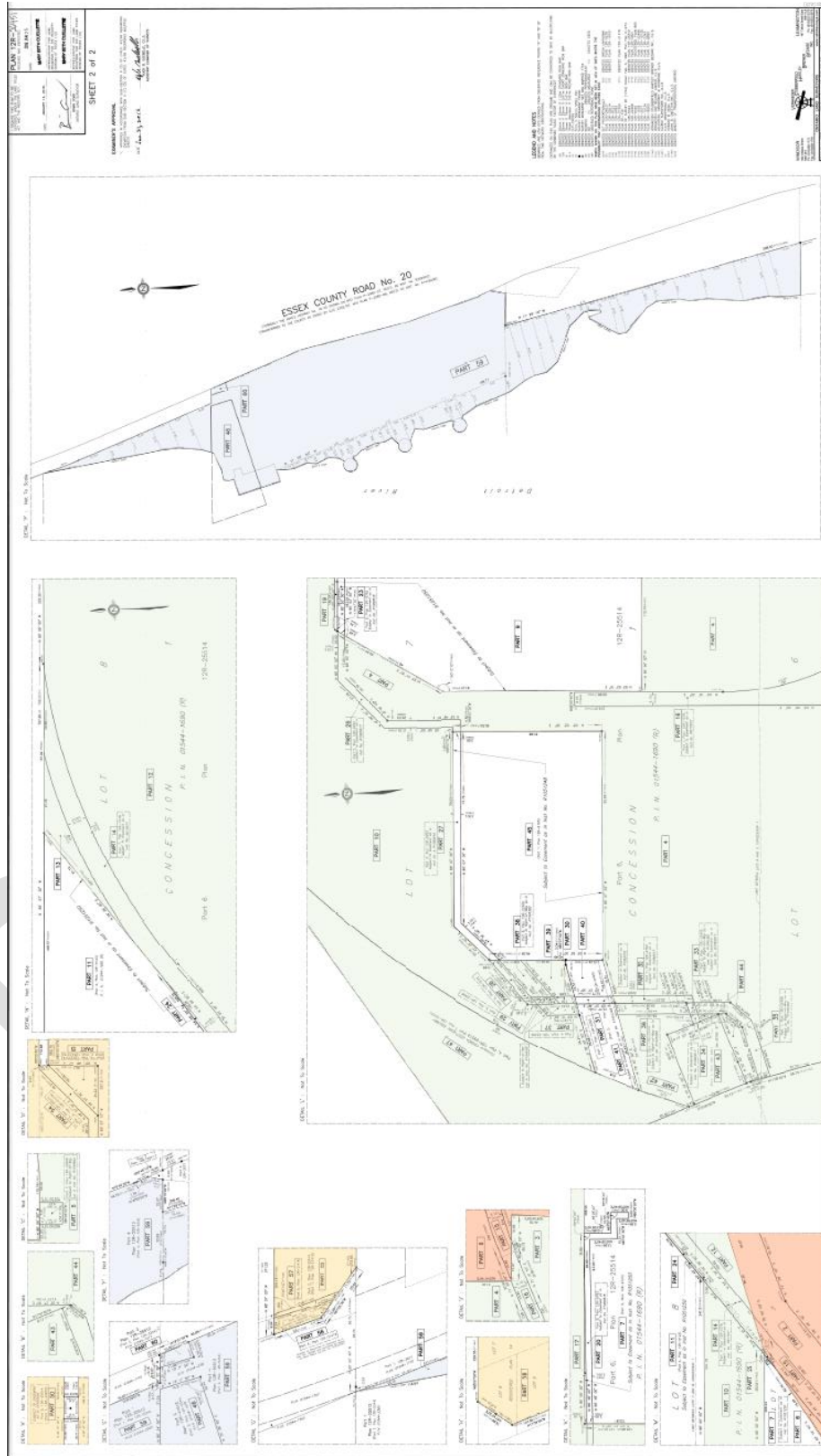
Schedule 'A': Figure 1B- RA Management Areas (not to scale)



Schedule 'A': Figure 1C (1 of 2)- RA Management Areas on Legal Survey (not to scale)



Schedule 'A': Figure 1C (2 of 2)- RA Management Areas on Legal Survey (not to scale)



Schedule 'A': Figure 2- Conceptual Design of Typical Hard Cap Barrier (not to scale)

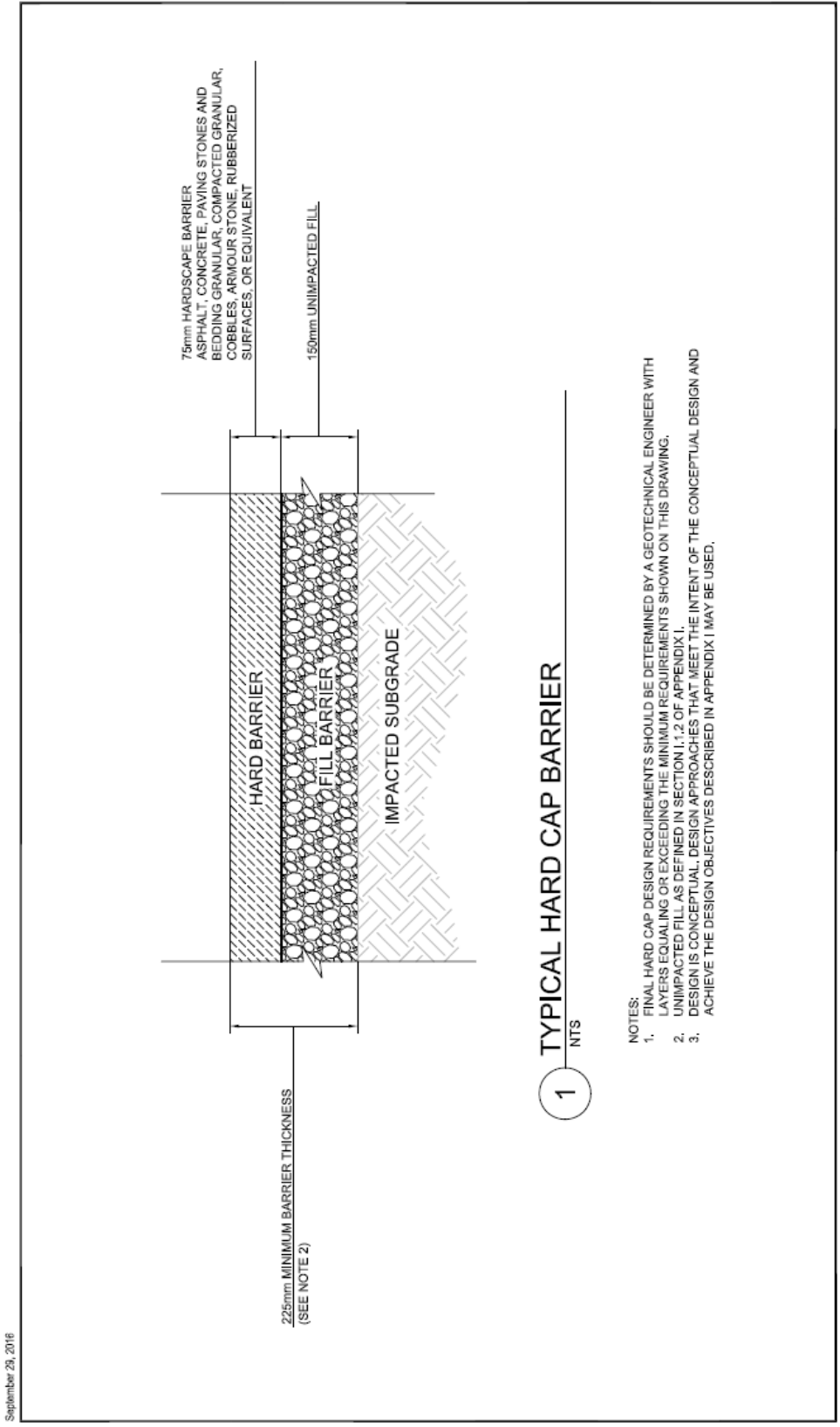


FIGURE I-1
Conceptual Design of Typical Hard Cap Barrier

Amherstburg Land Holdings (ALH)
Amherstburg, Ontario

NOT TO SCALE
440581_I01.dwg



Schedule 'A': Figure 3 – Conceptual Design of Typical Fill Cap Barrier - Vegetation Protective Cover - (not to scale)

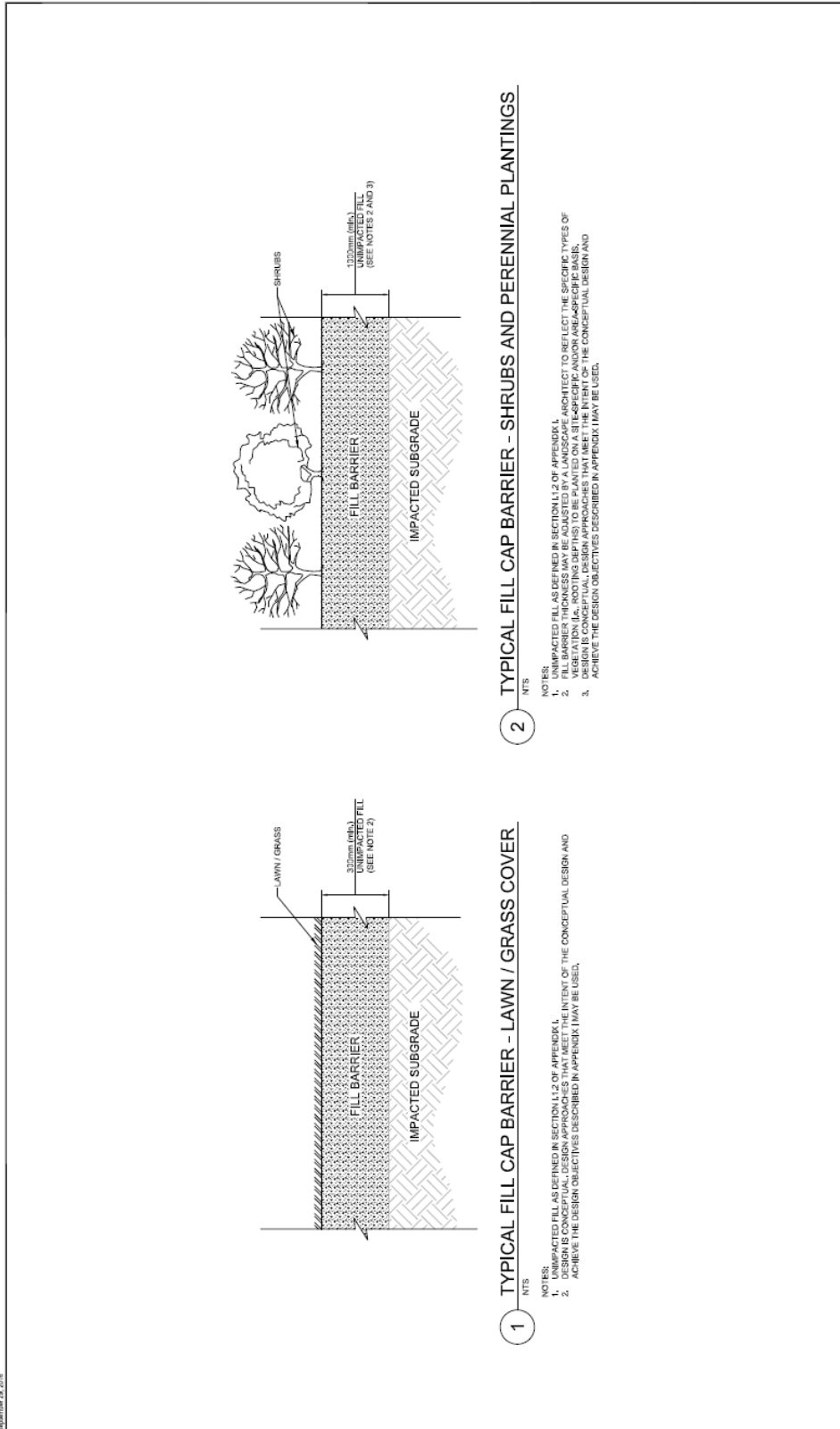


FIGURE I2
Conceptual Design of Typical Fill Cap Barrier
Vegetation Protective Cover
Amherstburg Land Holdings (ALH)
Amherstburg, Ontario



NOT TO SCALE
44881_12.dwg

Schedule 'A': Figure 4 – Conceptual Design of Typical Fill Cap Barrier - New and Existing Treed Areas - (not to scale)

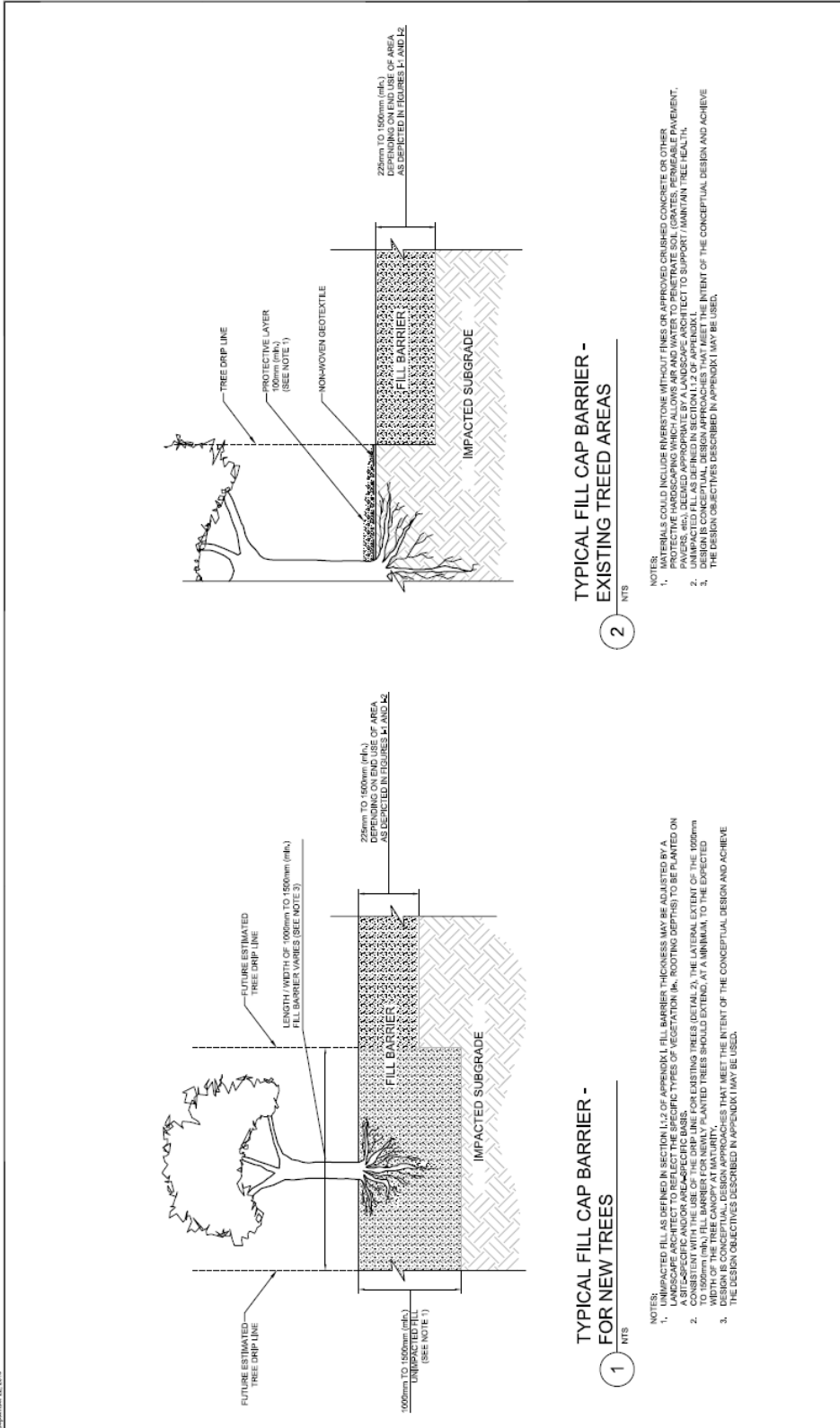


FIGURE 13
 Conceptual Design of Typical Fill Cap Barrier
 New and Existing Treed Areas
 Amherstburg Land Holdings (ALH)
 Amherstburg, Ontario

NOT TO SCALE
 4889/1303



Schedule 'A': Figure- 5 Proposed Groundwater Monitoring Locations for Groundwater Monitoring Risk Management Measure (not to scale)

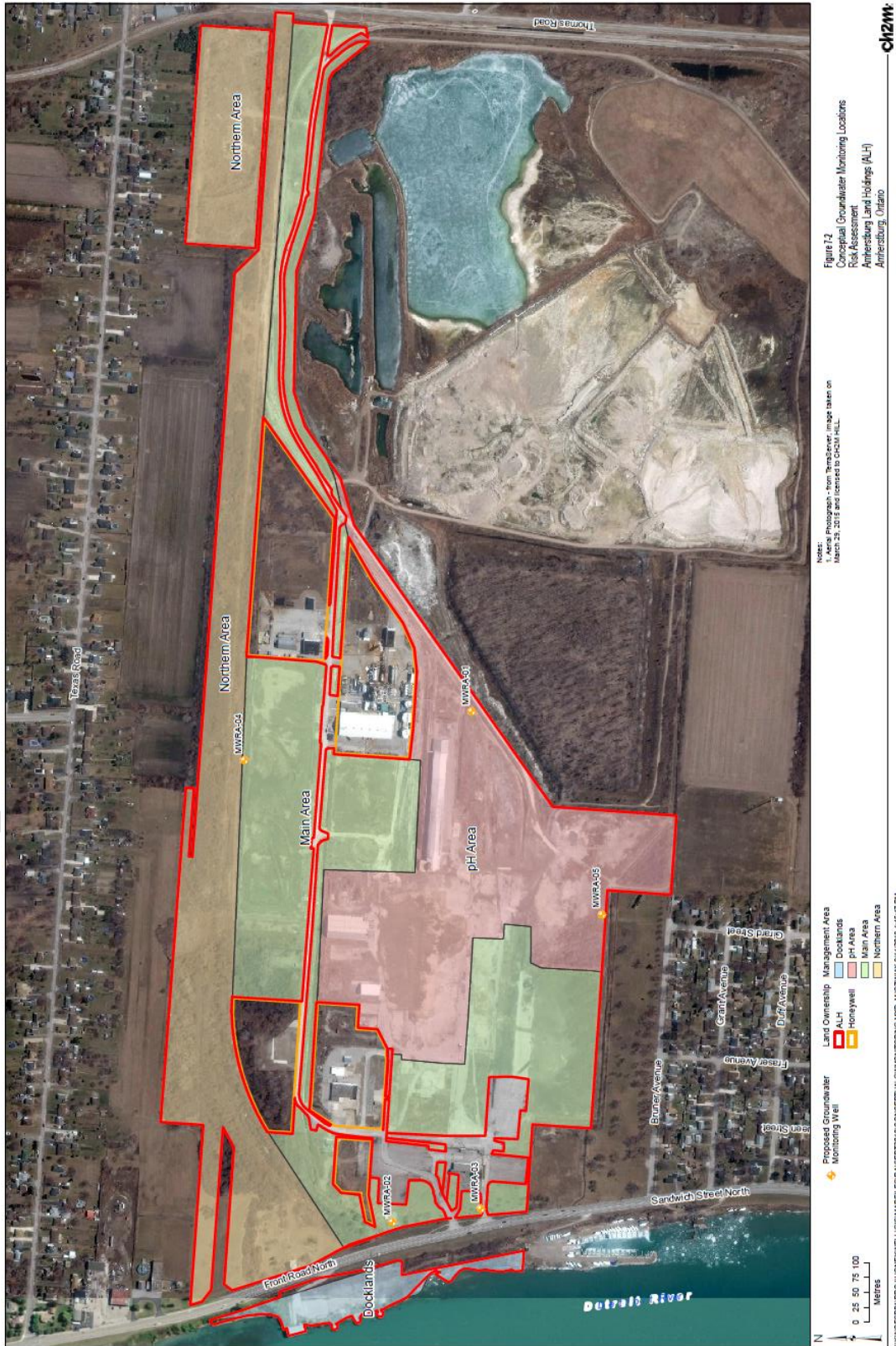
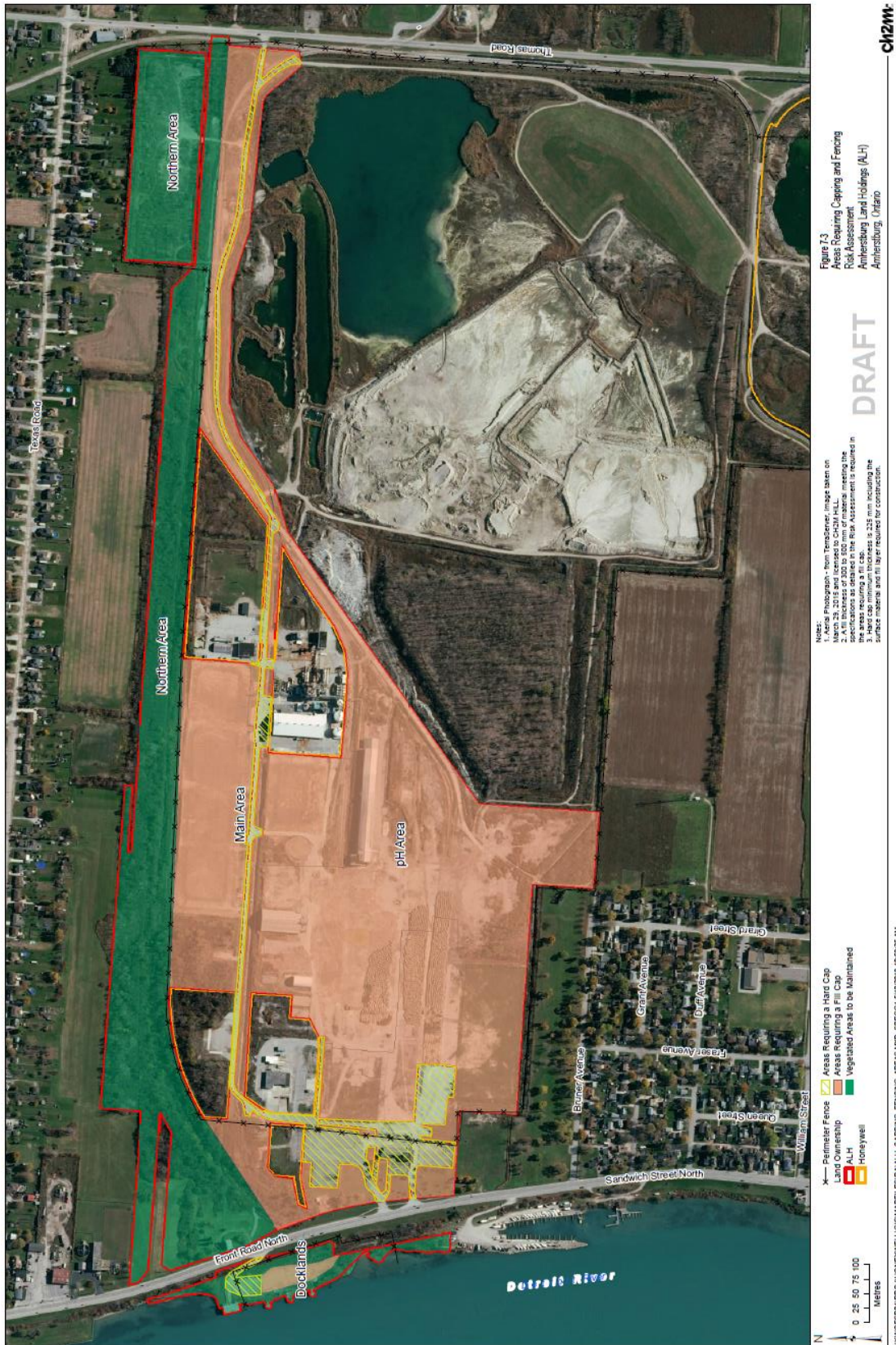


Figure 7.2
 Proposed Groundwater Monitoring Locations
 Scale: As Shown
 Amersburg Land Holdings (ALH)
 Amersburg, Ontario

Notes:
 1. Photograph - from "The Observer" - made taken on
 March 28, 2018 and licensed to CH2M HILL.

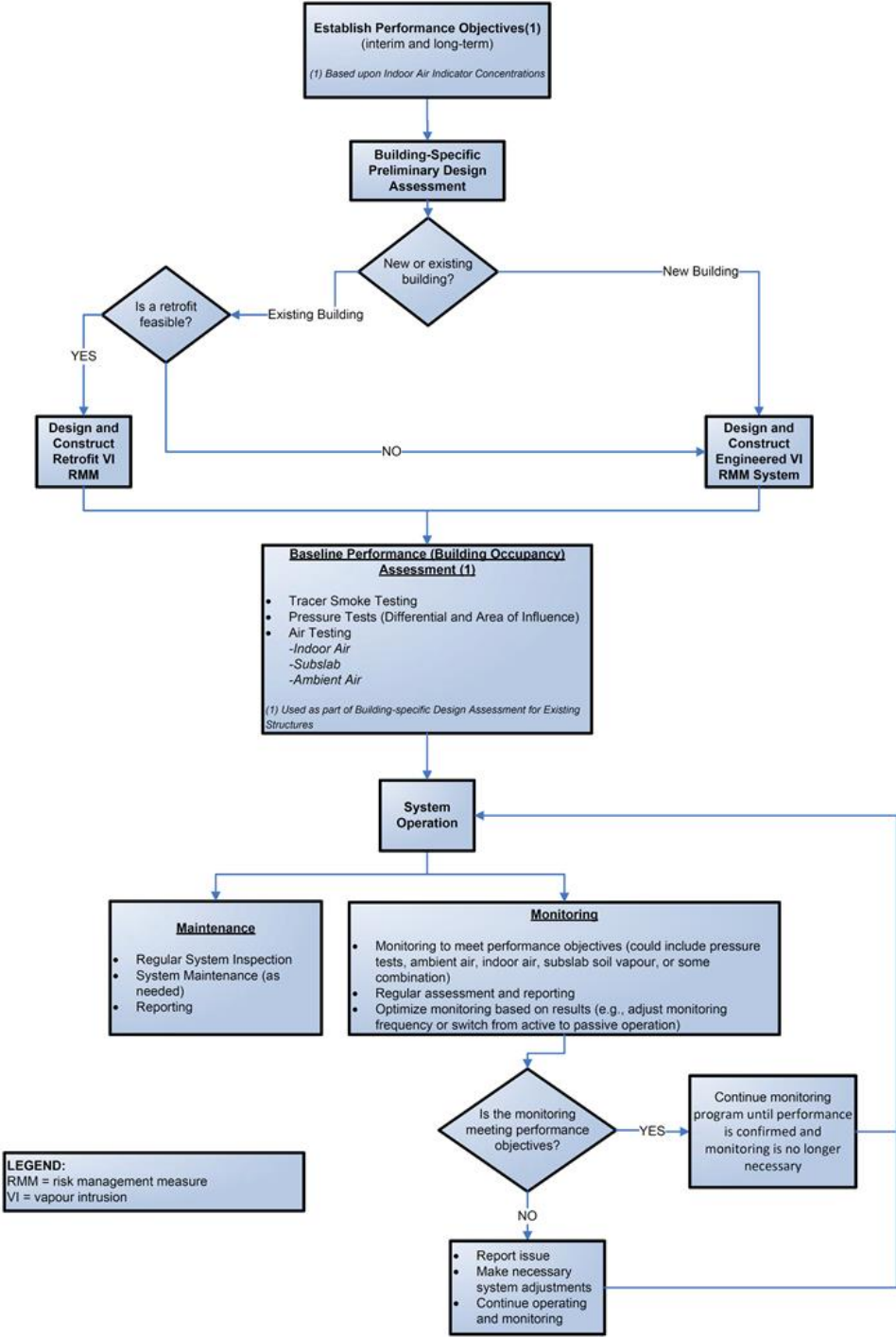
ch2m

Schedule 'A': Figure 6 – Areas Requiring Capping and Fencing (not to scale)



Schedule 'A': Figure 7 – Vapour Intrusion RMM – Design, Construction and Monitoring & Maintenance Process

Figure 7-1 Vapor Intrusion RMM – Design, Construction, and Monitoring and Maintenance Process



Schedule 'A': Table 1A: pH AREA - Property Specific Standards (PSS) – Soil

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
2-(1-)Methylnaphthalene	160
Acenaphthene	3.9
Acenaphthylene	27
Acetone	25
Anthracene	7.6
Antimony	19
Arsenic	54
Barium	790
Benzene	11
Benzo(a)anthracene	4.5
Benzo(a)pyrene	3.6
Benzo(b/j)fluoranthene	3.8
Benzo(g,h,i)perylene	1.8
Benzo(k)fluoranthene	1.3
Beryllium	3.2
Boron	61
Cadmium	1.8
Calcium	420000
Chloride	58000
Chloroform	2.5
Chromium	630
Chromium VI	2.5
Chrysene	3.8
Cobalt	260
Copper	760
Dibenz(a,h)anthracene	0.51
Ethylbenzene	4.6
F1 PHC C6-C10	280
F2 PHC C10-C16	730
F3 PHC C16-C34	2500
F4 PHC C34-C50	2700
Fluoranthene	9.4
Fluorene	27
Hot Water Ext. Boron (B)	6.2
Indeno(1,2,3-cd)pyrene	2.2
Lead	540
Magnesium	130000
Manganese	3400
Mercury	100
Methylene Chloride	2.5

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
Molybdenum	11
Naphthalene	340
Nickel	820
Phenanthrene	39
Pyrene	7.6
Selenium	5
Sodium	17000
Strontium	190
Styrene	5.6
Sulphate	32000
Tetrachloroethene	2.5
Toluene	3.4
Total PCBs	32
Uranium	3.4
Vanadium	240
Xylenes, Total	100
Zinc	1600
Conductivity (mS/cm)	100
SAR (unitless)	1500

Schedule 'A': Table 1B: MAIN AREA - Property Specific Standards (PSS) – Soil

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
Anthracene	2.1
Arsenic	130
Benzene	0.8
Benzo(a)anthracene	1.8
Benzo(a)pyrene	0.84
Benzo(b/j)fluoranthene	1.2
Boron	240
Cadmium	2.8
Calcium	360000
Chloride	42000
Cyanide, Free	0.15
F1 PHC C6-C10	260
F2 PHC C10-C16	3400
Hot Water Ext. Boron (B)	21
Iron	50000
Lead	220
Magnesium	120000
Mercury	43

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
Sodium	7400
Strontium	850
Sulphate	4400
Sulphur	2800
Total PCBs	1.6
Vanadium	180
Zinc	510
Conductivity (mS/cm)	51
SAR (unitless)	43

Schedule 'A': Table 1C: NORTHERN AREA - Property Specific Standards (PSS) – Soil

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
Calcium	120000
Chloride	1000
Magnesium	21000
Sodium	2100
Strontium	140
Sulphate	320
Conductivity (mS/cm)	9.2
SAR (unitless)	25

Schedule 'A': Table 1D: DOCKLANDS AREA - Property Specific Standards (PSS) – Soil

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
2-(1-)Methylnaphthalene	3.3
Acenaphthene	0.25
Acenaphthylene	0.25
Anthracene	0.45
Antimony	12
Arsenic	120
Barium	370
Benzene	0.16
Benzo(a)anthracene	1
Benzo(a)pyrene	1.3
Benzo(b/j)fluoranthene	1.5
Benzo(g,h,i)perylene	0.87

<i>Soil Contaminant of Concern (COC)</i>	<i>PSS (µg/g)</i>
Calcium	360000
Chloride	1800
Copper	110
Dibenz(a,h)anthracene	0.4
Ethylbenzene	0.49
F1 PHC C6-C10	100
F2 PHC C10-C16	440
F3 PHC C16-C34	920
F4 PHC C34-C50 (max)	490
Fluoranthene	1.9
Fluorene	0.25
Indeno(1,2,3-cd)pyrene	0.97
Lead	320
Magnesium	130000
Mercury	0.87
Molybdenum	8.2
Naphthalene	0.64
n-Hexane	0.36
Phenanthrene	2.5
Pyrene	1.6
Selenium	5
Sodium	1000
Strontium	1500
Styrene	0.3
Sulphate	21000
Sulphur	10000
Toluene	1.4
Uranium	3.2
Xylenes, Total	4
Conductivity (mS/cm)	3

Schedule 'A': Table 2A: pH AREA - Target Capping Soil Concentrations

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
2-(1-)Methylnaphthalene	3.2	160
Acenaphthene	3.9	3.9
Acenaphthylene	22	27
Acetone	25	25
Anthracene	7.6	7.6
Antimony	1.3	19

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
Arsenic	18	54
Barium	670	790
Benzene	0.32	11
Benzo(a)anthracene	1.3	4.5
Benzo(a)pyrene	0.3	3.6
Benzo(b/j)fluoranthene	3.8	3.8
Benzo(g,h,i)perylene	1.8	1.8
Benzo(k)fluoranthene	1.3	1.3
Beryllium	3.2	3.2
Boron	61	61
Cadmium	1.8	1.8
Calcium	420000	420000
Chloride	58000	58000
Chloroform	0.05	2.5
Chromium	70	630
Chromium VI	0.66	2.5
Chrysene	3.8	3.8
Cobalt	100	260
Conductivity (mS/cm)	1.4	100
Copper	300	760
Dibenz(a,h)anthracene	0.22	0.51
Ethylbenzene	4.6	4.6
F1 PHC C6-C10	280	280
F2 PHC C10-C16	260	730
F3 PHC C16-C34	2500	2500
F4 PHC C34-C50	2700	2700
Fluoranthene	9.4	9.4
Fluorene	27	27
Hot Water Ext. Boron (B)	2.0	6.2
Indeno(1,2,3-cd)pyrene	0.95	2.2
Lead	120	540
Magnesium	130000	130000
Manganese	1800	3400
Mercury	0.27	100
Methylene Chloride	2.0	2.5
Molybdenum	2.0	11
Naphthalene	3.7	340
Nickel	340	820
Phenanthrene	16	39
Pyrene	7.6	7.6
Selenium	1.5	5
Sodium	17000	17000

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
SAR (unitless)	12	1500
Strontium	190	190
Styrene	5.6	5.6
Sulphate	32000	32000
Tetrachloroethene	2.5	2.5
Toluene	3.4	3.4
Total PCBs	1.1	32
Uranium	3.4	3.4
Vanadium	86	240
Xylenes, Total	100	100
Zinc	340	1600

Note: ¹ – Where fill is required for capping or other purposes within 30m of the Property boundary, the Qualified Person will consider the potential for risk to an off-site residential receptor from vapour migration and may apply the Table 3 Residential Site Condition Standards for medium/fine textured soil as the target concentrations, if warranted

Schedule 'A': Table 2B: MAIN AREA - Target Capping Soil Concentrations

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
Anthracene	2.1	2.1
Arsenic	18	130
Benzene	0.4	0.8
Benzo(a)anthracene	1.3	1.8
Benzo(a)pyrene	0.3	0.84
Benzo(b/j)fluoranthene	1.2	1.2
Boron	120	240
Cadmium	1.9	2.8
Calcium	360000	360000
Chloride	42000	42000
Conductivity (mS/cm)	1.4	51
Cyanide, Free	0.11	0.15
F1 PHC C6-C10	260	260
F2 PHC C10-C16	260	3400
Hot Water Ext. Boron (B)	2.0	21
Iron	38000	50000
Lead	120	220
Magnesium	120000	120000
Mercury	20	43
Sodium	7400	7400
SAR (unitless)	12	43
Strontium	850	850
Sulphate	4400	4400
Sulphur	2800	2800

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
Total PCBs	1.1	1.6
Vanadium	86	180
Zinc	340	510

Note: ¹ – Where fill is required for capping or other purposes within 30m of the Property boundary, the Qualified Person will consider the potential for risk to an off-site residential receptor from vapour migration and may apply the Table 3 Residential Site Condition Standards for medium/fine textured soil as the target concentrations, if warranted

Schedule ‘A’: Table 2C: NORTHERN AREA - Target Capping Soil Concentrations

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
Calcium	54000	120000
Chloride	200	1000
Conductivity (mS/cm)	1.4	9.2
Magnesium	17000	21000
Sodium	200	2100
SAR (unitless)	12	25
Strontium	240	140
Sulphate	2.8	320

Note: ¹ – Where fill is required for capping or other purposes within 30m of the Property boundary, the Qualified Person will consider the potential for risk to an off-site residential receptor from vapour migration and may apply the Table 3 Residential Site Condition Standards for medium/fine textured soil as the target concentrations, if warranted

Schedule ‘A’: Table 2D: DOCKLANDS AREA - Target Capping Soil Concentrations

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
2-(1-)Methylnaphthalene	3.3	3.3
Acenaphthene	0.25	0.25
Acenaphthylene	0.25	0.25
Anthracene	0.45	0.45
Antimony	12	12
Arsenic	18	120
Barium	370	370
Benzene	0.16	0.16
Benzo(a)anthracene	1	1
Benzo(a)pyrene	0.3	1.3
Benzo(b/j)fluoranthene	1.5	1.5
Benzo(g,h,i)perylene	0.87	0.87
Calcium	360000	360000
Chloride	1800	1800
Conductivity (mS/cm)	2.7	3

<i>Soil Contaminant of Concern (COC)</i>	<i>Target Capping Soil Concentrations¹ (µg/g)</i>	<i>PSS (µg/g)</i>
Copper	110	110
Dibenz(a,h)anthracene	0.22	0.4
Ethylbenzene	0.05	0.49
F1 PHC C6-C10	100	100
F2 PHC C10-C16	260	440
F3 PHC C16-C34	920	920
F4 PHC C34-C50 (max)	490	490
Fluoranthene	1.9	1.9
Fluorene	0.25	0.25
Indeno(1,2,3-cd)pyrene	0.95	0.97
Lead	120	320
Magnesium	130000	130000
Mercury	0.87	0.87
Molybdenum	8.2	8.2
Naphthalene	0.64	0.64
n-Hexane	0.36	0.36
Phenanthrene	2.5	2.5
Pyrene	1.6	1.6
Selenium	5	5
Sodium	1000	1000
Strontium	1500	1500
Styrene	0.3	0.3
Sulphate	21000	21000
Sulphur	10000	10000
Toluene	1.4	1.4
Uranium	3.2	3.2
Xylenes, Total	4	4

Note: ¹ – Where fill is required for capping or other purposes within 30m of the Property boundary, the Qualified Person will consider the potential for risk to an off-site residential receptor from vapour migration and may apply the Table 3 Residential Site Condition Standards for medium/fine textured soil as the target concentrations, if warranted

Schedule 'A': Table 3A: pH AREA – Property Specific Standards (PSS) - Groundwater

<i>Groundwater Contaminant of Concern (COC)</i>	<i>PSS (µg/L)</i>
1,1,1,2-Tetrachloroethane	30
1,1,1-Trichloroethane	30
1,1,2,2-Tetrachloroethane	50
1,1,2-Trichloroethane	50
1,1'-Biphenyl	5.5
1,1-Dichloroethane	30
1,1-Dichloroethene	30

Groundwater Contaminant of Concern (COC)	PSS (µg/L)
1,2-Dibromoethane	50
1,2-Dichlorobenzene	50
1,2-Dichloroethane	50
1,2-Dichloropropane	30
1,3-Dichlorobenzene	50
1,3-Dichloropropene (cis and trans)	50
1,4-Dichlorobenzene	50
2-(1-)Methylnaphthalene	150
Acenaphthylene	5.4
Acetone	3000
Aluminum	520
Anthracene	42
Antimony	68
Arsenic	100
Barium	12000
Benzene	43
Benzo(a)anthracene	3.1
Benzo(a)pyrene	2.2
Benzo(b/j)fluoranthene	3.1
Benzo(g,h,i)perylene	2.5
Benzo(k)fluoranthene	2.5
Beryllium	50
Boron	8100
Bromodichloromethane	30
Bromoform	50
Bromomethane	100
Cadmium	13
Calcium	38000000
Carbon Tetrachloride	30
Chloride	94000
Chlorobenzene	30
Chloroform	30
Chromium	500
Chrysene	2.5
cis-1,2-Dichloroethene	30
Cobalt	100
Copper	100
Dibenz(a,h)anthracene	2.5
Dibromochloromethane	50
Ethylbenzene	1300
F1 PHC C6-C10	14000
F2 PHC C10-C16	6400

<i>Groundwater Contaminant of Concern (COC)</i>	<i>PSS (µg/L)</i>
F3 PHC C16-C34	1900
Fluoranthene	64
Indeno(1,2,3-cd)pyrene	150
Iron	30000
Lead	50
Lithium	15000
Magnesium	3700000
Manganese	49000
Mercury	0.84
Methyl ethyl ketone	1000
Methyl isobutyl ketone	1000
Methyl tert-butyl ether	50
Methylene Chloride	100
Molybdenum	210
Naphthalene	580
n-Hexane	100
Nickel	300
Phenanthrene	140
Potassium	1100000
Pyrene	37
Selenium	500
Silver	10
Sodium	46000000
Strontium	510000
Styrene	50
Sulphate	2000
Tetrachloroethene	30
Thallium	7
Tin	100
Titanium	500
Toluene	50
trans-1,2-Dichloroethene	30
Trichloroethene	30
Uranium	260
Vanadium	500
Vinyl Chloride	50
Xylenes, Total	2700
Zinc	500
Zirconium	100

Schedule 'A': Table 3B: MAIN AREA – Property Specific Standards (PSS) - Groundwater

<i>Groundwater Contaminant of Concern (COC)</i>	<i>PSS (µg/L)</i>
1,1,2,2-Tetrachloroethane	2
1,1,2-Trichloroethane	2
1,1-Dichloroethene	1
1,2-Dibromoethane	2
1,2-Dichloroethane	2
1,2-Dichloropropane	1
1,3-Dichloropropene (cis and trans)	2
1,4-Dichlorobenzene	2
Aluminum	370
Anthracene	6
Benzene	78
Bromomethane	5
Cadmium	4.3
Calcium	5200000
Carbon Tetrachloride	1
Chloride	16000
Chloroform	2.5
F1 PHC C6-C10	610
F2 PHC C10-C16	9400
F3 PHC C16-C34	4400
Iron	5000
Magnesium	1100000
Manganese	10000
Naphthalene	190
Potassium	36000
Silicon	14000
Silver	2.4
Sodium	5700000
Strontium	54000
Tetrachloroethene	1
Trichloroethene	1
Vinyl Chloride	2
Xylenes, Total	160

Schedule 'A': Table 3C: NORTHERN AREA – Property Specific Standards (PSS) - Groundwater

<i>Groundwater Contaminant of Concern (COC)</i>	<i>PSS (µg/L)</i>
Calcium	5700000
Chloride	12000

Schedule 'A': Table 4A: pH AREA - Target Indoor Air Concentrations

<i>Indoor Air Target Analytes</i>	<i>Target Indoor Air Concentration ($\mu\text{g}/\text{m}^3$)</i>
	<i>Industrial</i>
1,1,2,2-Tetrachloroethane	0.06*
1,1,2-Trichloroethane	0.14*
1,2-Dibromoethane	0.006*
1,2-Dichloroethane	0.14*
1,2-Dichloropropane	0.36*
Benzene	1.6
Bromomethane	3.6
Carbon Tetrachloride	0.6
Chloroform	0.67
Ethylbenzene	1.4
Naphthalene	0.11*
n-Hexane	500
Trichloroethene	0.4*
Vinyl Chloride	0.81*
PHC F1	8500
Aliphatic C6-C8	33000
Aliphatic C>8-C10	1800
Aromatic C>8-C10	360
PHC F2	1600
Aliphatic C>10-C12	1800
Aliphatic C>12-C16	1800
Aromatic C>10-C12	360
Aromatic C>12-C16	360

Note: * - Target concentration may not be achievable; TO-15 Method Reporting Limit (6-L canister) is reported to be $0.5 \mu\text{g}/\text{m}^3$. Discussion with MECP prior to the development and initiation of sampling program is recommended in order to confirm approach for COCs for which the target concentration cannot be achieved by commercial laboratories.

Schedule 'A': Table 4B: MAIN AREA - Target Indoor Air Concentrations

<i>Indoor Air Target Analytes</i>	<i>Target Indoor Air Concentration ($\mu\text{g}/\text{m}^3$)</i>
	<i>Industrial</i>
1,2-Dibromoethane	0.006*
Benzene	1.6
Bromomethane	3.6
Naphthalene	0.11*

PHC F1	8500
Aliphatic C6-C8	33000
Aliphatic C>8-C10	1800
Aromatic C>8-C10	360
PHC F2	1600
Aliphatic C>10-C12	1800
Aliphatic C>12-C16	1800
Aromatic C>10-C12	360
Aromatic C>12-C16	360

Note: * - Target concentration may not be achievable; TO-15 Method Reporting Limit (6-L canister) is reported to be $0.5 \mu\text{g}/\text{m}^3$. Discussion with MECP prior to the development and initiation of sampling program is recommended in order to confirm approach for COCs for which the target concentration cannot be achieved by commercial laboratories.

Schedule 'A': Table 5A: pH AREA - Target Soil Vapour Concentrations

<i>Soil Vapour Target Analytes</i>	<i>Target Soil Vapour Concentration</i> <i>($\mu\text{g}/\text{m}^3$)</i>
	<i>Industrial</i>
1,1,2,2-Tetrachloroethane	15
1,1,2-Trichloroethane	35
1,2-Dibromoethane	1.5
1,2-Dichloroethane	35
1,2-Dichloropropane	90
Benzene	400
Bromomethane	900
Carbon Tetrachloride	150
Chloroform	170
Ethylbenzene	350
Naphthalene	28
n-Hexane	130000
Trichloroethene	100
Vinyl Chloride	200
PHC F1	2100000
Aliphatic C6-C8	8300000
Aliphatic C>8-C10	450000
Aromatic C>8-C10	90000
PHC F2	410000
Aliphatic C>10-C12	450000
Aliphatic C>12-C16	450000
Aromatic C>10-C12	90000
Aromatic C>12-C16	90000

Schedule 'A': Table 5B: MAIN AREA - Target Soil Vapour Concentrations

<i>Soil Vapour Target Analytes</i>	<i>Target Soil Vapour Concentration ($\mu\text{g}/\text{m}^3$)</i>
	<i>Industrial</i>
1,2-Dibromoethane	1.5
Benzene	400
Bromomethane	900
Naphthalene	28
PHC F1	2100000
Aliphatic C6-C8	8300000
Aliphatic C>8-C10	450000
Aromatic C>8-C10	90000
PHC F2	410000
Aliphatic C>10-C12	450000
Aliphatic C>12-C16	450000
Aromatic C>10-C12	90000
Aromatic C>12-C16	90000

Schedule 'A': Table 6A: pH AREA - Target Groundwater Monitoring Concentrations

<i>Groundwater Target Analytes</i>	<i>Target Groundwater Concentrations ($\mu\text{g}/\text{L}$)</i>
1,1,2,2-Tetrachloroethane	1.8
1,1,2-Trichloroethane	2.8
1,2-Dibromoethane	0.2
1,2-Dichloroethane	1.1
1,2-Dichloropropane	9.9
Bromomethane	0.95
Carbon Tetrachloride	0.48
Ethylbenzene	270
Naphthalene	75
n-Hexane	5.9
Trichloroethene	1.2
Vinyl Chloride	0.5
PHC F1	58
PHC F2	97

Schedule 'A': Table 6B: MAIN AREA - Target Groundwater Monitoring Concentrations

<i>Groundwater Target Analytes</i>	<i>Target Groundwater Concentrations ($\mu\text{g}/\text{L}$)</i>
1,2-Dibromoethane	0.2

Benzene	2.8
Bromomethane	0.95
Naphthalene	75
PHC F1	58
PHC F2	97

Schedule 'A': Table 7: Proposed Groundwater Monitoring Program Summary

<i>Groundwater Monitoring Well ID</i>	<i>Location</i>	<i>Monitoring Requirements</i>	<i>Groundwater Monitoring Analytes and Target Concentrations</i>
MWRA-01	Upgradient side of Property in pH Area near eastern boundary	<ul style="list-style-type: none"> • Waterlevel measurements, • NAPL Monitoring, and • Groundwater Sampling 	Table 6A
MWRA-02 and MWRA-03	Downgradient of Main Area near Front Road	<ul style="list-style-type: none"> • Same as above 	Table 6B
MWRA-04	North and south Property lines to assess incoming GW on upgradient side and outflowing GW on downgradient side	<ul style="list-style-type: none"> • Same as above 	Table 6B
MWRA-05	towards north and south off-site residential properties	<ul style="list-style-type: none"> • Same as above 	Table 6A

Schedule ‘A’: Table 8: Building Types and Applicable Mitigation Approaches^c

<i>Building Type – New Construction</i>	<i>Is Building Foundation in Contact with Groundwater?</i>	<i>Vapour Mitigation Approach (es)^{a,b}</i>
Building with Slab-on-grade construction - Occupied and or constructed with vertical, belowgrade foundation walls, or both	Not Applicable	Passive subslab venting system, passive suction pit (plenum box) or vapour cut-off trench; vapour-proof barrier and sealing of penetrations
Building with Slab-on-grade construction – unoccupied and without vertical belowgrade foundation walls (i.e., storage shed)	Not Applicable	Vapour-proof barrier and sealing of foundation penetrations
Temporary Structures (such as tents and pedestal-mounted trailers)	Not Applicable	Vapour-proof barrier/impermeable membrane or sealed hard cap surface, and passive ventilation through an air space below a raised temporary flooring or through well-ventilated tent spaces
Parking garages under structures	Yes	Vapour-proof barrier and sealing of foundation penetrations and moisture protection
	No	Vapour-proof barrier and sealing of foundation penetrations and moisture protection
Other Basement (any below grade structure other than parking garages)	Yes	Passive submembrane venting layer and venting at the periphery of the foundation, vapour and water-proof barrier, sealing of foundation penetrations
	No	Passive subslab venting layer, vapour-proof barrier, sealing of foundation penetrations
Any Building/Structure constructed with a sump	Yes	Sealing, secured access, appropriate venting to exterior of structure

Notes:

- a. Detailed design will be based on actual building type/configuration and will be required to be designed and sized appropriately by a qualified Licensed Professional Engineer.
- b. Standard construction practices (that is, waterproofing versus sealing) may address vapour intrusion management requirements. It will be the responsibility of the qualified Licensed Professional Engineer to determine the acceptance of this approach.
- c. To be used in conjunction with Schedule ‘A’: Figure 7 - Vapour Intrusion RMM – Design, Construction and Monitoring & Maintenance Process

Schedule 'A': Table 9: Vapour Intrusion Risk Management Monitoring Requirements^e

<i>Monitoring Approach</i>	<i>Applicability</i>	<i>Performance Monitoring</i>	<i>Frequency</i>	<i>Measure of VI RMM effectiveness*</i>	<i>Contingency Activities (monitoring and Risk Management)</i>
Baseline Performance Assessment (Year 1)	Parking garages and unoccupied buildings with slab-on-grade construction and no vertical, below-grade foundation walls (such as storage sheds)	-Indoor air -Ambient air	One event before use to demonstrate effectiveness	Effective if Indoor Air Target Concentrations are met or other secondary sources (for example building interior sources) are determined to be the cause of exceedances of Indoor Air Target concentrations	If Table 4A or 4B (as applicable) targets are exceeded: <ol style="list-style-type: none"> 1. Evaluate data and determine if the concentrations of the observed Target Analytes are a result of soil vapour intrusion. 2. If observed concentrations are determined to be a result of soil vapour intrusion, resample to confirm within 10 business days (if negative, continue monitoring on regular schedule) . 3. If confirmation samples test positive, evaluate potential sources, modify the system, or implement contingency RMMs (for example make passive venting active) to address issue^c 4. Retest, as appropriate to demonstrate that Indoor Air Target concentrations are met and the system is effective. 5. Continue monitoring on regular schedule.
	Buildings with foundations that intersect the watertable	-Indoor air -Soil Vapour (near slab above water table) -Ambient air	One event before use and three subsequent quarterly events over 1 year ^b	Same as above	Same as above
	All other new construction except temporary structures ^a (such as tents and pedestal-mounted trailers)	-Indoor Air -Soil Vapour (sub-slab) -Ambient Air	Same as above	Same as above	Same as above

<i>Monitoring Approach</i>	<i>Applicability</i>	<i>Performance Monitoring</i>	<i>Frequency</i>	<i>Measure of VI RMM effectiveness*</i>	<i>Contingency Activities (monitoring and Risk Management)</i>
Confirmatory Monitoring ^d	Buildings with foundations that intersect the watertable	-Indoor air -Soil Vapour (near slab above water table) -Ambient air	Three events per year	Same as above	If Table 4A or 4B (as applicable) targets are exceeded: <ol style="list-style-type: none"> 1. Retest within 10 business days to confirm results. 2. If confirmation samples test positive, evaluate potential sources, modify the system, or implement contingency RMMs (for example make passive venting active) to address issue^c 3. Retest, as appropriate to demonstrate that Indoor Air Target concentrations are met and the system is effective. 4. Continue monitoring on regular schedule.
	All other new Building construction not containing a parking garage below the occupied space or meeting the definition of an unoccupied slab-on-grade building with no vertical, belowgrade foundation walls (such as a storage shed), except temporary structures ^a	-Indoor Air -Soil Vapour (sub-slab) -Ambient Air	Three events per year	Same as above	Same as above

Notes: * **Tables 4A and 4B are the benchmarks to be used for determining system effectiveness.**

- a. No monitoring is required for temporary structures placed at the RA property for a period of not more than 12 months
 - b. Buildings, other than those containing a parking garage below the occupied space must be monitoring for a minimum of 2 years (inclusive of baseline and confirmation periods)
 - c. If VI RMM contingencies are required, then indoor air sampling must be performed for a minimum of two events following implementation or systems with sub-slab depressurization (SSD)/sub-membrane depressurization (SMD) systems and one event following implementation for underground parking garage VI RMMs
 - d. At the end of two years, inclusive of baseline performance assessment, the decision may be made in consultation with a Qualified Person, to cease monitoring, if supported by data
 - e. To be used in conjunction with Schedule 'A': Figure 7 - Vapour Intrusion RMM – Design, Construction and Monitoring & Maintenance Process
- RMM – Risk Management Measure; VI – Vapour Intrusion

SCHEDULE 'B'
CERTIFICATE OF REQUIREMENT

s.197(2)
Environmental Protection Act

This is to certify that pursuant to Item 4.7 of Order number INSERT NUMBER issued by Sean Morrison, Director of the Ministry of the Environment, Conservation and Parks, under sections 18, 196 and 197 of the Environmental Protection Act, on [INSERT DATE], relating to the property municipally known as 381 Front Road North, Amherstburg, Ontario, N9V 2V5, (the "Order") and being legally described in Schedule "C" of the Order (the "Property") with respect to a Risk Assessment and certain Risk Management Measures and other preventive measure requirements on the Property

AMHERSTBURG LAND HOLDINGS LIMITED

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 Order, 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 Property.

Schedule 'C': Legal Description of the Property

Part of PIN 01544-1690 (R) – Part of Farm Lots 5, 6, 7 and 8, Concession 1, Part of Indian Stone Quarry Reserve, and Lot 1 and Part Lot 2 Block "C" Registered Plan 14, Town of Amherstburg (formerly Township of Anderdon) designated as Parts 2, 3, 4, 5, 6, 8, 10, 12, 13, 14, 15, 16, 18, 21, 22, 26, 28, 29, 30, 32 to 39 (inclusive), 42, 43 and 44 on Registered Plan 12R-26451, Amherstburg;

Together with Easement over Parts 6 and 7 on Plan 12R-9123 as in R1051249 and subject to R1051249;

Together with Easement over Parts 8 and 9 on Plan 12R-9123 as in R1045812 and subject to R1045812;

Together with Easement over Parts 2, 3, 4 and 5 on Plan 12R-9123 as in R1051250 and subject to R1051250;

Together with Easement over Parts 1 and 2 on Plan 12R-9165 in R1051248 and subject to 1051248;

Subject to R1082817; Subject to R1545382; Subject to R617977; Amherstburg;

Part of PIN 01544-2365 (LT) – Part of Lots 6, 7 and 8 Concession 1, Anderdon (Amherstburg); Part of Water Lots in front of Lots 6 to 8 Concession 1; Anderdon (Amherstburg); designated as Part 59 on Registered Plan 12R-26451; Amherstburg;

PIN 01544-1571 (LT) – Part of Lot 7 Concession 1 Anderdon designated as Part 60 on Registered Plan 12R-26451; Amherstburg;

Part of PIN 01544-1570 (LT) – Part of Lot 7 Concession 1 Anderdon; Part of Water Lot in front of Lot 7 Concession 1 Anderdon, designated as Part 46 on Registered Plan 12R-26451; Amherstburg;

PIN 01544-1583 (LT) – Lots 7-21 (inclusive) Block B on Plan 14 Anderdon; Part of Lots 1-6 (inclusive) Block B on Plan 14 Anderdon; Part of Lot 7 Concession 1 Anderdon, designated as Part 58 on Registered Plan 12R-26451; Amherstburg;

Part of PIN 01544-1558 (LT) – Part of Lot 8 Concession 1 Anderdon; Part of Lot 9 Concession 1 Anderdon, designated as Parts 52, 53, 54, 55, 56 and 57 on Registered Plan 12R-26451; Amherstburg; subject to R774431; subject to R190563; subject to the Rights of Owners of Adjoining Parcels, if any, under R774431; subject to R532456 and R658936; Together with an Easement over Part 1 on Plan 12R-24637 as in CE465626; Amherstburg;

PIN 01544-1367 (LT) – Part of Indian Stone Quarry Reserve Anderdon designated as Part 49 on Registered Plan 12R-26451; Amherstburg; Together with an Easement over Part 1 on Plan 12R-24637 as in CE465626; Amherstburg; and,

PIN 01544-1577 (LT) – Part of Lots 7 and 8, Concession 1 and Part of Indian Stone Quarry Reserve, Anderdon, designated as Parts 47 and 48 on Registered Plan 12R-26451; Amherstburg; Together with an Easement over Part 1 on Plan 12R-24637 as in CE465626; Amherstburg.

Schedule ‘C’: Table 1: Legal Description of the Risk Management Areas

Area	PIN	Legal Description
Main	Part of 01544-1690 (R)	Parts 3, 4, 5, 8, 10, 12, 13, 14, 16, 18, 21, 22, 26, 28, 29, 30, 32 to 39 (inclusive), 42, 43 and 44 on Registered Plan 12R-26451 (Part of Lots 5, 6, 7 and 8, Concession 1, Lot 1 and Part of Lot 2, Block “C” Registered Plan 14, Concession 1, Part of Indian Stone Quarry Reserve)
	Part of 01544-1577 (LT)	Part 47 on Registered Plan 12R-26451 (Part of Lots 7 and 8, Concession 1)
Northern	01544-1367 (LT)	Part 49 on Registered Plan 12R-26451 (Part of Indian Stone Quarry Reserve)
	Part of 01544-1577 (LT)	Part 48 on Registered Plan 12R-26451 (Part of Lots 7 and 8, Concession 1, Part of Indian Stone Quarry Reserve)
	Part of 01544-1558 (LT)	Parts 52 to 57 (inclusive) on Registered Plan 12R-26451 (Part of Lots 8 and 9, Concession 1)
	01544-1583 (LT)	Part 58 on Registered Plan 12R-26451 (Part of Lots 1 to 6 (inclusive) and all of Lots 7 to 21 (inclusive) on Block “B” Registered Plan 14, and Part of Lot 7, Concession 1)
Docklands	Part of 01544-1570 (LT)	Part 46 on Registered Plan 12R-26451 (Part of Lot 7, Part of Water Lot in front of Lot 7, Concession 1)
	01544-1571 (LT)	Part 60 on Registered Plan 12R-26451 (Part of Lot 7, Concession 1)
	Part of 01544-2365 (LT)	Part 59 on Registered Plan 12R-26451 (Part of Lots 6, 7 and 8, Part of Water Lots in front of Lots 6, 7 and 8, Concession 1)
pH	Part of 01544-1690 (R)	Parts 2, 6, and 15 on Registered Plan 12R-26451 (Part of Lots 5, 6, 7 and 8, Concession 1)