

**Notes**  
**A. General**  
 1. This site plan is prepared under the Aggregate Resources Act (ARA) for a Class A licence for a pit below the ground water table and follows the Aggregate Resources of Ontario: Site Plan Standards August 2020, specifically Existing Features for all sites (Numbers 1-26 in the standards).

2. **Area Calculations:**  
 Licence Area: 44.8 hectares (110 acres)  
 Limit of Extraction: 27.5 hectares (67 acres)  
 3. All measurements shown are in metres unless specified otherwise.

**B. References**  
 1. Topographic information compiled by GeoOptic (a division of Aeon Egnor Ltd.) with supplementary information from the Ontario Digital Terrain Model (contains information licensed under the Open Government Licence - Ontario). Data from GeoOptic was produced from aerial photography that was flown on June 4, 2021. Mapping is produced in real world scale and coordinates (NAD83 UTM Zone 17N). Contour interval is 1m. All elevations are geodetic (CGVD2013 ht2).

2. Plan of Survey prepared by Delph & Jenkins North Ltd. (2018).

3. The subject lands are zoned Agricultural (A) and Natural Environment (NE) and subject to an Environmental Protection Overlay in the Township of Puslinch Comprehensive Zoning By-law 2018-023 (April 2018 and Revised January 2020).

4. Ontario GeoHub © King's Printer for Ontario, 2023.

5. Grand River Conservation Authority (GRCA) for adjacent wetlands and WSP for floodline extent and field verified wetlands.

6. Land use information compiled from 2021 imagery, site visits and client input.

**C. Drainage**  
 1. Surface drainage on and within 120 metres of the licence boundary is by overland flow in the directions shown on the plan view or by infiltration.

**D. Groundwater**  
 1. Based on the available groundwater elevation data, the maximum predicted water table on the site is 301.91 metres asl in the western edge of the extraction area (as measured at SP18-04) to 304.33 masl in the northern portion of the site (as measured at MW18-04). The water table slopes downward moving from east to west across the site.

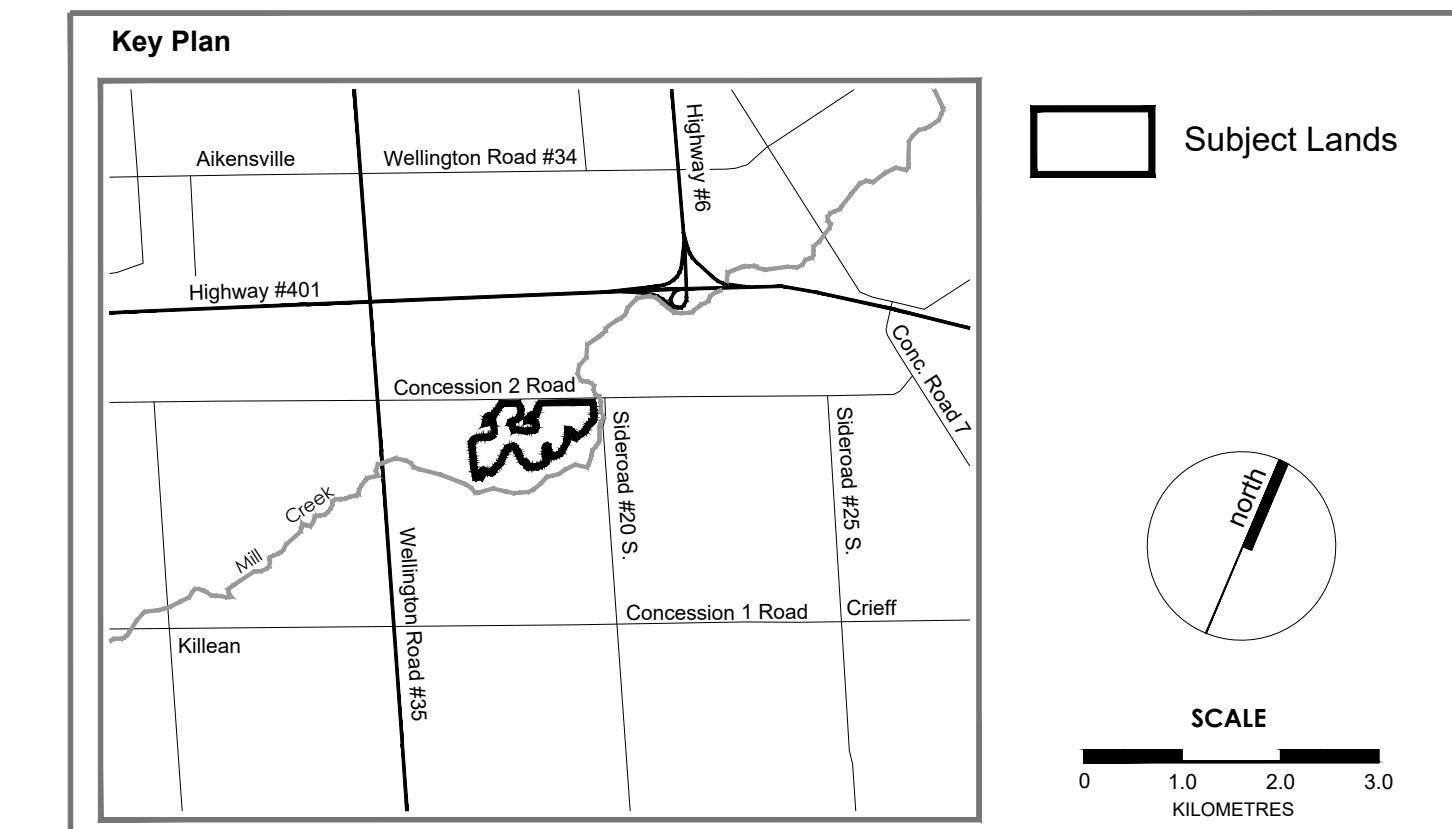
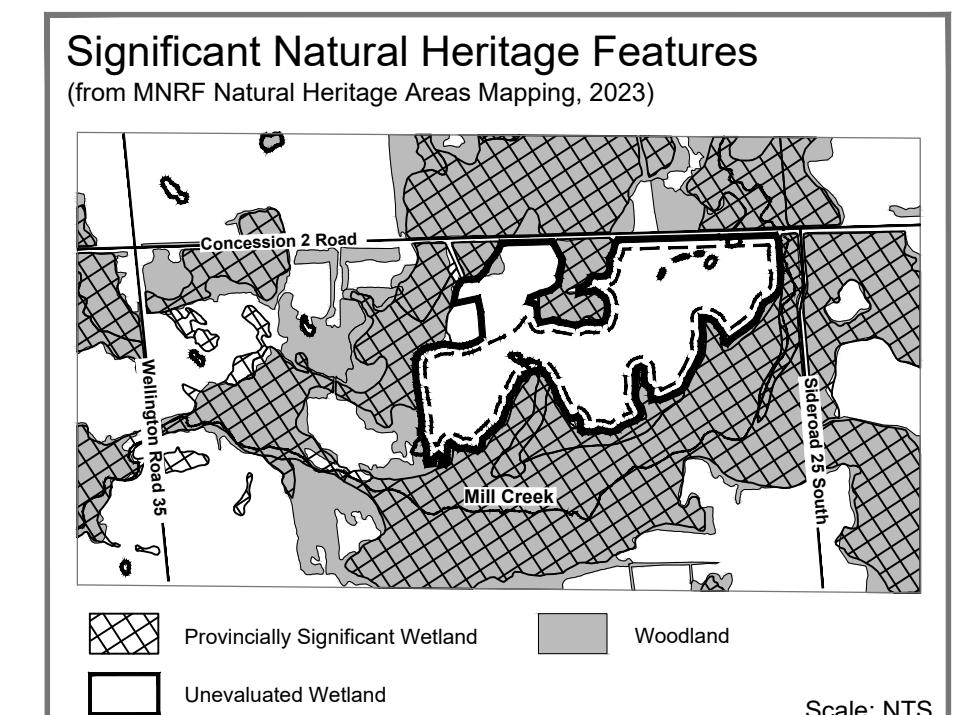
**E. Site Access and Fencing**  
 1. There are several existing field accesses to the site in the locations shown on the plan view.  
 2. Post and wire fencing (unless noted otherwise) exists in the locations shown on the plan view.

**F. Aggregate Related Site Features**  
 1. There are no existing aggregate operations or features on-site such as processing areas with stationary or portable equipment, stockpiles, recyclable materials, scrap, haul roads, fuel storage, berms or excavation faces.

**G. Significant Natural Features**  
 1. On-site: fish habitat (Tributary 3), unevaluated wetlands  
 2. Off-site within 120m: Mill Creek-Puslinch Provincially Significant Wetland, significant woodlands, endangered and threatened species habitat (little brown myotis, northern myotis, eastern small-footed myotis, tri-coloured bat and black ash), fish habitat and significant wildlife habitat.

**H. Cross Sections**  
 1. As shown on this page. Detailed sections are shown on page 5 of 5.  
 2. Cross section locations are identified on the plan view for each drawing.

**I. Report References**  
 1. Noise: "Noise Impact Assessment, Aberfoyle Pit Expansion" November 2023 (Source: WSP)  
 2. Natural Environment: "Natural Environment Report, Proposed Aberfoyle South Pit Expansion" November 2023 (Source: WSP)  
 3. Hydrogeology: "Water Report Level 1/2 Aberfoyle South Pit Expansion" November 2023 (Source: WSP)  
 4. Maximum Predicted Water Table Report: "Maximum Predicted Water Table Report" November 2023 (Source: WSP)  
 5. Archaeology: "Stage 1 and Archaeological Assessment, Revised Report" August 28, 2023 and "Stage 3 Archaeological Assessment (Locations 3 & 5)" June 1, 2023 (Source: WSP)  
 6. Traffic: "Revised Transportation Impact Study, CBM Aberfoyle South Lake Pit" February 2025 (Source: TYLin)  
 7. Agricultural Review: "Proposed Aberfoyle South Pit Expansion: Agricultural Considerations" September 2023 (Source: MHBC Planning)  
 8. Dust: "Best Management Practices Plan for the Control of Fugitive Dust at Aberfoyle South Pit Expansion" October 2023 (Source: WSP)  
 9. Supplemental Assessment of Potential Impacts to Provincially Significant Wetlands, October 21, 2025 (Source: WSP)  
 10. Hydrogeological and Ecological Monitoring Plan, October 21, 2025 (Source: WSP)  
 11. Supplemental Assessment of Potential Impacts to Baseflow in Mill Creek and Tributary 3, October 21, 2025 (Source: WSP)  
 12. Supplemental Assessment and Mitigation of Post-Rehabilitation Groundwater Uplift, October 21, 2025 (Source: WSP)



**Legal Description**  
 PART OF LOTS 18, 19 and 20  
 CONCESSION 1  
 (Geographic Township of Puslinch)  
 TOWNSHIP OF PUSLINCH  
 COUNTY OF WELLINGTON

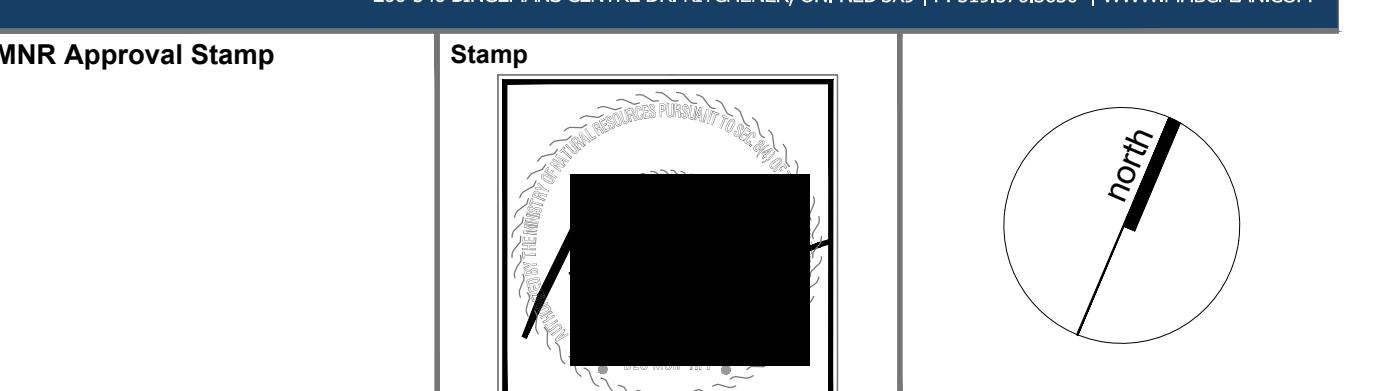
<b>Legend</b>		
	Boundary of Area to be Licensed	
	Additional Lands Owned by Applicant	
	Existing Fence POST & WIRE FENCE UNLESS OTHERWISE NOTED	
	Building/Structure LOCATION AND USE FOR BUILDINGS ON-SITE AND WITHIN 120m ARE SHOWN ON THIS PAGE	
	Public Road - Paved	
	Private Laneway	
	Direction of Surface Drainage (IF ANY)	
	Drainage Feature AS INDICATED	
	Parcel Fabric LOCATION APPROXIMATE	
	Archaeological Site SITE RECOMMENDED FOR FURTHER ARCHAEOLOGICAL FIELD WORK	
	Floodplain Extent WSP 2025	
	Groundwater Monitor	
	Cross Sections SEE PAGE 5 OF 5 FOR EXISTING AND REHABILITATED CROSS SECTIONS	

**Site Plan Amendments**

No.	Date	Description	By



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 Votorantim Cimento North America (VCNA)

**Project** **Aberfoyle South Lake Pit**

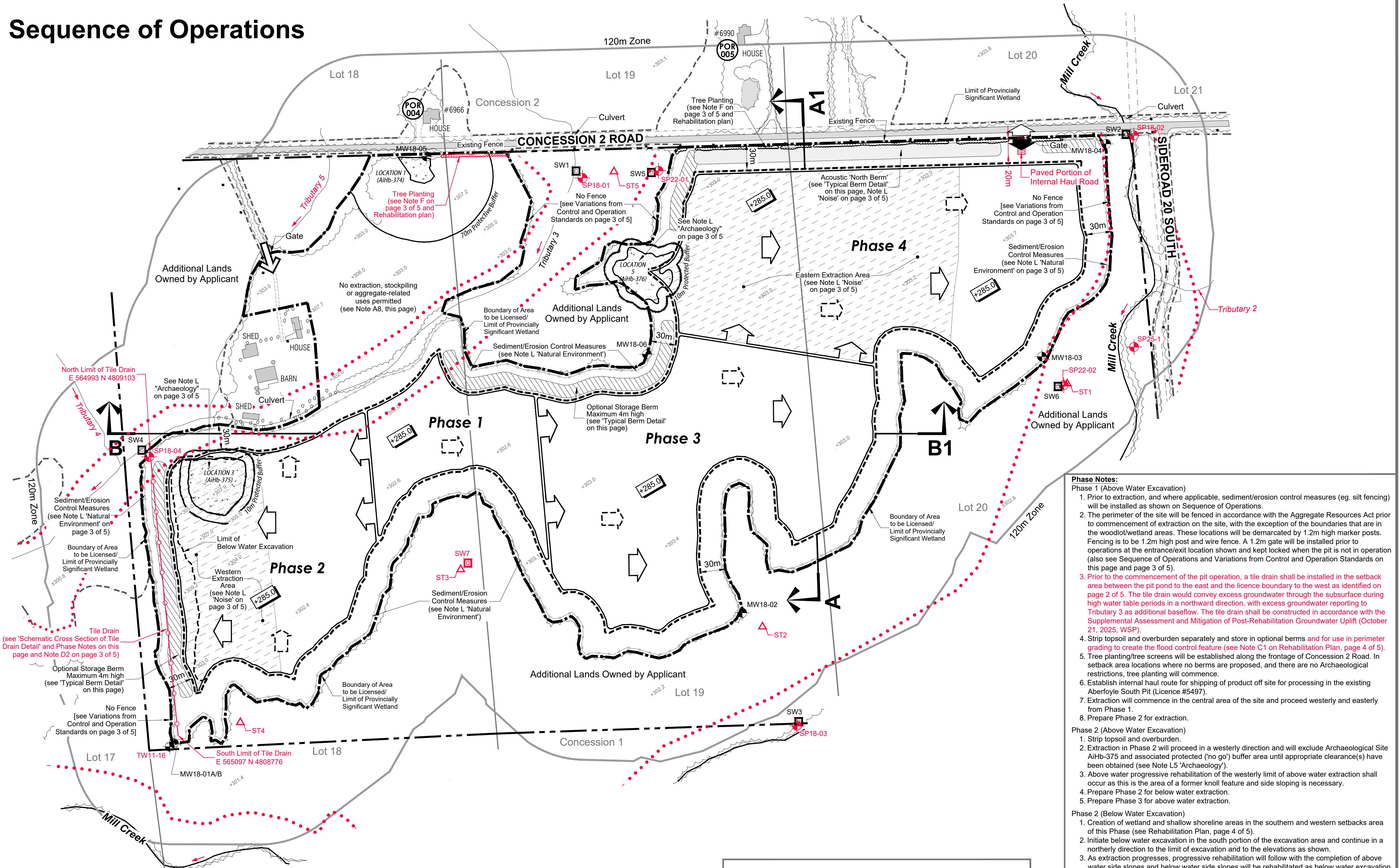
ARA Licence Reference No.	Pre-approval review:
	Rev. to address Agency and Public comments - Nov. 2025
	For application submission - November 2023
Plan Scale 1:2,500 (Arch D)	Plot Scale 1:2.5 [1mm = 2.5 units] MODEL
Drawn By D.G.S.	File No.
Checked By N.D.	

File Name **EXISTING FEATURES PLAN**

Drawing No. **1 OF 5**

K1Y321AB-CBM Aberfoyle South Lake Pit Expansion/AICBM Aberfoyle South Lake Pit Explan1of5 November2025 Agency and Public Comments.dwg

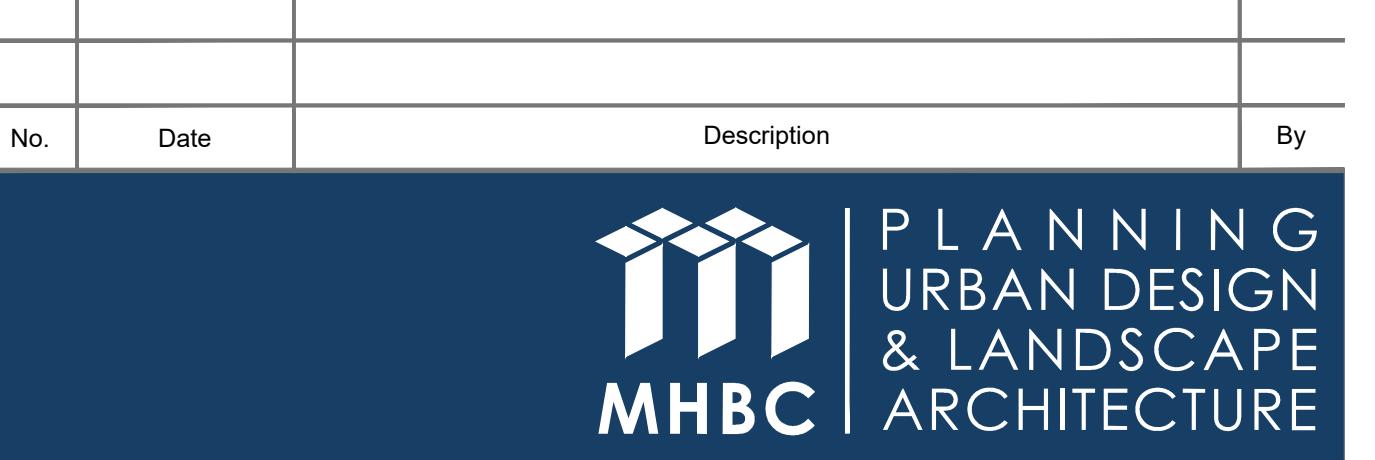
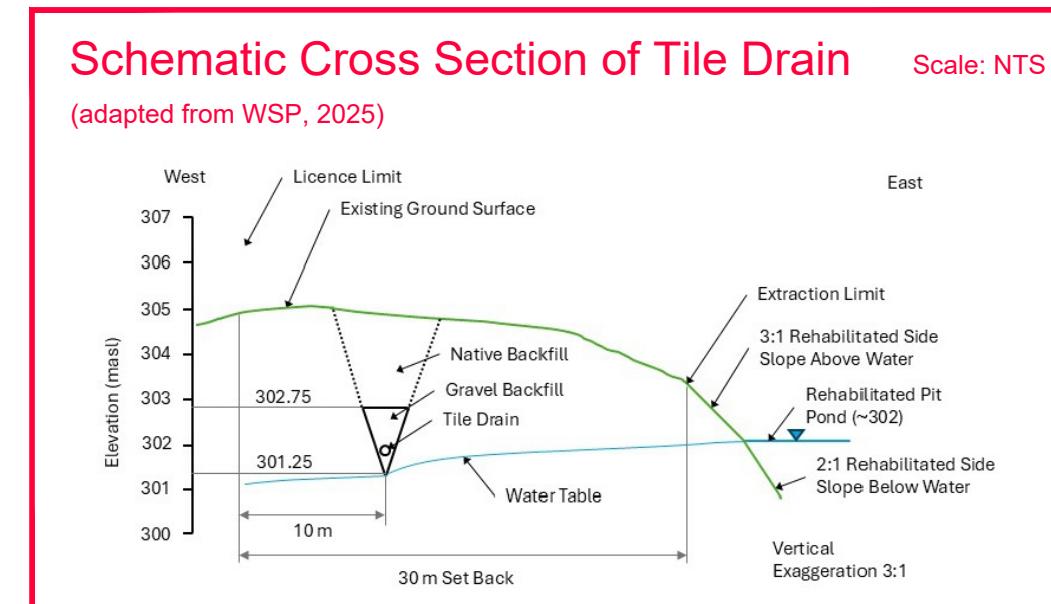
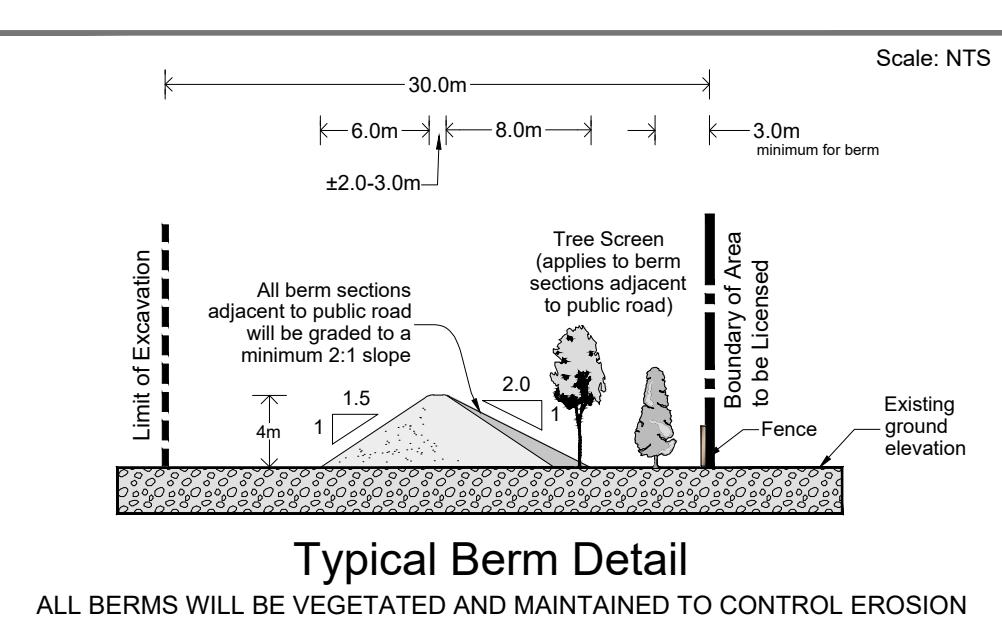
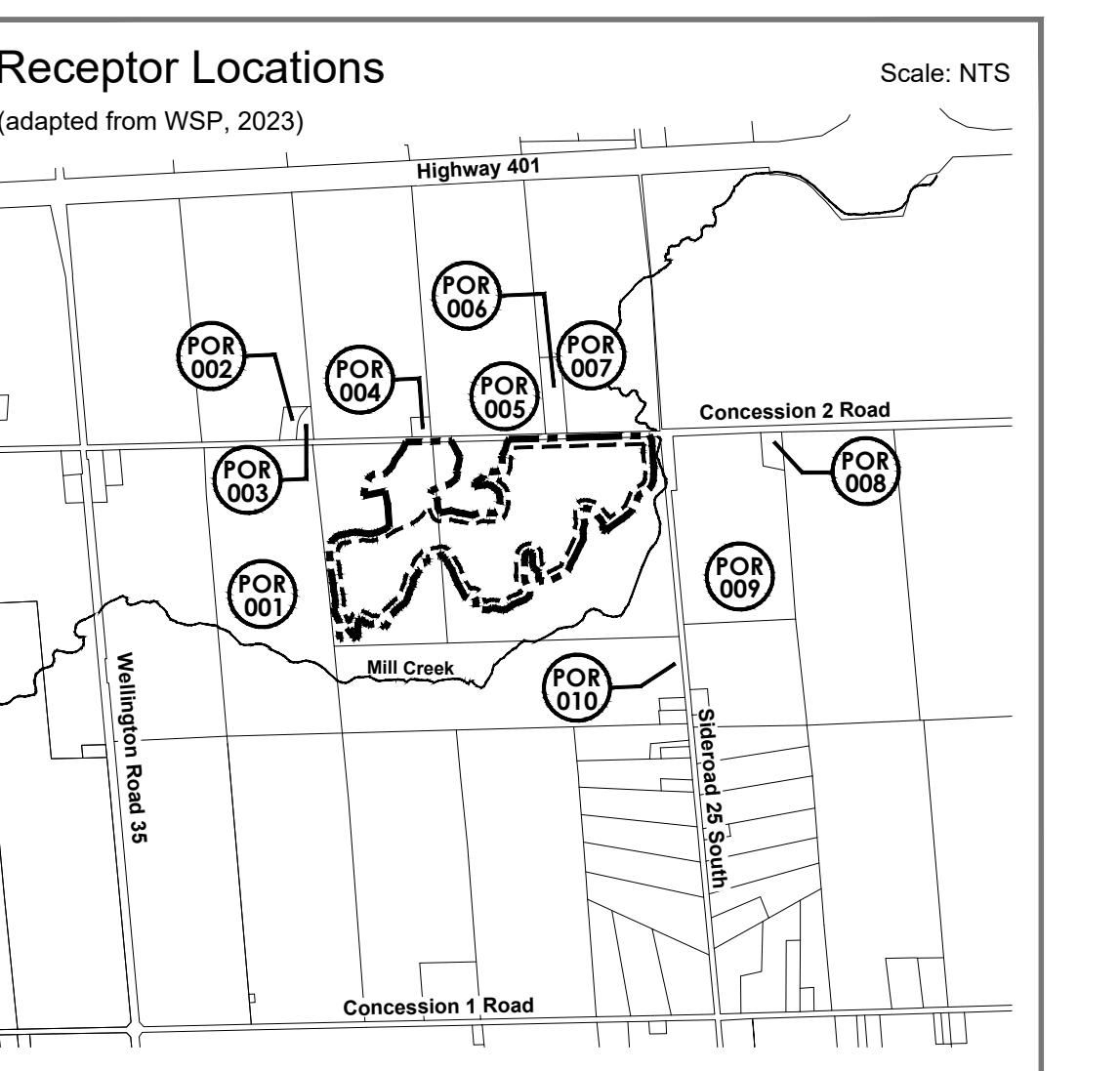
# Sequence of Operations



Legal Description  
PART OF LOTS 18, 19 and 20 CONCESSION 1  
(Geographic Township of Puslinch)  
TOWNSHIP OF PUSLINCH  
COUNTY OF WELLINGTON

<b>Legend</b>	
Boundary of Area to be Licensed	Limit of Excavation ALL SETBACKS ARE DRAWN TO SCALE AND SHOW LABELLED DISTANCES
Additional Lands Owned by Applicant	Operational Entrance/Exit MAINTAINED BY A GATE WHICH WILL BE CLOSED WHEN PIT IS NOT IN OPERATION
Field Access	General Direction of Above Water Excavation (SEE NOTES ON PAGE 3 OF 5)
Existing Spot Height Elevation +303.1	Below Water Excavation Limit METRES ABOVE SEA LEVEL (SEE NOTES ON THIS PAGE)
Existing Fence	Direction of Below Water Excavation (SEE NOTES ON PAGE 3 OF 5)
Existing Vegetation	Acoustic Berm SEE 'TYPICAL BERM DETAIL' AND NOTES ON THIS PAGE AND PAGE 3 OF 5
Drainage Feature	Optional Storage Berm SEE 'TYPICAL BERM DETAIL' AND NOTES ON THIS PAGE AND PAGE 3 OF 5
Parcel Fabric	Proposed Spot Elevation LOCATION APPROXIMATE
Archaeological Site	Receptor Locations WITHIN 120m OF THE SITE
Provincially Significant Wetland	Loader and Dragline Restrictions SEE NOTE L 'NOISE' ON PAGE 3 OF 5
Groundwater Monitor	Sediment/Erosion Control Measures
Surface Water Monitor	Tree Screen/Planting SEE NOTE F ON PAGE 3 OF 5
Cross Sections	Tile Drain WSP 2025

**Phase Notes:**  
Phase 1 (Above Water Excavation)  
1. Prior to extraction, and where applicable, sediment/erosion control measures (e.g. silt fencing) will be installed as shown in Sequence of Operations.  
2. The perimeter of the site will be fenced in accordance with the Aggregate Resources Act prior to commencement of extraction on the site, with the exception of the boundaries that are in the woodland/wetland areas. These locations will be demarcated by 1.2m high marker posts. Fencing will be 1.2m high post and wire fence. A 1.2m gate will be installed prior to operations at the entrance/exit location shown and kept locked when the pit is not in operation (also see Sequence of Operations and Variations from Control and Operation Standards on this page and page 3 of 5).  
3. Prior to the commencement of the pit operation, a tile drain shall be installed in the setback area between the pit pond to the east and the licence boundary to the west as identified on page 2 of 5. The tile drain would convey excess groundwater through the subsurface during high water table periods in a northward direction, with excess groundwater reporting to Tributary 3 as additional baseflow. The tile drain shall be constructed in accordance with the Supplemental Assessment and Mitigation of Post-Rehabilitation Groundwater Uplift (October 21, 2025, WSP).  
4. Strip topsoil and overburden separately and store in optional berms and for use in perimeter grading to create the flood control feature (see Note C1 on Rehabilitation Plan, page 4 of 5).  
5. Tree planting/tree screens will be established along the frontage of Concession 2 Road. In setback area locations where no berms are proposed, and there are no Archaeological restrictions, tree planting will commence.  
6. Establish internal haul route for shipping of product off site for processing in the existing Aberfoyle South Pit (Licence #5497).  
7. Extraction will commence in the central area of the site and proceed westerly and easterly from Phase 1.  
8. Prepare Phase 2 for extraction.  
Phase 2 (Above Water Excavation)  
1. Strip topsoil and overburden.  
2. Extraction in Phase 2 will proceed in a westerly direction and will exclude Archaeological Site AIIb-375 and associated protected ('no go') buffer area until appropriate clearance(s) have been obtained (see Note L5 Archaeology).  
3. Above water progressive rehabilitation of the westerly limit of above water extraction shall occur as this is the area of a former knoll feature and side sloping is necessary.  
4. Prepare Phase 2 for below water extraction.  
5. Prepare Phase 3 for above water extraction.  
Phase 2 (Below Water Excavation)  
1. Creation of wetland and shallow shoreline areas in the southern and western setbacks area of this Phase (see Rehabilitation Plan, page 4 of 5).  
2. Initiate below water excavation in the south portion of the excavation area and continue in a northerly direction to the limit of excavation and to the elevations as shown.  
3. As extraction progresses, progressive rehabilitation will follow with the completion of above water side slopes and below water side slopes will be rehabilitated as below water excavation proceeds.  
Phase 3 (Above Water Excavation)  
1. Strip topsoil and overburden.  
2. Above water extraction will proceed in an easterly direction.  
3. Prepare Phase 1 for below water extraction.  
Phase 3 (Below Water Excavation)  
1. Creation of wetland and shallow shoreline areas in the northern setback area of this Phase (see Rehabilitation Plan, page 4 of 5).  
2. Below water extraction will follow the same direction as above water extraction and proceed in an easterly direction to the depths (pit floor) shown on the Sequence of Operations.  
3. Initiate progressive rehabilitation of below water side slopes from a west to east direction as operations progress.  
4. Prepare Phase 3 for below water extraction.  
Phase 4 (Above Water Excavation)  
1. Prior to extraction in Phase 4, the acoustic berm ('North Berm') must be completed to the requirements outlined in Note L 'Noise' on page 3 of 5.  
2. Strip topsoil/overburden.  
3. Above water extraction will proceed in an easterly direction.  
4. Creation of shallow shoreline areas in the southern setback area of this Phase (see Rehabilitation Plan, page 4 of 5).  
5. Prepare Phase 4 for below water extraction.  
Phase 4 (Not Shown)  
1. Remove any equipment, haul roads and buildings on site.  
2. Final rehabilitation to be completed (see Rehabilitation Plan on page 4 of 5).



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**Project** **Aberfoyle South Lake Pit**

ARA Licence Reference No.	Pre-approval review:
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Plan Scale 1:2,500 (Arch D)	Plot Scale 1:2.5 [1mm = 2.5 units] MODEL
SCALE	
0 25 50 METRES	
Drawn By D.G.S.	File No.
Checked By N.D.	
File Name	
<b>OPERATIONAL PLAN</b>	
<b>2 OF 5</b>	
Drawing No.	

K/Y321AB-CBM Aberfoyle South Lake Pit Expansion/ACBM Aberfoyle South Lake Pit Operplan 2of5 November2025 Agency and Public Comments.dwg

**A. General**  
 1. This site plan is prepared under the Aggregate Resources Act (ARA) for a Class A licence for a pit below the ground water table and follows the Aggregate Resources of Ontario: Site Plan Standards August 2020, specifically Operations for all sites (Numbers 33-55 in the standards).  
 2. Area Calculations: Licence Area: 44.8 hectares (110 acres)  
 Limit of Excavation: 27.5 hectares (67 acres)  
 3. The maximum number of tonnes of aggregate to be removed from this property is 1,000,000 tonnes in any calendar year.  
 4. Based on the available groundwater elevation data, the maximum predicted water table on the site is 301.97 metres asl in the western edge of the extraction area (as measured at SP18-04) to 304.33 masl in the northern portion of the site (as measured at MW18-04). The water table slopes downward moving from east to west across the site. The existing water table elevations are shown on each cross section on page 5 of 5.  
 5. Setbacks will be as shown and labelled on the Sequence of Operations Diagram (page 2 of 5) and on the Existing Features Plan (page 1 of 5).  
 6. Agricultural use may continue in areas not under extraction.  
 7. Source Water Protection: The site lies within the Grand River Source Protection Area which is part of the Lake Erie Source Protection Region (LESPR). The Site is not proximal to any Wellhead Protection Area (WHPA) and is located outside the Wellhead Water Quantity Zone. The Site is currently classed as a Significant Groundwater Recharge Area (SGRA). No proposed on-site activities are considered to be significant drinking water threats (See also 'hydrogeology' notes on this page).  
 8. Aggregate extraction, stockpiling and aggregate-related uses are not permitted on the licensed lands between Tributary 3 and Concession Road 2. This area shall be retained in its current condition or used for natural restoration / enhancement, if required.

**B. Hours of Operation**

1. Extraction will occur during the daytime period (i.e. between 07:00 and 19:00).  
 2. Shipping hours are restricted to 07:00 to 18:00 on weekdays and 08:00 to 16:00 on Saturdays.

3. Activities used to prepare the site for excavation, such as stripping of topsoil, construction of the berms, or activities related to the rehabilitation of the site after extraction is completed are considered to be construction activities and are only permitted to occur during the daytime (i.e. 07:00 to 19:00) Monday to Friday except statutory holidays.

**C. Site Access and Fencing**

1. The existing field accesses may be utilized for monitoring, setback maintenance and agricultural access. The accesses shall be gated, kept closed during hours of non-operation and shall be maintained throughout the life of the licence. Aggregate trucks shall not be permitted to access the site at these locations.  
 2. The site shall be accessed through the operational entrance/exit as shown and it will be gated.  
 3. There is existing fencing along the Concession 2 Road frontage. This fencing will meet ARA requirements.  
 4. Portions of the licence boundary within the existing wetland/woodlot will not be fenced (see Note M 'Variations from Control and Operation Standards'). Where there is no fencing, 1.2m marker posts will be installed that are visible from one to the other.  
 5. Sediment/erosion control measures (e.g. silt fencing) shall be installed along the portions of the licensed boundary as shown on the Sequence of Operations between the area to be disturbed and the wetlands prior to commencement of work (see Note L 'Natural Environment').

**D. Drainage**

1. During above water excavation, surface drainage from active pit areas will be detained within the pit area. For below water excavation, drainage will be directed toward the pond area. Drainage will also percolate naturally through the soil.  
 2. Prior to the commencement of the pit operation, a tile drain shall be installed in the setback area between the pit pond to the east and the licence boundary to the west as identified on page 2 of 5. The tile drain would convey excess groundwater through the subsurface during high water table periods in a northerly direction, with excess groundwater reporting to Tributary 3 as additional baseflow. The tile drain shall be constructed in accordance with the Supplemental Assessment and Mitigation of Post-Rehabilitation Groundwater Uplift. The following mitigation measures shall be implemented for the tile drain construction and monitoring:  
 a. Strip topsoil and temporarily store separately from subsoils  
 b. Spoils piles should be stored on the east side of the trench away for the woodland and wetland edge  
 c. Erosion control setting silt fencing should be installed as required to ensure no erosion or sediment transport for the temporary spoils piles enter the wetland areas.  
 d. Work to be completed in the shortest period possible, limiting the period of open trench and spoil piles.  
 e. Work to be scheduled during period of forecasted low, or preferably no, precipitation periods.  
 f. Backfilling the original grade to be completed immediately after drain installation and subsoil replaced and topsoil used to cap the trench area.  
 g. The rehabilitation of the trench area and temporary work area will be restored and managed as outlined in the Supplemental Assessment and Mitigation of Post-Rehabilitation Groundwater Uplift (October 21, 2025 WSP).

**E. Site Preparation**

1. Prior to preparation, a Spills Contingency Plan shall be developed to address any potential spills from equipment on-site.  
 2. Timber resources will be salvaged for use as logs, fence posts and fuel wood where appropriate. Non-merchantable timber, stumps and brush may be used in for aquatic habitat enhancement or mulched for use in progressive rehabilitation. Excess material not required for uses mentioned above will be burned (with applicable permits).  
 3. Topsoil and overburden shall be stripped and stored separately in accordance with the Sequence of Operations diagram.  
 4. Excess topsoil and overburden not required for immediate use in the construction of acoustic berms or rehabilitation, may be temporarily stockpiled inside the licensed area. Topsoil and overburden stockpiles shall be located within the limit of excavation and remain a minimum of 30 metres from the licence boundary and 90 metres from a property with residential use (see Note M 'Variations').  
 5. Temporary topsoil and overburden stockpiles which remain for more than one year shall have their slopes vegetated to control erosion. Seeding shall not be required if these stockpiles have vegetated naturally in the first year.  
 6. **F. Berms and Screening**  
 1. Berms shall be constructed as specified in the location shown on the Sequence of Operations. The height shown is the minimum required for acoustic berms.  
 2. Berm side slopes shall not exceed 1.5:1 on the interior (extraction) side and 2:1 on the exterior side facing Concession 2 Road. See 'Typical Berm Detail' on page 2 of 5.  
 3. Berms shall not be located within three (3.0) metres of the licence boundary.  
 4. The proposed berm will be constructed in accordance with the 'Typical Berm Detail' on page 2 of 5 and will be vegetated and maintained to control erosion using a low maintenance grass/legume seed mixture (e.g. MTO Seed Mix) composed of Creeping Red Fescue, Perennial Ryegrass, Kentucky Bluegrass and White Clover. Temporary erosion control will be implemented as required.  
 5. Berms shall be maintained (vegetated to prevent erosion) throughout the operational life of the pit.  
 6. Optional storage berms may be constructed in the locations as shown.  
 7. Within 2 years of licence issuance, two rows of trees will be planted along the Concession 2 Road frontage adjacent to Phase 4 and across from 6966 Concession 2 Road (east side-of-site). Adjacent to Phase 4, the trees shall be planted in front of the berms to provide additional screening to the site. These two rows of trees will be planted in front of the berm required for noise attenuation during operations; to provide additional screening to the site. Native larch, white/balsam, white cedar and white pine shall be planted for the tree screens.  
 8. Existing vegetation within the setbacks shall be maintained except where noise attenuation berms are required or for the operational entrance/exit.

**G. Extraction Sequence**

1. The operational plan depicts a schematic operations sequence for this property. Phases do not represent any specific or equal time period. The direction of extraction will be in accordance with the Sequence of Operations diagram shown on page 2 of 5. All extraction, processing and transportation equipment operating within these phases shall comply with the restrictions identified in Note L 'Noise'.  
 2. Progressive and final rehabilitation will be completed in direct correlation to the development of the pit as the extraction limits in each Phase are reached and enough area is available to ensure that rehabilitation activities will not interfere with the production and stockpiling of aggregate materials (see also Phase Notes on page 2 of 5). Notwithstanding the operation and rehabilitation notes, demand for certain products or blending of materials may require minor deviations in the extraction and rehabilitation sequence. Any major deviations from the operations sequence shown will require approval from MNRF.

3. See Phase Notes on page 2 of 5 for details.

**H. Extraction Details**

1. The maximum depth of extraction is as shown as spot elevations and extraction will occur in up to 2 lifts through the four phases as shown on the Sequence of Operations Diagram on page 2 of 5 and in accordance with the Ministry of Labour requirements. The proposed pit floor will be located at an elevation of 285 masl or 22 m to 24 m below the existing ground surface.  
 2. For the majority of the site, the groundwater table is near the ground surface. While some above water excavation may occur across the site, this excavation will take place in one lift of a maximum height of 5m in the western portion of Phase 1. Below water excavation will take place in one lift of a maximum height of 20m, which would be the maximum depth of extraction. See Rehabilitation Plan (page 3 of 5) and Cross Section Plan (page 5 of 5) for excavation depths and final rehabilitation contours.  
 3. Aggregate stockpiles will move throughout the life of the operations of the pit. Stockpiles will not be located within 30m of the Licensed boundary.  
 4. There will be no aggregate processing or recycling at this pit.  
 5. Internal haul road locations will vary as extraction progresses through the site.

**I. Equipment and Processing**  
 1. The equipment used on site for aggregate operations may include: Highway Trucks, Loaders (2), Dragline, Excavator/Backhoe.

2. There will be no aggregate processing on site. Processing will be carried out at other CBM licences.

**J. Fuel Storage**

1. Mobile fuel trucks will be used for fuelling of equipment. There will be no fuel storage on site (See also 'Hydrogeology' notes on this page).

**K. Scrap and Recycling**

1. No scrap will be stored on site.  
 2. No recycling activities will take place on site.

**L. Report Recommendations**

1. **Noise: "Noise Impact Assessment, Aberfoyle Pit Expansion" November 2023 (Source: WSP)**  
 a. Prior to extraction in Phase 4 a 4m high berm shall be installed (North Berm).  
 b. Within the area identified on the Sequence of Operations [western and eastern extraction areas], the loader operations will be reduced to 45 minutes per 1-hour period. Once the North Berm is in place, the loaders could operate for the full 60 minutes during any given 1-hour period in Phase 4 [eastern extraction area].  
 c. Dragline operating 'under load' for a maximum of 45 minutes per hour and the engine will generally operate in low revolutions conditions (i.e. 'low rev') for the remaining 15 minutes per hour.  
 d. During the operations within the area identified on the Sequence of Operations [western and eastern extraction areas], the dragline will require noise controls (e.g. equipment mounted noise barrier or acoustically equivalent treatment) to reduce its noise emissions by a minimum of 5dB to target a sound power level as presented in Table 1 of the Noise Impact Assessment.  
 e. Extraction will occur during the daytime period (i.e. between 07:00 and 19:00).  
 f. For the extraction associated with the operations, the equipment will operate as specified above and in Section 2.0 of the Noise Impact Assessment and is expected to operate continuously except for the dragline or excavator/backhoe and loaders (i.e. within identified areas) expected to operate "under load" up to 45 minutes in a given 1-hour period and under 'low-rev' condition for the remaining 15 minutes in the hour.  
 g. When an excavator/backhoe will be used to support extraction operations a dragline shall not be in operation.  
 h. An excavator or backhoe will be permitted to operate as a replacement for a dragline if the sound power level of the excavator/backhoe does not exceed 107 dBA.

i. Equipment shall be operated as intended by manufacturer specifications.

j. Equipment shall be maintained and kept in good condition.

k. Equipment shall be fitted with manufacturer specified and properly functioning noise control devices.

l. On-site roadways shall be maintained to limit noise resulting from trucks driving over ruts and potholes.

m. Alternative to narrow band back up alarms shall be investigated and used at the site provided they are found to meet the licensee's safety requirements.

n. Activities used to prepare the site for excavation, such as the stripping of topsoil, construction of the berm, or activities related to the remediation of the site after the extraction is completed as considered to be construction activities and are only permitted to occur during the daytime (i.e. 07:00 to 19:00) Monday to Friday except statutory holidays.

o. Prior to operations commencing, sound measurements of the equipment used on the site shall be undertaken to confirm maximum emission levels provided in Table 1 of the Noise Impact Assessment are not exceeded.

p. To confirm that sound levels from the site operations are in compliance with the MECP noise guideline limits, an acoustical audit shall be completed within six months of the start of extraction activities on the site.

Table 1: Facility Noise Source Summary

Source ID	Source Description	Quantity	Overall Sound Pwr level (dBA) <sup>(1)</sup>
Truck	Highway Truck	28 <sup>(4)</sup>	102
Loader 1	Loader	1	107 <sup>(2)</sup>
Loader 2	Loader	1	107 <sup>(2)</sup>
Dragline	Dragline	1	112
Dragline	Dragline Mitigated	1	107 <sup>(3)</sup>
Excavator/Backhoe	Excavator/Backhoe	1	<112

1) Values presented in Table 1 do not include adjustments that were considered in the modelling (i.e., time, weighting) where applicable.  
 2) Average sound power level representing various loader activities  
 3) Either a single form of mitigation (e.g. silencer, barrier) or combination of different types of noise mitigation  
 4) Number of one-way trips per hour

2. **Natural Environment: "Natural Environment Report, Proposed Aberfoyle South Pit Expansion" November 2023 (Source: WSP) and "Supplemental Assessment of Potential Impacts to Provincially Significant Wetlands" October 21, 2025, "Hydrological and Ecological Monitoring Plan" October 21, 2025 (Source: WSP)**

a. General Best Management Practices

Standard Best Management Practices to be followed during site preparation and operations to mitigate damage to the adjacent natural features include the following:

i. Clearly demarcate and maintain recommended setbacks on the site plan.

ii. To comply with the Migratory Birds Convention Act (MBCA), avoid removal of vegetation during the active season for breeding birds (April 1 - August 31), unless construction disturbance is preceded by a nesting survey conducted by a qualified biologist, if any active nests are found during the nesting survey, a buffer will be installed around the nest to protect against disturbance. Vegetation within the protection buffer cannot be removed until the young have fledged the nest.

b. Significant Wetland and Woodland

The following mitigation measures are recommended to minimize adverse indirect impacts on the adjacent significant wetland and significant woodland (i.e., Mill Creek-Puslinch PSW):

i. Implement a 30 m setback from Mill Creek-Puslinch PSW / significant woodland

ii. If gradients indicate there is potential for runoff to enter Mill Creek-Puslinch PSW, implementation of sediment and erosion controls will occur prior to commencement of operations to prevent the runoff of suspended solids into Mill Creek-Puslinch PSW. In particular, in such areas where potential runoff exists, silt fencing (or similar) will be installed along the dripline of Mill Creek-Puslinch PSW in those areas prior to commencement of activities within 30 m of Mill Creek-Puslinch PSW, including site preparation and vegetation clearing. The sediment and erosion control measures will be actively monitored and maintained for the duration of the proposed operations. Following rehabilitation of the areas adjacent to the PSW, the control measures will be removed.

iii. Where installed, silt fencing will be maintained for the duration of the operations phase adjacent to Mill Creek- Puslinch PSW and will include regular inspections for signs of damage or deterioration.

iv. Following rehabilitation adjacent to Mill Creek-Puslinch PSW, any silt fencing or other erosion/sediment controls that had been installed, will be removed from the site.

v. To avoid compacting the soil in the setback area (which can negatively impact tree roots) the use of heavy machinery should be minimized within 5 m of the dripline (where potential for root damage is most likely), particularly during wet periods (e.g., spring) when soil may already be saturated.

vi. Any berms located within the 30 m setback area must be located a minimum of 5 m from the dripline of the woodland to protect the critical root zone for the woodland.

vii. A minimum 35% (6.7 ha) of the non-aquatic portion of the licensed area will be rehabilitated to forest cover.

c. Fish Habitat

i. A DFO Request for Review will be submitted for Tributary #3.

ii. All requirements identified by DFO will be implemented.

d. Non-significant Wetlands

i. Replace 0.3 ha of wetland habitat as part of progressive rehabilitation. See Rehabilitation Plan on page 4 of 5.

e. **Monitoring**

i. Monitoring as recommended in the Water Report Level 1/2 (WSP-2023) will be implemented for the proposed extraction.

ii. Ecological Monitoring

i. To observe ecological conditions in the PSW, monitoring of the form and function of the wetland shall be carried out annually (in early summer) along the five Ecological Monitoring Survey Transects and detailed in the Hydrological and Ecological Monitoring Plan (WSP, 2025). Ecological monitoring shall begin one year prior to the start of aggregate extraction, and continue during the Operational Period, and end one year after the completion of site Rehabilitation. During the one year of monitoring prior to the start of aggregate extraction, monitoring will be carried out biannually (early summer and early fall) to provide baseline data for comparison to enhanced monitoring in the event this is required.

ii. In order to ensure effective monitoring of the Mill Creek fishery, existing baseline data and monitoring programs will be consolidated prior to the commencement of extraction activities. Identified gaps will be addressed to establish a comprehensive and robust baseline that serves as an essential reference point for evaluating the fishery during its operational phases. Ongoing monitoring will subsequently be conducted in response to hydrological conditions that may suggest potential ecological impacts.

iii. To effectively monitor the Mill Creek fishery, baseline monitoring shall be conducted prior to the start of extraction, with a particular focus on key ecological indicators such as Brown Trout spawning activity. This monitoring will serve as a critical reference point for evaluating the fishery during operational phases and will be presented to GRCA to ensure alignment with their current monitoring activities. Subsequent monitoring of the Mill Creek fishery will be conducted in response to hydrological conditions that indicate a potential ecological impact.

iv. The ecological monitoring involves the establishment of a combination of survey transects and associated fixed sample plots as outlined in the Hydrological and Ecological Monitoring Plan (WSP, 2025).

v. The following monitoring of the naturalization of the setback along the alignment of the tile drain will be undertaken:

• Monitor the site for signs of rill and other erosion until the area has stabilized and vegetation within the buffer has become established and self-sustaining;

• Monitor wetland edge for signs of erosion and sedimentation. Correct any potential issue and restabilize and plant areas; and

• Monitor the newly planting buffers for invasive species and if needed initiate an invasive species control program.

vi. Results of the monitoring program shall be reviewed by the licensee quarterly and reported to MNR annually as part of the licence requirements. Trends during Operations and Post-Rehabilitation shall be compared to Pre-Operational conditions. If the results of the monitoring program indicate the potential for adverse impacts to groundwater users (private wells), surface water features (Mill Creek and its tributaries) or to wetlands, then appropriate enhanced monitoring, and corrective actions shall be implemented, as outlined in the Hydrological and Ecological Monitoring Plan (WSP, 2025).

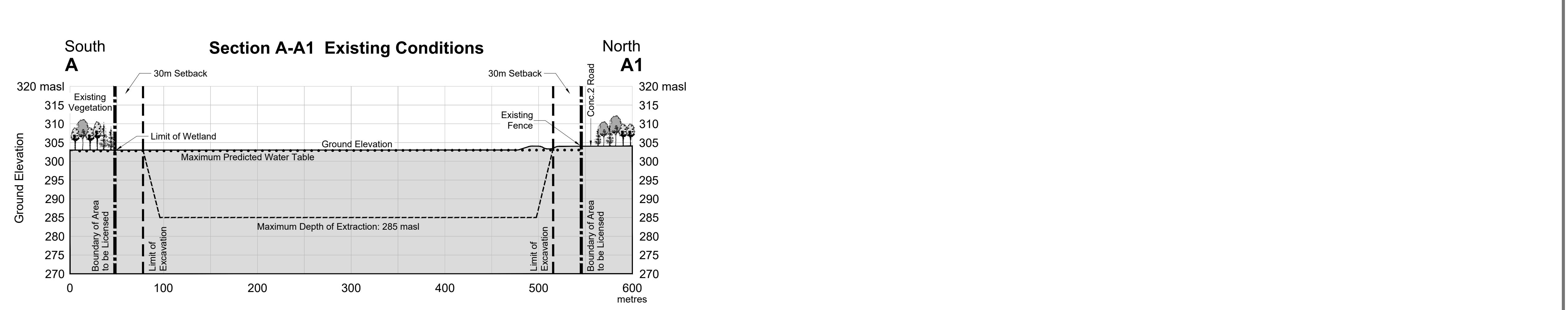
vii. Best Management Practices for the Protection, Creation and Maintenance of Bank Swallow Habitat in Ontario.

viii. A site-specific Best Management Practices with standard practices will be recommended to be prepared upon licence approval.

This will be a Wildlife Encounter Best Management Practices and includes training, signage, encounter procedure, site (exclusionary fencing if applicable) and equipment inspection, etc.

3. **Hydrogeology: "Water Report Level 1/2 Aberfoyle South Pit Expansion" November 2023, "Hydrological and Ecological Monitoring Plan" October 21, 2025 "Supplemental Assessment of Potential Impacts to Basewill in Mill Creek and Tributary 3" October 21, 2025 "Supplemental Assessment and Mitigation of Post-Rehabilitation Groundwater Uplift" October 21, 2025 (Source: WSP)**



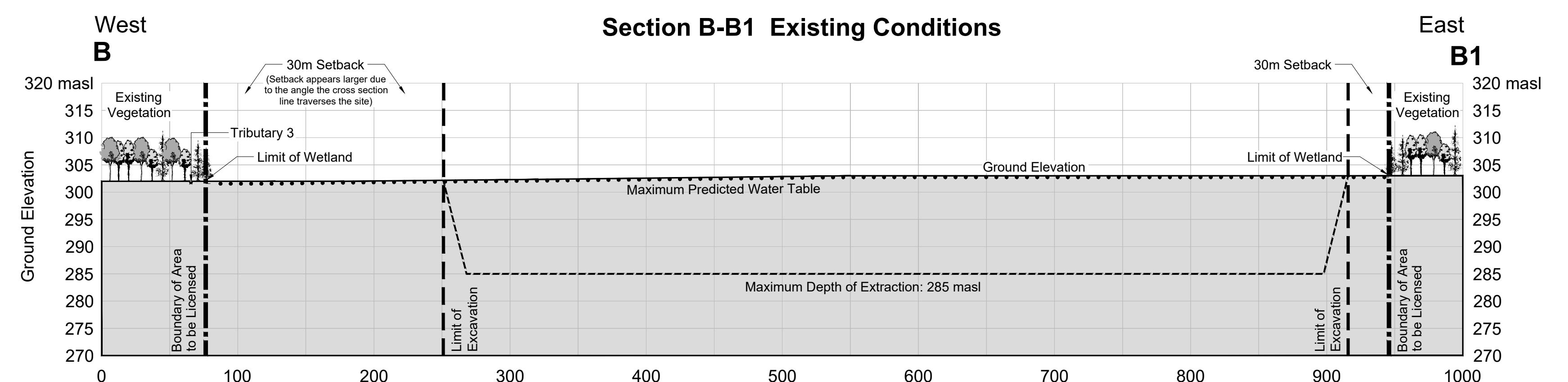
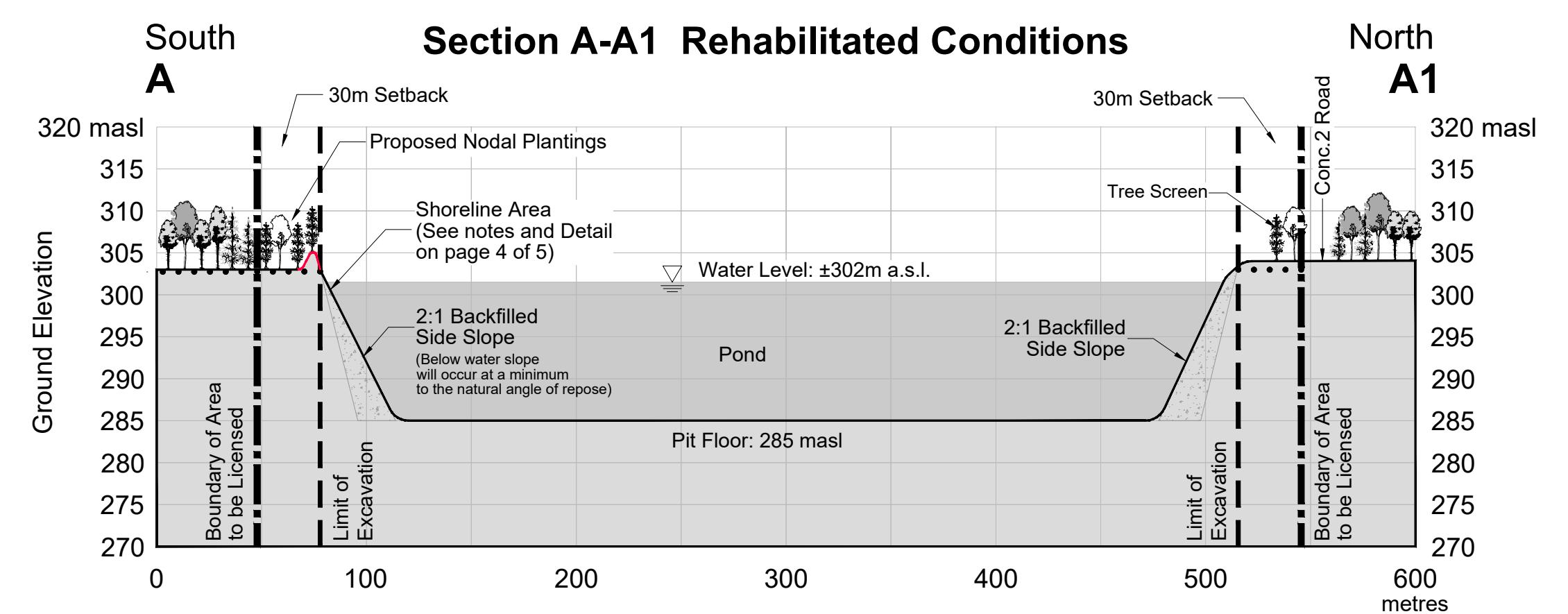


**Legal Description**  
PART OF LOTS 18, 19 and 20  
CONCESSION 1  
(Geographic Township of Puslinch)  
TOWNSHIP OF PUSLINCH  
COUNTY OF WELLINGTON

**Legend**

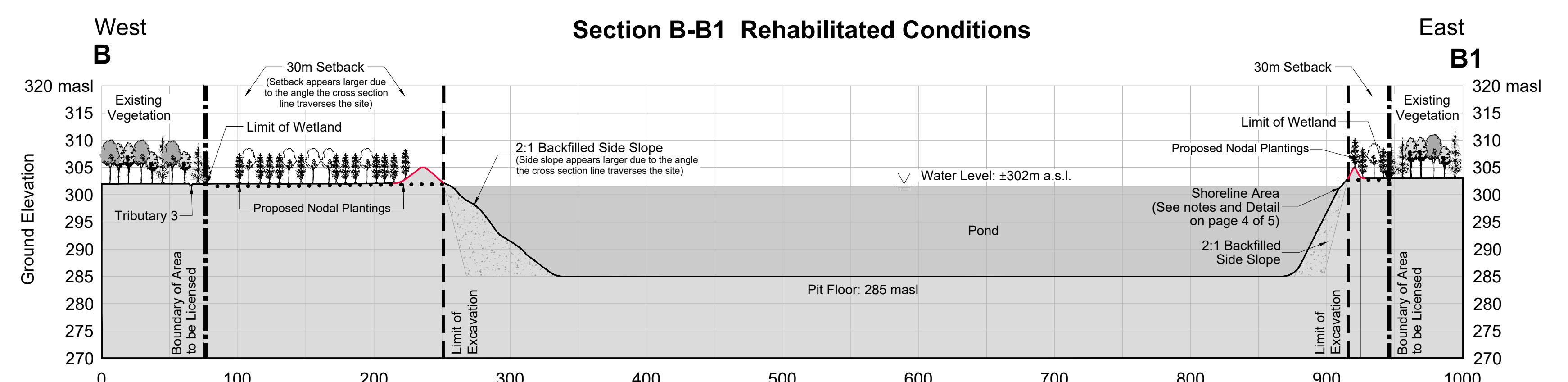
- Licensed Boundary
- Limit of Excavation
- Maximum Depth of Extraction
- Existing Vegetation/Trees
- Proposed Nodal Plantings
- Maximum Predicted Water Table (SEE NOTE D ON PAGE 1 OF 5)

**Cross Sections**  
SEE PAGES 1, 2 & 4 OF 5 FOR PLAN VIEW  
LOCATION OF CROSS SECTIONS



**Site Plan Amendments**

No.	Date	Description	By
 <b>MHBC</b> PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE 200-540 BINGEMANS CENTRE DR, KITCHENER, ON, N2B 3X9   P: 519.575.3650   WWW.MHBCPLAN.COM			
MNR Approval Stamp		Stamp	



For all Cross Sections  
Horizontal Scale - 1:2,500  
Vertical Scale - 4x Exaggeration (1:625)

**Project** **Aberfoyle South Lake Pit**

ARA Licence Reference No.	Pre-approval review:		
Revs. to address Agency and Public comments - Nov.2025			
For application submission - November 2023			
Plan Scale: 1:2,500 (Horizontal) / 4x Exaggeration (Vertical)	Plot Scale: 1:2.5 [1mm = 2.5 units] MODEL		
Horizontal Scale			
50	0 METRES	50	100
Drawn By D.G.S.	File No.		
Checked By N.D.	Y321AB		
File Name	<b>CROSS SECTIONS PLAN</b>		
Drawing No.	5 OF 5		

K:\Y321AB-CBM Aberfoyle South Pit Expansion\CBM Aberfoyle South Lake Pit Xsecplan 5of5 November2025 Agency and Public Comments.dwg