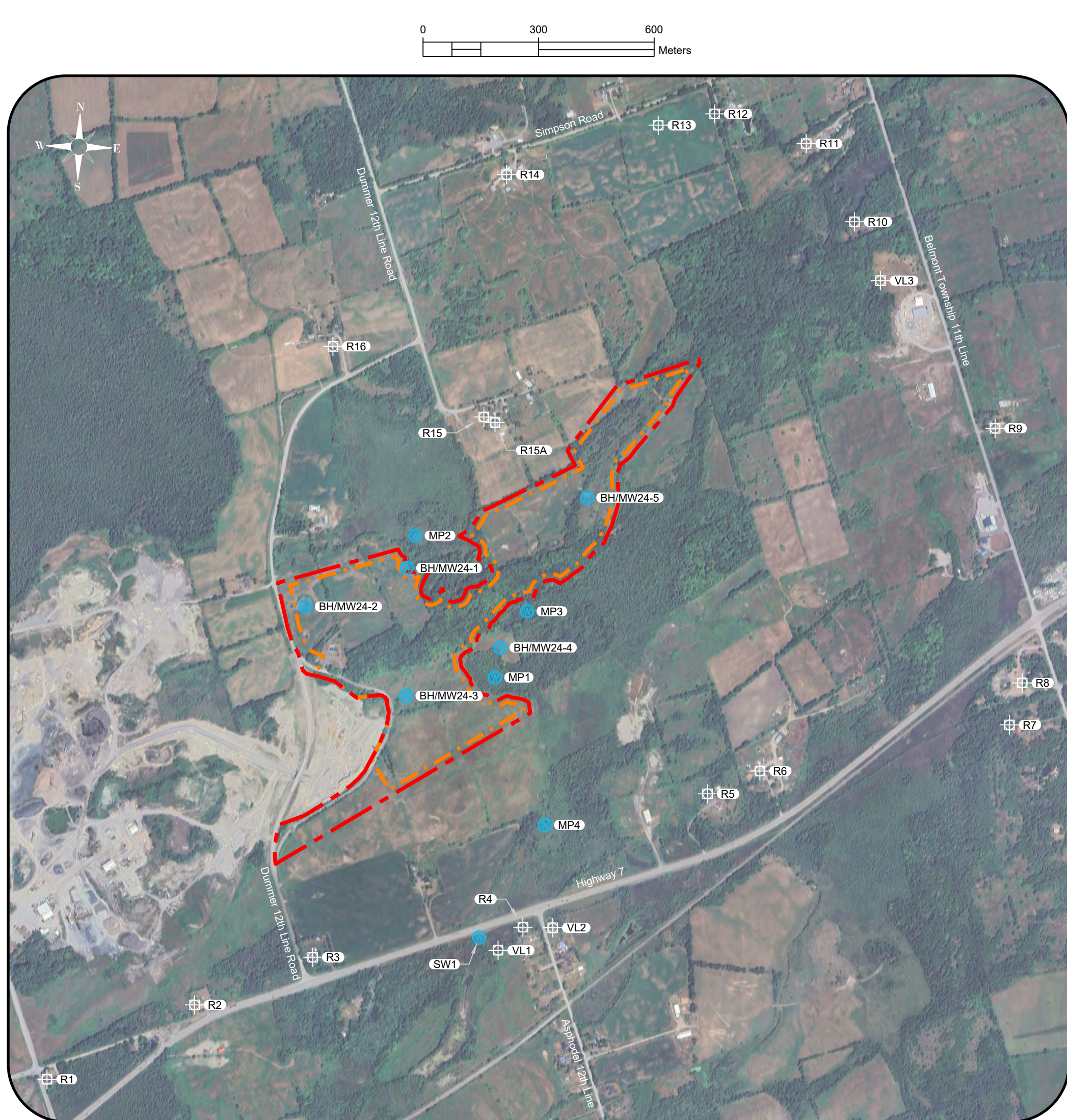


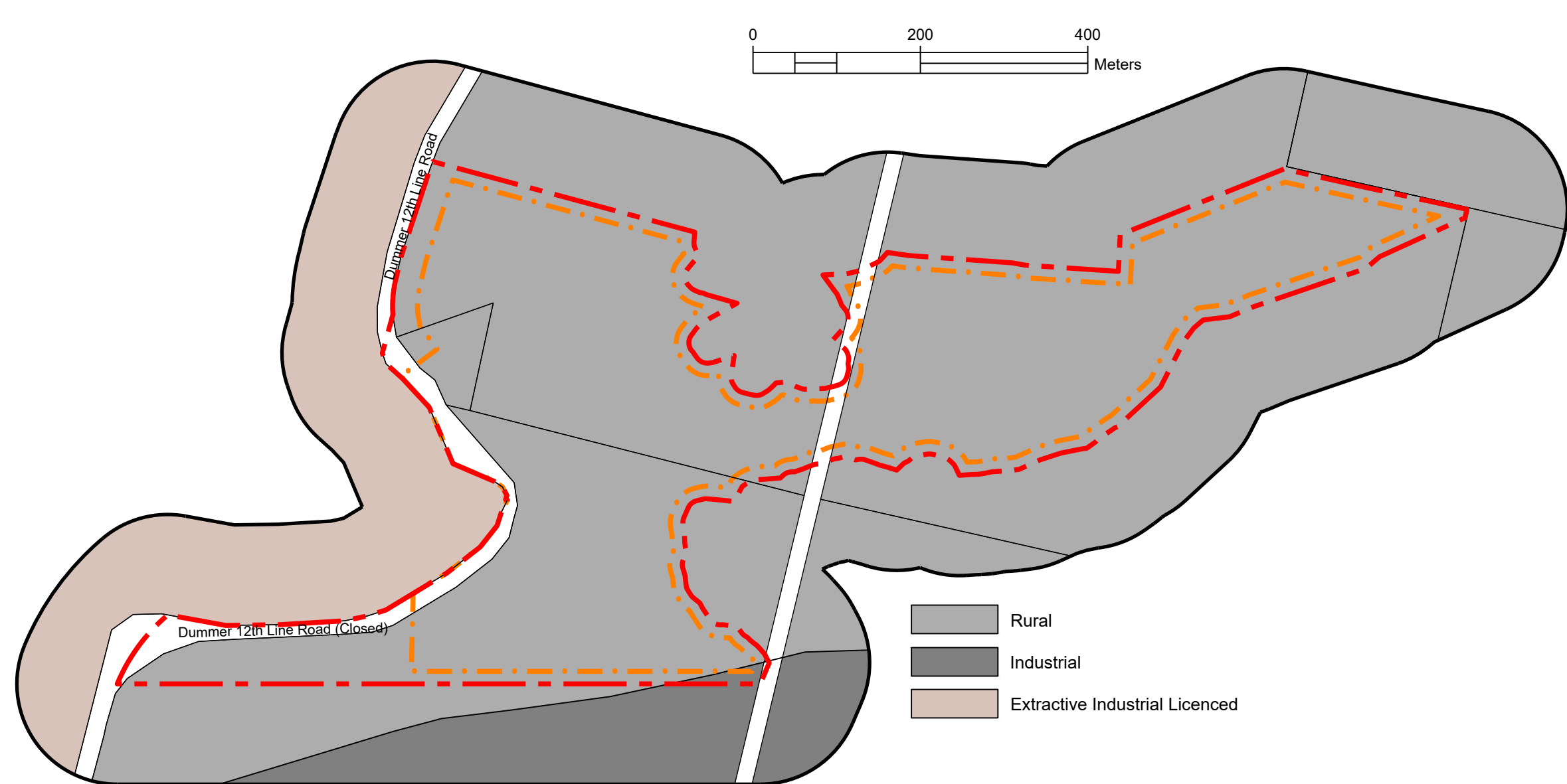
Receptor and Groundwater Monitoring Locations

Scale 1:10,000



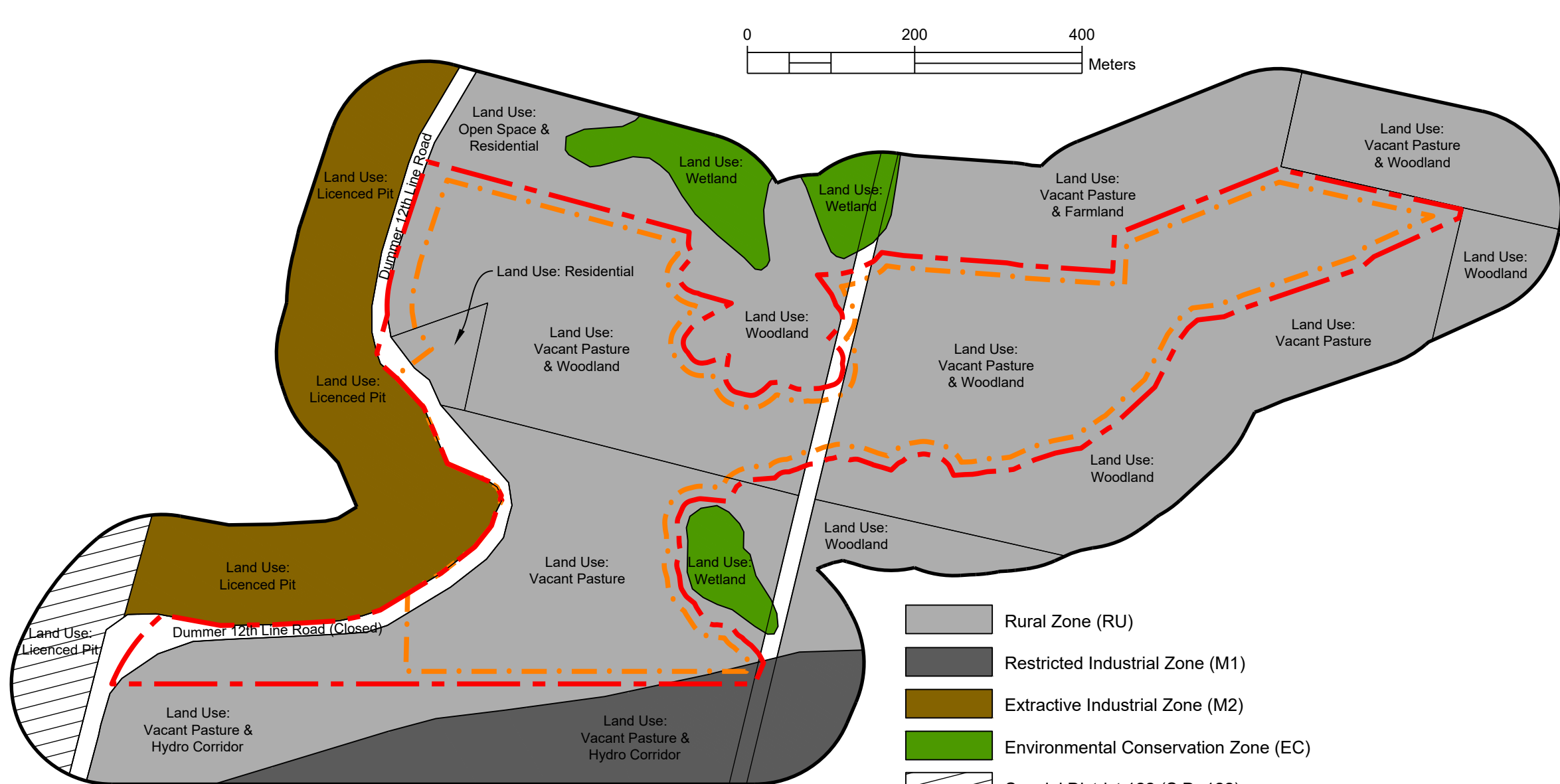
Land Use Designation Schematic

Scale 1:6000



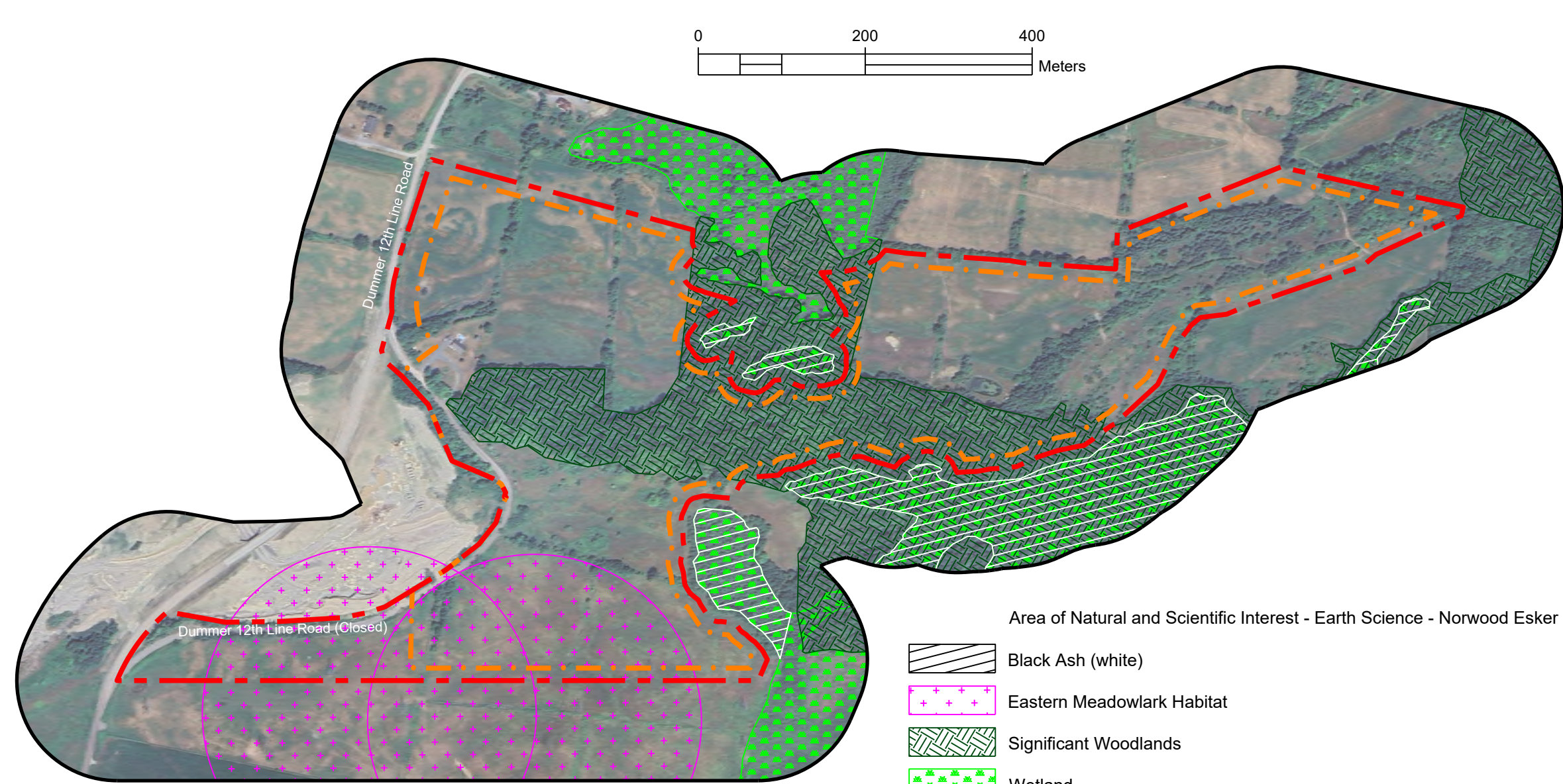
Zoning and Land Use Schematic

Scale 1:6000



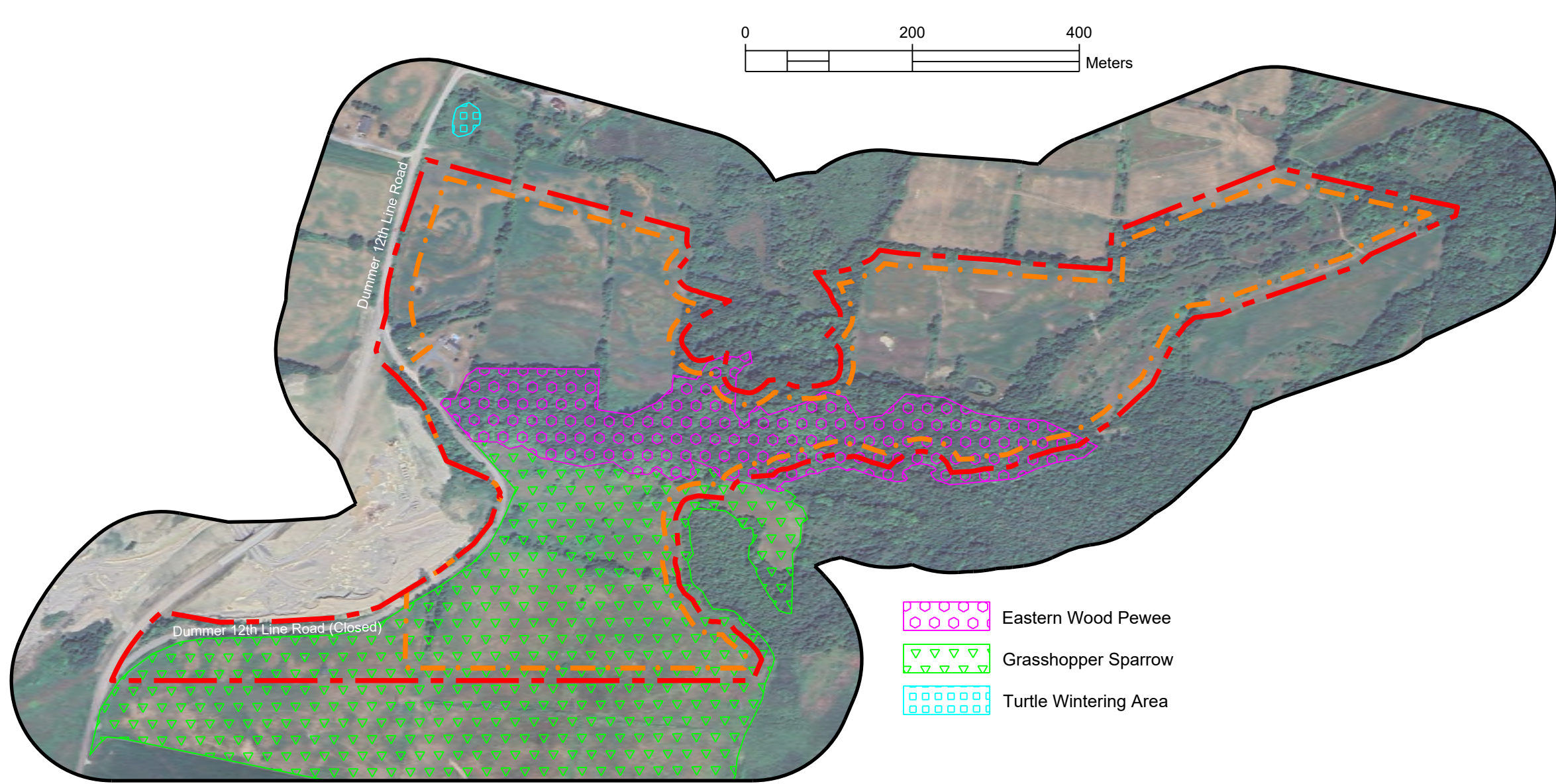
Key Natural Heritage Features Schematic

Scale 1:6000



Significant Wildlife Habitat Schematic

Scale 1:6000



A. General

- This site plan is prepared under the Aggregate Resources Act (ARA) for a Class 'A' Licence for a pit above the ground water table.
- Area Calculations:
 - Licence Boundary 36.7 hectares
 - Limit of Extraction 28.1 hectares

B. References

- Contours were obtained from the 2017 Ontario Digital Terrain Model (available through Geospatial Ontario), which is a raster data set representing the bare-earth terrain derived from a classified lidar point cloud, and are displayed in one metre intervals. Elevations shown are in metres above mean sea level (masl).
- Topographic information was obtained from numerous sources including Ontario GeoHub (Geospatial Ontario), Google Earth Pro aerial photography captured on July 15, 2025 and field investigations for technical reports.
- All topographic features and structures are shown to scale in North American Datum of 1983 (NAD83) Canadian Spatial Reference System (CSRS), Universal Transverse Mercator (UTM) Zone 18 North coordinate system. Units are in metres.
- The licence boundary was established using Teranet parcel fabric obtained through First Base Solutions, Plan of Survey 45R-17820 completed by Elliott and Parr (deposited in the Land Registrar on February 27, 2025) and a wetland survey completed by RiverStone Environmental Solutions Inc.
- Existing land use designations on and within 120 metres of the licence were obtained from Township of Douro-Dummer Official Plan, Schedule A4-2, dated February 2014. See the Zoning and Land Use Schematic on this drawing for additional information.
- Existing zoning on and within 120 metres of the licence was obtained from the Township of Douro-Dummer Comprehensive Zoning By-Law No. 10-1996, as well as Peterborough County's Let Me Map 2.0 website. The licence area is currently zoned Rural (RU) and Restricted Industrial (M1). See the Zoning and Land Use Schematic on this drawing for additional information.
- Land use information and structures identified on or within 120 metres of the licence boundary was determined using Google Earth Pro aerial photography captured on July 15, 2025.

C. Drainage

- Surface drainage on and within 120 metres of the licence boundary is by overland flow in the directions shown by arrows on the plan view, or by infiltration.
- There are no existing surface water diversions or discharge locations on-site.

D. Groundwater

- The maximum predicted water table within the limit of extraction varies between 221.5 and 224.0 masl and is shown in each cross section on drawing 3 of 3.

E. Site Access and Fencing

- Six access points exist in the locations shown on the plan view of this drawing. One of the access points is from Dummer 12th Line Road, one is from adjacent licence # 624922 and four are to access land to the north and south of the licence boundary. Only the access point from adjacent licence # 624922 is gated.
- Post and wire fencing (unless otherwise noted) exists in the locations shown on the plan view.

F. Significant Natural Features On and Within 120 Metres

- There are Significant Woodlands, Significant Wildlife Habitat, and Habitat for Endangered and Threatened Species, as determined by RiverStone Environmental Solutions Inc., within the licence boundary (see the Key Natural Heritage Features and Significant Wildlife Habitat schematics on this drawing for locations).
- There are Significant Woodlands, Significant Wildlife Habitat, and Habitat for Endangered and Threatened Species, as determined by RiverStone Environmental Solutions Inc., within 120 metres of the licence boundary (see the Key Natural Heritage Features and Significant Wildlife Habitat schematics on this drawing for locations).

G. Significant Human-Made Features on and Within 120 Metres

- There is an existing house and shed within the licence boundary.
- All existing buildings and structures within 120 metres of the licence boundary are identified on the plan view of this drawing.
- An existing pit operation (Licence # 624922) is located southwest of the licence, as shown on the plan view of this drawing.

H. Aggregate Related Site Features

- 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.

I. Cross Sections

- Cross sections depicting existing conditions are shown on drawing 3 of 3.
- Cross sections depicting post rehabilitation conditions are shown on drawing 3 of 3.
- Cross section locations are identified on the plan view of each drawing.

J. Technical Report - References

- Stage 1 and 2 Archaeological Assessment, Norwood Pit Expansion, Matrix Heritage, May 27, 2025.
- Cultural Heritage Screening Report, Proposed Norwood Pit Extension, MHBC, May 2026.
- Level 1 and 2 Hydrogeological Assessment, Norwood Pit Extension, Tatham Engineering, June 25, 2026.
- Maximum Groundwater Level Report, Norwood Pit Extension, Tatham Engineering, July 6, 2026.
- Natural Environment Report, Norwood Pit Extension Application, RiverStone Environmental Solutions Inc., July 2026.
- Noise Impact Assessment, Norwood Pit Extension, HGC Noise Vibration Acoustics, August 2026.
- Traffic Impact Brief, Proposed Norwood Pit Extension, Paradigm Transportation Solutions Limited, June 18, 2026.



Legal Description

Part of Lots 1 & 2, Concession 11 and Part of Lot 2, Concession 12
Part of Road Allowance Between Concessions 11 and 12
(former geographic Township of Dummer)
Township of Douro-Dummer, County of Peterborough

Legend

- | | | | |
|--|---|--|--|
| | Licence Boundary | | Existing Licence Boundary |
| | Limit of Extraction | | Existing Limit of Extraction |
| | Contours with Elevation
Metres above sea level (MASL) | | 120m Offset From Licence Boundary |
| | Public Road | | Parcel Fabric |
| | Former Public Road | | Overhead Hydro |
| | Internal Haul Road | | Fence
1.2m post & wire fence unless otherwise noted |
| | Driveway | | Entrance / Exit |
| | Disturbed Area | | Gate |
| | Water Feature | | Direction of Surface Drainage |
| | Wooded Area | | Building/Structure |
| | Wetland
Identified by RiverStone | | Receptor |
| | Reduced Setback
Area subject to a separate Site Plan Amendment to reduce the setback to 0 metres | | Groundwater Monitor |
| | | | Cross Sections |

Site Plan Amendments			
No.	Date	Description	By

Site Plan Revisions (Pre-Licensing)			
No.	Date	Description	By

**PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE**

113 COLLEGE STREET, BARRIE, ON L4N 1H1 | P: 705.738.0945 | WWW.MHBCON.COM

MNR Approval Stamp

MHBC Stamp

Christopher Poole
Is authorized by the Ministry of Natural Resources pursuant to Subsection 0.2(3)(f) of Ontario Regulation 244/07 to prepare and certify site plans.

Applicant

DRAIN BROS
Excavating Limited

Drain Bros Excavating Limited
2130 8th Line Road North Dummer
Douro-Dummer, Ontario
K0L 2H0
Tel: (705) 639-2301

Project

Norwood Pit Extension
89 Twelfth Line Road Dummer, Norwood, Ontario, K0L 2V0

MNR Licence Reference No.

Applicant's Signature

Date
August 2026

Plan Scale: 1:2500 (Arch E)

0 75 150 Meters

Drawing Name
Existing Features

Drawing No.
1 of 3

File Path
B:\08\21100B Drain Brothers - Norwood Expansion\Drawings\Site Plan\CAD\21100B - Site Plan.dwg

A. General

- Area calculations
 - Licence Boundary 36.7 ha
 - Limit of Excavation 28.1 ha
- The maximum annual tonnage is 227 000 tonnes. In combination with adjacent licence # 624922.
- The maximum predicted water table within the limit of extraction varies between 221.5 msl and 224.0 msl. The maximum predicted water table is shown in each cross section on drawing 3 of 3.
- The licence boundary is located within an Intake Protection Zone and Wethead Protection Area. Therefore, source water protection policies apply for this licence. Based on the Water Resources Technical Recommendations on this drawing, there will be no adverse impacts to the Intake Protection Zone and the Wethead Protection Area.

B. Hours of Operation

- Extraction and shipping shall be permitted Monday to Saturday between 6:00 am and 7:00 pm.
- Processing shall be permitted Monday to Saturday between 7:00 am and 7:00 pm.
- No operations shall be permitted on Sunday or a Holiday.
- Holiday is as defined by the Interpretation Act.

C. Site Access and Fencing

- The existing access point on Dummer 12th Line Road utilized for the existing dwelling shall be decommissioned prior to site preparation in Phase 1.
- The four field access points identified on the plan view of this drawing may remain for maintenance purposes. Should they remain, these access points shall be gated, kept closed during hours of non-operation and maintained throughout the life of the licence. Aggregate and highway trucks shall not be permitted to access the site in these locations.
- An operational entrance/exit shall be permitted anywhere along the common licence boundary with adjacent licence # 624922 (see Section O Variations from Control and Operation Standards on this drawing for additional information).
- Portions of the licence boundary that are not currently fenced shall be fenced with post and wire fencing at least 1.2 metres in height. The common licence boundary with adjacent licence # 624922 shall not be fenced (see Section O Variations from Control and Operation Standards on this drawing for additional information).
- Fencing shall occur in a phased approach (see Section O Variations from Control and Operation Standards on this drawing for additional information). Phase 1 shall be fenced prior to site preparation commencing in Phase 1 while Phase 2 shall be fenced prior to site preparation commencing in Phase 2.
- A sign of at least 0.5 metres by 0.5 metres in size shall be erected and maintained at the operational entrance/exit that says in legible words "This site is licensed under the Aggregate Resources Act 1990".

D. Drainage and Siltation Control

- Drainage of undisturbed areas will continue in the directions shown on drawing 1 of 3.

E. Site Preparation

- Prior to site preparation, a Spills Contingency Plan shall be prepared and implemented.
- Prior to site preparation in each phase, Natural Environment note P.3.6.2 on this drawing shall be completed.
- The house and shed in Phase 1 shall be removed prior to extraction in Phase 1 in accordance with Natural Environment note O.3.8 on this drawing.
- Remove vegetation in accordance with Natural Environment notes P.3.4.1 and P.3.7.1 on this drawing.
- Timber resources shall be salvaged for use as saw logs, fence posts and fuel wood where appropriate. Cleared stumps and brush may be burned (with applicable permits), used for aquatic habitat enhancement or mulched for use in progressive rehabilitation.
- Topsoil and overburden shall be stripped and stored separately wherever feasible (see Section O Variations from Control and Operation Standards on this drawing for additional information).
- Topsoil and overburden shall be placed in noise attenuation berms or used immediately for progressive rehabilitation.
- If not required for immediate use in berms or progressive rehabilitation, topsoil and overburden stockpiles shall be located within the limit of extraction and remain a minimum of 30 metres from the licence boundary (see Section O Variations from Control and Operation Standards on this drawing for additional information) and 50 metres from a property with a residential use.
- Topsoil and overburden stockpiles shall be vegetated to control erosion.

F. Berms and Screening

- Berms shall be constructed to the height specified in the locations shown on the plan view of this drawing.
- Berms shall not be located within three metres of the licence boundary.
- Berm side slopes shall not be steeper than 2:1 (horizontal : vertical).
- The minimum width of the berm crest shall be one metre.
- Berms shall be vegetated with non-invasive plant species and maintained to control erosion. See Natural Environment note 3.9.2 on this drawing for additional information.
- See Typical Noise Attenuation & Visual Berm detail on this drawing for additional information.
- Existing vegetation within the setbacks shall be maintained for screening purposes, except where berms are required.

G. Site Dewatering

- No drainage facilities, water diversion or discharge points to any surface water bodies or courses are proposed.

H. Extraction Sequence

- The site shall be extracted in two phases (Phases 1 and 2) as shown on the plan view of this drawing.
- Phases may overlap as one phase is prepared or extraction, and the previous phase is nearing depletion and undergoing progressive rehabilitation.
- Progressive rehabilitation shall follow the sequence of extraction with progressive rehabilitation occurring in Phase 1 during extraction of Phase 2.
- Phase 1
 - Prepare Phase 1 for extraction and ensure all the requirements in Sections "C" through "F" on this drawing are met.
 - Strip Phase 1 and use the topsoil and overburden to construct the noise attenuation berm in Phase 1.
 - Extract Phase 1 in a southeast, northeast and northwest direction.
 - Extraction equipment shall operate in accordance with Noise notes P.4.4 and P.4.5 on this drawing.
 - Extraction may occur to a maximum depth of 223.0 to 224.5 msl.
 - As excavation reaches the limit of extraction or maximum depth, progressive rehabilitation shall commence.
 - Progressive rehabilitation shall consist of backfilling the excavation faces and pit floor to establish the elevations, grades and slopes depicted on drawing 3 of 3.
 - Prepare Phase 2 for extraction and ensure all the requirements in Sections "C" through "F" of this drawing are met.
- Phase 2
 - Strip Phase 2 and use the topsoil and overburden to construct the noise attenuation berm in Phase 2.
 - Extract material in a northeast direction.
 - Extraction equipment shall operate in accordance with Noise notes P.4.4 and P.4.5 on this drawing.
 - Extraction may occur to a maximum depth of 224.5 to 225.5 msl.
 - As excavation reaches the limit of extraction or maximum depth, progressive rehabilitation shall commence.
 - Progressive rehabilitation shall consist of backfilling the excavation faces and pit floor to establish the elevations, grades and slopes depicted on drawing 3 of 3.

I. Extraction Details

- All trees within five metres of the excavation face inside the limit of extraction shall be removed.
 - The existing grade, maximum depth of extraction and maximum predicted water table are indicated by spot elevations in various locations on the plan view of this drawing.
 - The maximum lift height shall be 7 metres.
 - The maximum depth of sand and gravel in Phase 1 is approximately 19 metres and shall be extracted in three lifts.
 - The maximum depth of sand and gravel in Phase 2 is approximately 18 metres and shall be extracted in three lifts.
- Aggregate stockpiles shall be located within the limit of extraction and remain a minimum of 30 metres from the licence boundary (see Section O Variations from Control and Operation Standards for additional information) and 50 metres from a property with a residential use.
- Portions of berms that encroach within the limit of extraction shall be removed, and the underlying aggregate may be extracted, as part of final extraction/rehabilitation of the site.
- Internal haul road locations will vary on the pit floor as extraction progresses.

J. Equipment, Processing and Structures

- Equipment used on-site may include portable crushers (both primary and secondary), portable screening plants, portable stackers, conveyors, excavators, loaders, dozers, dump trucks, articulated dump trucks, highway trucks, water trucks, fuel trucks, pickup trucks, generators and tire cleaning equipment.
- No buildings or structures are proposed on-site. This licence will utilize the existing office and weigh scale in nearby licence # 3270 which is owned by the same licensee.

K. Wash Pond

- No wash pond is proposed on-site.

L. Dust

- Dust shall be mitigated on-site in accordance with the dust control requirements stipulated in Ontario Regulation 244/97.

M. Fuel Storage

- No fuel storage tanks shall be permitted on-site.
- Fuel trucks may be used to transfer fuel to on-site equipment in accordance with the Liquid Fuels Handling Code. See Water Resources note P.6.6 on this drawing for additional information.
- The Spills Contingency Plan required under the Aggregate Resources Act shall be available on-site and all employees and contractors shall be informed and required to comply with this plan.

N. Recycling and Scrap

- No scrap shall be stored on-site.
- No recycling shall occur on-site.

O. Variations from Control and Operation Standards

Section & O Standard	Variation	Rationale
(1) 1.6 (1)2	Gates shall not be required where haul roads cross the common boundary with adjacent licence # 624922.	This will eliminate constraints to the movement of equipment between licences owned by the same licensee.
(1) 1.6	Topsoil and overburden shall be stored and stored separately, wherever feasible.	The depth of topsoil and overburden on-site is minimal.
(1) 1.0	A 0 metre setback shall be provided along the common licence boundary with adjacent licence # 624922.	This will enable material to be extracted along the common boundary and for rehabilitation to transition between licences. A site plan amendment for existing licence # 624922 is required.
(1) 1.3	Aggregate, topsoil and overburden stockpiles as well as processing equipment may be located within 30 metres of the common licence boundary with adjacent licence # 624922.	The adjacent licence is owned by the same licensee.
(3) a	The common licence boundary with adjacent licence # 624922 shall not be fenced.	The common licence boundary with adjacent licence # 624922 shall be demarcated with marker posts every 30 metres or less in order to maintain visibility from one marker post to the next.
	Fencing shall be installed in a phased approach.	Due to the pinch point between Phases 1 and 2, this enables Phase 1 to be second efficiently until site preparation is required in Phase 2.

P. Technical Recommendations

- Archaeology
 - No further archaeological study is required for the subject property.
 - Due to the nature of archaeological assessments, the potential exists to miss information; and if any artifacts of Indigenous interest or human remains are encountered during the development of the subject property, please contact:

Alderville First Nation
11 Ojibway Mission
Alderville, Ontario K0K 2X0
Tel: 705-243-2011
Email: APAdmin@survivale.ca

Curve Lake First Nation
Lands Resource Consultation
22 Wintroseville Rd
Curve Lake, ON K0L 1R0
Tel: 705-627-9045
Email: Consultation@curvefirstnation.ca

Hawatha First Nation
123 Paulson St.
Hawatha, ON N0S 0E5
Tel: 705-265-4421
Email: mcmgong@hawatha.ca
towie@hawatha.ca sdverson@hawatha.ca

Massisage of Scoping Island First Nation
2021 Island Rd
Port Perry, ON L1L 1B6
Tel: 905-865-3307
Email: consultation@scopingfirstnation.com

Huron-Wendat Nation
250 place Chef Michel Lavoie,
Wendake, QC G0A 4V0
Email: consultation@wendake.ca

Beausoleil First Nation
11 Ojibway Mission
Alderville, Ontario K0K 2X0
Tel: 705-243-2011
Email: consultation@beausoleil.ca

Chippewas of Rama First Nation
5844 Rama Rd., Suite 200
Rama, ON L3V 6N6
Tel: 705-325-3611
Email: consultation@ramafirstnation.ca

Chippewas of Georgian Island
R.R. #2, Box N-13
Sutton, ON L1E 1R0
Tel: 705-437-1337
Email: natasha.chen@chippewasofgeorgianisland.com
j.porter@chippewasofgeorgianisland.com

Kawartha Niichewaspe First Nation
Email: natasha.chen@kawartha.ca

- If it is an offence under Sections 46 and 49 of the Ontario Heritage Act for any party other than a licensed archaeologist to make any alteration to a known archaeological site, or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the Ontario Heritage Act.
- If archaeological resources are found during operations, the aggregate operator shall:
 - Immediately cease any activities that could disturb the resource or its location, and
 - Engage a licensed Consultant Archaeologist to conduct an archaeological assessment.
- If human remains are discovered during operations, the aggregate operator shall:
 - Upon discovery all activities must immediately stop, and the police or coroner be notified, as required under the Funeral, Burial and Cremation Services Act.
 - If the remains appear to be, or are associated with archaeological resources, then the operator shall also:
 - Stop any activities that could disturb the remains or their location, and
 - Notify the Ministry of Citizenship and Multiculturalism (MCM) of this discovery.

2. Cultural Heritage

- There are no site plan recommendations.

3. Natural Environment

- The limit of extraction and operational activities shall be setback a minimum of 30 metres from the boundary of all wetland features as shown on the plan view of this drawing. The 30 metre setback shall be permanently marked prior to the commencement of pit operations.
- The on-emptive naturalization of all setbacks with a combination of native trees and shrubs adjacent to wetlands shall occur, where the current use is agricultural field as shown on the plan view of this drawing. See Natural Environment notes on drawing 3 of 3 for planning details and rehabilitation requirements.
- The 30 metre wetland setbacks shall be undisturbed by pit operations and remain as natural self-sustaining vegetation.
- Significant Woodlands
 - Woodland feature removal and woodland thinning shall only occur between November 1st and March 15th to avoid active periods for birds and bats.
 - The limit of extraction shall be setback a minimum of 30 metres from the boundary of all woodland features not approved for extraction as shown on the plan view of this drawing. The 30 metre setback shall be permanently marked prior to the commencement of pit operations.
 - To prevent damage to adjacent woodland habitat located within the licence boundary, tree protection measures (e.g., hoarding, temporary fencing at the drip line) shall be applied.
 - The 30 metre woodland setback shall be undisturbed by pit operations and remain as natural self-sustaining vegetation.
- Black Ash
 - The recommendations to protect the wetlands must be implemented in full to protect Black Ash and their habitat.
 - If it is the licensee's responsibility to confirm any updated requirements for the protection of all endangered and threatened species including Black Ash, Black Ash is an endangered species and protection measures afforded by the Species Conservation Act (SCA) apply within the County of Peterborough. Black Ash protection shall be reviewed prior to vegetation clearing on lands adjacent to wetlands to ensure ongoing compliance with the SCA or future policy guidance related to the SCA.

3.6. Snapping Turtle and Turtle Wintering Areas

- 3.6.1. A Scientific Collections Permit from the Ministry of Natural Resources (MNR) shall be obtained to remove any fish and wildlife species from the pond located at Station T1 to allow for removal of turtles, fish, and wildlife prior to decommissioning of pond. Any captures shall be relocated to other pond features on the subject property.
- 3.6.2. Prior to site alteration, turtle exclusion fencing that include J hooks, shall be erected along the licence boundary adjacent to wetland features in the locations shown on the plan view of this drawing.
- 3.6.3. A qualified person shall be retained to verify the adequacy of the specialized barrier fence. The fence shall be inspected to ensure necessary repairs occur on a routine basis (monthly from April through October).
- 3.7. Eastern Wood-pewee, Wood Thrush, and Glasshopper Sparrow
 - Removal of natural vegetation (e.g., shrub clearing, fallow fields, etc.) shall be completed outside of the primary breeding bird nesting window (i.e., between April 1st and August 31st).
 - The progressive rehabilitation plan shall include the restoration of forest habitat that is continuous with the existing habitat for woodland species and shall include the creation of meadow habitat sufficient size to provide suitable habitat for grassland birds.

3.8. Barn Swallow

- 3.8.1. Removal of structures shall occur outside the primary breeding bird window (i.e., between April 1st and August 31st), if structures are to be removed during the primary breeding bird nesting window (i.e., between April 1st and August 31st), a search of structures is to be completed by a qualified professional. If active nests are present, removal shall be delayed until young have fledged.

3.9. Monarch

- 3.9.1. Removal of natural vegetation within the natural meadow communities shall be completed outside of the primary Monarch breeding window (i.e., between May 1st to October).
- 3.9.2. Cultural meadow habitat, using a native wildflower mix that includes milkweed species, shall be included as shown on the plan view of this drawing. Native seed mixes that include milkweed species shall also be applied on the berms.
- 3.10. Other Natural Features and Functions
 - At pit closure, site rehabilitation shall be required utilizing vegetation species native to the local area in the final rehabilitation plan. Areas adjacent fence communities shall utilize native species that blend with the adjoining vegetation communities.

4. Noise

- The Extension shall be limited to the following hours of operation:
 - Extraction and shipping activities shall be permitted Monday to Saturday between 6:00 am and 7:00 pm.
 - Processing activities shall be permitted Monday to Saturday between 7:00 am and 7:00 pm.
 - No operations shall be permitted on Sundays or statutory holidays.
- Prior to commencement of extraction activities within each of the two phases of the proposed extension, the Licensee shall implement and maintain noise berms as follows:

Berm	Height (m)	Length (m)
Phase 1	5	620
Phase 2	5	825

- The berms noted above shall be constructed of any earthen material (i.e. overburden or extracted/processed aggregate materials) and shall be constructed prior to commencement of each corresponding phase. The location of the berms are depicted on the plan view of this drawing.
- Processing equipment, when located within Noise Control Area 1, as depicted in the plan view of this drawing, shall have acoustical shielding. The acoustical shielding shall be constructed along the north side of the processing equipment and completely cover the line-of-sight between the processing equipment and R1/R1SA, and R1E (see Receptor and Groundwater Monitoring Locations on drawing 1 of 3 for locations). The shielding shall be a minimum of 7 metres tall, and the peak shall be located not more than 30 metres away from the processing equipment. The acoustical shielding shall be constructed of any earthen material (i.e. overburden or extracted/processed aggregate materials).
- The processing equipment shall not be operated within Noise Control Area 2 as depicted on the plan view of this drawing.
- The sound power levels for the equipment employed within the Pit shall not be greater than the limits in the table below:

Source Sound Power Levels (dB re: 10 ⁻¹² Watts)	
Source Type / Name	Sound Power Level
Extraction Front-End Loader (quantity 1)	108
Processing Equipment (crusher, screener, generator, etc.)	119
Highway Trucks (each)	102

- Extraction shall be conducted with a maximum of one extraction loader, and a maximum of 20 trucks can unload at the site for shipping.
- All mobile construction equipment used to prepare for, rehabilitate, or maintain the operations shall produce sound levels which comply with the Ministry of the Environment, Conservation and Parks (MECP) Publication NPS-115.
- It is recognized that advancements of equipment or different configurations may allow additional equipment or equipment to be substituted for certain activities while still meeting MECP guidelines. Variations to the noise control measures may be permitted, provided that the sound level revisions can demonstrably meet the applicable MECP limits as confirmed through documentation by a professional engineer. Prior to modification, notification shall be given to the MNR.
10. An updated Noise Impact Assessment, prepared by a Professional Engineer qualified to provide Acoustical Engineering services in the Province of Ontario, shall be submitted to the MNR within 12 months following the pit operator receiving notification of a building permit issued for a noise-sensitive use on the properties designated as V1.1, V1.2 or V1.3 (see Receptor and Groundwater Monitoring Locations on drawing 1 of 3 for locations). If the updated study concludes that the sound levels of the pit will not comply with the applicable limits, the report shall include the following:
 - Details regarding the noise control measures required to reduce the sound levels of the pit to comply with the applicable limits.
 - A timetable for implementation of the noise control measures, including dates for achieving compliance with specific milestones.
 - A list of the submissions for further assessments to demonstrate compliance with the applicable sound level limits at the properties designated as V1.1, V1.2, and V1.3 (see Receptor and Groundwater Monitoring Locations on drawing 1 of 3 for locations).

5. Traffic

- No off-site modifications, such as geometric roadway or intersection improvements, shall be required to support the gravel pit.

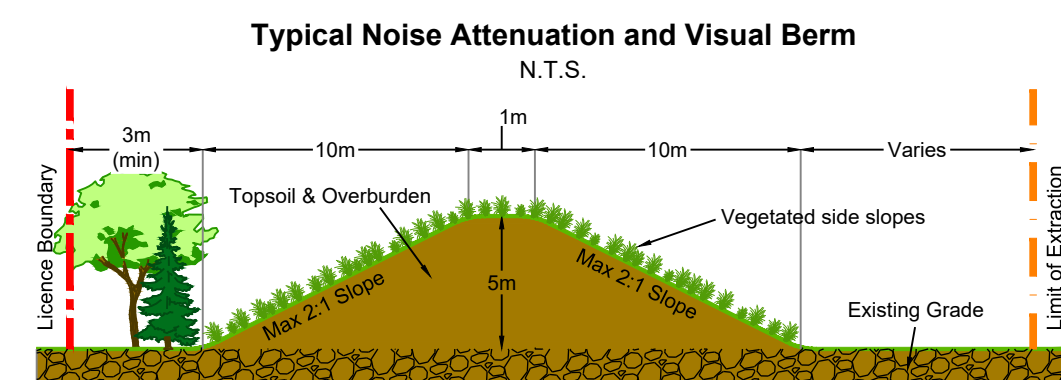
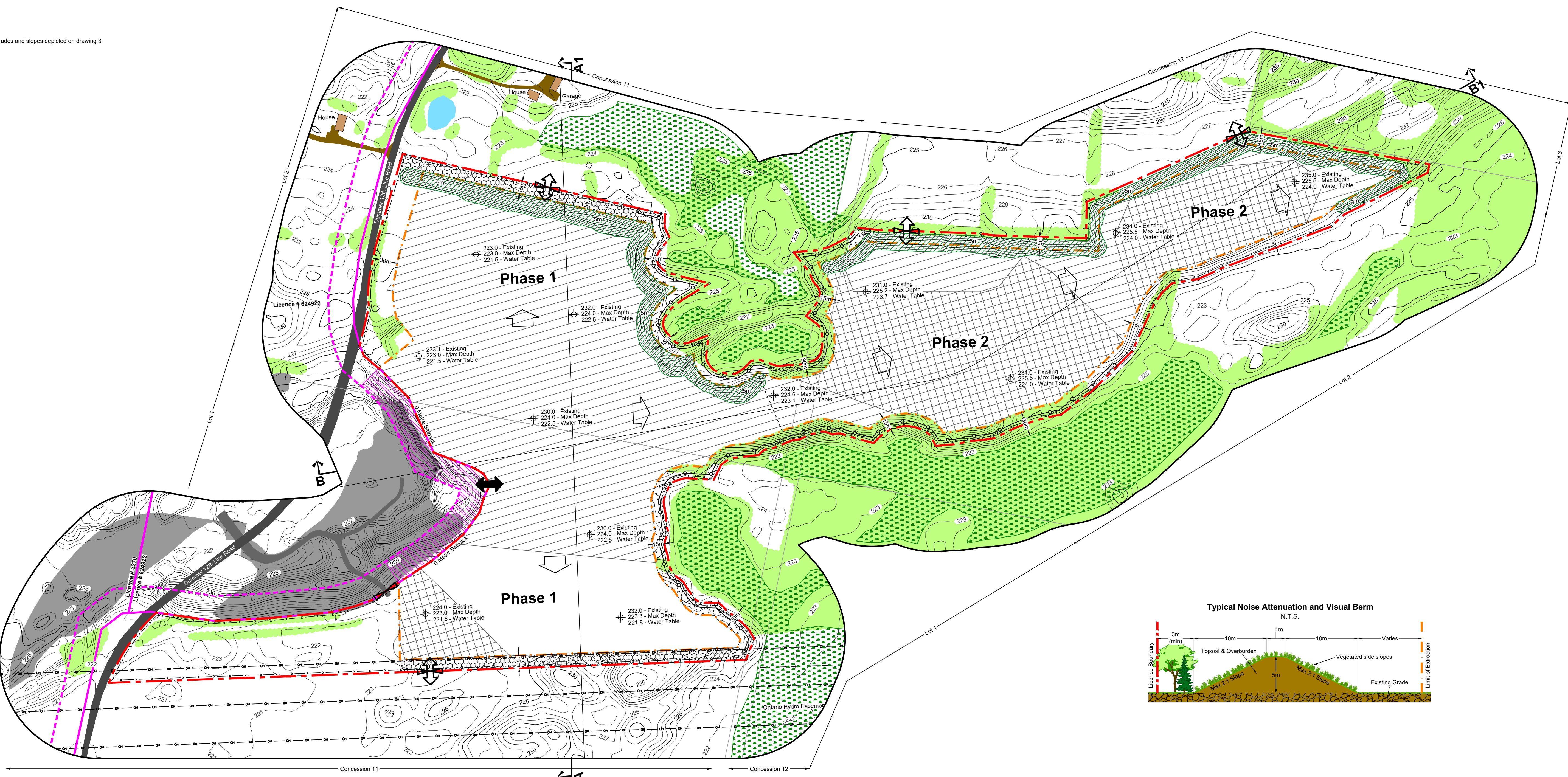
6. Water Resources

- Water levels shall be collected continuously with automatic water level transducers, with manual measurements collected quarterly for the first two years of operations, and annually afterwards at the following groundwater monitors: BHMW24-1, BHMW24-2, BHMW24-3, BHMW24-4, BHMW24-5, MP1, MP2, MP3 and MP4 (see Receptor and Groundwater Monitoring Locations on drawing 1 of 3 for locations).
- Water levels and drawdowns shall be collected continuously with automatic water level transducers March through November, collected quarterly for the first two years of operations, and annually afterwards at surface water monitor SW1.
- Annual water quality sampling for Metals, alkalinity, pH, conductivity, bicarbonate, major anions, Oil and Grease and Petroleum Hydrocarbons shall be conducted at the following groundwater monitors (provided water is present): BHMW24-1, BHMW24-2, BHMW24-3, BHMW24-4, and BHMW24-5 (see Receptor and Groundwater Monitoring Locations on drawing 1 of 3 for locations).
- If a well complaint is received by the licensee, the following actions should be taken by the licensee:
 - Notify the MNR and MECP.
 - Ensure a Certified Well Inspector (i.e. licensed water well technician) and/or qualified hydrogeologist visits the site within 24 hours of receiving the complaint to investigate. The Certified Well Inspector and/or hydrogeologist shall complete a well inspection including a review of the pump, well condition, pump depth and condition, etc.
 - Temporary water supply shall be provided by the licensee to the well owner within 48 hours of receiving the complaint and thereafter until such time as the cause of the disruption has been determined.
 - If the well complaint cannot be definitively determined to not be a result of the pit operations after the initial site visit, a hydrogeologist shall review the water well inspection report and supporting information, water level data and on-going operations at the pit to provide an assessment of the cause of the complaint. The hydrogeologist shall prepare an opinion letter to be provided to the MNR, MECP, and the complainant as to the likelihood the well complaint is related to the pit operation.
- If the well complaint is considered to be a result of the pit operations the following water supply restoration program shall be initiated at the expense of the licensee to the satisfaction of MECP:
 - 4.5.1. Step 1: Well system rehabilitation: this includes the replacement or lowering of pumps, flushing the pump lines, well deepening, etc.
 - 4.5.2. Step 2: Well Replacements: if system rehabilitation is not an option, the well will be replaced with a new well further from the pit.
 - 4.5.3. Step 3: Water treatment considerations: appropriate water treatment will be incorporated into any restored water supply.

- Refueling of machinery shall not be conducted in areas of excavation within 5 m of the water table.
- No chemical sprays shall be used in the areas of the excavation.
- Operator training shall include understanding and implementing the preventative measures provided above, in addition to any on-site corporate Spill Contingency Plan.
- Excess soil to be utilized for berm construction and rehabilitation shall be imported to the site in accordance with Ontario Regulation 244/97 under the Aggregate Resources Act.
- Extraction shall remain 1.5 metres above water table.
- Maximum Groundwater Water Table
 - The maximum groundwater elevations are depicted on the plan view of this drawing.
 - The pit floor shall be 1.5 metres above the maximum groundwater elevations, as depicted by spot elevations on the plan view of this drawing.

Site Plan Acronyms

- ARA - Aggregate Resources Act
- CSRS - Canadian Spatial Reference System
- MASL - Metres Above Mean Sea Level
- MCM - Ministry of Citizenship and Multiculturalism
- MECP - Ministry of the Environment, Conservation and Parks
- MNR - Ministry of Natural Resources
- NAD - North American Datum
- SCA - Species Conservation Act
- UTM - Universal Transverse Mercator



Legal Description
Part of Lots 1 & 2, Concession 11 and Part of Lot 2, Concession 12
Part of Road Allowance Between Concessions 11 and 12
(former geographic Township of Dummer)
Township of Duro-Dummer, County of Peterborough

Legend

- Licence Boundary
- Limit of Extraction
- Contours with Elevation
- Public Road
- Driveway
- Disturbed Area
- Water Feature
- Wooded Area
- Wetland
- Noise Control Area 1
- Noise Control Area 2
- Monarch Habitat Cultural Meadow
- Pre-emptive Planting Adjacent to Wetlands
- Reduced Setback
- Existing Licence Boundary
- Existing Limit of Extraction
- 120m Offset From Licence Boundary
- Parcel Fabric
- Overhead Hydro
- Fence
- Turtle Exclusion Fencing
- Entrance / Exit
- Gate
- General Direction of Excavation & Boundary
- Berm
- Building/Structure
- Spot Elevation
- Cross Sections

No.	Date	Description	By

No.	Date	Description	By

MHBC
PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE
113 COLLIER STREET, SARRIS, ON, L4N 1H0 | P: 705.738.0945 | WWW.MHBCPLAN.COM

MNR Approval Stamp

MHBC Stamp

Christopher Poole
Is authorized by the Ministry of Natural Resources pursuant to Subsection 0.2(3)(f) of Ontario Regulation 244/97 to prepare and certify site plans.

Christopher Poole

Applicant

DRAIN BROS
Excavating Limited

Drain Bros Excavating Limited
2130 8th Line Road North Dummer
Douro-Dummer, Ontario
K0L 2H0
Tel: (705) 639-2301

Project

Norwood Pit Extension
89 Twelfth Line Road Dummer, Norwood, Ontario, K0L 2V0

MNR Licence Reference No.	Applicant's Signature
	<i>Christopher Poole</i>
Plan Scale: 1:2500 (Arch E)	Date August 2026
Drawn By C.P.	File No. 21100B
Checked By E.F.	

Drawing Name

Operational Plan

Drawing No.

2 of 3

File Path

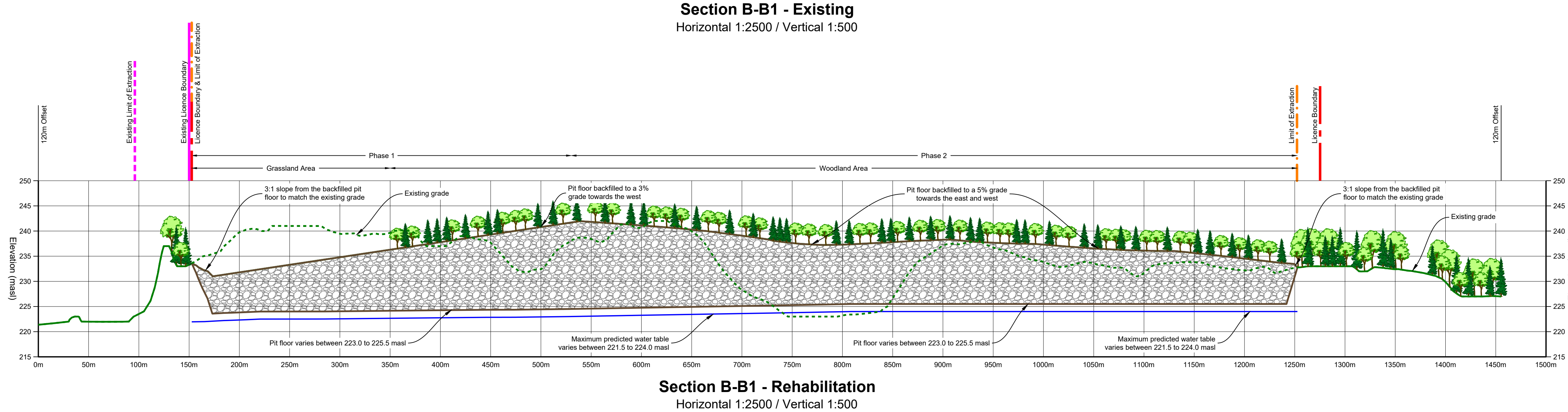
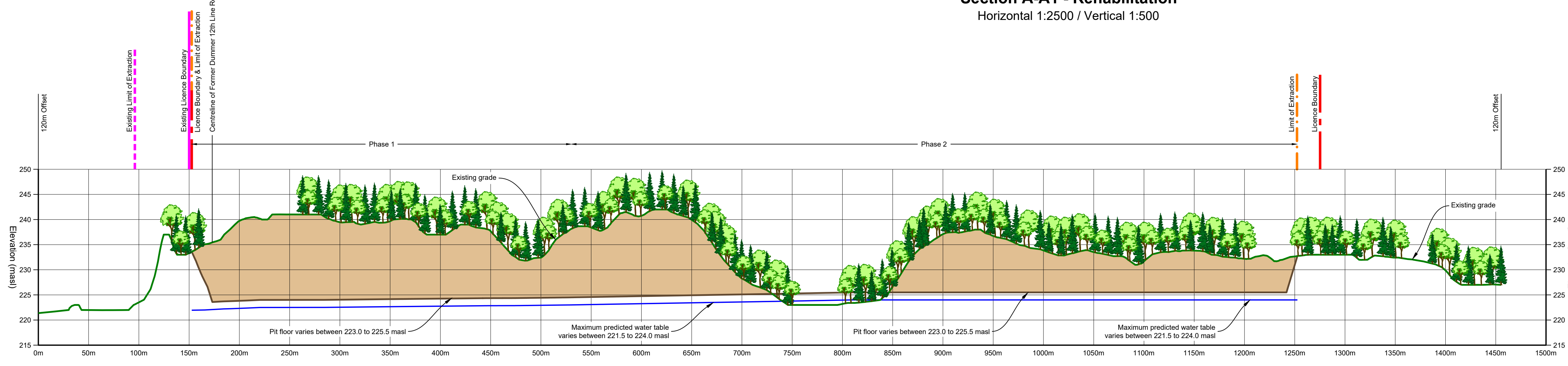
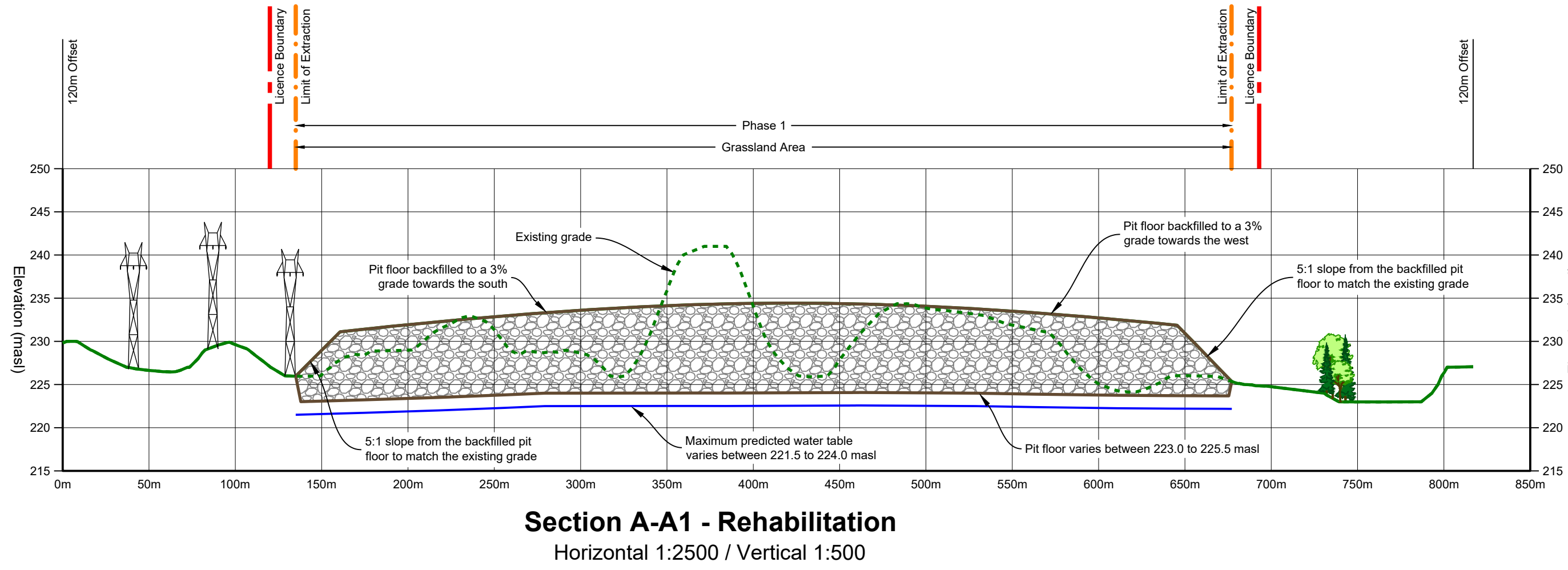
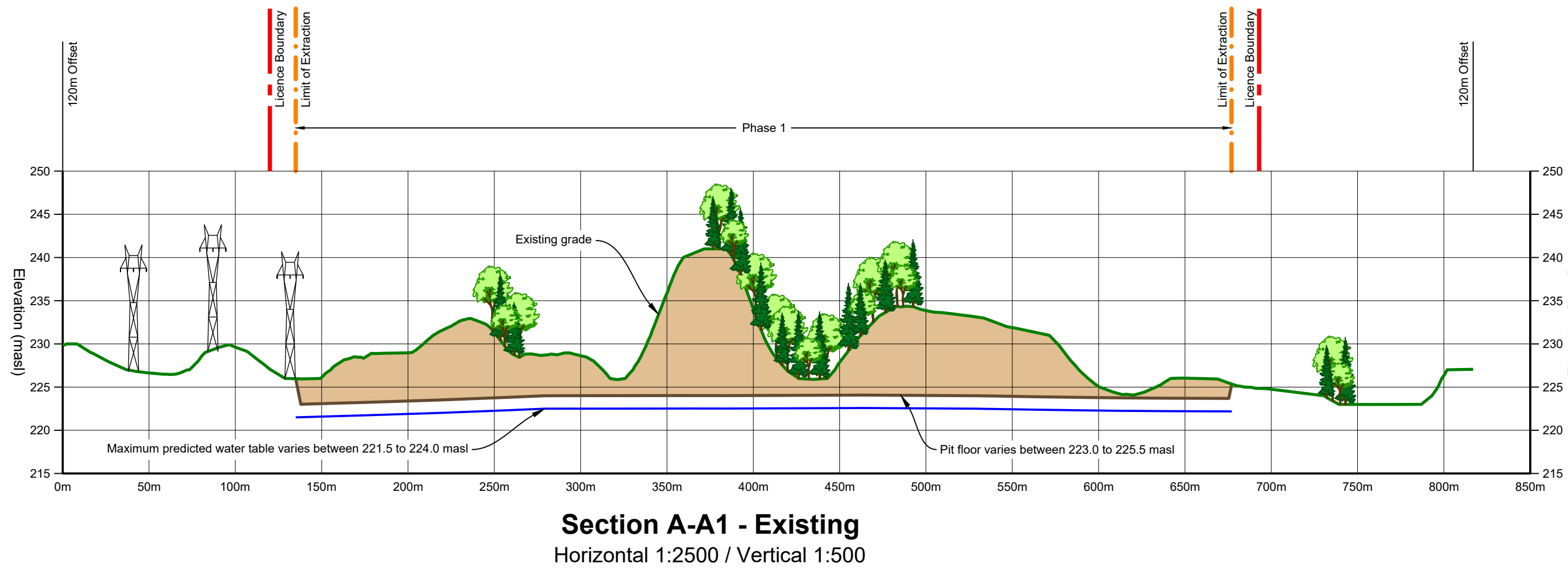
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- Site Plan Acronyms**
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Legal Description
Part of Lots 1 & 2, Concession 11 and Part of Lot 2, Concession 12
Part of Road Allowance Between Concessions 11 and 12
(former geographic Township of Dummer)
Township of Douro-Dummer, County of Peterborough

- Legend**
- Licence Boundary
 - Limit of Extraction
 - Contours with Elevation
Metres above sea level (MASL)
 - Public Road
 - Driveway
 - Disturbed Area
 - Water Feature
 - Wooded Area
 - Wetland
identified by RiverStone
 - Monarch Habitat
Cultural Meadow
 - Pre-emptive Planting
Adjacent to Wetlands
 - Reduced Setback
Area subject to a separate Site Plan Amendment
to reduce the setback to 0 metres
 - Existing Licence Boundary
 - Existing Limit of Extraction
 - 120m Offset From
Licence Boundary
 - Parcel Fabric
 - Overhead Hydro
 - Fence
1.2m post & wire fence unless otherwise noted
 - Gate
 - Building/Structure
 - Proposed Final Grade
 - Proposed Final Slope
(Horizontal - Vertical)
 - Grassland
 - Woodland
 - Cross Sections
A1



PROGRESSIVE REHABILITATION

- A. General**
1. Internal haul roads are permitted to remain in progressively rehabilitated areas, but shall be removed as part of final rehabilitation.
- B. Phasing**
1. Progressive and final rehabilitation shall be in direct correlation to the development of the pit as the maximum extraction limits and depths are reached and enough area is available to ensure rehabilitation activities will not interfere with the production, stockpiling and processing of aggregate material.
 2. Progressive rehabilitation will follow the general direction and sequence of extraction identified on the plan view and described in the notes on drawing 2 of 3.
- C. Slopes and Grading**
1. Progressive rehabilitation shall consist of backfilling the limit of extraction to the elevations, grades and slopes shown on the plan view of this drawing with on-site topsoil, overburden, non-marketable material and/or excess soil.
 2. During site restoration when final grades are within 1.0 metre of the existing grade along the limit of extraction where there is potential for runoff off-site, silt fencing shall be installed and maintained until vegetation has been established to prevent erosion off-site.
 3. Excess soil, as defined in Ontario Regulation 244/97 (as amended from time to time), may be imported to this site to facilitate the following rehabilitation:
 - 3.1. To establish the final elevations, grades and slopes depicted on the plan view of this drawing.
 - 3.2. Top dressing to establish vegetation.
 4. Liquid soil, as defined in Ontario Regulation 496/15 (as amended from time to time) under the Environmental Protection Act, is not authorized for importation to the site.
 5. The quality of excess soil imported to the site for final placement must be equivalent to or more stringent than the applicable excess soil quality standards as determined in accordance with Ontario Regulation 244/97 (as amended from time to time) and must be consistent with the site conditions and the end use identified in the approved rehabilitation plan.
 6. Where a qualified person is retained or required to be retained in accordance with Ontario Regulation 244/97 (as amended from time to time), the quality, storage, and final placement of excess soils shall be done according to the advice of the qualified person.
 7. Excess soil imported to facilitate rehabilitation as described on this site plan shall be undertaken in accordance with Ontario Regulation 244/97 under the Aggregate Resources Act (as amended from time to time).
 8. The cumulative total amount of excess soil that may be imported to this site for rehabilitation purposes is 2,840,000 m³.

- F. Drainage**
1. The final surface drainage will follow the rehabilitation contours and directional arrows shown on the plan view of this drawing.

G. Natural Environment

- 1. Pre-emptive Plantings Adjacent to Wetlands**

- 1.1. The area identified for Pre-emptive Planting on the plan view of this drawing and on drawing 2 of 3 shall be planted within 5 years of the issuance of the ARA licence in the spring (i.e., May) or fall (i.e., mid-September to early-October) with a mixture of the following tree and shrub species:
- Trees**
- Red Maple (*Acer rubrum*)
 - Bigtooth Aspen (*Populus grandidentata*)
 - Trembling Aspen (*Populus tremuloides*)
 - White Birch (*Betula papyrifera*)
 - American Basswood (*Tilia americana*)
 - Balsam Fir (*Abies balsamea*)
 - Eastern Hemlock (*Tsuga canadensis*)
 - Eastern White Pine (*Pinus strobus*)
- Shrubs / Groundcover**
- Choke Cherry (*Prunus virginiana*)
 - Red Osier-dogwood (*Cornus sericea*)
 - Staghorn Sumac (*Rhus typhina*)
 - Smooth Senecio (*Achillea millefolium*)
 - Common Blackberry (*Rubus alleghaniensis*)
 - Northern Bracken Fern (*Pteridium aquilinum* var. *latiusculum*)
 - White Meadow-sweet (*Spiraea alba*)

- 1.2. Within the Pre-emptive Planting Area, the following planting requirements shall be met:
- 1.2.1. Trees shall be planted at a density of five (5) trees per 100 m².
 - 1.2.2. All tree saplings shall be planted 5 metres apart to increase rooting and provide stabilization.
 - 1.2.3. Trees shall be a minimum of 1.2 metres (~4 feet) in height with a sufficiently developed root ball to sustain planting.
 - 1.2.4. Shrubs shall be planted at a shrub to tree ratio of 5:1.

- 1.2.5. All shrubs shall be installed 1 metre apart.
 - 1.2.6. All installed shrubs shall consist of potted material at least 30 centimetres tall in 1 to 3 gallon pots.
 - 1.2.7. Any woody plant root defects (e.g., girdling) shall be corrected prior to installation.
 - 1.2.8. All woody plants shall be installed such that the root crown/trunk flare is exposed above the soil surface to ensure proper oxygenation of the rooting zone.
 - 1.2.9. All installed woody plants shall be watered (deep soaking) following installation.
- 2. Woodland Rehabilitation**
- 2.1. The area identified as woodland on the plan view of this drawing shall be planted in the spring (i.e., May) or fall (i.e., mid-September to early-October) with a minimum of six (6) of the following tree species:
 - Sugar Maple (*Acer saccharum*)
 - Northern Red Oak (*Quercus rubra*)
 - Eastern White Pine (*Pinus strobus*)
 - Eastern Hemlock (*Tsuga canadensis*)
 - Red Maple (*Acer rubrum*)
 - Bigtooth Aspen (*Populus grandidentata*)
 - Trembling Aspen (*Populus tremuloides*)
 - White Birch (*Betula papyrifera*)
 - American Basswood (*Tilia americana*)
 - Balsam Fir (*Abies balsamea*)
 - 2.2. The location and diversity of the tree species within the woodland area shall be field fitted based on the soil conditions, and topography.
 - 2.3. A minimum of 15 % of each selected tree species shall be planted overall within the woodland area. Trees shall be a minimum height of 0.45 metres (1.5 feet) tall when planted and shall be planted at a 2 metres spacing to a minimum density of 1,500 to 2,000 seedlings per hectare.
 - 2.4. Prior to planting, the woodland planting area shall be amended with topsoil/organic soil to be at minimum 0.3 metres deep.
 - 2.5. Competing vegetation shall be removed yearly until the planted trees have reached 2 metres in height.
 - 2.6. Monitoring shall occur annually for three (3) years to verify a survival rate of greater than 75% in the woodland plantings. If survival is noted to be less than 75% during the annual monitoring, replacements will be planted in order to ensure a minimum density of 1,200 trees per hectare.

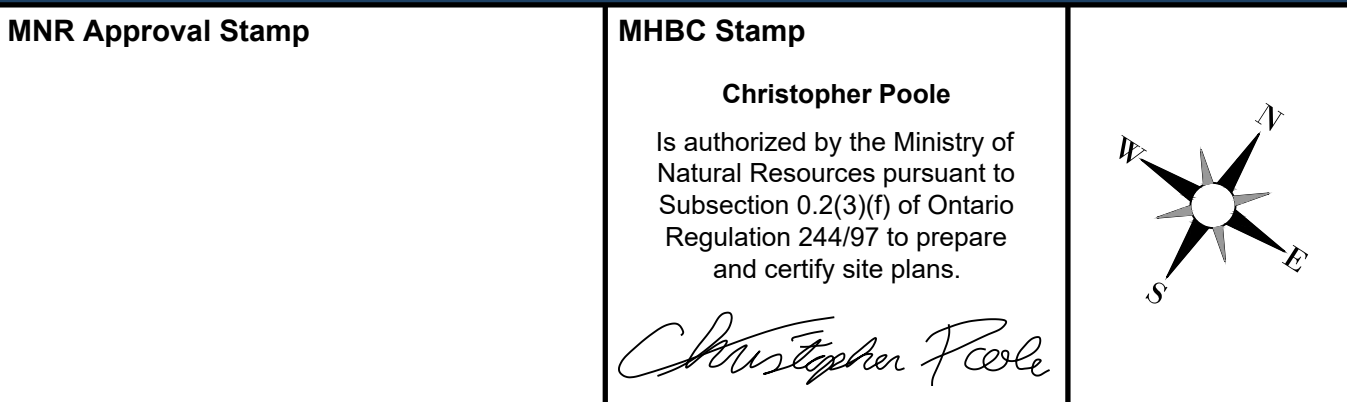
- 3. Grassland Habitat Naturalization**
- 3.1. The area identified for grassland on the plan view of this drawing shall be planted with a mix of short and mid height native bunchgrass and diverse wildflowers composed of roughly 20% native grass and 80% forbs to provide appropriate habitat for grassland bird species. The grassland area shall be planted with the following species:
 - Panic Grass Switch Grass (*Panicum virgatum*)
 - Little Bluestem (*Schizachyrium scoparium*)
 - Orchard Grass (*Dactylis glomerata*) Not Native
 - Indian Grass (*Sorghastrum nutans*)
 - Crowsfoot (*Sporobolus vaginifolius*)
 - Slenderstem Grass (*Bouteloua curtipendula*)
 - Purple Coneflower (*Echinacea purpurea*) Not Native
 - Black-eyed Susan (*Rudbeckia hirta*)
 - Wild Bergamot (*Monarda fistulosa*)
 - Gray Goldenrod (*Solidago nemoralis*)
 - Milkweed species (*Asclepias* spp.)
 - Red-top Sedge (*Carex bebbii*)
 - 3.2. The area identified for potential Monarch Habitat Cultural Meadow on the plan view of this drawing shall be planted with a native mix of wildflowers and grasses to stabilize soils and provide appropriate habitat for the Monarch Butterfly. These areas shall be maintained as a meadow with mowing and maintenance limited to periodic removal of trees and woody shrubs. The area shall be planted with an Early Succession Mix that includes the following:
 - Black-eyed Susan (*Rubus coccineus*)
 - Blue Verain (*Verbena hastata*)
 - Canada Anemone (*Anemone canadensis*)
 - Canada Blue-joint (*Calamagrostis canadensis*)
 - Canada Goldenrod (*Solidago canadensis*)
 - Little Bluestem (*Schizachyrium scoparium*)
 - Common Milkweed (*Asclepias syriaca*)
 - Fowl Bluegrass (*Poa palustris*)
 - Meadow/Open Field Sedge (*Carex granularis*)
 - New England Aster (*Symphoricarpos novae-angliae*)
 - Path Rush (*Juncus tenuis*)
 - Purple Stemmed Aster (*Symphoricarpos puniceus*)
 - Virginia Bower (*Asclepias tuberosa*)
 - Wild Bergamot (*Monarda fistulosa*)

FINAL REHABILITATION

- J. General**
1. All equipment shall be removed from the site.
 2. No buildings, structures or haul roads shall remain.
 3. The anticipated final end-use is naturalized grasslands and woodlands.

- Legend - Cross Sections**
- Licence Boundary
 - Limit of Extraction
 - Existing Licence Boundary
 - Existing Limit of Extraction
 - Existing Grade - Removed / Altered
 - Existing Grade - Undisturbed
 - Maximum Predicted Water Table
 - Pit Floor
 - Aggregate Available for Extraction
 - Backfilled

Site Plan Amendments			
No.	Date	Description	By
Site Plan Revisions (Pre-Licensing)			
No.	Date	Description	By



Project			
Norwood Pit Extension			
89 Twelfth Line Road Dummer, Norwood, Ontario, K0L 2V0			
MNR Licence Reference No.		Applicant's Signature	
Plan Scale: 1:2500 (Arch E)		Date	August 2026
Drawn By		C.P.	File No.
Checked By		E.F.	21100B

Drawing Name
Rehabilitation Plan & Cross Sections
Drawing No.
3 of 3

File Path
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