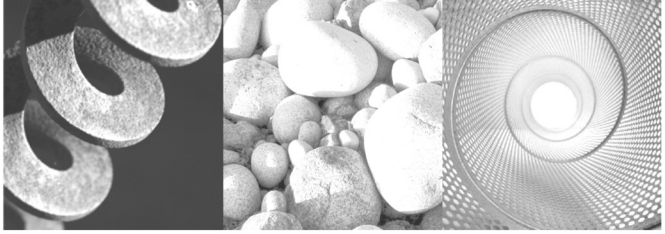

GEI Consultants

Summary Statement
Proposed Class "A" Aggregate Pit

Municipality of West Grey

Submitted to:
JT Excavating Ltd.
382063 Concession 4
Bentinck, ON

Submitted by:
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December 2, 2024
Project No. 2401284

Professional Engineers Ontario
Licensed Engineering Technologist
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Number: 100501338
Limitations: Environmental investigations of soil, groundwater, air and sediment products including Records of Site Conditions, soil management plans and completion of Phase I and Phase II Environmental Site Assessments, excluding design, construction and verification of site remediation.
Association of Professional Engineers of Ontario

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1. Introduction

This Summary Statement is prepared to accompany an application for a Class “A” Pit Above Water proposed for the property on Concession 5, Lot 22, in the former Township of Bentinck, now the Municipality of West Grey, with a civic address of 382063 Concession 4 NDR. The following drawings have been prepared to detail the proposed pit development:

Drawing No.	**Title**
1 of 4	Existing Features Plan
2 of 4	Operations Plan
3 of 4	Rehabilitation Plan
4 of 4	Cross-Sections

This Summary Statement and enclosures are to be circulated to agencies reviewing the license application and are to be included with the application for Official Plan and Zoning amendments required for the site.

2. Existing Conditions

2.1 Physiography and Geology

Based on our review, the site is located within the physiographic region of the Horseshoe Moraines. In general, the Horseshoe Moraines are characterized by drumlinized till plains, kame moraines, and outwash deposits (Chapman and Putnam, 1984).

The soils on and surrounding the subject site are identified as that of the Sargent series, which is defined as a series of two thin layers of grey and brown loam (i.e. ~0.10 metres each) overlying well-sorted gravelly outwash deposits (Soil Survey Report No. 17). The physiographic mapping (Map 2225) indicates that the subject property is located in an area of glacial spillway deposits. According to the Surficial Geology of Southern Ontario (Ontario Geologic Survey), the subject property contains coarse textured glaciofluvial deposits consisting of river deposits and delta topset facies.

The Site is reported to be situated on or near the spatial contact between dolostone of the Guelph formation to the northeast and Salina formation to the southwest. Based on the mapping provided by the Grey and Bruce Groundwater Study, an analysis of water well logs in the area, the depth to bedrock in the vicinity of the subject property is reported to be in the range of 13 to 26 meters below ground surface (mbgs).

The subject Site primarily consists of gently undulating hills gradually sloping toward the west and the Saugeen River west of the Site. As discussed, a low-lying vegetated area with seasonal ponding was observed to extend in an east-west direction across the central portion of the Site, which effectively separates the southern fields with the northern field. Additionally, the northernmost portion of the property is at a relatively low elevation compared to the majority of the Site and is currently undeveloped and vegetated.

Based on onsite observations during the four Site visits in 2021 and 2022, the low-lying areas in the southwest and central portions of the Site were only saturated during the early spring freshet, when the groundwater elevations are at their maximum.

2.2 Surface Water Features

The proposed licenses area is proposed for the elevated portions of the property appropriately set back from seasonally wet areas of the Site. No permanent surface water features are located within the licensed area.

2.2.1 Seasonally Saturated and Ponding Areas

A seasonally saturated area is situated in the central portion of the property. Due to the coarse-textured nature of the soils onsite, this feature is expected to be consistent with the occurrence of water table elevation. More specifically, since this area was observed to be dry during the most Site visits, it is expected that water is only present in this area during relatively high groundwater conditions or during surface run-off flooding events.

Further, the western portion of the property is currently designated as Hazard Lands and an Ontario Regulation 169/06 screening area. These limitations on the Site development are associated with the floodplains of the Saugeen River, located approximately 160 metres west of the subject property at its closest point.

The proposed onsite pit operations are required to have a setback from the areas of the property designated as Hazard Lands as part of the Grey County Official Plan. It is noted that the SVCA regulated screening area extends 50 metres beyond the noted Hazard Land boundary. It is our understanding that development within the area designated as an SVCA screening area is not prohibited as long as suitable consultation with the SVCA has been conducted and written permissions or permits (if required) have been obtained.

It is of particular note that the proposed operations are to be above the water table. No dewatering or water diversion will take place onsite as part of aggregate extraction operations. Based on the occurrence of coarse-grained soils (i.e., the sand and gravel) below the groundwater table, the pre- to post-development groundwater flows are expected remain similar. Consequently, the groundwater flow to the onsite seasonal surface water feature and more largely to the west toward the Saugeen River, considering both the water budget and flow direction, is expected to remain unchanged from pre-extraction to post-extraction when appropriate setback distances are maintained. Thus, no impacts to these areas are anticipated.

2.2.2 Saugeen River and Flood Plain

The Saugeen River is situated approximately 160 metres west of the subject property at its closest point, which flows in a southerly direction. The western portion of the property is currently designated as Hazard Lands and an Ontario Regulation 169/06 screening area. These limitations on the Site development are associated with the floodplains of the Saugeen River.

During the April 7 and June 30, 2021 Site visits, the western portion of the property was observed to be generally dry, with no evidence of surface water with the exception of the seasonally saturated / ponding area in the central portion of the Site, which was found to contain some standing surface water during a Site visit on April 30, 2021. As such, although the western portion of the Site is reported to fall within the GCOP Hazard Land and the SVCA Screening Area, the western portion of the Site does not show evidence of recent seasonal saturation and is expected to only become saturated during record snowmelt or storm events, which would cause the Saugeen River to flood to the limits of the designated floodplain of the river (i.e. 100 year flood event). Further, agricultural activities have been ongoing up to the western property boundary that do not appear to be hindered by saturated soil conditions.

Considering the proposed area of extraction is located outside of the designated Hazard Lands and the required setbacks will be implemented, no impacts to the Saugeen River or its flood plain are anticipated.

The SVCA will be consulted as part of the ARA process and the appropriate permissions or permits are expected to be issued to support development.

No diversion or pumping of surface water is to be conducted as part of the operations. The surface water features are protected through achieving setback distances developed through SVCA and implementing mitigative measures stipulated in the Maximum Predicted Water Table and Hydrogeological Assessment Report prepared by GM Blue Plan dated June 2022 and Natural Environment Technical Report prepared by AWS Environmental Consulting Ltd dated March 2022.

2.3 Nature and Occurrence of Aggregate

The quality, quantity, and approximate limits of the sand and gravel deposits were confirmed during the progression of the boreholes for the installation of the onsite monitoring wells on February 22 to 23, 2021. Each of the monitoring wells were installed near the boundaries of the proposed extraction area. The soil stratigraphy encountered in each of the testholes is summarized in the borehole/monitoring well logs provided in the Maximum Predicted Water Table and Hydrogeological Assessment Report.

In summary, the eastern and northern elevated portions of the Site contain generally well sorted sand, gravel, and cobbles. According to the Surficial Geology of Southern Ontario (Ontario Geologic Survey), the subject property contains coarse textured glacial spillway deposits. The ground surface elevation across the subject property is gradually sloping toward the west and the Saugeen River.

The approximate thickness of the sand and gravel unit was observed to extend from at or near the surface to beyond the elevation of the water table across the proposed area of extraction, resulting in an expected thickness of aggregate above the water table of between approximately 2.5 and 9 metres across the proposed area of extraction.

2.4 Current Use

The subject property is currently being used for agricultural purposes. An existing storage structure is located in the south-central portion of the site, with a gravel access roadway extending north from Concession 4 to the northern portion of the property.

It is noted that the building is proposed to be demolished to allow for aggregate extraction in this area.

2.5 Planning and Land Use Considerations

The overall property is zoned Agricultural Zone (A1) and Natural Environment Zone (NE) under Municipality of West Grey Zoning By-law Number 37-2006. The proposed licensed boundary of the aggregate pit falls within the Agricultural Zone (A1). Consequently, we understand that an amendment to the zoning bylaw (to obtain an Extractive Industrial zoning) is required. An amendment to the Official Plan is not required as the proposed license boundary falls within the aggregate resource area as outlined in Schedule B of the Grey County Official Plan.

Properties surrounding the proposed pit also include Agricultural Zone (A1) and Natural Environment Zone (NE), and Open Space (OS) zones.

The subject Site is situated in the Saugeen Valley Source Protection Area. However, this Site is not situated in a designated drinking water source protection area. Therefore, source water protection policies do not apply to this Site.

Based on the Canada Land Inventory Soil Capability for Agriculture (Department of Energy, Mines and Resources 1967), the proposed extraction area on the subject property is associated with Class 3 Soils with moderately severe limitations that restrict the range of crops that would be suitable for the Site. More specifically, the soil on the Site is reported to have low fertility and moisture limitations.

The total area of the proposed area of extraction is currently being utilized as agricultural crop land. As part of the development and restoration, existing topsoil shall be sequentially stripped and used to create berms, as shown on the plan. However, any portions of the Site that are not undergoing active extraction, excluding the Phase 1A area, shall continue to be used for agricultural crop use pre-extraction and post-extraction following progressive rehabilitation. More specifically, as noted in the Site plans, no more than 5 ha shall remain open for extraction over no more than two phases at one time (excluding the Phase 1A area), with all other portions of the proposed extraction area to continue agricultural crop operations.

Any remaining topsoil is to be maintained in stockpiles on site with vegetative cover, then replaced as part of remediation. Upon restoration and return to use as agricultural lands, the soil quality is expected to be similar to existing conditions. It is of particular note that since it is expected that the sand and gravel aggregate strata extends below the water table across the proposed area of extraction, the post-extraction rehabilitated portion of the subject property is expected to have a similar drainage to pre-extraction.

2.6 Site Access and Haul Route

The proposed haul route will have primary Site access along Concession 4 NDR and Mulock Road to Grey Road 4. The existing farm entrance is considered to be acceptable for truck traffic associated with proposed pit operations. No additional entrance/exit permits are expected to be required from the Municipality.

The primary haul route is east on Concession 4 to Mulock Road, and South to Grey Road 4. Local deliveries may take alternate routes. The County / Municipality would determine the need for the installation of truck turning signs.

3. TECHNICAL REPORTS

Technical reports completed by specialist consultants have been prepared to accompany this application and support the proposed pit development as follows:

- Transportation Study: Proposed JT Excavating Ltd. Pit, Concession 4 NDR, Grey County, prepared by Paradigm Transportation Solutions Limited, dated September 2023;
- Noise Impact Study, Bentinck Gravel Pit, 382063 Concession 4 NDR, West Grey, prepared by Valcoustics Canada Limited dated August 2023;
- A Maximum Predicted Water Table Elevation and Hydrogeological Assessment Report, Proposed Class “A” Pit Above Water, JT Pit, 382063 Concession 4 Bentinck, Prepared by GM BluePlan Engineering June 2022;
- Natural Environment Technical Report prepared by AWS Environmental Consulting Ltd, dated March 2022; and
- A Stage 1 and Stage 2 Archeological Assessment prepared by Archeaological Research Associates Ltd, dated February 2022.

the owner has chosen to conduct a noise assessment although no noise assessment is required for this application since the proposed area of extraction is set back a minimum of 150 metres from surrounding residential dwellings. Each of the completed Technical Reports is described in more detail in the following sections.

3.1 Transportation Study

The study entitled “Transportation Study: Proposed JT Excavating Ltd. Pit Concession 4 NDR, Grey County” was prepared by Paradigm Transportation Solutions Limited in September 2023. A copy of this report is enclosed with this Summary Statement.

The report concluded that:

- Existing Traffic Operations: The study area intersection is currently operating at a good level of service during the AM and PM Peak hour periods;
- Site-generated Traffic: The proposed development is forecast to generate 10 truck trips per hour at full build out;
- Total Traffic Operations: The observed intersection is forecasted to operate well by the five-year horizon without any problem movements;
- Site Distance Assessment: The sight distance required for trick driver’s eye height meets the recommended minimum if the appropriate vegetation is removed. This is an existing condition, not introduced by the subject development; and

- The southwest corner of the intersection of Mulock Road and Concession 4 NDR should be paved to better accommodate truck movements. This is an existing condition, not introduced by the subject development.

3.2 Noise Impact Study

The study entitled "Noise Impact Study, Bentinck Gravel Pit, 382063 Concession 4 NDR, West Grey" was prepared by Valcoustics Canada Ltd., in August 2023. A copy of this report is enclosed with this Summary Statement.

The impact study had the following recommendations:

- All operations at the pit should only be done during the daytime (ie. 0700 to 1900 hours) period;
- The sound emission level for all pieces of equipment used for construction activities including site preparation and rehabilitation must comply with the limits outlined in MECP Publication NPC-115 Construction Equipment;
- Construction activities should only be done during the daytime (0700 to 1900 hours) Monday to Friday and should not be done on the weekends or statutory holidays;
- Alternative technologies to back-up beepers (such as broadband alarms) should be used on the equipment operating at the site. Internal haul routes should be designed to minimize the need for reversing to reduce the use of back-up alarms; and
- The amount and sound emission levels from the equipment operating on site must not exceed those outlined in **Table 1**.

Table 1. Equipment Limits

Type	Maximum Number	Maximum Sound Emission Level (dBA)
Front End Loader	1	76 @ 15 m
Processing Plant	1	90 @ 15 m
Shipping Trucks	10 per hour	75 @ 15 m

- To ensure noise emissions comply with the recommendations of this report, sound emission levels from equipment to be used on site should be measured to ensure they do not exceed the levels outlined herein (Table 5). For equipment brought to the site on an as-needed basis, they may have appropriate CofAs or ECAs that measurements would have been completed prior to approval;
- An off-site noise audit should be completed within 6 months of the start of extraction while processing operations are being done on the site to confirm the MECP noise guideline limits are not exceeded. The audit must be done by a qualified acoustical engineer; and
- If alternate noise mitigation measures are to be implemented they be reviewed and approved by a qualified acoustical consultant to ensure the MECP noise guideline limits will not be exceeded.

The report concluded that with the appropriate implementation of the mitigation measures in the report, the sound levels from the worst case operations on the site will be in compliance with MECP noise guideline limits. As the operations move over the site, sound levels at the off-site receptors will vary. The noise analysis was approached on the basis of determining worst case conditions to ensure that the data presented does not under predict the potential off site sound levels.

3.3 Maximum Predicted Water Table Elevation and Hydrogeological Assessment Report

The study entitled "*Maximum Predicted Water Table Elevation and Hydrogeological Assessment Report - Proposed Category 3, Class "A" Pit Above Water –382063 Concession 4, Bentinck, Municipality of West Grey, Jt. Excavating Ltd.."* was prepared by GM BluePlan Engineering Limited in March 2022, which was revised in November 2023. A copy of this report is enclosed with this Summary Statement.

This investigation has determined that the pit would have no impact on the ground water or surface water features within the area. Based on the geologic mapping, MECP well records, the Grey and Bruce Counties Groundwater Study, and on the site-specific investigations completed to date, it is observed that the groundwater table roughly mimics the topography of the site, with the highest groundwater elevation onsite in the northeastern portion of the property. More specifically, the water table is expected to decline to the lower southwestern portion of the property, consistent with the location of the Saugeen River west of the western property boundary.

In the portions of the site where extraction is proposed, the high water table is inferred to decline from approximately 292.0 masl in the northeastern portion of the proposed extraction area to 289.0 masl in the lower southwestern portion of the extraction area based on March 25, 2022 water levels.

As part of the Hydrogeological Study, the following operational measures were recommended to protect the sensitive features:

- The surface water features, including outlet elevations and controls are not to be adjusted as part of the pit development.
- To generally maintain surface water flows to the same low-lying locations, sloping of the restored grades to maintain similar catchment areas (pre- and post-development) shall be conducted.

3.4 Natural Environmental Technical Report

The combined report entitled "*Natural Environment Level 1 & 2 Reports and E.I.S. Prepared for JT Excavating Ltd. Aggregate Resources Act Application – Part Lot 22, Concession 5, Geographic* Township *of Bentinck, Municipality of West Grey"* was prepared for JT Excavating Ltd by AWS Environmental Consulting Ltd., dated March 2022. A copy of this report is enclosed with this Summary Statement.

Several features were identified that require mitigative measures, including:

- Black Ash colony;
- Ravine Woodland feature through the central portion of the property; and
- Significant Woodlands adjacent to the Site and proposed licensed area.

To address these features, the following mitigative measures were recommended:

1. The 'Limit of Extraction' shall maintain a minimum separation width, to identified Natural Environment features as outlined on Figure 9, with no disturbances within the natural environment setbacks other than that for the internal haul road crossing the central ravine feature:
    a. 30 m from the woodland edge of the central Ravine & Wetland Feature being vegetation community numbers 2, 3, 4, 5 and 6;
    b. 15 m from the Significant Woodland along the north boundary and northeast property corner, being vegetation community numbers 1 and 2;
2. The ‘Operational Plan’ shall show the internal haul road along the existing agricultural land which bisects through the central area of the Ravine feature. However, any required road upgrades or width expansion shall be shown and focused away from the west side of the road which is adjacent to the Black Ash colony and Wetland environment; and
3. The ‘Operational Plan’ design and depth of extraction shall demonstrate no negative hydrogeological or draw-down influences that could negatively impact the wetland feature or it’s identified ecological functions or the headwater area of the watercourse feature.

3.5 Cultural Heritage Resources Investigation

The combined report titled “*Stage 1-2 Archaeological Assessment, Proposed Aggregate Pit, 382063 Concession 4 NDR, Municipality of West Grey”* was prepared by ARA Consultants dated February 2, 2022. A copy of this report is enclosed with this summary statement.

Although the Stage 2 archaeological assessment resulted in the discovery of one location containing cultural heritage value of interest (CHVI) (i.e. Site 3), the Site and it’s recommended setback are outside of the proposed extraction area on the Site.

As such, the following recommendations have been made in the report:

1. No further archeological assessment of the study area is warranted;
2. The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed; and
3. The proposed undertaking is clear of any archeological concern.

4. Operational Plan

The Operational Plan for the proposed pit has been developed based, in part, on the results and recommendations made in the Maximum Predicted Water Table and Hydrogeological Assessment Report, the NETR and the Cultural Heritage Resources Investigation.

4.1 Extraction Operations

4.1.1 Depth of Extraction

The pit is designed for extraction above the water table. Based on the findings of the Hydrogeological Report (GM BluePlan, March 2022), the maximum water table elevation in the portion of the site where extraction is proposed (i.e. the elevated area) was inferred to decline from approximately 292.0 masl in the northeastern portion to approximately 289.0 masl in the southwestern portion of the extraction area based on April 10, 2023 water levels.

Based on the requirement for extraction to be 1.5 m above the high water table, **the maximum elevation of extraction in the northeastern portion of the licensed area is 293.5 masl, sloping to an elevation of 290.5 masl in the southwestern portion of the proposed extraction area.**

Although the depth of the water table has been established via the Maximum Predicted Water Table and Hydrogeological Assessment Report, it is possible that subsurface conditions can vary from those identified. As such, no excavation below the water table, or in standing water is to occur during operations.

4.1.2 Water Diversion and Surface Water Management

No water diversion or taking is planned as part of pit operations. Surface water is to continue to be subject to overland flow and infiltration within the licensed area. Consequently, no permitting specific to water diversion or pumping, such as Ministry of Environment, Conservation and Parks (MECP) Environmental Compliance Approval or Permit to Take Water will be required.

4.1.3 Equipment

Extraction of aggregate is proposed to take place year round with the majority of extraction from April to November during each year of operation at the pit. The mined material is primarily intended for use as aggregate. Extraction is proposed to occur via excavation equipment, including excavators, loaders, or dozers with potential processing via portable crusher and/or screening plant, as needed. No blasting is proposed to occur.

The potential equipment to be utilized on-site includes excavators, dozer, loader, skid steers, grader, crusher, screener, stacker, generator, air compressor and trucks.

4.1.4 Aggregate Quality

The soils on and surrounding the subject site are identified as that of the Sargent series, which is defined as a series of two thin layers of grey and brown loam (i.e. ~0.10 metres each) overlying well-sorted gravelly outwash deposits (Soil Survey Report No. 17). A review of the physiographic mapping (Map 2225) indicates that the subject property is located in an area of glacial spillway deposits.

Glacial spillway deposits generally consist of poorly sorted coarse-textured sand, gravel, and/or cobbles with relatively low silt and clay content. The nature of this soil makes it suitable for a variety of potential aggregate applications depending on the processing (i.e. crushing, screening, etc) that is deemed necessary to meet specific construction/engineering standards.

Observations documented during the drilling investigation and monitoring well installations that were conducted on the Site to support the hydrogeological assessment indicate that the aggregate onsite consists of generally coarse gravel and sand with varying cobble content across the area of proposed extraction, which is expected to be generally consistent with material that is suitable for various uses as engineered granular fill materials.

4.1.5 Extraction Phases and Quantities

The total area to be licensed comprises 30.79 ha. The total area within the setback limits that is proposed for extraction is 20.79 ha. The remaining 10.00 ha is comprised primarily of buffer lands, visual screening, environmental buffer, set-backs and the access roads. Based on available information, assuming associated processing, crushing, or screening is performed to meet specific gradation requirements (if required), the aggregate onsite is expected to be suitable to be used as granular 'A', granular 'B', or other various granular fill materials. It is proposed to conduct the extraction operations in five (5) phases, commencing as follows:

Phase 1: Progression from the central portion of the licensed area to the northeastern extent of the extraction area in a northerly direction and the development of the processing and equipment storage area in the location of Phase 1A,

Phase 2: Progression from the central portion of the licensed area to the northwestern extent of the extraction area in a northerly direction,

Phase 3: Progression from the east-central portion of the licensed area in a southerly direction to the eastern portion of the extraction area,

Phase 4: Progression from the eastern portion of the licensed area in a southerly direction to the southeastern extent of the extraction area, and

Phase 5: Progression from the west-central portion of the licensed area in a southerly direction to the westerly and southwesterly extent of the extraction area.

Each phase includes an area of approximately one fifth of the total extraction area. Generally, extraction of suitable aggregate would be generally completed in each phase before extraction in the adjacent area would start. Multiple phases may be open at one time in order to achieve extraction of differing materials that meet blending requirements, so long as the required berms are in place prior to extraction in the associated areas. No more than 5 ha shall remain open at once across no more than 2 Phases, excluding the Phase 1A area.

The limits of extraction proposed in each phase are indicated on the Operational Plan (Drawing No. 2). The density of aggregate has been estimated to be 2.2 tonnes/m^3.

It is noted that an unknown percentage of the total aggregate volume would be lost due to unsuitable materials.

Based on a maximum extraction rate of 300,000 tonnes per year, the site life is estimated to be approximately 4.3 years assuming the maximum tonnage, full limits and depths of proposed extraction are realized.

The sequence of material movement and extraction operations within each extraction phase is described in the following:

Phase 1/1A

1. Stripping of topsoil and extraction of the overburden down to the top of the aggregate would be completed in the Phase 1 area. The topsoil / overburden materials from Phase 1 are to be used in the construction of berms at the north side of Phases 1 and 2 and the west side of Phase 2, as noted in the Operations Plan. These berms are to be constructed prior to extraction operations in Phases 1 and 2.
2. Interim storage of the extracted aggregate would occur until the extraction to the pit floor is established in Phase 1. Once sufficient storage area in the floor of Phase 1 is established, future stockpiling of the product would remain in Phase 1 and the floor of the pit in the active area. The area of Phase 1A will be maintained as a processing and equipment storage area.
3. Extracted material would be processed and equipment would be stored in the Phase 1A area to maximize the distance from residential dwellings in the area and Concession 4.
4. Excess stockpiled soil not used in berm construction (if any) would be utilized for progressive rehabilitation as operations proceed from Phase 1 to Phase 2.

Phase 2

1. Stripping of topsoil and extraction of the overburden down to the top of the aggregate would be completed in the Phase 2 area. The topsoil/ overburden materials from Phase 2 are to be used in the construction of the berms at the southwestern and southern property boundary, as required, and/or for the rehabilitation of Phase 1, as needed, with excess soil placed at the south of Phase 2.
2. Phase 1 rehabilitation is to occur.
3. Initial stockpiling of topsoil/overburden and materials would occur in the last stages of the Phase 1 area. Once sufficient storage area in the floor of Phase 2 is established, future stockpiling of the product would remain in Phase 2 and the floor of the Pit in the active area, with the final portion of Phase 1 subsequently rehabilitated.
4. Phase 1A shall be maintained as an equipment storage, processing, and/or aggregate stockpiling area for the duration of onsite operations. The northerly and northwesterly berms are to remain in place during operations.

5. Stockpiled soils would be utilized for progressive rehabilitation, then for berm construction on the southern portion of the Site as operations proceed from Phase 2 to Phase 3.

Phase 3

1. Stripping of topsoil and extraction of the overburden down to the top of the aggregate would be completed in the Phase 3 area. The topsoil/ overburden materials from Phase 3 are to be used in the construction of the berms west of Phases 3 to 5 and east of Phase 4, adjacent to Concession Road 4. These berms are required to be in place prior to the extraction of aggregate in Phases 3 to 5.
2. Excess soil shall be placed at the north end of Phase 3 and used for the rehabilitation of Phase 1 or 2 areas, as needed.
3. The stockpiling of topsoil/overburden and aggregate materials would occur in the northern portion of the Phase 3 area, proximal to the working face, or in the Phase 1A area.
4. Once sufficient storage area in the floor of Phase 3 is established, future stockpiling of the product would remain in Phase 3, on the floor of the Pit in the active area, with the final portion of Phase 2 subsequently rehabilitated.

Phase 4

1. Stripping of topsoil and extraction of the overburden down to the top of the aggregate would be completed in the Phase 4 area. The topsoil/ overburden materials from Phase 4 are to be placed at the north end of Phase 4 and used for the rehabilitation of Phase 2 or 3 areas, as needed.
2. The stockpiling of topsoil/overburden and aggregate materials would occur in the northern and/or eastern portions of the Phase 4 area, proximal to the working face, or in the Phase 1A area.
3. Once sufficient storage area in the floor of Phase 4 is established, future stockpiling of the product would remain in Phase 4, on the floor of the Pit in the active area, with the final portion of Phase 3 subsequently rehabilitated.

Phase 5

1. Stripping of topsoil and extraction of the overburden down to the top of the aggregate would be completed in the Phase 5 area. The topsoil/ overburden materials from Phase 5 are to be placed at the north end of Phase 5 and used for the rehabilitation of Phase 3 or 4 areas, as needed.
2. The stockpiling of topsoil/overburden and aggregate materials would occur in the northern portion of the Phase 5 area, proximal to the working face, or in the Phase 1A area.
3. Once sufficient storage area in the floor of Phase 5 is established, future stockpiling of the product would remain in Phase 5, on the floor of the Pit in the active area, with the final portion of Phase 4 subsequently rehabilitated.
4. Upon completion of Phase 5, final rehabilitation of the Phase 5 and the overall Site is to commence, with the rehabilitation of Phase 1A completed when it is no longer required. Soils used in the construction of the berms shall be used for the final rehabilitation of the Site. The extension of the existing access roadway is to be rehabilitated and the underlying soil returned to a non-compacted condition to facilitate future agricultural use.

Stockpiles will be located in the active Phase proximal to the working face, or in Phase 1A (Processing Area) greater than 30 metres from the licensed boundary.

Regardless of the Phasing sequence, multiple phases may be open at one time in order to achieve extraction of differing materials that meet blending requirements, so long as the required berms are in place prior to extraction in the associated areas. No more than 5 ha shall remain open at once across no more than 2 Phases, excluding the Phase 1A area.

4.1.6 Visual Screening

Visual screening from Concession 4 will be provided along the south side of the licensed limit via construction of a topsoil berm (refer to Drawing 2). The berms are to be 3 metres high.

No visual screening is required along the remainder of the east, south, and west boundaries due to the land topography, existing tree/vegetative cover, and sight distance. More specifically, the nearest residential dwelling from the license area (i.e. on the southerly adjacent property) is approximately 310 metres south of the Site and will be screened with existing vegetation and the proposed berm. The closest residential dwelling not separated by the proposed berm is the dwelling situated approximately 320 metres west of the western license boundary, which is screened by a number of treelines and is located beyond the Saugeen River.

4.2 Access and Haulage Route

The primary haul route is east on Concession 4 to Mulock Road, and South to Grey Road 4. Local deliveries may take alternate routes.

The Site entryway shall be maintained to accommodate the associated truck traffic and be in compliance with applicable Municipality of West Grey By-Laws. The County / Municipality would determine the need for the installation of truck turning signs.

4.3 Operational Setbacks

Operational setbacks have been provided to mitigate potential concerns caused by operations including, but not limited to, noise, visual buffer, and ecological and environmental disruption. Prior to extraction in each Phase, the limits of extraction are to be staked/demarked.

The following setbacks are shown on the Operational plans and were developed based on standards developed through the ARA or support studies:

- 10 m setback from property limits;
- 15 m setback from existing tree lines of significant woodlands;
- 30 m setback from property boundaries for soil and overburden stockpiles (not including berms);
- 3 m setback for berms from property boundary;
- 30 m setback from treeline of identified ravine and wetland feature; and

- The setback for noise receptor (150 m) and processing (300 m) have been met. The owner has chosen to carry out a Noise Impact Assessment although one is not required.

4.4 Progressive and Final Rehabilitation

Rehabilitation is to occur progressively throughout development of the proposed Pit. Rehabilitation of the phases is to be initiated upon completion of each successive phase so that no more than one Phase is exposed at one time, with the exception of internal haul roads, during transition from one Phase to the next, and the Phase 1A area, which will be used for a processing and equipment storage area throughout onsite operations.

Excess and/or unsuitable overburden is to be used to complete restoration. Although imported fill is not expected to be required for the rehabilitation of the Site, it may be imported for rehabilitation/grading purposes as long as it meets the soil quality standards outlined in Drawing 3 (Rehabilitation Plan) and only after available onsite excess soil has been utilized. After extraction and as part of rehabilitation, the final grade of the side slopes are to be no steeper than 3:1 (horizontal to vertical). The side sloping may be achieved via extraction methodology or by filling with excess soils and/or inert fill.

As part of the development and restoration, existing topsoil is to be stripped, maintained in stockpiles on site with vegetative cover, or used for the construction of berms, then replaced. Replaced topsoil shall be vegetated with grasses or agricultural crops such as wheat, beans, corn, or native grass mix. Additional seeding is to occur on a regular basis until sufficient vegetative cover is achieved. Upon restoration and return to use as agricultural lands, the soil quality and drainage is expected to be similar to existing conditions. After restoration and where harvest is not planned for the next season, the field is to be seeded with standard cover crop to promote soil fertility.

All of which is respectfully submitted,

5. Enclosures

Transportation Study

Transportation Study: Proposed JT Excavating Ltd. Pit, Concession 4 NDR, Grey County, prepared by Paradigm Transportation Solutions Limited, dated September 2023;

Noise Study

Noise Impact Study, Bentinck Gravel Pit, 382063 Concession 4 NDR, West Grey, prepared by Valcoustics Canada Limited dated August 2023;

Maximum Predicted Water Table and Hydrogeological Assessment Report

"Maximum Predicted Water Table and Hydrogeological Assessment Report - Proposed Class 'A' Aggregate Pit Above Water – J.T. Pit – 382063 Concession 4, Bentinck, Municipality of West Grey – J.T. Excavating Ltd." (Revised November 2023) prepared by GM BluePlan Engineering Limited.

Natural Environmental Technical Report

"Natural Environment Technical Report prepared for JT Excavating Ltd. Aggregate Resource Act Application – JT Pit – Part Lot 22, Concession 5 NDR, Geographic Township of Bentinck, Municipality of West Grey, County of Grey", (March 2022) prepared by AWS Environmental Consulting Ltd.

Cultural Heritage Resources Investigation

"Stage 1 and 2 Archaeological Assessment – Proposed Aggregate Pit – 382063 Concession 4 NDR, Municipality of West Grey, Part of Lot 22, Concession 5, Geographic Township of Bentinck, Grey County, Ontario", (July 2022) prepared by Archaeological Research Associates Ltd.