Planning Justification Report

Whistle Bare Aggregate Pit Expansion

1476545 Ontario Inc.

Township of North Dumfries

Zoning By-law Amendment

March 2022 revised September 2024



Planning Justification Report

Whistle Bare Aggregate Pit Expansion

Zoning By-law Amendment

Township of North Dumfries

March 2022 Revised September 2024

Prepared for:

1476545 Ontario Inc. 270 Shoemaker Street Kitchener, ON N2E 3E1

Prepared by:

GSP Group Inc. 201-72 Victoria Street South Kitchener, ON N2G 4Y9

Project No: 19036



Contents

1.	Introduction			
	1.1	Background	1	
	1.2	Purpose and Scope	2	
2.	Site Context			
	2.1	Site Description	3	
	2.2	Surrounding Land Uses	3	
3.	Proposed Development			
	3.1	Extraction	4	
	3.2	Rehabilitation	4	
4.	Proposed Applications			
	4.1	Zoning By-law Amendment	6	
	4.2	Aggregate Resources Act	6	
5.	Supporting Studies		7	
	5.1	Environmental Impact Study	7	
	5.2	Hydrogeological Investigation	9	
	5.3	Archaeological Assessments	10	
	5.4	Noise Impact and Land Use Compatibility Study	12	
	5.5	Best Management Practices Plan for Control of Fugitive Dust Emissions	13	
6.	Planning Policy Framework			
	6.1	Planning Act	15	
	6.2	Provincial Policy Statement	15	
	6.3	2024 – Provincial Planning Statement	17	
	6.3	Growth Plan for the Greater Golden Horseshoe	18	

	6.4	Region of Waterloo Official Plan	20	
	6.5	Township of North Dumfries Official Plan	22	
	6.6	Township of North Dumfries Zoning By-law No. 689-83	26	
7.	Publ	ic Consultation Strategy	27	
8.	Justification & Compatibility			
9.	Cond	clusion	30	
Appendix A: Pre-application Consultation Record				
Appendix B: Proposed Zoning By-law Amendment				
Appendix C: Rehabilitation Plan				

Figures

- 1. Site Location
- 2. Surrounding Land Uses
- 3. Concept Plan
- 4. Growth Plan: Prime Agricultural Areas
- 5. Region of Waterloo Official Plan: Land Use
- 6. Region of Waterloo Official Plan: Mineral Aggregate Resource Areas
- Township of North Dumfries Official Plan: The Countryside 7.
- 8. Township of North Dumfries Official Plan: Mineral Aggregate Resource Areas
- 9. Township of North Dumfries Official Plan: Hazard Lands
- 10. Township of North Dumfries Zoning By-law Schedule

1. Introduction

1.1 Background

GSP Group Inc. has been retained by 1476545 Ontario Inc. (the "Owner") to prepare a Planning Justification Report in support of a Zoning By-law Amendment application for 1821-1835 Whistle Bare Road (the "Site"). The Site is legally described as Part of Lots 27 and 28, Concession 12.

The Owner is proposing to expand the existing aggregate extraction operation on 1951 Whistle Bare Road to the Site (the "Proposed Development"), which is adjacent to the west. The current annual tonnage (100,000 tonnes per year) of the existing aggregate pit will not increase under existing Pit License Number 5470.

The Site is 41.52 hectares in size with 820 metres of frontage on Whistle Bare Road. It is currently occupied by a single detached dwelling and farm buildings which will be demolished to accommodate the Proposed Development. The majority of the Site is used for agricultural cash crop production.

The Site is designated Prime Agriculture in the Province's Growth Plan for the Greater Golden Horseshoe Agricultural Land Base Mapping. It is further designated "Rural Area", "Protected Countryside", "Aggregate Resource Area", and "Hazard Land" in both the Region of Waterloo Official Plan and the Township of North Dumfries Official Plan. It is zoned Agriculture (Zone 1).

A Zoning By-law Amendment to rezone the Site to Mineral Aggregates (Zone 14) and Environmental Protection 1 (Zone 12a) is required, as well as approval of a Class A Category 3 Aggregate License through the Aggregate Resources Act from the Ministry of Natural Resources and Forestry ("MNRF"). The Aggregate Resources Act application is a separate process from the *Planning Act* process and is addressed independently.

The Proposed Development and applications were discussed at a Pre-Application Consultation with Township of North Dumfries ("Township"), Region of Waterloo ("Region"), and the MNRF on April 3, 2019. The Grand River Conservation Authority "GRCA") were not in attendance and provided written comments for review. Staff identified that a Planning Justification Report, Traffic Impact Study, Environmental Impact Study, Ecological Management and Enhancement Plan, Hydrogeological Study, Archaeological Study, Noise and Air Quality Assessment, and Land Use Compatibility Study are required as part of a complete application.

In consultation with the Township, a Traffic Impact Study has not been completed as the haul route and extraction rate will not change with the expansion of the Tullis-Whistle Bare pit onto the Site. The Ecological Management and Enhancement Plan is addressed in the Environmental Impact Assessment, Hydrogeological Study, and Rehabilitation plans.

1.2 **Purpose and Scope**

This Report has been prepared in support of a Zoning By-law Amendment required to rezone the Site to permit aggregate extraction. The objectives of this Report are as follows:

- To provide a description of the Site's existing conditions and its context within the Township of North Dumfries and the surrounding neighbourhood (Section 2);
- To describe the Proposed Development (Section 3):
- To outline the proposed planning application required for the Proposed Development (Section 4):
- To provide a summary of the findings of the technical studies and reports prepared in support of the application (Section 5);
- To provide an overview and analysis of the relevant Provincial and Municipal planning policy and regulatory context relevant to the proposed application (Section 6);
- To provide a Public Consultation Strategy (Section 7); and,
- To provide a planning opinion and justification supporting the proposed application based on site suitability and land use policy and regulatory considerations (Section 8).

The Pre-submission Consultation Record, Region of Waterloo comments, and Grand River Conservation Authority comments are included in this Report as Appendix A. The Draft Zoning By-law Amendment is included as **Appendix B**. The Rehabilitation Plan is included as Appendix C.

2. Site Context

2.1 Site Description

The Site is located at 1821-1835 Whistle Bare Road in the Township of North Dumfries and is legally described as Part of Lots 27 and 28, Concession 12 (**Figure 1**). It is 41.52 hectares in size with 820 metres of frontage on Whistle Bare Road.

The Site is currently occupied by a farm, a silo, sheds, and an accessory two storey single detached dwelling. A barn was demolished in early 2020 due to its hazardous condition. The majority of the Site is used for agricultural cash crop production. Two hydro towers are located on the property in an easement that bisects the property. A small wetland is located at the south portion of the Site and is partially located within the adjacent Grand Valley Golf Course. This wetland area is regulated by the Grand River Conservation Authority and has been evaluated as Provincially Significant. It is excluded from the extraction area and is addressed in the Environmental Impact Study that is summarized in Section 5.1 of this Report.

The Site generally drains towards the north and the south, with little surface water runoff to Blair Creek or Cedar Creek. The low point on the Site is the wetland.

Test pits and boreholes advanced by Chung and Vander Doelen revealed that the Site has extensive deposits of sand, gravel, and trace cobbles suitable for aggregate extraction. The deposits are classified as high-quality aggregate due to the low silt content within the deposits.

The Canada Land Inventory ("CLI") classifies soils based on their agricultural productivity. The soils on the Site are Class Two Prime Agricultural. Once aggregate extraction has ceased on the Site, it will be rehabilitated to agricultural use.

2.2 Surrounding Land Uses

The Site is located east of Highway 401, west of Dickie Settlement Road, north of Roseville Road, and south of Fountain Street in rural North Dumfries (**Figure 2**). It is directly south of the Whistle Bear Golf Club and Whistle Bare Campground. The existing Tullis-Whistle Bare Pit is adjacent to the west, the Grand Valley Golf and County Club is adjacent to the south, and agricultural uses are adjacent to the east.





Site Location
Source: Waterloo Region Maps (2018)

Figure





Surrounding Land Uses
Source: Waterloo Region Maps (2018)

3. **Proposed Development**

3.1 **Extraction**

The Proposed Development is an extension of the Tullis-Whistle Bare Pit (Figure 3). Both Sites will share an access, an internal haul route, and the same hours of operation. Extraction will continue from the existing pit into the Site in a west to east direction over the next 21-24 years, as described in these three phases:

- 1. Extraction on the Site will begin at the boundary of the Tullis Pit and move east into the Site, encompassing an area of 5.53 hectares. Aggregate will be extracted for 5-6 years before moving to Phase Two.
- 2. In Phase Two, extraction will move east around the wetland and will continue for 9-10 years. The Phase Two extraction area is 6.98 hectares.
- 3. Phase Three the remaining 8.33 hectares of the Site will be extracted, providing enough aggregates for 7-8 years of extraction.

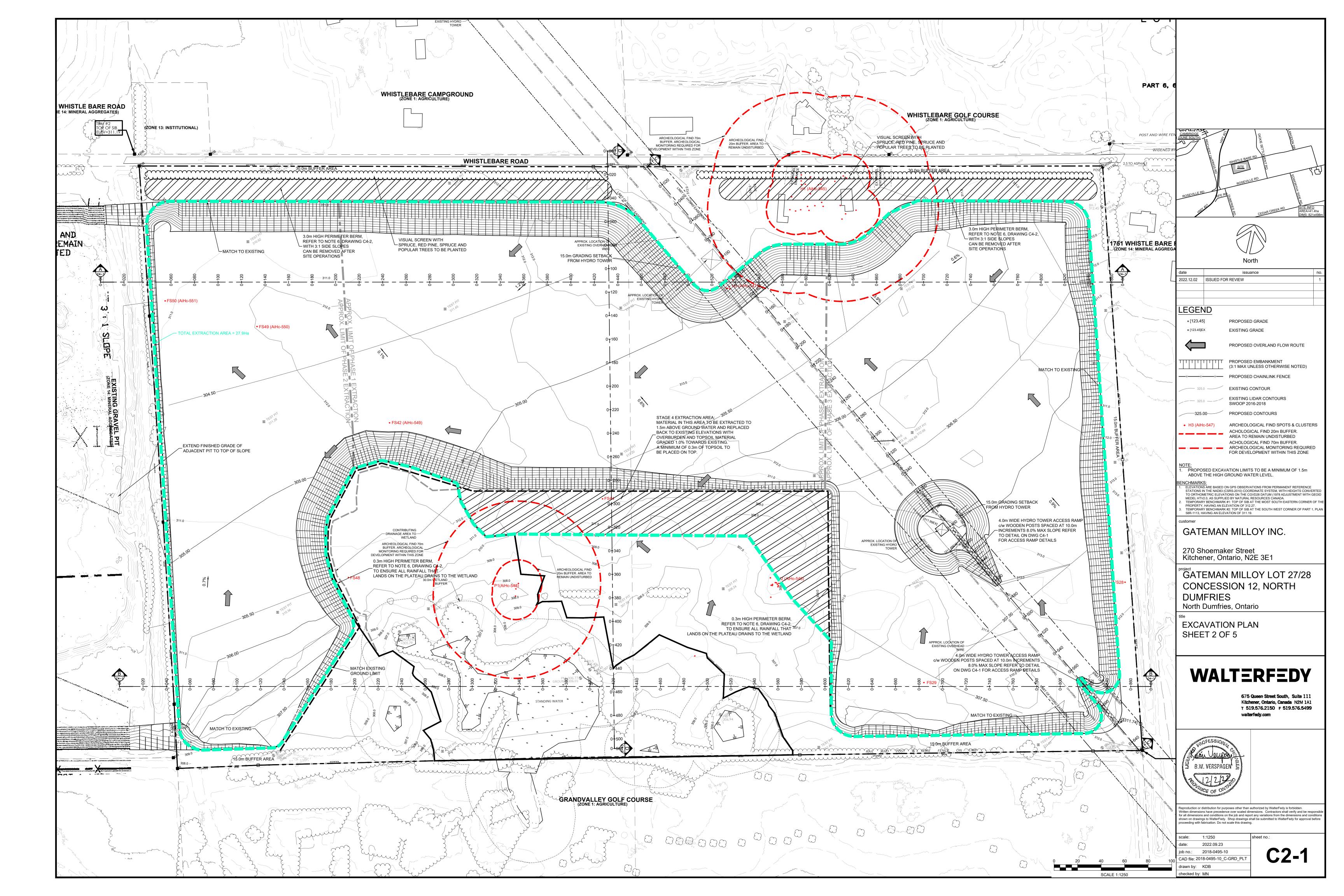
A 15-metre buffer is proposed along the east and south property lines, while a 30-metre buffer is proposed along the north property line parallel to Whistle Bare Road. A 15-metre setback with an incorporated access ramp is proposed along the southern hydro tower, while the northern hydro tower is outside of the extraction limit. A 20-metre buffer is proposed around an archaeological find at the north of the Site (AiHc-545) which will remain undisturbed. A 70-metre buffer around this same find requires archaeological monitoring for site alteration and / or extraction, both of which are proposed. A separate archaeological find located within the wetland area (AiHc-548) requires the same 20- and 70-metre buffers. Site alteration is not proposed within the buffers of the southern find.

Topsoil is proposed to be bermed along the north, south, and east property line to conserve the Class 2 soils and to create a barrier that will reduce the amount of dust and noise from operations. The berms will be less than 4 metres high and will have a maximum slope of 3:1. The bermed topsoil will be used to remediate the Site once extraction operations cease.

Temporary aggregate stockpiles will be less than 10 metres in height, measured from the pit floor. Silt screens will be installed around disturbed areas of the Site and around the wetland.

3.2 Rehabilitation

The Site will be rehabilitated to a condition that is suitable for agricultural use once extraction has been completed. The topsoil berms will be distributed over the Site to create a 0.3metre-thick layer of topsoil on top of a 0.3-metre-thick layer of silt loam. The Site will be



graded to maintain existing drainage and will include depressed areas to receive onsite runoff. A buffer is proposed along the extraction limit to ensure rainfall continues to drain into the wetland.

Native seed mixes and native shrubs will then be planted on the Site. A 30-metre buffer is proposed along Whistle Bare Road and a 15-metre buffer is proposed along the eastern and southern property lines. The Rehabilitation Plan is included as **Appendix C**.

4. **Proposed Applications**

4.1 **Zoning By-law Amendment**

The Site is currently zoned Agriculture (Zone 1), which does not permit aggregate extraction. As such, a Zoning By-law Amendment is required to rezone the Site to Mineral Aggregates (Zone 14) and Environmental Protection One (Zone 12a). A site-specific exception is requested to permit extraction along the western property line in accordance with the Preapplication Consultation. The Township of North Dumfries has requested a Holding provision to ensure that no excavation occurs at a depth greater than 1.5 metres above the seasonally adjusted high groundwater level unless the required studies and approvals are granted, as well as to ensure all necessary road improvements are completed.

As described in Section 4.2 below, the requested permit from the Ministry will ensure that the pit bottom is at least 1.5 metres above the water table. A Hydrogeological Investigation and topographical survey have been prepared to identify the water table to ensure the depth of extraction is at least 1.5 metres above the water table. As such, this concern has been addressed and a related holding provision is not required.

The access, haul route, and amount of annual tonnage will remain the same despite the expansion and there will be no necessary road improvements. As such, this concern has been addressed and a related holding provision is not required.

The Zoning By-law Amendment is included in **Appendix B**.

4.2 **Aggregate Resources Act**

All aggregate extraction pits in Ontario require a permit from the Ministry of Natural Resources and Forestry under the Aggregate Resources Act. The existing Tullis-Whistle Bare pit has a permit for an annual extraction tonnage of 100,000 tonnes per year.

A new Category 3 - Class A Above Water pit permit is required to facilitate aggregate extraction on the Site. Above water table pits maintain a pit bottom that is at least 1.5 metres above the water table. The location of the water table has been determined in a Hydrogeological Investigation that is summarized in Section 5.3 of this Report. This application is addressed separately from the Planning Act process.

5. **Supporting Studies**

The following studies have been prepared in accordance with the Pre-consultation Application Meeting and are summarized in this Report for convenience. The full reports have been submitted with the application.

5.1 **Environmental Impact Study**

Natural Resource Solutions Inc. prepared an Environmental Impact Study to assess the environmental conditions of the Site and determine how environmental features will be impacted by the Proposed Development.

The Township and Grand River Conservation Authority were consulted in the preparation of the Study to define the scope, terms of reference and study methods. The GRCA was also consulted to confirm the boundary of the wetland.

The Study included 16 terrestrial field surveys to characterize natural features and identify significant natural heritage features and species. These surveys included vegetation surveys, breeding bird surveys, herpetofaunal surveys, insect surveys, and mammal surveys. These surveys identified the following:

- 165 species of plants were observed, with the majority observed in proximity to the wetland. No Species at Risk plants were observed, and regionally rare plants that were identified are not considered significant as they were located in field hedgerows and were not of native origin. The wetland area is identified as Significant Wildlife Habitat due to providing possible nesting habitat for the Green Heron, which was observed on the Site.
- 43 bird species were observed on the Site, with 35 species showing signs of breeding. One regulated Species at Risk, the Barn Swallow, was observed on the Site and was nesting in the barn. Eight active nests were documented in the barn. The barn was demolished in early 2020 due to its hazardous condition. In accordance with Ontario Regulation 242/08, a Barn Swallow Mitigation Plan was prepared to ensure that Barn Swallows were not harmed during the demolition. This included providing a replacement nesting structure prior to demolition that is to be monitored for 3 years following installation.
- 6 species of frogs and toads were identified, none of which were Species at Risk or Species of Special Concern.
- 4 mammal species were observed, none of with are Species at Risk or Species of Special Concern. Coyotes are identified as regionally scarce.

- The wetland area is identified as Significant Wildlife Habitat due to providing possible nesting habitat for the Green Heron, which was observed on the Site.
- Candidate bat habitat was identified, with the majority being within trees located within the wetland area. The existing house was identified as possible bat habitat, though no evidence of bats was discovered during an inspection. A few trees located in hedgerows were also identified as candidate habitat. The Study recommends the house be re-examined for evidence of endangered bats prior to demolition, and the trees in proximity to the wetland and within the hedgerow are to be retained.
- 3 species of butterfly were observed, including the Monarch, a Species of Special Concern. Only adults were discovered during surveys, and limited Common Milkweed was present on the Site. As a result, the Site is not identified as Significant Wildlife Habitat.
- 3 species of odonata (dragonfly and damselfly) species were identified, none of which are Species at Risk or Species of Special Concern.

The wetland on the Site was not previously evaluated. As a result of the investigation and due to proximity to the Cedar Creek Tributary Provincially Significant Wetland, the wetland was identified as "provincially significant". A 30-metre buffer from the wetland is imposed to protect the wetland from development impacts.

Direct impacts to the natural heritage features identified in the Study are:

- Removal of vegetation including cultural meadow, deciduous trees, and shrubs from sparse hedgerows;
- Removal of the barn containing barn swallow nests; and,
- Removal of the house, which may be candidate bat habitat.

Recommended mitigation includes the retention of vegetation whenever possible and the planting of native species. Vegetation clearing is to occur outside of the breeding bird season (May 1 to July 31), and if this cannot be avoided, a nest search by qualified biologists is required. The existing house is to be examined for bats prior to demolition. Trees proximate to the house are to be removed outside the active bat season (April 1 to September 30). Barn swallow mitigation has been detailed in a separate mitigation plan.

Indirect impacts analyzed by the Study are:

- Changes to surface drainage, specifically as it relates to the wetland and off-site creeks;
- Changes to groundwater infiltration patterns;
- Sedimentation and erosion; and,

Impacts to wildlife.

Impacts to the surface drainage related to the wetland is proposed to be mitigated by including the wetland catchment area within the protected area of the wetland (i.e. 30 metre buffer) (proposed to be Zoned EP1 and not subject to aggregate extraction). Groundwater infiltration will increase with aggregate extraction due to removal of vegetation and topsoil and is not anticipated to impact the water table or water quantity reaching Blair Creek or Cedar Creek. A low berm is proposed to be constructed at the limit of extraction to ensure rainfall flows towards the wetland in accordance with the water budget.

A sedimentation and erosion plan is recommended. Wildlife impacts are mitigated through the retention of the wetland and adjacent lands, though indirect impacts including noise, dust, and lighting may arise and disrupt species. Limiting aggregate extraction to daylight hours and avoiding the use of artificial lighting is recommended, as well as preparation of a dust mitigation plan.

The Study also provides recommendations for enhancement and restoration, which include retaining the existing wetland buffer, using prescriptive seeding within the hay field, and converting the portion of the cornfield outside the extraction limit into a natural meadow. These opportunities are to be considered with the long-term rehabilitation plan. Continued biological monitoring is recommended.

The Study concludes that the natural heritage features of the Site can be adequately protected by excluding the wetland, its 30-metre buffer and its catchment area from aggregate extraction in combination with proposed mitigation measures.

5.2 **Hydrogeological Investigation**

A Hydrogeological Investigation was prepared by Chung & Vander Doelen to examine the Site's water table configuration and aggregate characteristics and to assess potential impacts of the development on groundwater, surface water, and wetland features.

The Investigation included advancing 21 test pits into the Site at a depth between 4.9 and 7.3 metres. The borehole and test pit data confirm that the Site is underlain by extensive deposits of gravel and sand with trace cobbles interlayered with deposits of sand. The deposits have trace amounts of silt and are considered high quality aggregate that meet the criteria for Granular "A" or "B".

In addition, 8 monitoring wells were installed at depths between 5.0 and 13.1 metres and 3 shallow drive-point piezometers were installed to investigate the wetland. The water table configuration indicates that the majority of shallow groundwater flow is directed toward the Blair Creek watershed. The depths of the water table vary across the property, with a depth between 10.5 to 5 metres in the north and adjacent to the west and east property boundaries during the spring. In the south near the wetlands the depth ranges from 5 metres to 6.5 metres during the fall to 0 to 0.5 metres during the spring. The piezometers indicate that shallow groundwater moves away from the main wetland the majority of the time and that the pond functions as a recharge feature to the shallow groundwater regime. At times (July, August, and October) the wetland pond was dry. The only significant water balance components are groundwater recharge and evapotranspiration.

The Site is topographically divided between the Blair Creek and Cedar Creek watersheds and includes numerous topographic depressions. Due to the hummocky topography, it is expected that little or no surface water runoff leaves the Site. Instead, on-site runoff is directed to topographic depressions, infiltrates, or evaporates. The lowest point on the Site is occupied by a wetland and pond that is also located on the neighbouring Grand Valley Golf Course. The golf course uses the pond for irrigation and pumps water into the pond from an adjacent well.

The Hydrogeological Assessment determine that the high-water contour is a conservative baseline for determining the 1.5 metre distance between the high-water table and the pit bottom limit of extraction. Removal of topsoil to facilitate aggregate extraction is expected to result in an increase in groundwater recharge on the Site, resulting in the water table rising a few centimeters after recharge events. Based on the increased recharge, no water quantity impacts are expected to shallow aquifer wells or to Blair Creek or Cedar Creek.

The Assessment concludes that the catchment areas and closest depressions around the wetland are to be maintained by prohibiting aggregate extraction inside or below the 310 metres above sea level elevation contours. For the remainder of the Site, aggregate extraction can occur provided the pit bottom is offset 1.5 metres from the high-water table identified in the Assessment (approximately 307.5 metres above sea level in the southwest corner and 306.5 metres above sea level along the north and east edges, and no deeper than 304 metres above sea level in the northwest corner).

5.3 **Archaeological Assessments**

Detritus Consulting Ltd. Prepared a Stage 1-2 Archaeological Assessment to determine the archaeological potential of the Site and to conduct a field assessment of archaeological resources.

The Stage 1 Assessment involved a desktop review of information on the study area's geography, history, and previous archaeological fieldwork to determine the archaeological potential of the Site. The Stage 1 Assessment determined that the Site has high

archaeological potential due to the proximity of registered finds within one kilometre of the Site, proximity to potable water, suitable soils for agriculture, and the length of time the study area was inhabited prior to the arrival of Euro-Canadian settlers.

The Stage 2 Assessment involved a pedestrian survey to identify archaeological resources. Approximately 90% of the Site was ploughed, facilitating a five-metre pedestrian survey which revealed the following:

- One cluster of pre-contact Aboriginal artifacts (P1)
 - Projectile point and chert flakes that possibly indicate an incidental loss during a hunt.
- Two clusters of Euro-Canadian artifacts (H2 and H3)
 - H2: primarily glass bottle fragments and ironstone dating from the late 19th to early 20th century
 - H3: glass bottle fragments, ironstone, porcelain fragments dating from the late 19th to early 20th century
- Three isolated projectile points (42, 49, and 50)
- Four isolated pre-contact Aboriginal artifacts (43, 44, 48, and 60).

These resources were recorded and collected for laboratory analysis and description.

The remaining portion of the Site (i.e. 10%) was inaccessible to ploughing and required a test pit survey analysis at five metre intervals. Test pits were at least 30 centimetres in diameter to a depth between 25 and 45 centimetres. The survey identified:

- Cluster of Euro-Canadian artifacts (H1) containing 208 artifacts.
 - Primarily ceramics and structural artifacts (brick, nails, window fragments) that predate 1900

The wetland and highly disturbed areas were not investigated.

The Stage 2 Assessment determined that Cluster H1 and Cluster P1 were of cultural significance and recommended for Stage 3 Assessment. To develop within 20 metres of H1 or P1, a Stage 3 Assessment is required. Alternatively, an avoidance and protection approach can be utilized where site alteration and development are not permitted within 20 metres of either find and an additional 50 metre construction monitoring zone is applied which requires archaeological monitoring during site alteration.

The avoidance and protection approach will be utilized for this Site. As such, the archaeological resources of Clusters P1 and H1 will be protected and no further

archaeological assessment is required. A letter confirming that the above-noted avoidance measures will be implemented has been signed by the owners and is included in the submission package. A restrictive covenant will also be required to be registered on title regarding the ongoing protection of Cluster H1.

5.4 Noise Impact and Land Use Compatibility Study

GHD prepared a Noise Impact and Land Use Compatibility Study to assess noise, dust, and vibration impacts on surrounding sensitive uses from the expanded aggregate pit. The Study includes a D-6 Evaluation and NPC-300- Noise Assessment. There are no anticipated odour impacts and dust has been assessed in a separate report (see Section 5.5 below).

D-6 Guidelines

The Study determined that the Site is a Class III Heavy Industry under the D-6 Guidelines with a recommended minimum separation distance of 300 metres and a potential area of influence of 1,000 metres. There are existing sensitive land uses within both separation distances.

Regardless of the recommended separation distances, Section 4.10.3 of the Guidelines permits the proponent to prepare a detailed impact assessment to support an application for a change in land use. As noise is expected to be the most significant impact on the Site, a detailed noise assessment was prepared.

Noise / NCP-300

Aggregate operations will include the removal, crushing, and piling of gravel and soil within the pit during the hours of 7 a.m. to 5 p.m. Two trucks per hour are anticipated as a worstcase scenario. A loader, crusher, screener, and stockpiling conveyors will be used in the operations. All equipment has been identified as a steady-state noise source.

Nine sensitive point-of-reception locations within 500 metres of the Site were identified, all of which are dwellings along Whistle Bare Road or Roseville Road.

The Site is within an Acoustic Class 2 Area, which allows a minimum sound level of 50 dBA to the plane of window and 50 dBA to the outdoor point of reception (7 a.m. to 7 p.m.).

The following mitigation measures are recommended to reduce noise:

A sign posted at the entrance to the Site prohibiting vehicle tail gate banging;

- Crushers, screener and stockpiling conveyors to be operated at least 90 metres from the eastern berm;
- The construction of a 4-metre-tall berm along the northern property boundary with a portion in the middle that's an additional metre tall;
- The construction of a 4-metre-tall berm along the eastern property line, with portions from 3 to 5 metres tall.

These mitigation measures will be implemented.

Based on the above, the worst-case predicted noise levels are within the minimum MECP daytime sound limits. As a result, the proposed operation is compatible with the existing sensitive uses in the area with respect to the noise requirements of NPC-300.

5.5 Best Management Practices Plan for Control of Fugitive Dust Emissions

GHD prepared a Best Management Plan for the control of dust generated by the proposed aggregate operation. The purpose of the Plan is to provide best management practices to reduce and control the amount of dust leaving the Site and has been prepared in accordance with the requirements of the MECP Technical Bulletin on the "Management Approaches for Industrial Fugitive Dust Sources".

Fugitive dust is anticipated to be generated by on-site traffic, processing operations, material conveyance systems, material stockpiles, and material loading and unloading. Dust emissions can be carried by the wind and depends upon the characteristics of the granular material being disturbed, and intensity and frequency of the mechanical disturbance. The distance dust travels is dependent upon climactic conditions and particle size distribution.

Wind analysis was conducted and determined that approximately 62% of the winds have a speed of 4.5 metres per second or less and predominately blow from the east.

Recommended mitigation:

- Water truck on site to apply water to the internal road surfaces on a daily basis;
- The inclusion of a spray bar on the crusher;
- All processing operations (with the exception of screening) to occur at the lowest pit floor elevation;
- The application of water suppressant to stockpiles in the event of extremely dry and/or windy conditions; and,
- Material loading to be conducted at reduced speeds to limit disturbance;
- Minimizing drop distances for materials;

- Optimizing truck routes to minimize distance traveled;
- Reducing the speed limit to 20 kilometres per hour within the Site; and,
- The construction of the berms and planting of the proposed vegetation.

Dust is to be continuously monitored with daily observations logged and filed. Training is required for all staff to ensure they are aware of the recommended dust mitigation measures and best practices.

6. **Planning Policy Framework**

6.1 **Planning Act**

The Planning Act R.S.O. 1990, c. P.13 ("Planning Act") establishes the policy-led land use planning system for Ontario that outlines matters of provincial interest as part of municipal planning decisions and provides for statutory planning processes in Ontario.

Section 2 of the *Planning Act* identifies the breadth of matters considered as being provincial interest which a municipality must "have regard to" in carrying out its responsibility under the *Planning Act*. These matters are general in nature and broad in range. These matters are captured in more detail through the policy statements and provincial plans issued under the Section 3 of the Planning Act and through the Official Plan of the Township of North Dumfries which are reflected in subsequent sections of this Planning Justification Report.

Section 3(5) of the *Planning Act* requires that the decisions of municipal councils regarding the exercise of authority concerning planning matters, including decisions on Planning Act applications:

- (a) shall be consistent with the policy statements issued under subsection (1) that are in effect on the date of the decision; and
- (b) shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be.

The 2020 Provincial Policy Statement was issued under Section 3(5) and is applicable and relevant to the consideration of the proposed application. The 2020 Growth Plan for the Greater Golden Horseshoe, 2017 Greenbelt Plan, 2017 Oak Ridges Moraine Conservation Plan, and 2017 Niagara Escarpment Plan were also issued under Section 3(5). There have been no policy statements issued under 31.1 of the Metrolinx Act, 2006 or Section 11 of the Resource Recovery and Circular Economy Act, 2016 per Section 3(8) of the Planning Act.

The criteria of Section 2 of the Planning Act have been considered in the design of the Proposed Development.

6.2 **Provincial Policy Statement**

The Provincial Policy Statement ("PPS") provides land use planning policy on matters of Provincial interest. The 2020 PPS has received royal assent and is in effect as of May 1, 2020. The overriding vision of the PPS states that "the long-term prosperity and social wellbeing of Ontario depends upon planning for strong, sustainable and resilient communities

for people of all ages, a clean and healthy environment, and a strong and competitive economy".

The following sections of the PPS are relevant to the proposed application:

Rural Areas in Municipalities

Section 1.1.4.1(f) of the PPS states that healthy, integrated, and viable rural areas are to be supported by diversification of the economic base and employment opportunities. Subsection (i) further states that economic activities are to be provided in prime agricultural areas in accordance with the relevant policies of the PPS.

Consistency: The Proposed Development is consistent with Section 1.1.4.1 of the PPS as the expansion of the aggregate extraction use will continue to provide economic activity within the rural area.

Natural Heritage

Section 2.1 of the PPS requires natural heritage features, including significant wetlands, to be protected from development.

Consistency: The Proposed Development is consistent with the natural heritage policies of the PPS as natural heritage features identified in the Environmental Impact Study have been protected. The proposed Zoning By-law Amendment will rezone the wetland and an associated catchment area and 30 metre buffer to a zone that prohibits site alteration and development.

Prime Agricultural Areas

Section 2.3 of the PPS requires prime agricultural areas to be protected for long-term agricultural use. Section 2.3.6 permits the extraction of minerals and mineral aggregates within prime agricultural areas provided the impacts on surrounding agricultural operations are mitigated to the extent feasible.

Consistency: The Proposed Development is permitted within the prime agricultural area. A Rehabilitation Plan has been prepared that will rehabilitate the land for agriculture once extraction has ceased. Topsoil is to be bermed along the perimeter of the Site and will be redistributed on the Site after extraction. Dust will be mitigated through berming, the application of water, and other best management practices. Aside from the Site itself, no impacts to surrounding agricultural operations are anticipated.

Mineral Aggregate Resources

Section 2.5 states that mineral aggregate resources are to be protected for long-term use and is to be made available as close to markets as possible. Extraction is to minimize social, economic, and environmental impacts. Rehabilitation is required to accommodate subsequent land uses and promote land use compatibility, and in prime agricultural areas, Section 2.5.4.1 requires that the lands be rehabilitated for agricultural use.

Consistency: The Proposed Development is consistent with the Mineral Aggregate Resource policies of the PPS as the development will provide a source of mineral aggregates that is close to Highway 401, a major highway that can transport the materials to market. Impacts to social and economic activities have been assessed in the Compatibility Study (summarized in Section 5.4 of this Report), while environmental impacts have been assessed in the Environmental Impact Study (summarized in Section 5.1 of this Report). The prime agricultural topsoil is proposed to be bermed along the perimeter of the Site and will be redistributed on the Site once extraction activities cease.

6.3 2024 – Provincial Planning Statement

In August 2024 the Province released the 2024 Provincial Planning Statement (2024 PPS). The 2024 PPS is noted as coming into force and effect on October 20, 2024. While the PPS is not in effect as of the writing of this revised report a review is relevant given the timelines to final approvals for the Proposed Development.

The role of the 2024 PPS continues to be policy document providing policy direction on matters of provincial interest related to land use planning and development. The 2024 PPS is to set the policy foundation for regulating development and use of land on a provincewide basis while helping achieve the provincial goal of meeting the needs of a fast-growing province while enhancing the quality of life for all Ontarians.

Section 2.5 of the 2024 PPS provides policy direction for Rural Areas in Municipalities. The policy direction is consistent with the direction of the 2020 PPS in that Healthy, integrated and viable rural areas should be supported by: e) promoting diversification of the economic base and employment opportunities through goods and services, including valueadded products and the sustainable management or use of resources.

Consistency: As supported by the Mineral Aggregate policies in Section 4.5 of the 2024 PPS (outlined below) and as directed by the above Section 2.5 the sustainable use of resources is promoted in Rural Areas. The expansion of an existing gravel extraction operation maintains this direction.

Natural Heritage policies are provided in Section 4.1 of the 2024 PPS. Natural features and areas (including wetlands) shall be protected for the long term (4.1).

Consistency: The proposed expansion plans protect identified natural features with appropriate buffers and setbacks.

Section 4.3 of the 2024 PPS provides policy direction for Agricultural areas. Section 4.3.5 provides direction for Non-agricultural uses in Prime Agricultural Areas. Mineral extraction is a permitted non-agricultural use in Prime Agricultural Areas (4.3.5.1a).

Consistency: The Proposed Application seeks permission to expand an existing mineral aggregate extraction operation in an agricultural area.

Policy direction for Mineral Aggregate Resources is provided in Section 4.5. Notably, Mineral aggregate resources are to be protected for long-term use (4.5.1.1). Policy 4.5.2 provides further direction for the protection of aggregate resources by making as much of the resource as possible available as close as possible to markets, ensuring that extraction is undertaken in a manner which minimizes social, economic and environmental impacts. Rehabilitation policies are outlined in Section 4.5.4 and require rehabilitation to an agricultural condition (unless extraction is proposed below the water table).

Consistency: The Proposed Development has been supported by an Environmental Impact Study and a Noise and Land Use Compatibility Study. Provided the recommendations of these studies are implemented though site design and land use approvals as appropriate the Proposed Development is not anticipated to create any negative impacts to surrounding land uses. A comprehensive rehabilitation plan will be approved as part of the Provincial Approvals for the Proposed extraction plans.

6.3 **Growth Plan for the Greater Golden Horseshoe**

The Growth Plan for the Greater Golden Horseshoe (the "Growth Plan") is the Province's growth strategy for the Greater Golden Horseshoe region. The Growth Plan came into effect on May 16, 2019 and was most recently amended in August 2020. The Growth Plan builds on the PPS with more specific land use planning policies as "a framework for implementing the Government of Ontario's vision for building stronger, more prosperous communities by managing growth in the region to 2031".

Section 3(5) of the *Planning Act* specifically requires that municipal council decisions regarding the exercise of authority concerning planning matters "shall conform with the provincial plans that are in effect on that date, or shall not conflict with them, as the case may be". As of August 20, 2024 the Province has released the 2024 PPS which consolidates the Growth Plan and the 2020 Provincial Policy Statement. The new consolidated 2024 PPS is to take effect on Oct. 20, 2024.

Rural Lands

The Growth Plan permits development outside of settlement areas for the management and use of resources.

Conformity: While outside of a settlement area and not an agricultural use, the Proposed Development is permitted and in conformity with the Growth Plan with regard to the use of resources.

Prime Agricultural

Section 4.2.6 of the Growth Plan requires prime agricultural lands to be designated and protected for long-term agricultural use. Section 4.2.6.3 states: "Where agricultural uses and non-agricultural uses interface outside of settlement areas, land use compatibility will be achieved by avoiding or where avoidance is not possible, minimizing and mitigating adverse impacts on the Agricultural System. Where mitigation is required, measures should be incorporated as part of the non-agricultural uses, as appropriate, within the area being developed. Where appropriate, this should be based on an agricultural impact assessment."

Consistency: The Site is identified as Prime Agricultural in the Province's mapping (Figure 4). Mitigation to surrounding agricultural uses include berming and dust mitigation, as recommended in the Land Use Compatibility Study and Dust Mitigation Plan that is summarized in Section 5 of this Report. We note that the Prime Agricultural designation in the Growth Plan is not in effect until it is implemented in the Region of Waterloo Official Plan and Township of North Dumfries Official Plan. As such, an Aggregate Impact Assessment has not been prepared.

Mineral Aggregate Resources

The Growth Plan addresses mineral aggregate resources in Section 4.2.8. Mineral aggregate resources are to be conserved and are not permitted within significant wetlands or habitat of endangered or threatened species. Section 4.2.8.2(b) states: "any application for a new mineral aggregate operation will be required to demonstrate:

- how the connectivity between key natural heritage features and key hydrologic features will be maintained before, during, and after the extraction of mineral aggregate resources;
- how the operator could replace key natural heritage features and key hydrologic features that would be lost from the site with equivalent features on another part of the site or on adjacent lands;





Growth Plan
Source: Ontario Ministry of Agriculture



- iii. how the water resource system will be protected or enhanced; and
- iv. how any key natural heritage features and key hydrologic features and their associated vegetation protection zones not identified in policy 4.2.8.2 a) will be addressed in accordance with policies 4.2.8.4 b) and c) and 4.2.8.5 c)."

In prime agricultural areas, applications for new mineral aggregate operations are to be supported by an agricultural impact assessment and are to maintain or improve connectivity of the agricultural system whenever possible in accordance with Section 4.2.8.3.

Rehabilitation is required for new operations to protect or enhance natural heritage features and prime agricultural status.

<u>Conformity:</u> The Proposed Development conforms to the Mineral Aggregate Resources policies of the Growth Plan in that natural heritage features and hydrogeological features have been identified and preserved and the Site will be rehabilitated to prime agricultural status once extraction has been concluded. Although an Agricultural Impact Assessment has not been prepared, a Land Use Compatibility Study has been prepared.

Natural Heritage System

Section 4.2.2.3 prohibits new development or site alteration that negatively impacts natural heritage features or hydrologic functions. An Environmental Impact Assessment is required for development within 120 metres of a key natural heritage feature in accordance with Section 4.2.4.1.

<u>Conformity:</u> The Proposed Development excludes the wetland, its catchment area, and a 30-metre buffer from the extraction area in conformity with the Growth Plan. An Environmental Site Assessment has been prepared and is summarized in Section 5.1 of this Report.

6.4 Region of Waterloo Official Plan

The Region of Waterloo Official Plan ("ROP") was passed by Regional Council in June 2009, replacing the previously 1995 plan, and was approved by the Ministry of Municipal Affairs and Housing in December 2010. The ROP came into effect in June 2015 further to OMB orders regarding appeals, except for certain sections and policies that remain deferred. The *Planning Act* requires that all local official plans, local land use related by-laws, and all future development must conform to the ROP. The below sub-sections address the relevant ROP policies concerning the Site and the proposed applications and assess the conformity of the latter with these policies.

Land Use

The Site is designated "Rural Areas" and "Protected Countryside" on ROP Map 7 (**Figure 5**). The "Rural Areas" designation applies to lands where Canada Land Inventory Class 4-7 soils predominate (the Province has since updated their mapping to denote the Site as Prime Agricultural, however, the Prime Agricultural designation is not in effect until the Regional Official Plan and Township of North Dumfries Official Plan have been updated to reflect this change). Section 6.A.7 states that mineral aggregate operations are permitted as an interim use in the Prime Agricultural Area and Rural Areas designations.

The "Protected Countryside" designation pertains to a continuous band of rural lands outside of the Urban Area that is to be permanently protected from urban development. Mineral aggregate resource extraction is permitted.

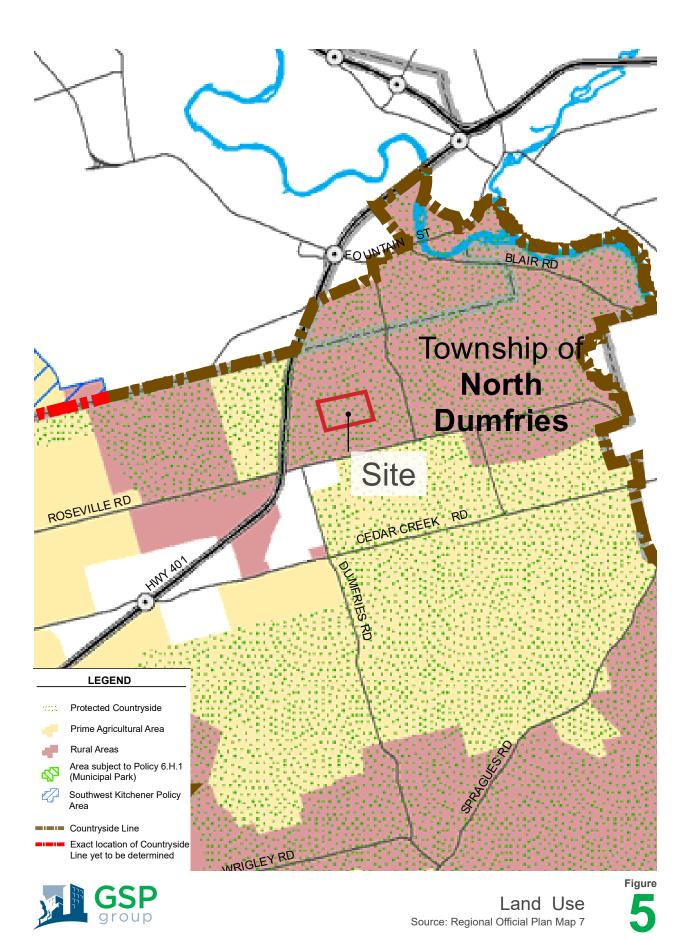
<u>Conformity:</u> The Proposed Development conforms to the Countryside policies of the ROP. While the Region's mapping does not reflect the Province's most recent update denoting the Site as Prime Agricultural, the ROP permits interim aggregate extraction in both the "Rural Areas" and "Prime Agricultural" designations, as well as within the "Protected Countryside".

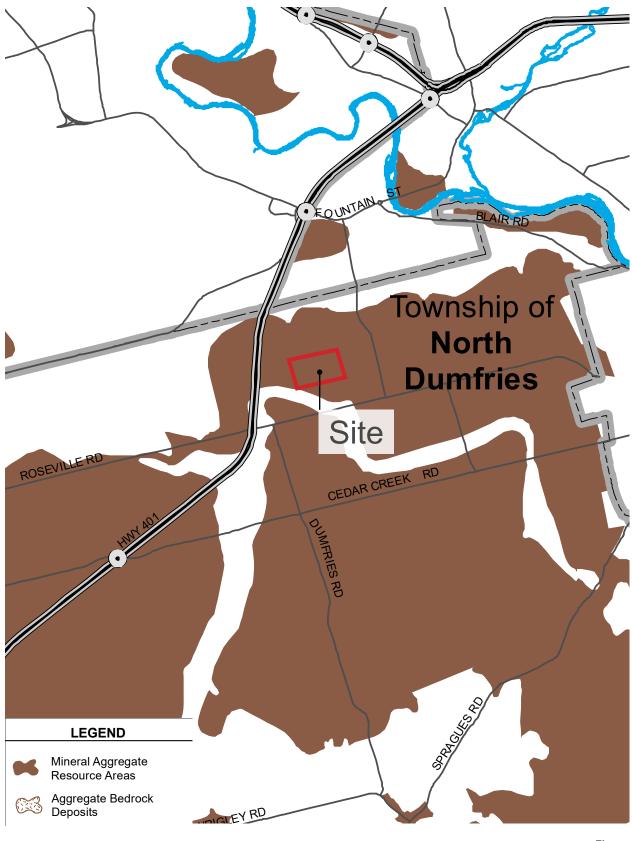
Mineral Aggregates

ROP Map 8 identifies the Site as within a "Mineral Aggregate Resource Area" (**Figure 6**). In accordance with Section 9.A of the ROP, mineral aggregate areas are to be protected from incompatible development and buffering, screening, and other mitigation measures are to be used to prevent or minimize adverse impacts on surrounding sensitive land uses.

Section 9.C is under appeal and states that new mineral aggregate operations require a site-specific amendment to the Zoning By-law. Section 9.C.3 states that development applications for new mineral aggregate operations require the following studies:

- a) noise, dust and vibration studies demonstrating that the proposed operation is appropriately designed, buffered and/or separated from any surrounding sensitive land uses to prevent any adverse effects;
- b) a hydrogeological study in accordance with the provisions of the Regional Implementation Guideline for Source Water Protection Studies, demonstrating that the proposed operation will have no negative impacts on the quality and quantity of any surface water or groundwater resources;
- a Transportation Impact Study in accordance with Policy 5.A.25 indicating how the proposed operation will address any potential impacts on Regional roads and Provincial Highways;







Mineral Aggregate Resource Areas

Source: Regional Official Plan Map 8



- an Environmental Impact Statement in accordance with the policies in Section 7.G, where the proposed mineral aggregate operation is contiguous to a Core Environmental Feature, or within or contiguous to a Supporting Environmental Feature;
- e) an archaeological assessment and/or Cultural Heritage Impact Assessment in accordance with the policies in Section 3.G;
- f) information on the estimated lifespan of the mineral aggregate operation and demonstration that the final rehabilitation plan is consistent with the policies in this Plan and the Area Municipal official plan; and
- g) any other studies identified by the Area Municipality to meet requirements of a complete application under the provisions of the Planning Act.

Mineral aggregate operations are to be located outside of natural heritage areas and habitat of endangered or threatened species and are to have no negative impacts on such features. Rehabilitation of the lands is to be carried out whenever feasible and final land use shall comply with the land use within the ROP. Within the Prime Agricultural Area, rehabilitation to an agricultural use is the first priority.

<u>Conformity:</u> The Proposed Development conforms to the Mineral Aggregate policies of the ROP. The required studies have been prepared and are summarized in Section 5 of this Report. The proposed extraction limit is outside the natural heritage feature identified in the Environmental Impact Assessment and the lands will be rehabilitated for future agricultural use through retention and redistribution of topsoil post-extraction.

Natural Heritage

The ROP includes Provincially Significant Wetlands as Core Environmental Features. Development and site alteration are prohibited within Core Environmental Features. An Environmental Impact Statement is required for development or site alteration on lands contiguous to a Provincially Significant Wetland.

<u>Conformity:</u> The wetland has been evaluated via an Environmental Impact Assessment and is proposed to be zoned Environmental Protection One (Zone 12a) to ensure development and site alteration does not occur within the catchment area of the wetland.

6.5 Township of North Dumfries Official Plan

The Township of North Dumfries Official Plan ("OP") provides detailed land use planning policy and was most recently comprehensively updated on December 16, 2013. The most recent consolidation is dated November 2018.

The following policies are relevant to the Proposed Development:

Land Use

The Site is designated "Rural Areas" and "Protected Countryside" on Map 7 of the OP (Figure 7). The "Protected Countryside" is a continuous band of environmental features and agricultural lands that are to be permanently protected from urban development. Lands within the "Rural Areas" designation are intended to be used primarily for agricultural use. Mineral aggregate operations are permitted as an interim use in "Rural Areas" and "Prime Agricultural Areas" in accordance with Section 5.2.3.4 of the OP.

Conformity: The Proposed Development conforms to the "Protected Countryside" and "Rural Areas" policies of the OP. The aggregate extraction use is permitted as an interim use and is an expansion of an existing aggregate operation. The Site will be rehabilitated to agricultural use once extraction ceases.

Mineral Aggregates

The OP includes the Site within a "Mineral Aggregate Resource Area" on Map 8 of the OP (Figure 8). Such areas permit aggregate extraction and prohibit development that may hinder mineral aggregate operations except in specific circumstances in accordance with Section 5.2.1 of the OP. Mineral aggregate operations are permitted contiguous to Core Environmental Features provided there are no adverse impacts to their features.

Mineral aggregate operations are permitted as an interim use in rural areas and prime agricultural areas and require a site-specific Zoning By-law Amendment, a land use compatibility study, hydrogeological study, transportation impact study, environmental impact study, archaeological assessment, and rehabilitation plan. Section 5.2.5.8 states that Township support for a zone change application to permit a new mineral aggregate operation is subject to the following:

- a) the submission and acceptance of any required studies identified in Policies 5.2.4.1 and 5.2.6.1;
- b) demonstration that the proposed rehabilitation is consistent with the policies of the ROP and this Plan; and,
- c) the submission of all reports required by the Ministry of Natural Resources in accordance with the Aggregate Resources Act, and the Region in accordance with the policies of the ROP:
- d) such other relevant matters as Council deems necessary; and,
- e) the Township being satisfied that the following conditions will be dealt with through the site plan approved under the Aggregate Resources Act, or other appropriate means:

LEGEND Protected Countryside Prime Agricultural Area

Prime Agricultural Area



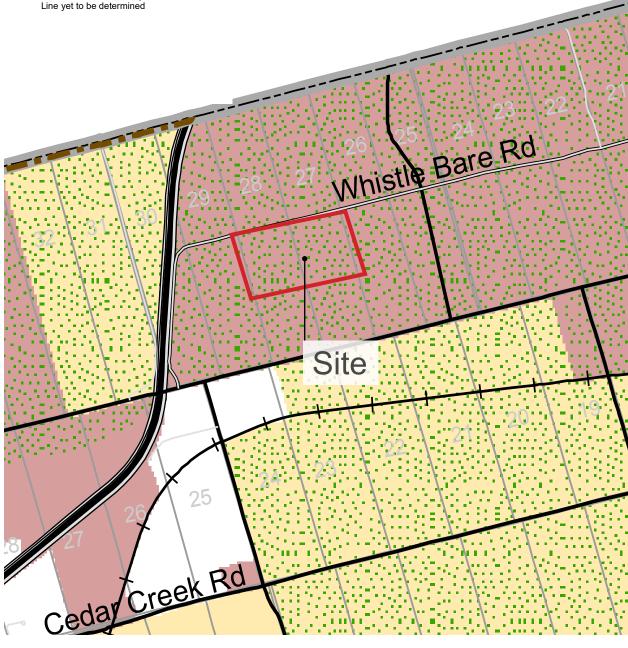
Area subject to Policy 6.H.1 (Municipal Park)



Countryside Line

Exact location of Countryside
Line yet to be determined







The Countryside
Source: North Dumfries Official Plan Map 7

Figure

LEGEND

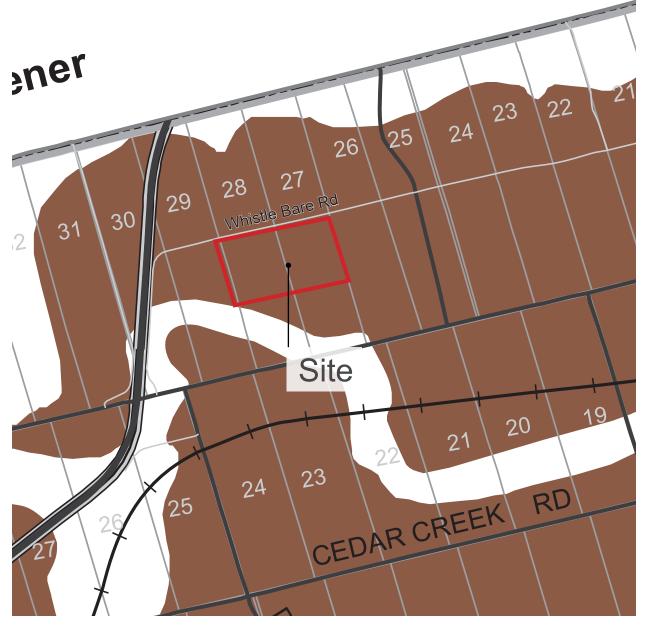


Mineral Aggregate Resource Areas



Aggregate Bedrock Deposits







Mineral Aggregate Resource Areas

Source: North Dumfries Official Plan 8



- i. to ensure provision of adequate buffering and/or screenings along road rights-of-way, or adjacent to any existing or proposed sensitive uses, and implementation of any other necessary mitigation measures as determined through the approval of required studies to prevent where possible, or minimize any potential adverse effects on the surrounding sensitive land uses, to the satisfaction of the Township;
- ii. that no new excavation or processing will take place until all required buffers and/or screenings have been installed;
- iii. that no water or washing or screening operations will be directly discharged into any water course without being subjected to treatment processes to remove existing contaminants in the water;
- iv. that the applicant, in cooperation with the Township and the Region, will establish all haul routes for truck traffic;
- v. that required road improvements identified through the transportation study noted in a) above are in place prior to the removal of aggregates from the site; and,
- vi. that no new excavation or processing will take place until all required fencing and/or security measures have been put in place.

Section 5.2.8.3(d) requires that aggregate operations within rural areas be rehabilitated to substantially the same land area and same average soil quality for agriculture.

<u>Conformity:</u> The Proposed Development conforms to the Mineral Aggregate Resource policies of the OP in that:

- a) The proposed use is permitted, is an expansion of an existing aggregate operation, and a site-specific Zoning By-law Amendment is requested;
- b) There will be no negative impacts on the Provincially Significant Wetland;
- c) The required studies have been prepared;
- d) A rehabilitation plan has been prepared to rehabilitate the land to agricultural use;
- e) An Aggregate Resources Act application has been submitted;
- Berming is proposed along the perimeter of the Site to screen the proposed use from adjacent development; and,
- g) Haul routes and extraction quantities of the existing pit will be identical and there are no required road improvements.

Compatibility

Section 3.1.1 of the OP addresses land use compatibly, and states that the following factors will be considered in assess compatibility of proposed development:

- a) the density, scale, height, massing, visual impact, building materials and architectural character of surrounding buildings and the proposed development;
- b) the preservation of the natural environment and built heritage resources;
- c) the continued visibility and viability of adjacent land uses;
- d) pedestrian and vehicular movement and linkages, and parking requirements;
- e) landscaping, setbacks, sun and shadow effects, wind effects, signage, lighting and buffering of proposed and existing developments;
- f) noise, dust, emissions or odours generated by surrounding land uses as well as the proposed development; and,
- g) traffic generated by surrounding land uses and the proposed development.

Separation distances, setbacks, berming, screening, and fencing are listed as potential mitigation measures that may increase compatibility.

Conformity: The Proposed Development is compatible with the surrounding land uses and is an expansion of an existing aggregate operation. A Land Use Compatibility Study has been prepared to examine the impacts of dust, noise, odour, and other emissions from the aggregate extraction use. The Study concludes that the proposed development will be compatible provided all recommended mitigation measures, such as the berms, are implemented.

Natural Heritage

Section 6.1.7 states that Provincially Significant Wetlands are protected from development or site alteration. An Environmental Impact Study is required to consider development proximate to such features to ensure there are no adverse impacts on natural heritage features or functions

Conformity: The Proposed Development conforms to the Natural Heritage policies of the OP. An Environmental Impact Study has been prepared that evaluated the wetland, and a Hydrogeological Assessment has been prepared to determine the catchment area of the wetland. Both the wetland and catchment area are proposed to be zoned Environmental Protection One (Zone 12a) to prohibit development and site alteration.

Hazard Lands

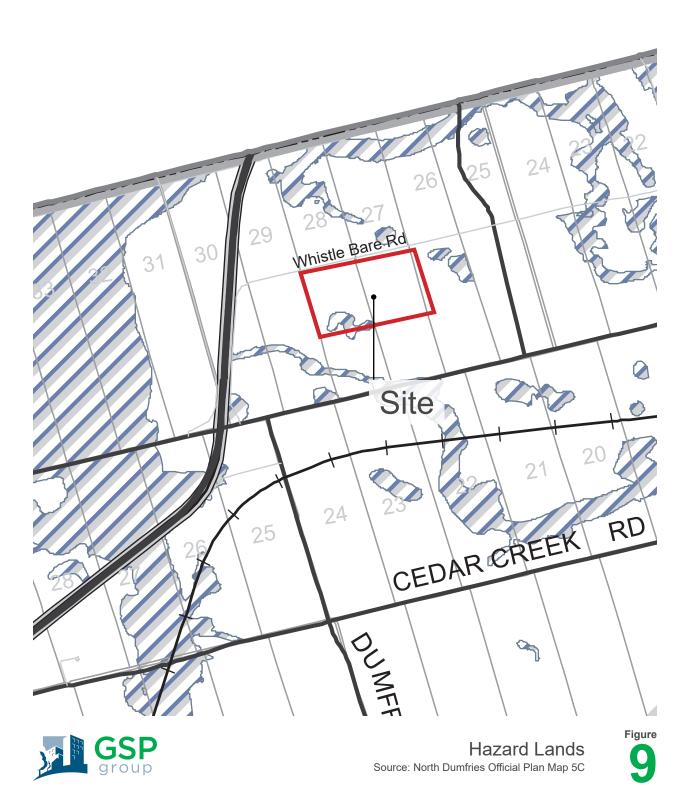
The southwest portion of the Site is included within the "Hazard Lands" overlay on May 5C of the OP (Figure 9). These lands are identified and regulated by the Grand River Conservation Authority and correspond with Environmental Constraint Areas, specifically lands that may be subject to flooding. Hydrogeological studies are required to permit development within such areas.

LEGEND



Hazard Lands





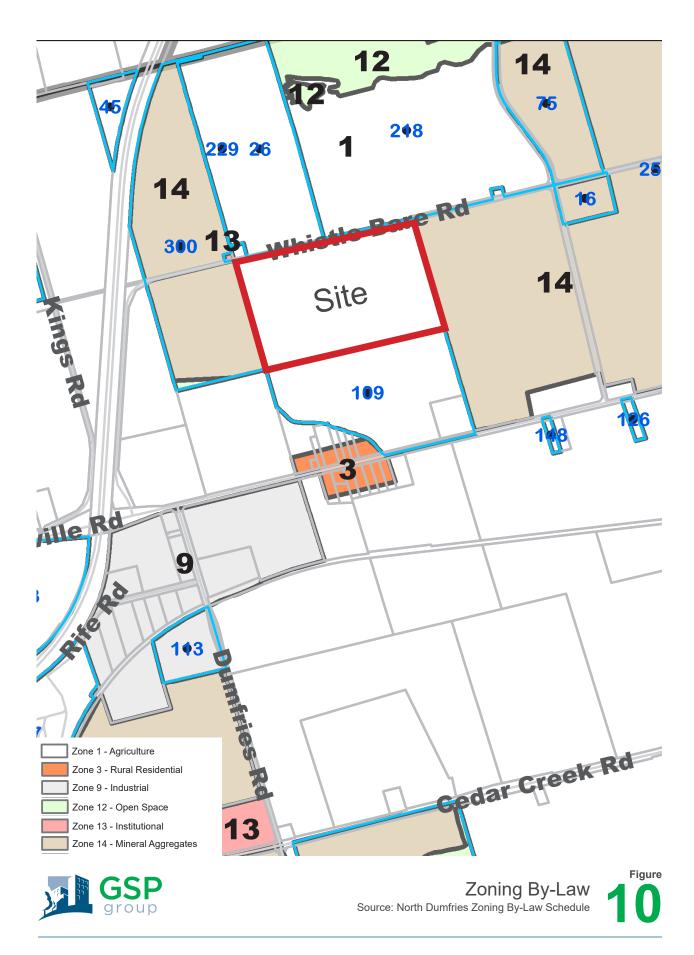
Conformity: The Proposed Development conforms to the Hazard Lands policies of the OP as the area identified as Hazard Lands is within the area proposed to be zoned Environmental Protection One (Zone 12a) and will not be subject to development.

6.6 **Township of North Dumfries Zoning By-law No. 689-83**

The Site is zoned Agriculture (Zone 1) in the Township of North Dumfries Zoning By-law No. 689-83 (Figure 10). The Agriculture zone does not permit aggregate extraction, requiring a Zoning By-law Amendment to rezone the Site to Aggregate Extraction (Zone 14).

Zone 14 permits the making, establishment, or operation of a pit or quarry as well as farming, forestry, and accessory buildings. The zone does not include any zoning provisions, except that accessory uses are not to be located within 15 metres of any zone limit.

Site-specific provisions are requested to permit extraction along the mutual property line with the Tullis - Whistle Bare pit in accordance with the pre-application consultation comments. The draft amendment is included in **Appendix B**.



Public Consultation Strategy 7.

In accordance with the *Planning Act*, the Township of North Dumfries provides public notice of the application in the prescribed manner and holds a Statutory Public Meeting as part of a regularly scheduled council meeting. Any individuals or property owners that request further notification regarding the application would be formally notified by the municipality as to the time and location that Council will be considering the application.

Additional public consultation is not proposed at this time. If warranted by public interest, the owner can hold a virtual open house to provide an additional forum for community comment.

8. Justification & Compatibility

The proposed Zoning By-law Amendment is appropriate and represents good planning for the following reasons:

Proposed Use is Consistent with the PPS and Conforms to Provincial and Municipal Plans

The Provincial Policy Statement, Growth Plan for the Greater Golden Horseshoe, Region of Waterloo Official Plan, and Township of North Dumfries Official Plan permit interim aggregate extraction within agricultural areas, provided the lands are rehabilitated to agricultural once extraction uses cease. Natural heritage features will be protected, and the appropriate studies have been prepared to ensure there will be no adverse impacts to surrounding features or land uses.

Site-specific Exceptions are Appropriate

The requested Zoning By-law Amendment (**Appendix B**) includes a site-specific provision to permit extraction up to the mutual boundary with the adjacent Tullis – Whistle Bare aggregate pit. This exception is appropriate as it will facilitate a shared access and haul route and will allow for seamless aggregate extraction across the two propoerties that are in the same ownership and will function as one operation under the same Pit Licence.

Site will be Rehabilitated

The Site will be rehabilitated to agricultural use in accordance with Provincial, Regional, and Township policies in accordance with the rehabilitation plan (**Appendix C**). The agricultural topsoil will be bermed to create a visual buffer during extraction and will be redistributed across the Site during rehabilitation to facilitate future agricultural use.

Appropriate Mitigation will be Implemented

A Land Use Compatibility Study has been prepared to assess impacts of Noise, Odour, Dust, and other nuisances on surrounding land uses. The Study recommends:

- A sign posted at the entrance to the Site prohibiting vehicle tail gate banging;
- Crushers, screener and stockpiling conveyors to be operated at least 90 metres from the eastern berm;
- The construction of a 4-metre-tall berm along the northern property boundary with a portion in the middle that's an additional metre tall;
- The construction of a 4-metre-tall berm along the eastern property line, with portions from 3 to 5 metres tall.

These recommendations will be implemented to increase compatibility with the proposed use.

Natural Heritage Features will be Protected

An Environmental Impact Study has been prepared to evaluate the wetland and determine if any Species at Risk or Species of Special Concern are utilizing the Site. In accordance with the recommendations of the Study, the wetland and surrounding catchment area are proposed to be zoned Environmental Protection One (Zone 12a), protecting them from any future development or site alteration.

Compatibility to surrounding land uses

The surrounding land uses include the existing Tullis-Whistle Bare Pit to the west, the Whistle Bare Campground and Whistle Bare Golf Course to the north, agricultural uses to the east and the Grand Valley Golf Course to the south. Surrounding sensitive land uses include existing dwellings and the proposed Whistle Bare campground expansion, all of which have been evaluated as 'sensitive point(s)-of-reception' (POR). The February 2023, GHD Noise Impact and Land Use Compatibility report identified and analyzed each POR and have recommended administrative and property feature (noise berm) controls to mitigate noise impacts.

The GHD Report specifically noted that "..the proposed site is feasible if the impacts are minimized the implementation of administrative controls, adjusted property line noise berms and suitable dust mitigation measures".

The property owner has confirmed agreement to the suggested mitigation measures all of which will be implemented during site development.

9. Conclusion

GSP Group has been retained by 1476545 Ontario Inc. (the "Owner") to prepare a Planning Justification Report in support of a Zoning By-law Amendment application for 1821-1835 Whistle Bare Road to facilitate the expansion of a mineral aggregate extraction operation onto the Site. The proposed Zoning By-law Amendment would rezone the Site from Agriculture (Zone 1) to a site-specific Mineral Aggregates (Zone 14) and zone the wetland and catchment area Environmental Protection One (Zone 12a). A site-specific exception is requested to permit extraction along the western property line in accordance with the Preapplication Consultation.

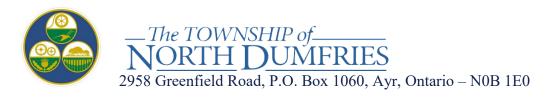
The Proposed Development and applications were discussed with Township of North Dumfries staff, Region of Waterloo Staff, and the Ministry of Natural Resources and Forestry on April 3, 2019. All required studies have been prepared and have been submitted as part of a complete application.

This Planning Justification Report concludes that the proposed Zoning By-law Amendment is appropriate, in the public interest, and represents good planning for the following reasons:

- It is consistent with the policies of the 2020 Provincial Policy Statement;
- It is consistent with the policies of the 2024 Provincial Planning Statement;
- It conforms to the Growth Plan for the Greater Golden Horseshoe:
- It conforms to the Region of Waterloo Official Plan;
- It conforms to the Township of North Dumfries Official Plan;
- It will facilitate the extraction of aggregate in an area proximate to Highway 401;
- The site-specific provisions are appropriate;
- Land use compatibility concerns have been evaluated and addressed;
- The Site will be rehabilitated to facilitate future agricultural use;
- The natural heritage features associated with the Site and surrounding area have been protected; and,
- The development is appropriate within this rural context.

It is therefore our opinion that the proposed application should be approved.

Appendix A: Pre-application Consultation Record



April 9, 2019

Mr. Chris Pidgeon **GSP Group** 72 Victoria Street South, Suite 201 Kitchener, ON N2G 4Y9

Dear Mr. Pidgeon:

RE: Pre-Consultation File No. PC-01/19

1821- 1835 Whistle Bare Road, Roll No. 300102000610800

Proposed Expansion of Tullis-Whistle Bare Pit

ARA Application, Zoning Amendment

Thank you for meeting with staff from the Township of North Dumfries, the Region of Waterloo, and MNRF on April 3, 2019. Staff from GRCA were not able to attend the meeting, but provided comments on March 27, 2019.

Via Email: cpidgeon@gspgroup.ca

Based on the pre-consultation meeting, it is our understanding that 1476545 Ontario Inc. is proposing to expand the Tullis-Whistle Bare Pit located at 1951 Whistle Bare Road, to lands located to the east at 1821-1835 Whistle Bare Road. The current annual tonnage of 100,000 tonnes/ year will remain the same or could be increased potentially to an additional 100,000 tonnes/ year.

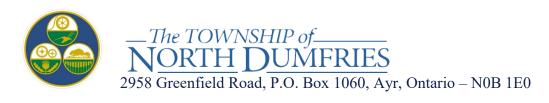
Please be advised that it may be determined that additional studies or information is required, as a result of new information, issues arising during processing of the application, and/or changes to relevant legislation. The applicant will be required to provide technical studies and necessary information as identified by the Township and Agencies, at their own expense. Peer review of these studies may also be required by the Township at the expanse of the owner. Included in this letter is an overview and additional information related to the items discussed at the pre-consultation meeting and provided by Agencies through pre-consultation.

Township of North Dumfries

The subject lands are currently in Zone 1 (Agriculture). A Zoning By-law Amendment is required to Zone 14 (Mineral Aggregates). If environmental features are identified they will need to be rezoned to an Environmental Protection Zone.

Telephone: 519-632-8800 extension 132 Fax 519-632-8700 E-mail: mschaefle@northdumfries.ca

Website: www.northdumfries.ca



The following is a summary of comments from the Township of North Dumfries:

Traffic

- A Traffic Impact Study will be required based on up to date standards. The Township will require this to be Peer Reviewed at the expense of the owner.
- The Township is concerned about any proposed increase in annual tonnage through a future Site Plan Amendment. MNRF advised that the Township would be circulated any proposed increases in annual tonnage.
- Confirmation of Haul Route is required, as trucks seem to go in either direction at this time.
- Study needs to address what the expected volume of heavy truck counts will be and if any upgrades to the road are required. This section of Whistle Bare Road is only built for light vehicle traffic. If required, the Township will require partial contribution to upgrading the road to a standard for aggregate trucks. If required, the Township will require 100% contribution for upgrades to entrance (e.g. shoulder, signals). Any required contributions will be addressed through conditions to the ARA license and/or as a Holding Provision on the zoning, until the required upgrades are provided.
- Study must assess access onto Whistle Bare Road and if any changes to the location are required. Need to ensure access is compatible with adjacent areas, such as the Campground at 1898 Whistle Bare Road.

Agriculture

 The Provincial Mapping identifies this land as Prime Agriculture. Depending on the designation and policies at the time of the application, an Agriculture Impact Assessment may be required as per the Growth Plan.

Comprehensive Rehabilitation:

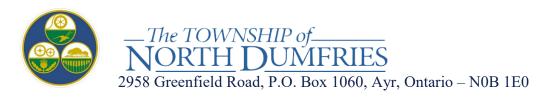
- Zoning to provide for extraction along common boundary subject to a common boundary agreement, between existing pits. For example, between the proposed pit and the existing pit and the adjacent pit to the east.
- o Gentle slopes to be provided along the property boundaries (e.g. 1:10, 1:8) to provide for comprehensive rehabilitation between properties, as opposed to using steeper slopes at a grade of 1:3.

Zoning

- Holding provision to ensure:
 - No excavation is permitted to occur at a depth greater than 1.5 m (5 ft) above the seasonally adjusted high groundwater level, unless the required studies and approvals are granted (Township Staff to provide example from Cedar Creek and Alps pits).
 - Any necessary road improvements are completed.

Telephone: 519-632-8800 extension 132 Fax 519-632-8700 E-mail: mschaefle@northdumfries.ca

Website: www.northdumfries.ca



Over-burden stripping

o No winter stripping of topsoil and over burden is to be permitted between December 1st to March 31st.

Environmental:

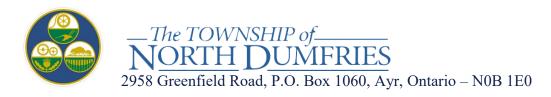
- o There are unevaluated wetlands in the south part of the property. As requested by GRCA and MNRF, they must be evaluated for provincial significance, for example if they are they part of provincially significant Cedar Creek Tributary Wetland Complex to the south.
- o Growth Plan Policy, 4.2.8:
 - 2(b): If the wetland is not provincially significant, but deemed to be a key hydrologic feature and proposed for removal, it needs to be demonstrated how it could be replaced with equivalent features on another part of the site or on adjacent lands
 - (4): Disturbed area must be returned to equal or greater ecological value
- Preparation of an Ecological Management and Enhancement Plan consisting of native species to include:
 - Areas to be enhanced prior to extraction to prevent protection of features (e.g. if wetlands are to remain)
 - Areas to be enhanced and as part of rehabilitation plan such as slopes or Cedar Creek
 - Township Staff will provide an example of a Plan completed for Alps and Cedar Creek pits.

Visual Screen:

- Township Staff are concerned about the visual impact of berms along roadways. To mitigate this impact the Township recommends providing a visual screen along Whistle Bare Road to screen the mineral aggregate operation and protect the scenic/ open landscape character of the area. The mineral aggregate operation should be screened while it is in progress and prior to extraction.
- Overburden material can be used in the form of a berm with varied heights and widths, supplemented with native trees, shrubs and vegetative plantings.
- Vegetative screen plantings are to be of compatible species and sizes to permit only very limited visual view of the pit from the surrounding landscape.
- Plantings must be properly maintained to ensure continued survival and good growth rates.
- o Native vegetation could be planted prior to a pit application, to allow the growth of vegetation prior to an application and/or its approval.

Telephone: 519-632-8800 extension 132 Fax 519-632-8700 E-mail: mschaefle@northdumfries.ca

Website: www.northdumfries.ca



Studies Required

- Planning Justification including Consultation Plan
- Agricultural Impact Assessment if required by legislation (Region of Halton has good guidelines in the absence of guidelines from the Province)
- Traffic Impact Study
- Environmental Impact Study
- Ecological Management and Enhancement Plan
- Hydrogeological Study
- Archaeological Study
- Noise and Air Quality Assessment
- Studies as required by other Agencies
- Draft Zoning By-law Text and Schedules

2019 Plan Review Fees

- Zoning By-law Amendment: \$30,700
- Refundable Peer Review: \$20,000

AGENCY COMMENTS

Ministry of Natural Resources and Forestry (Diane Schwier, David Marriott)

Comments were provided during the meeting regarding evaluation of the
wetlands including an understanding of hydrogeology, species at risk, significant
wildlife habitat, First Nations Consultation, progressive/comprehensive
rehabilitation, and concern about expansion of the Whistle Bare Campground
potentially hindering future resource extraction.

Energy + Inc. - Helen Robinson: hrobinson@energyplus.ca

Comments provided March 13, 2019

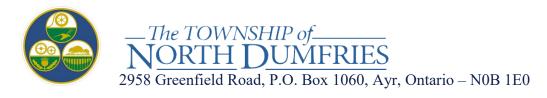
GRCA – John Brum: jbrum@grandriver.ca

• Comments to be provided March 27, 2019

Region of Waterloo - Matt Colley: mcolley@regionofwaterloo.ca

Comments to be provided April 2019

Telephone: 519-632-8800 extension 132 Fax 519-632-8700 E-mail: mschaefle@northdumfries.ca Website: www.northdumfries.ca



Enbridge Pipelines

• Advised on March 12, 2019 that they do not have any assets in the area.

If you have any further questions, do not hesitate to contact the undersigned by email at mschaefle@northdumfries.ca or by telephone at 519-632-8800 ext. 132.

Yours sincerely,

Michelle Schaefle, RPP Township Planner

Township of North Dumfries

c.c. Shawn Milloy, Owner
Matt Colley, Region of Waterloo
Jane Gurney, Region of Waterloo
John Burm, GRCA

Appendix B: Proposed Zoning By-law Amendment

THE CORPORATION OF THE TOWNSHIP OF NORTH DUMFRIES

BY-LAW NUMBER XXXX-22

Being a By-law to further amend General Zoning By-law Number 689-83, as amended, for the Township of North Dumfries

WHEREAS an application (File ZC-XX/22) was received for lands legally described as Part of Lots 27 and 28, Concession 12 in the Township of North Dumfries, Regional Municipality of Waterloo and municipally known as 1821-1835 Whistle Bare Road to amend By-law Number 689-83 to rezone the property from Zone 1 – Agriculture to Zone 14 – Aggregate Extraction with site-specific regulations and Zone 12a - Environmental Protection One to facilitate a mineral aggregate operation;

WHEREAS the *Planning Act* empowers a municipality to pass by-laws prohibiting the use of land and the erection, location and use of buildings or structures, except as set out in the by-law;

AND WHEREAS the Council of the Corporation of the Township of North Dumfries, under Section 34 of the Planning Act, R.S.O. 1990., c. P. 13, deems it to be desirable to further amend said By-law Number 689-83 to allow for a mineral aggregate operation on the lands described above:

NOW THEREFORE, Township Council enacts as follows:

1. THAT General Zoning Bv-law 689-83, as amended, is hereby further amended insofar as the zoning on these lands, described as Part of Lots 27 and 28, Concession 12, Township of North Dumfries, Regional Municipality of Waterloo and municipally known as 1821-1835 Whistle Bare Road, to Zone 14 - Aggregate Extraction with Exemption 20.1.XXX and Zone 12a - Environmental Protection One as follows:

20.1.XXX Notwithstanding any other provisions of this By-law:

a)	The lands illustrated as Zone 14 Exemption 20.1.XXX on Schedule 'A' ma		
	permit all uses permitted in Zone 14 - Aggregate Extraction subject to the		
	following provisions:		

Mineral aggregate extraction may occur along the shared property line with the adjacent Tullis – Whistle Bare pit to the west.

- 2. That except as amended by this By-law the subject lands as shown on Schedule 'A' - Section 20.1.XXX to this By-law shall be subject to all other applicable provisions and regulations of By-law Number 689-83, as amended.
- 3. That By-law Number 689-83, as amended, is hereby further amended by adding Schedule 'A' – Section 20.1.XXX attached to and forming part of this By-law.

READ a first and second time in the Council Chambers of the Township of North Dumfries

thisth day of,		·
Mayor	Clerk	
READ a third time and Dumfries thisth day	•	cil Chambers of the Township of North
 Mayor	 Clerk	

Appendix C: Rehabilitation Plan

