

Regional Road 4, Whitefish

Presented To:	Planning Committee
Meeting Date:	December 13, 2021
Type:	Public Hearing
Prepared by:	Mauro Manzon Planning Services
Recommended by:	General Manager of Growth and Infrastructure
File Number:	751-8/21-001

Report Summary

This report provides a recommendation regarding an application for rezoning in order to permit a Category 3 Class A Pit and a Category 4 Class A Quarry.

This report is presented by Mauro Manzon, Senior Planner.

Resolution

THAT the City of Greater Sudbury approves the application by Bradley John Rintala to amend Zoning By-law 2010-100Z by changing the zoning classification from "RU", Rural to "M5", Extractive Industrial and "HM5", Holding Extractive Industrial on lands described as Part of PIN 73382-0494 in Lot 9, Concession 2, Township of Denison, as outlined in the report entitled "Regional Road 4, Whitefish", from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on December 13, 2021, subject to the following conditions:

1. That prior to the enactment of the amending by-law, the owner shall address the following conditions:
 - i) A final plan of survey shall be submitted in order to enact the amending by-law. The final plan of survey shall delineate the limits of the extraction area subject to the rezoning. The Phase 3 extraction area shall be indicated as a part or parts on the survey plan; and
 - ii) The owner shall apply for and receive a driveway entrance permit to the satisfaction of the General Manager of Growth and Infrastructure.
2. That the amending by-law includes a Holding symbol to be applied to the Phase 3 extraction area. The Holding symbol shall not be removed by the Council of the City of Greater Sudbury until the following reports have been submitted to the satisfaction of the Director of Planning Services:
 - i) Noise Assessment; and
 - ii) Stage 2 Archaeological Assessment.

Until such time as the H symbol has been removed, the only permitted use shall be in accordance with Section 13.1.

3. Conditional approval shall lapse on December 14, 2023 unless Condition 1 above has been met or an extension has been granted by Council.

Relationship to the Strategic Plan, Health Impact Assessment and Community Energy & Emissions Plan (CEEP)

The application to amend the Zoning By-law is an operational matter under the Planning Act to which the City is responding. There is general alignment with the goals and objectives of Strategic Plan given that the proposal will support the City's industrial resource sector and will also contribute towards business retention and growth. However, there is an inherent conflict with the CEEP based on the increased emissions resulting from the processing and transportation of aggregates over the 25-year lifespan of the proposed pit and quarry.

Financial Implications

There are no financial implications associated with this report at this time.

Report Overview

An application for rezoning has been submitted on vacant rural lands in order to permit a Category 3 Class A Pit and a Category 4 Class A Quarry with a total extraction area of 28 hectares. The lands to be rezoned are limited to the proposed extraction area. The subject land is located on Municipal Road 4 in Denison Township, approximately four (4) km east of Totten Mine.

The proponents have demonstrated general conformity with the broad framework of policies applied to aggregate resource development by providing the necessary background reports in support of the application. Such matters include a comprehensive analysis of natural heritage features and functions, land use compatibility and the potential impact on sensitive receptors, and protection of archaeological resources. A range of mitigation and avoidance measures are proposed, most importantly the preservation of the extensive wetland complexes located north, south and east of the proposed extraction area.

In order address the proximity to a sensitive receptor and an archaeological site, it is recommended that a holding provision be applied to the proposed Phase 3 extraction area as delineated on the operations plan. The holding provision shall not be removed until such time that a noise assessment and a Stage 2 Archaeological Assessment have been submitted.

Staff Report

Proposal:

An application for rezoning has been submitted in order to permit a Category 3 Class A Pit and a Category 4 Class A Quarry with a total extraction area of 28 hectares to be licensed under the Aggregate Resources Act. The lands to be rezoned are limited to the proposed extraction area.

A Class 'A' licence permits the removal of more than 20,000 tonnes of aggregate annually. For a Category 3 Pit above water, the extraction of aggregate material shall be no closer than 1.5 metres above the established groundwater table. For a Category 4 Quarry above water, extraction is limited to 2 metres above the established groundwater table.

As part of a complete application, the owner provided the following background materials in support of the application:

- Planning Justification Report (Tulloch Engineering - March 2021);
- Traffic Impact Study (JD Northcote Engineering Inc. - Dec. 15, 2020);
- Natural Environment Level 1 & 2 Studies (Tulloch Environmental - Jan.11, 2021); and,
- Stage 1 Archaeological Assessment (Horizon Archaeology Inc. - May 26, 2020).

Existing Zoning: "RU", Rural

Rural zoning permits a residential use in the form of a single detached dwelling or a mobile home on a permanent foundation. Seasonal dwellings are only permitted on legal existing waterfront lots.

Other permitted uses include agricultural use, animal shelter, cannabis production facility, distilling facility, forestry use, legal existing hunting or fishing camp, garden nursery, kennel, public utility, small-scale brewing facility, veterinary clinic, and winery.

Some of the above noted uses are subject to special setback provisions.

Requested Zoning: "M5", Extractive Industrial

"M5", Extractive Industrial zoning is primarily focused on aggregate facilities, where permitted uses include pits, quarries and aggregate transfer sites. Forestry and agricultural uses are also permitted in M5 zones.

Location and Site Description:

PIN 73382-0494 in Lot 9, Concession 2, Township of Denison (Regional Road 4, Whitefish)

The subject land comprises a large rural parcel located on the south side of Municipal Road 4 in Whitefish, approximately four (4) km east of Totten Mine. The lands are undeveloped and located opposite the former Victoria Mines townsite, which was relocated in the early part of the 20th century. MR4, which is also known as Regional Road 4 and Fairbank Lake Road, is designated as a Collector Road and is constructed to a rural standard. There are no municipal sewer and water services available in this area.

The total area of the subject parcel is approximately 105 ha. The northerly limit of the parcel abuts the Huron Central Railway right-of-way for a length of approximately 800 metres. A hydro corridor owned by Vale, identified as PIN 73382-0493 on the operations plan, is located north of the rail corridor. The remaining narrow strip of land situated between the hydro corridor and MR4 is owned by the applicant (PIN 73382-0766). The corridor that bisects the subject parcel in an irregular pattern is also owned by Vale (PIN 73382-0342). A driveway provides access to the site at approximately the mid-point of the street line.

The undeveloped lands essentially comprise a wilderness area that is mostly undisturbed excluding the site alteration that has occurred for the private access. There are several large wetland complexes that extend across property lines as illustrated on the attached aerial photo. Existing conditions are diverse and comprise nine (9) ecosite types that are common to Ecoregion 5E, as detailed in the Natural Environment studies.

The southerly portion of the site is noted for a large wetland area that isolates the southerly portion of the parcel from the remainder of the site. These lands, which comprise approximately one-third of the parent parcel including a proposed 120-metre wetland buffer, are to remain undisturbed. Lands located directly east of the extraction area are identified as Category 2 habitat of Eastern Whip-poor-will (EWPW), beyond which another wetland area is situated. The third wetland complex is located along the north portion of the parcel, including the railway right-of-way, hydro corridor and driveway access to the site.

Within the proposed extraction area, the only surface water features identified include small ephemeral streams. Two (2) wetland features within the extraction area comprising 3.1 ha of wetland habitat will be lost as part of this development. However, the submitted studies indicate that these smaller wetland units are free of natural heritage features as defined under the PPS.

There are two (2) sensitive receptors within 1,000 metres of the proposed extraction area. This is largely due to the sparsely populated rural location and the presence of mining lands surrounding the site. A property assessed as a farm with a residence is located on the north side of MR4 opposite the subject land (747 Regional Road 4). The dwelling has a separation distance of more than 500 metres from the Phase 1 and 2 extraction areas, but is located within 500 metres of the Phase 3 extraction area. A seasonal dwelling located on the westerly shoreline of St. Pothier Lake is approximately 1,000 metres from the southeast limit of the Phase 1 extraction area.

The lands are located outside the watershed that forms the regulated area of Conservation Sudbury (Nickel District Conservation Authority). The subject property therefore falls within the jurisdiction of the Ministry of Natural Resources and Forestry (MNRF).

Surrounding Land Uses:

The area surrounding the site includes:

North: Huron Central Railway right-of-way and a farm with residence on north side of MR4;

East: mining lands owned by Vale;

South: vacant lands owned by City of Greater Sudbury; and,

West: mining lands owned by Glencore.

Public Consultation:

The notice of complete application was circulated to the public and surrounding property owners on March 31, 2021. The statutory notice of the public hearing was provided by newspaper along with a courtesy mail-out circulated to the public and surrounding property owners within 240 metres of the property on November 25, 2021.

The applicant was advised of the City's policy recommending that applicants consult with their neighbours, ward councillor and key stakeholders to inform area residents on the application prior to the public hearing.

The proponents have indicated that no additional public consultation is proposed beyond the statutory requirements of the rezoning application and the licensing process.

As of the date of this report, no phone calls or written submissions have been received.

Policy & Regulatory Framework:

The property is subject to the following policy and regulatory framework:

- [2020 Provincial Policy Statement](#)
- [2011 Growth Plan for Northern Ontario](#)
- [Official Plan for the City of Greater Sudbury, 2006](#)
- [Zoning By-law 2010-100Z](#)

Provincial Policy Statements and geographically specific Provincial Plans, along with municipal Official Plans, provide a policy framework for planning and development in the Province. This framework is implemented through a range of land use controls such as zoning by-laws, plans of subdivision and site plans.

Provincial Policy Statement (PPS):

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters are consistent with the Provincial Policy Statement. In general, resource-related uses are permitted on rural lands in municipalities under Section 1.1.5, provided the proposed land use demonstrates consistency with other applicable policies of the PPS. Therefore the four (4) key policy areas that are relevant to this application concern the following:

Section 1.2.6: Land Use Compatibility;
Section 2.1: Natural Heritage;
Section 2.5: Mineral Aggregate Resources: and,
Section 2.6: Cultural Heritage and Archaeology.

Section 1.2.6: Land Use Compatibility

- 1.2.6.1 Major facilities and sensitive land uses shall be planned and developed to avoid, or if avoidance is not possible, minimize and mitigate any potential adverse effects from odour, noise and other contaminants, minimize risk to public health and safety, and to ensure the long-term operational and economic viability of major facilities in accordance with provincial guidelines, standards and procedures.
- 1.2.6.2 Where avoidance is not possible in accordance with policy 1.2.6.1, planning authorities shall protect the long-term viability of existing or planned industrial, manufacturing or other uses that are vulnerable to encroachment by ensuring that the planning and development of proposed adjacent sensitive land uses are only permitted if the following are demonstrated in accordance with provincial guidelines, standards and procedures:
- a) there is an identified need for the proposed use;
 - b) alternative locations for the proposed use have been evaluated and there are no reasonable alternative locations;
 - c) adverse effects to the proposed sensitive land use are minimized and mitigated; and,
 - d) potential impacts to industrial, manufacturing or other uses are minimized and mitigated.

Section 2.1: Natural Heritage

- 2.1.1 Natural features and areas shall be protected for the long term.
- 2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.

- 2.1.3 Natural heritage systems shall be identified in Ecoregions 6E & 7E1, recognizing that natural heritage systems will vary in size and form in settlement areas, rural areas, and prime agricultural areas.
- 2.1.4 Development and site alteration shall not be permitted in:
- a) significant wetlands in Ecoregions 5E, 6E and 7E; and
 - b) significant coastal wetlands.
- 2.1.5 Development and site alteration shall not be permitted in:
- a) significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;
 - b) significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
 - c) significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);
 - d) significant wildlife habitat;
 - e) significant areas of natural and scientific interest; and
 - f) coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b) unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
- 2.1.6 Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements.
- 2.1.7 Development and site alteration shall not be permitted in habitat of endangered species and threatened species, except in accordance with provincial and federal requirements.
- 2.1.8 Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in policies 2.1.4, 2.1.5, and 2.1.6 unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions.
- 2.1.9 Nothing in Policy 2.1 is intended to limit the ability of agricultural uses to continue.

Section 2.5: Mineral Aggregate Resources

- 2.5.1 Mineral aggregate resources shall be protected for long-term use and, where provincial information is available, deposits of mineral aggregate resources shall be identified.
- 2.5.2 Protection of Long-Term Resource Supply
- 2.5.2.1 As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible.
- Demonstration of need for mineral aggregate resources, including any type of supply/demand analysis, shall not be required, notwithstanding the availability, designation or licensing for extraction of mineral aggregate resources locally or elsewhere.
- 2.5.2.2 Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts.
- 2.5.2.3 Mineral aggregate resource conservation shall be undertaken, including through the use of accessory aggregate recycling facilities within operations, wherever feasible.

- 2.5.2.4 Mineral aggregate operations shall be protected from development and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact. Existing mineral aggregate operations shall be permitted to continue without the need for official plan amendment, rezoning or development permit under the Planning Act. Where the Aggregate Resources Act applies, only processes under the Aggregate Resources Act shall address the depth of extraction of new or existing mineral aggregate operations. When a license for extraction or operation ceases to exist, policy 2.5.2.5 continues to apply.
- 2.5.2.5 In known deposits of mineral aggregate resources and on adjacent lands, development and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:
- a) resource use would not be feasible; or
 - b) the proposed land use or development serves a greater long-term public interest; and
 - c) issues of public health, public safety and environmental impact are addressed.
- 2.5.3 Rehabilitation
- 2.5.3.1 Progressive and final rehabilitation shall be required to accommodate subsequent land uses, to promote land use compatibility, to recognize the interim nature of extraction, and to mitigate negative impacts to the extent possible. Final rehabilitation shall take surrounding land use and approved land use designations into consideration.
- 2.5.3.2 Comprehensive rehabilitation planning is encouraged where there is a concentration of mineral aggregate operations.
- 2.5.3.3 In parts of the Province not designated under the Aggregate Resources Act, rehabilitation standards that are compatible with those under the Act should be adopted for extraction operations on private lands.

Section 2.6: Cultural Heritage and Archaeology

- 2.6.1 Significant built heritage resources and significant cultural heritage landscapes shall be conserved.
- 2.6.2 Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.
- 2.6.3 Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.
- 2.6.4 Planning authorities should consider and promote archaeological management plans and cultural plans in conserving cultural heritage and archaeological resources.
- 2.6.5 Planning authorities shall engage with Indigenous communities and consider their interests when identifying, protecting and managing cultural heritage and archaeological resources.

Growth Plan for Northern Ontario (GPNO):

Municipalities in the Province of Ontario are required under Section 3 of the Planning Act to ensure that decisions affecting planning matters conform with the Growth Plan for Northern Ontario.

The GPNO has no specific policies on aggregate resources. However the Plan does speak broadly to the sustainable development of natural resources as follows:

Natural resource management and stewardship practices will occur within a framework that recognizes and responds to evolving environmental, economic and social values, and science-based knowledge and information, which allows for the introduction of new practices, technologies and management approaches, traditional knowledge, and locally and regionally responsive approaches.

Official Plan for the City of Greater Sudbury:

The subject parcel has a split land use designation. The northwest portion is designated as Mining/Mineral Reserve, with the remainder of the lands designated as Rural. The wetland features are identified on Schedule 5, Natural Heritage.

Mining/Mineral Reserve

The applicable policies are set out under Section 4.6.1 as follows:

1. Mining/Mineral Reserve areas will be protected from development that would preclude or hinder the establishment of new operations or access to the resource unless:
 - a. the resource use would not be feasible; or,
 - b. the proposed land use or development serves a greater long-term public interest; and,
 - c. issues of public health, public safety and environmental impact are addressed.
2. Lands designated Mining/Mineral Reserve may be used for a variety of uses related to the extraction of minerals. Permitted uses may include mining and mining-related uses, mineral aggregate uses, smelting and refining uses, pits and quarries and related uses, and accessory uses and structures associated with mining.
3. For land in the Mining/Mineral Reserve to be used for mining purposes, an amendment to the Zoning By-law must occur where such lands are not pre-zoned. In considering an amendment to the Zoning By-law to permit a mining or mining-related use or the expansion of an existing use in the Mining/Mineral Reserve area, the City will consider:
 - a. the impact on the environment, particularly new mining operations which must be located where there will be little or no impact on natural heritage features and functions;
 - b. indirect impacts on the utilities and services provided by the City;
 - c. the impact on surrounding land uses;
 - d. the impact on cultural heritage and archaeological resources;
 - e. the aesthetic appearance of the proposed development; and,
 - f. the benefit of the mining or mining-related use to the City.

Rural Areas

Pits and quarries are permitted in Rural designations subject to rezoning. The applicable Official Plan policies under Section 5.2.5 include the following:

- Rural industrial/commercial uses are generally resource-based and may include agriculture, dry industrial/commercial uses, and forestry.
- Pits and quarries are permitted in appropriately zoned areas.

- Rural industrial/commercial sites are to be located with adequate separation distances from residential areas and provide proper buffering and landscaping along Arterial Road frontages. Entrances are restricted to Secondary Arterial and Local Roads, and no temporary structures, outside storage or sales displays may be visible from the frontage of abutting roads. All such development is subject to rezoning and site plan control.
- New resource-related industries should not impact the natural resource base. Rural industrial/commercial uses must generate limited amounts of wastewater and minimize land use conflicts.

Natural Environment

Chapter 9 of the Official Plan contains policies applied to the natural environment, including habitat of endangered and threatened species, wetlands, fish habitat, significant wildlife habitat, significant areas of natural and scientific interest; and sites of geological interest. These policies largely mirror the Provincial Policy Statement, with some added local context.

a) Section 9.2.2: Endangered and threatened species

Development and site alteration are not permitted in habitat of endangered species and threatened species except in accordance with Provincial and Federal requirements.

Development and site alteration are not permitted on lands adjacent to habitat of endangered species and threatened species unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural feature or their ecological functions. Adjacent lands to endangered species and threatened species may vary depending on general habitat descriptions. Habitat descriptions can be obtained through the Ministry of Natural Resources and Forestry. This area can be modified if justified by a study completed by a qualified professional.

b) Section 9.2.3: Wetlands

In areas without a watershed or subwatershed plan, development and site alteration are not permitted in a wetland unless it can be demonstrated that there will be no impacts to the quality and quantity of surface water features that are hydrologically linked to the wetland and that losses of significant wetland features and functions will not occur.

c) Section 9.2.4: Fish habitat

1. Development and site alteration are not permitted in fish habitat except in accordance with provincial and federal requirements.
2. All construction activities will be mitigated to prevent impacts on receiving waters.
3. Development and site alteration shall not be permitted on adjacent lands to fish habitat unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions. Adjacent lands are considered to be within 120 metres of fish habitat. This area can be modified if justified by a study.

d) Section 9.2.5: Significant wildlife habitat

For the purposes of the Official Plan, significant wildlife habitat includes the following:

- a. habitat used by moose during the critical late winter period;
- b. great blue heron nesting sites; and,
- c. osprey nesting sites.

1. Development and site alteration is not permitted within significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.
2. Development and site alteration is not permitted on adjacent lands to significant wildlife habitat unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions. Adjacent lands are considered to be within 120 meters of features listed in 9.2.5 a, b, and c.

e) Section 9.2.6: Significant areas of natural and scientific interest (ANSI)

An Area of Natural and Scientific Interest is identified as provincially significant by the Ministry of Natural Resources because of its life science or earth science value related to protection, scientific study or education.

1. Development and site alteration are not permitted on lands in a significant Area of Natural and Scientific Interest unless it has been demonstrated that there will be no negative impacts on natural features or their ecological functions.
2. Development and site alteration are not permitted on lands adjacent to a significant Area of Natural and Scientific Interest unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions. Ecological function refers to the natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions. Adjacent lands are defined as follows:
 - a. significant Area of Natural and Scientific Interest – life science: 120 metres; and,
 - b. significant Area of Natural and Scientific Interest – earth science: 50 metres.

f) Section 9.2.7: Site of geological interest

Sites of Geological Interest represent the rich geological heritage of the City and are to be protected from incompatible development, including infrastructure development. Mitigative measures, including setbacks, may be required during development and site alteration to protect Sites of Geological Interest. Public access should be incorporated into development plans, wherever possible.

Archaeological resources

Archaeological resources are addressed under Section 13.3 of the Official Plan and may include artifacts, archaeological sites, marine archaeological sites, as defined under the Ontario Heritage Act. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken in accordance with the Ontario Heritage Act.

1. Disturbance of known archaeological sites and areas of archaeological potential are discouraged by this Plan. This Plan encourages mapping the archaeological resource potential of the City of Greater Sudbury in order to better determine where an archaeological resource assessment will need to be conducted by a licensed archaeologist. Until such mapping is completed, development applications will be screened for archaeological potential in accordance with provincial standards.
2. Any alterations to known archaeological sites and areas of archaeological potential will only be performed by licensed archaeologists in accordance with the Ontario Heritage Act.
3. Where a development may cause an impact to archaeological resources or areas of archaeological potential, an archaeological assessment will be required in accordance with the Ontario Heritage Act. Archaeological resources that are located on a proposed development site will be conserved.

4. The local police, Cemeteries Regulation Unit of the Ministry of Consumer Services and the Ministry of Tourism, Culture and Sport will be contacted by the proponent if an identified human cemetery, marked or unmarked human burial site is discovered during land use development.
5. The City may maintain the integrity of archaeological resources by adopting zoning by-laws under Section 34 of the Planning Act to prohibit any land use activities or the erection of buildings or structures on land which is a site of a significant archaeological resource.

Zoning By-law 2010-100Z:

The following zone standards are applied to lands being rezoned to “M5”, Extractive Industrial:

- Minimum setbacks from all lot lines: 15 metres.
- Location and Fencing of Excavations: any open excavation associated with, or pertaining to an extractive use shall:
 - (i) Be located not closer than 30 metres to a street line or 15.0 metres to any other lot line; and,
 - (ii) Be fully encircled by a continuous fence or other barrier not less than 1.8 metres in height, located not closer than 10.0 metres to any part of such excavation.
- No part of any extractive use, except for an accessory business office, shall be established or erected closer than 150 metres to a Residential (R) Zone.
- No accessory industrial use shall be permitted in an M5 Zone except for the washing, screening, sorting, drying, stockpiling, crushing, blending or other such primary processing, excluding roasting or smelting, of ores, minerals or aggregates originating from an extractive use to which the said industrial use is accessory.

Site Plan Control:

Site plan control is not typically applied to pits and quarries. The proposed pit and quarry will be subject to a detailed operational plan approved by the Province as part of the licensing process.

Department/Agency Review:

Building Services and Development Engineering advised that there are no concerns based on their area of interest.

ICPS, Transportation & Innovation Section concur with the findings of the submitted Traffic Impact Study. A driveway entrance permit is required as a condition of approval.

The Manager of Environmental Planning Initiatives has reviewed the natural environment studies and is satisfied that the proposal addresses Provincial and Federal requirements provided the proponents adhere to the avoidance and mitigation measures recommended by the environmental consultants.

Planning Analysis:

The review of this file is focused on the following core issues:

- Land use compatibility with existing sensitive land uses in a rural setting;
- Traffic impact including the adequacy of existing transportation infrastructure;
- Environmental considerations related to natural heritage features and functions; and,
- Presence of an archaeological resource on the subject land.

Further to the above, the application must also address conformity with the Official Plan, the 2020 Provincial Policy Statement, and the 2011 Growth Plan of Northern Ontario.

Land use compatibility

Resource extraction activities are defined as major facilities under the Provincial Policy Statement, thereby emphasizing the importance of adequate separation distances between aggregate facilities and adjacent sensitive land uses. The need to address compatibility is balanced with policies intended to protect the viability of the Province's resource base.

Under the Aggregate Resources Act O. Reg. 244/97, a sensitive receptor is defined as follows:

- (a) a school or child care centre; or,
- (b) any residence or facility at which at least one person sleeps, including a long-term care home, hospital, trailer park or campground.

In this case, the subject land is located in a rural area and is largely surrounded by mining lands owned by Vale and Glencore. However, there are two (2) sensitive receptors that fall within a potential influence area of 1,000 metres.

1. 747 Regional Road 4, Whitefish

A single detached dwelling is located at 747 Regional Road 4 on lands that historically formed the settlement of Victoria Mines. The underlying lot fabric of the former townsite is illustrated on the operations plan. The property is currently assessed as a farm with residence.

The operations plan identifies the location of the dwelling, which is sited northeast of the proposed extraction area on the opposite side of MR4. The plan indicates that the dwelling has a separation distance of more than 500 metres from the Phase 1 and 2 extraction areas, but falls within a 500-metre buffer applied to the Phase 3 extraction area.

Under MNRF licensing requirements, a noise assessment is required when a sensitive receptor is located within 500 metres of extraction and/or processing facilities. Furthermore, a Blast Design report is triggered when a sensitive receptor is located within 500 metres of the extraction area in order to determine compliance with Provincial guidelines.

It is therefore recommended that as a condition of approval, a holding provision shall be applied to the Phase 3 extraction area. The holding provision would not be removed by Council until such time that a noise assessment is submitted to the satisfaction of the Director of Planning Services in order to address any potential nuisance factors related to on-site activities.

Any safety or nuisance concerns related to blasting will be addressed under the Provincial licensing regime, including vibration levels, flyrock, and other blasting impacts.

2. PIN 73382-0277

A seasonal dwelling is located on Parcel 6877 southeast of the subject land. The property has no public road frontage and no assigned municipal address. The seasonal dwelling, which is located on the westerly shoreline of St. Pothier Lake, is approximately 1,000 metres from the southerly limit of the Phase 1 extraction area as measured at the closest points.

The seasonal dwelling is essentially buffered from the area of operations by the large wetland complex on the southerly portion of the parent parcel, which will not be zoned for aggregate extraction and will be protected based on its natural heritage features and functions. There are no concerns related to land use compatibility given the large separation distance that results and no specific studies are required.

3. PIN 73382-0804

A single detached dwelling previously occupied the property municipally known as 650 Regional Road 4, which is located further to the east on lands owned by Vale. The dwelling, which is visible in historical Street View images, was demolished in 2017 and no longer presents any compatibility concerns (Permit #B17-0319). The property is currently zoned Rural and assessed as patented mining lands.

Traffic impact study

The Traffic Impact Study (TIS) contains various operational details that are relevant to the traffic analysis but also informative in terms of proposed operations on the site. The quarry is intended to be a year-round operation. Hours of operation are likely to be between 6:00 am and 8:00 pm. Expected daily tonnage is 1,200 tonnes on a typical day to a maximum of 3,000 tonnes. Four (4) employees are expected to work on-site.

Ninety (90) truck loads are anticipated on a typical day. Ten (10) truck loads are estimated during the AM/PM peak hours, with the remaining 70 truck loads spread over the remainder of the day. Each truck load represents two (2) trips (inbound and outbound). The average number of truck loads per hour is approximately 6.4 per hour, with 10 per hour during peak periods. Traffic assignment is 90% east and 10% west.

The TIS determined that there is sufficient separation distance between the site entrance and existing driveways on MR4, which is designated as a haul route. The roadway has a maximum speed limit of 60 km/hour and is operating at 10% below capacity. A left-turn lane is not required based on MTO turning lane warrants. However, the TIS does recommend a 2.0 metre-wide asphalt shoulder tapered over a 20- metre length of roadway on both sides of the entrance to accommodate truck movements.

Transportation & Innovation Section has reviewed the analysis and recommendations of the TIS and have not indicated any concerns related to traffic generation. As a condition of approval, a driveway entrance permit is required prior to the adoption of the amending by-law.

Impacts on the natural environment

The proponents prepared comprehensive natural environment studies which outline existing conditions, present results of field surveys, evaluate potential impacts, and establish parameters for development. The natural environment studies are essential in determining consistency with the Provincial Policy Statement and the presence of natural heritage features and functions.

The following technical reports are required for Category 3 and 4 licences as follows:

Natural Environment Level 1: determine whether any of the following features exist on and within 120 metres of the site: significant wetland, significant portions of the habitat of endangered or threatened species, fish habitat, significant woodlands (south and east of the Canadian Shield), significant valley lands (south and east of the Canadian Shield), significant wildlife habitat and significant areas of natural and scientific interest; and,

Natural Environment Level 2: impact assessment where the Level 1 identified any features on and within 120 metres of the site in order to determine any negative impacts on the natural features or ecological functions for which the area is identified, and any proposed preventative, mitigative or remedial measures.

A. Level 1 environmental review and field surveys

The study area comprises the licence area and adjacent areas within 120 metres of the site. The proposed extraction area itself contains nine (9) ecosite types, all of which are common to Ecoregion 5E. The boundaries and descriptions of these ecosites are illustrated in Figure 3 in the Level 1 report. As part of the background review conducted by the consultants, it was determined that there are no protected areas within

1,000 metres of the study area. There are no existing records indicating significant wildlife habitat within the study area itself.

There are three (3) large wetland features located north, south and east of the proposed extraction area. The southerly portion of the parent parcel is isolated by a large wetland complex that extends across property lines, essentially rendering this part of the property inaccessible. The owner has committed to retaining the large wetland complexes surrounding the site and establishing appropriate operational setbacks.

There are two (2) smaller wetland units within the study area that were determined not to support any significant or unique ecological functions, nor qualify for Provincial significance. No surface water features were found within the proposed extraction area aside from small ephemeral streams, which do not support fish habitat based on the findings of the report.

The wetland features have not been evaluated utilizing the Ontario Wetland Evaluation System (OWES), which is a science-based ranking system used to determine the relative value of wetlands. High value wetlands are considered to be Provincially significant. In order to forego the above noted evaluation, the proponent will preserve sensitive wetland habitats and adhere to operational setbacks.

The natural heritage assessment encompassed a wide range of potential natural heritage features, with results briefly summarized as follows:

- Eastern Whip-poor-will (Threatened Species): Most of the study area comprises Category 3 habitat. No callings were detected from the central portion of the site. Category 2 habitat located east of the proposed extraction area is delineated on the operations plan.
- Turtle habitat (Blanding's Turtle, Midland Painted Turtle, Snapping Turtle): Suitable habitat was identified north and south of the study area, which will remain undeveloped. Other wetlands in and around the study area did not support sufficient standing water for turtle wintering.
- Endangered bats and bat habitat (Little Brown Bat, Eastern Small-footed Bat and Northern Long-eared Bat): Habitat in the study area is not considered high quality for bat maternity roosting. No caves or other areas suitable for bat hibernation were found.
- Bird habitat including species of Special Concern: There is suitable habitat within the study area to support nesting for five (5) species of Special Concern including Canada Warbler, Common Nighthawk, Wood Thrush, Olive-sided Flycatcher, Eastern Wood-pewee and Golden-winged Warbler. There is no evidence of nesting by Great Blue Heron. Large wetland complexes outside study area have high potential for marsh bird breeding. Open water marshes within southerly wetland complex have highest potential for waterfowl feeding and staging habitat.
- Amphibian habitat: Small wetland units within study area not significant for amphibian breeding. No significant woodland breeding area was found within study area.
- Cervid habitat (white-tailed deer, moose): There are no cervid winter yarding areas associated with study area. The wetland/riparian woodland area abutting the roadway is being used as a movement corridor for elk.
- Snake habitat: Potential snake hibernation areas identified on slopes facing wetland features to be retained. Appropriate setbacks and mitigation methods to be implemented.
- Fish community survey: Unnamed permanent watercourse on northerly portion of property confirmed to support fish habitat. No critical or sensitive fish habitat was identified.

B. Level 2 impact assessment and operational recommendations

The Level 2 report contains some operational details that are relevant to the impact assessment. Site access

is proposed by means of an approximate 400-metre private driveway extending south from MR4. Site activities will include land clearing, heavy equipment operation, aggregate extraction, stockpiling, processing of materials, and truck hauling. The facility is intended to have an approximate 25-year lifespan. The study sets out two (2) broad objectives as a result of the Level 1 analysis:

- i) Evaluate impacts of aggregate extraction if proposed in close proximity to sensitive wetland complexes located to the north, south and east; and,
- ii) Delineate the extraction area to avoid known and candidate natural heritage features.

The Level 2 report asserts several a priori avoidances as follows:

- No operations will occur in the wetland complexes located to the north, south and east of the proposed extraction area;
- Operational setbacks will be 100 metres from northerly wetland, 120 metres from southerly wetland, and 120 metres from the easterly wetland; and,
- All extraction will remain above the water table.

The potential impacts of the proposed aggregate operations are summarized as follows:

- The two (2) smaller wetland units within the study area, which were found to be free of natural heritage features, will be lost. This area comprises approximately 3.1 ha of wetland habitat;
- Potential surface wetland contamination from sediments and the fuels and lubricants used for heavy equipment;
- Groundwater contamination from fuels, lubricants and other substances;
- Seeds of invasive plant species that may be transported on-site via equipment and vehicles; and,
- Species-specific impacts.

In order to address the above noted impacts, avoidance and mitigation measures will include no work to be conducted within sensitive wetland complexes; sediment control; spills prevention and control including no vehicles, equipment or deleterious substances stored within 30 metres of a wetland or waterbody; passive water management to include two (2) collection points subject to groundwater protection controls; and, regular cleaning of equipment.

Species-specific concerns are to be addressed as follows:

- The Level 1 study determined that most of the proposed extraction area qualifies as Category 3 habitat for Eastern Whip-poor-will. Accordingly, the extraction area has been delineated to avoid Category 1 and 2 habitats. The retention of the sensitive wetland complexes combined with the proposed buffer ensures that abundant Category 3 habitat is retained.
- Suitable habitat for Blanding's Turtle was found north and south of the study area, with potential overwintering habitat identified in the northerly wetland area along MR4. Overall, there are four (4) ecosites identified as candidate turtle wintering habitat for the three (3) species listed in the Level 1 study. Although the extraction area will result in the loss of assumed Category 3 habitat for Blanding's Turtle, all candidate Category 1 and 2 habitats will be preserved. Avoidance and mitigation measures include no operations in wetland complexes, operational setbacks, wildlife signage, restricted vehicular speeds and staff education.
- The protection of the extensive wetland complexes and the adjacent 100 to 120 metres of riparian forest will ensure that quality forage and day-roost habitat for bats is retained.
- In regards to migratory birds, up to 50 species were observed, with no at-risk species identified other than Eastern Whip-poor-will. Given the high potential for bird nesting within the study area, avoidance and mitigation will mainly involve timing restrictions (restricted work during the general nesting period and phased vegetation removal).

- The level of amphibian breeding within the study area is not known. However, the proposal retains ecosites on which breeding potentially takes place. Mitigation measures are largely tied to the driveway access (speed limits, wildlife signage) and the containment of refuse to discourage predators.
- The subject property contained an abundance of elk signs. Most notably the wetland and riparian woodland areas abutting MR4 provide a movement corridor for elk. The large wetland area to the south qualifies as a feeding area for moose. Mitigation entails the preservation of the north and south wetland complexes with appropriate buffers, which will enable elk to circumvent areas of activity. Traffic control measures will reduce the potential for wildlife collisions.
- Identified fish and aquatic habitat includes the north and south wetland complexes, as well as the ditching beside the railway right-of-way. No critical or sensitive fish habitat was found. The main activity occurring adjacent to fish habitat will be vehicles and equipment traversing the driveway access. Any maintenance required for the driveway in the vicinity of fish habitat may require DFO review.

C. Staff review of natural environment studies

Planning staff are satisfied that the Natural Environment Level 1 & 2 Studies address consistency with Section 2.1 of the Provincial Policy Statement provided there is effective implementation of the mitigation and avoidance measures.

For the purposes of the zoning by-law amendment application, the Manager of Environmental Planning Initiatives has reviewed the studies and has advised that the proposed development does not pose an elevated risk to natural heritage features and functions provided there is strict adherence to the provisions set out in the Tulloch Environmental reports.

Archaeological assessment

The subject land is adjacent to the site of a former company town known as Victoria Mines, which functioned as a mining settlement during the early part of the 20th century. At its peak the settlement had a population of 600 persons. The adjacent smelter and roasting yards were discontinued in 1913 and the town was subsequently closed to settlement in 1915. Mining operations were transferred to Coniston, as were some of the homes and other buildings. Very little evidence remains of the former settlement, which is indiscernible from the vantage point of the roadway. The original subdivision plan is shown on the operations plan as an overlay, thereby illustrating the proximity of the former townsite to the proposed extraction area.

An archaeological resource has been found on the subject land, just outside the proposed extraction area identified as Phase 3 on the operations plan. The feature is described as a midden of Euro-Canadian artifacts and is located at the edge of a low-lying wet area. The midden, which is essentially a refuse heap, contains ceramic shards, glass vessels, bricks and other discarded items. As a result, the Stage 1 Archaeological Assessment determined that the project area presents high potential for cultural values. A Stage 2 assessment is therefore recommended.

The proposed Phase 3 extraction area encroaches into the 300-metre radius assessment area applied to the archaeological site. It is therefore recommended that the submission of a Stage 2 Archaeological Assessment be included as a condition to lifting the holding provision in order to demonstrate conformity with Official Plan and PPS policies applied to areas of archaeological potential.

Conformity with the Official Plan

The proposal addresses conformity with applicable Official Plan policies based on the following summary:

- There is no conflict with the policies applied to the Mining/Mineral Reserve, which covers a portion of the property. The Mining/Mineral Reserve permits extraction activities including pits and

quarries. The proposal satisfies the criteria applied to rezoning applications within the Reserve, including policies addressing natural heritage features, land use compatibility, and the impact on cultural heritage and archaeological resources.

- Pits and quarries are permitted in Rural Areas. The proposal addresses the general criteria applied to rezonings for resource-based uses, including adequate separation distances from sensitive land uses, adequate buffering and screening along the road corridor, and no visible outdoor storage from the roadway. Extraction within the area identified as Phase 3 is conditional upon submission of a noise assessment in order to address the proximity to a sensitive receptor.
- Staff are satisfied that the proposal demonstrates conformity with the policies applied to natural heritage features and functions, which essentially mirror the Provincial Policy Statement. The results of the analysis are detailed above.
- The archaeological resource found on the subject land is located outside the proposed extraction area. Phase 3 extraction will be contingent upon submission of a Stage 2 Archaeological Assessment as recommended by the owner's archaeological consultant.

Consistency with the 2020 Provincial Policy Statement

The proposal presents consistency with the four (4) major policy areas directly relevant to the subject application, including Section 1.2.6: Land Use Compatibility; Section 2.1: Natural Heritage; Section 2.5: Mineral Aggregate Resources: and, Section 2.6: Cultural Heritage and Archaeology.

Section 1.2.6: Land Use Compatibility

Under the PPS, resource extraction activities are defined as major facilities, whereby special consideration is extended to land use compatibility. Although the thrust of the policy is intended to avoid the development of sensitive land uses in close proximity to major facilities, in this case the sensitive receptors are existing dwellings that pre-date the proposed use. Staff are satisfied that there are adequate separation distances for the two (2) dwellings located within the potential influence area and that the requisite studies will address any potential nuisance and safety concerns if and when extraction takes place within 500 metres of a sensitive receptor.

Section 2.1: Natural Heritage

The proponents have submitted comprehensive environmental reports that assess the potential for natural heritage features and functions within the study area as defined under the PPS. The cornerstone of the analysis is tied to the preservation of the extensive wetland complexes located north, south and east of the proposed extraction area. Staff are satisfied that Provincial and Federal requirements under the range of applicable legislation can be addressed by the proposed development provided the owner strictly adheres to the mitigation and avoidance measures outlined in the studies.

Section 2.5: Mineral Aggregate Resources

Although the subject lands are not located within the Aggregate Reserve, the PPS permits resource development on rural lands within municipalities, particularly if the aggregate resource provides proximity to markets. A demand/supply analysis is not required to demonstrate the need for mineral resource extraction.

The key policy under Section 2.5 therefore relates to the extraction activity itself, which shall be undertaken in a manner which minimizes social, economic and environmental impacts. The land use compatibility analysis, Traffic Impact Study, Stage 1 Archaeological Assessment and Natural Environment studies have demonstrated that consistency with Section 2.5 can be achieved.

Section 2.6: Cultural Heritage and Archaeology

Under Section 2.6, development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved. Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

In this case, the archaeological resource is located outside the proposed extraction area as identified in the Stage 1 Archaeological Assessment. A Stage 2 assessment will be required as a condition of approval if and when extraction takes place within a 300-metre radius of the archaeological resource. Staff are satisfied that Provincial policies applied to cultural heritage are being adequately addressed.

Conformity with the 2011 Growth Plan for Northern Ontario

There are no specific land use policies applied to aggregate extraction, archaeological resources and compatibility with sensitive land uses under the GPNO. There is instead a general focus on the sustainable development of natural resources with a balanced approach to environmental, social and economic health.

In this case, the natural environment studies have demonstrated that sensitive natural heritage features and functions located outside the proposed extraction area will be protected from resource development. As a result, there is no conflict with the Growth Plan.

Conclusion:

The proponents have demonstrated conformity with the broad range of policies applied to aggregate resource development by providing the necessary background reports in support of the application. Most notably, the Natural Environment Level 1 & 2 Studies address consistency with Section 2.1 of the Provincial Policy Statement related to natural heritage features and functions, which is considered the highest test of this application. This is largely achieved through the preservation of the extensive wetland complexes located north, south and east of the proposed extraction area.

Staff are satisfied that there are adequate separation distances to the two (2) sensitive receptors that fall within a potential influence area. Any extraction proposed within 500 metres of a sensitive receptor will require a noise assessment. This requirement can be implemented as part of a holding provision, which will also include a Stage 2 Archaeological Assessment.

Zoning relief is not required as part of the proposed M5 zoning, which will be applied only to the proposed extraction area. Most operational matters will be addressed by the aggregate licence issued by the Province. However, a final plan of survey is required to enact the amending by-law. In order to implement the holding provision, the survey shall delineate the limits of the Phase 3 extraction area.

Planning Services recommends that the application for rezoning be approved subject to the conditions outlined in the Resolution section of this report.