



DEVELOPMENT SERVICES

Staff Report

REPORT NO: DS 2023-006

TO: Council

SUBMITTED BY: Harold O'Krafka, MCIP RPP
Director of Development Services

PREPARED BY: Andrew Martin, MCIP RPP
Manager of Planning and Economic Development

REVIEWED BY: Sharon Chambers, CAO

DATE: May 29, 2023

SUBJECT: ZCA-06/22, Petersburg Sand Company Inc./IBI Group, 1856
Snyder's Road East

RECOMMENDATION:

THAT Council approve Zone Change Application 06/22 made by Petersburg Sand Company Inc./IBI Group, affecting Part of Lot 5, Concession North of Snyder's Road, to rezone the subject lands as follows:

1. in part from Zone 1 (Agricultural) to Zone 14 (Extractive Industrial) with site specific provisions permitting the importation of concrete and asphalt for recycling,
2. in part from Zone 1 (Agricultural) to Zone 11 (Open Space) with site specific provisions limiting uses to an Arboretum, Wildlife Sanctuary, and accessory uses,
3. on the lands south of the CN railway, to permit an access route to an extractive industrial operation north of the CN railway, and
4. on the lands north of the CN railway, to permit buildings or structures, not including a dwelling unit, to be erected provided access is maintained through joint property ownership fronting on, or by way of a right-of-way to, a municipally maintained public road.

and,

THAT the Township request that the Ministry of Natural Resources and Forestry, in addition to comments provided by the Region of Waterloo dated November 25, 2022:

1. not issue the ARA license until such time as the CN railway has approved final construction of the private railway crossing and the necessary agreement with CN and the property owner has been completed to the satisfaction of CN,
2. modify Note 5, under the heading Noise of the Operation Plan Notes (Sheet 3 of 5) to require the 3.0m berm to be constructed at the same time as the construction of the pit entrance, and
3. advise the Township of Wilmot if any changes are made to the ARA plans from those dated as follows:
 - a. Existing Conditions (revised May 17, 2022)
 - b. Operational Plan (revised November 24, 2022)
 - c. Operational Plan Notes (revised November 24, 2022)
 - d. Rehabilitation Plan (revised June 9, 2022)
 - e. Cross-sections (revised May 17, 2022)

SUMMARY:

In June 2022, IBI Group on behalf of Petersburg Sand Company, filed a zone change application that proposes to rezone a portion of the subject property to Zone 14 (Extractive Industrial) to permit a gravel pit operation. The zoning proposes to include provisions for the importation of concrete and asphalt for recycling. The application also proposes to rezone the St. Agatha Forest Environmentally Sensitive Policy Area (ESPA) located on a portion of the subject property to Zone 11 (Open Space).

Through the review and approval of detailed technical studies, the proposed limits of the Zone 11 area were increased from approximately 1.5ha to approximately 3.1ha to incorporate the ESPA and its associated buffer and enhancement areas located on the subject. Considering the 15m setbacks from the south and west property lines, the actual area to be extracted is approximately 22.5ha.

Concurrently, the applicant has also filed a Category 3 – Class A license application with the Ministry of Natural Resources and Forestry (MNRF) for an above water pit.

The MNRF is responsible for implementation of licensing, regulating, and enforcement of the aggregate operation. This report provides comments to be incorporated in the licensing of the pit should the zone change application be approved.

Through the submission of detailed technical studies and their associated acceptance by the appropriate agencies, the applicant has demonstrated compliance with the Provincial, Regional and Township requirements and standards as set out in the Provincial Policy Statement, Region of Waterloo Official Plan and Township Official Plan.

This report considers the proposed zoning of the property along with supporting materials, expert agency comments and associated peer reviews, and public comments.

BACKGROUND:

A Public Meeting was held on August 22, 2022. Minutes of the public meeting are included as Attachment H. On May 1, 2023 notice that this application would return to Council for a decision, along with advisement that this report was available to review online at www.wilmot.ca/zca-06-22, was given to property owners within 120 metres of the subject lands along with individuals who requested notice.

All submission material including plans, technical reports, and peer reviews, have been made available throughout the review process online at www.wilmot.ca/zca-06-22.

The following is a summary of comments received prior to writing of this report.

Public

Opposition

At the time of finalizing this report, 16 unique letters/emails were received. 13 of these responses were from addresses identified as being within Wilmot Township, 1 was from a non Wilmot address and 2 did not include an address. A list of these respondents and a copy of the complete written responses are included as Attachment E.

The Township also received a total of 166 submissions that contained one of two responses. 94 of these submissions were from Wilmot addresses, 71 from non-Wilmot address and 1 response did not include an address. A list of these respondents and copies of the two emails/letters are included as Attachment F.

The primary themes in opposition of the application were impact on health (noise, dust, air quality), impact on the environment (habitat loss, farmland loss, threat to water table), road safety (conflict with school bus stops, site lines, increased traffic), and issues with a new railway crossing (safety, noise from additional horn use).

Support

At the time of finalizing this report, 21 unique letters/emails were received. 6 letters were from addresses within Wilmot and 15 were from non-Wilmot addresses. A list of these respondents and a copy of the complete written responses are included as Attachment G.

The primary themes in support of the application were the benefits of close-to-market aggregate to support continued growth and benefits to the local economy.

Agencies

Grand River Conservation Authority – indicating all previous comments have been addressed, and no concerns with the application. *(Final comments included as Attachment B)*

Region of Waterloo – indicating no objections to the application subject to the ESPA and associated buffers and enhancement area being rezoned as Open Space. (*Final comments included as Attachment C*)

CN Railway – no concerns with zoning proceeding and identifying requirements for the construction of the railway crossing. (*Final comments included as Attachment D*)

Waterloo Region District School Board – no comments or concerns.

Waterloo Catholic District School Board – no comments or concerns.

REPORT:

The subject lands are designated Agricultural Resource Area by the Township Official Plan (OP) and are identified as Mineral Aggregate Resource Area on Map 10 of the OP.

The subject lands are currently zoned Zone 1 (Agricultural) and this application proposes to rezone approximately 24.55ha of the subject property to Zone 14 (Extractive Industrial). Taking into account the 15m setbacks from the south and west property lines, the actual area to be extracted is approximately 22.5ha.

The extraction proposed is a Class 3 operation – being extraction above the water table only. The zoning also proposes to include the importation of concrete and asphalt for recycling as a use accessory to the gravel pit.

The application also proposes to rezone approximately 3.1ha of the subject property to Zone 11 (Open Space) encompassing the area containing an ESPA including a deciduous forest and a small wetland along with associated buffering and a proposed enhancement area.

In support of the applications the applicants have submitted a Planning Justification Report, Hydrogeological Assessment, Traffic Impact Study, Noise Impact Study, Agricultural Impact Assessment, Archaeological Assessment, Natural Environment Report and EIS, Dust Mitigation Best Management Practices Plan, and a Cumulative Air Quality Assessment.

Conformity with Official Plan

The subject property is designated Mineral Aggregate Resource Area and Prime Agricultural within the OP.

Based on borehole testing completed on the subject lands, the estimated aggregate reserves available within the proposed licensed property were calculated to be approximately 6.9 million tonnes. Based on a maximum annual extraction limit of 450,000 tonnes, the minimum pit life span would be 15 years.

Required Technical Information

The OP sets out technical studies required to be submitted as part of a development application for a new mineral aggregate operation. The studies identified in the plan and clarified during initial pre-consultation were submitted and reviewed by the appropriate review agencies as part of the zone change review.

The OP further sets out criteria to be satisfied prior to Township support of a zone change application. Those criteria are expanded upon in the following items 1 to 5.

1. Submission and acceptance of any required studies

Planning Justification Report

A planning justification report was provided in support of the application highlighting the proposed aggregate operations' conformity with the Provincial Policy Statement (PPS), Regional Official Plan (ROP), and OP.

The applicable technical studies included as appendices to the Planning Justification Report have addressed the potential cumulative impacts of the proposed operation and have been assessed in the peer reviews completed.

Hydrogeological Assessment

The Region of Waterloo was responsible for the review and acceptance of the hydrogeological assessment. Technical documents reviewed that led to the Region's acceptance of the hydrogeological assessment include the initial study, an updated response document and a spills contingency plan.

Key outcomes of the study review and acceptance were:

- There are no private wells for at least 1.5 kilometers downgradient of the site. There are also three operational pits downgradient of the subject property that have been operational for decades with no knowledge of any water quality impacts from these existing sites and therefore none expected from the proposed pit;
- The extraction limit was deliberately located outside of the catchment of the small wetland located within the deciduous forest at the north end of the subject property. There will be no change in surface water support of this wetland and as such the wetlands will not be altered as a result of aggregate extraction activities;
- There is no change in runoff or infiltration at this site and as such there will be no cumulative impact from the proposed extraction activities;
- Pit extraction will remain 1.5m above the water table; recycling materials will not be stockpiled within 2m of the water table;
- Annual groundwater monitoring around the site will occur for the operational life of the pit;
- A detailed spills response plan has been prepared, accepted and has been included within the Aggregate Resources Act (ARA) site plan notes;

- The proponent will adjust the pit floor elevation if future groundwater monitoring show a water table elevation within 1.5m of the pit floor elevation; and
- Recommendations from the approved hydrogeology studies have been incorporated within the proposed ARA operational plan notes.

The Region considered all technical reports and was satisfied that the technical documents provided sufficient analysis to demonstrate that the proposed extraction operations and accessory uses would not impact ground water and neighbouring private wells. Sufficient monitoring and contingency provisions will be in place to ensure that operations align with analysis that led to their acceptance.

Traffic Impact Study

The Region of Waterloo reviewed the Transportation Impact Study (TIS) and were satisfied that there will be no negative impacts on Regional road infrastructure as a result of this application, site lines are acceptable, and no warrants exist for turning lanes. The Region further reviewed a geotechnical report for the proposed entrance and concluded that no improvements are required to the existing paved shoulders and have accepted the proposed location and design of the new pit entrance.

Noise Impact Study

A noise impact study was completed to review the operation plan and conduct an analysis of operations based on a worst case operational scenario. The study included modelling and predicted levels of noise at six neighbouring residences. Measures including noise attenuation berms, phasing and direction of extraction, and location of processing equipment will be used to mitigate potential noise impacts from the operation.

The results of the study indicated that sound emissions from the proposed pit operations with the noise control measures in place are expected to comply with Ministry of Environment, Conservation and Parks (MECP) noise guideline limits at neighbouring noise sensitive receptors.

The Region of Waterloo engaged a third party consultant to undertake a peer review of the noise impact study and that review resulted in the same conclusions that the operations in a worst case scenario, would result in compliance with the applicable MECP guidelines.

Recommended noise control measures are included within the ARA site plan as follows:

- A 3m high noise barrier with a length of approximately 80m will be constructed on the east side of the haul route in the area closest to 1876 Snyder's Road East (as identified on the Operation Plan included in Attachment I);
- No excavation will occur in Phase 4 until all extraction in Phases 1 to 4 have been completed to preserve the shielding provided by the height of land in the Phase 4 area for the noise sensitive receptors (neighbouring residences);

- A minimum 8.0m high acoustical barrier is required to be constructed and maintained on the pit floor beside the crushing/screening equipment and this equipment is required to be at least 350m from the closest neighbouring residence when extraction has commenced in Phase 4; and
- A 3.5m high noise barrier will be constructed on the southwest corner of Phase 4 prior to extraction activities in Phase 4.

Within the recommendation, Township staff have included a request that the MNRF clarify that the noise barrier required beside 1876 Snyder's Road East be constructed during construction of the pit entrance to ensure the berm is in place prior to commencement of extraction activities.

Agricultural Impact Assessment

An agricultural impact study (AIA) was completed to evaluate the impact of the proposed gravel pit and its ultimate rehabilitation to agricultural uses. The Region of Waterloo engaged a third party consultant to peer review the AIA who ultimately concurred with its findings that the extractive operations and its progressive rehabilitation back to agriculture will have minimal impact on surrounding agricultural activities.

The Region has identified that an agricultural rehabilitation monitoring program is required in accordance with the ARA guidance document. The Region has requested that the ARA plans be updated to require an agricultural rehabilitation monitoring program, which includes an annual report prepared by a Qualified Professional that reports on all stages of the rehabilitation process (including soil removal, storage and handling), evaluates the results of on-going post rehabilitation management and documents agricultural condition including soil capability.

Archaeological Assessment

Stage 1 and 2 archaeological assessments were completed for the subject property. No artifacts or sites were encountered and as such, no further archaeological assessment was required. The required acknowledgment letter was received from the Ministry of Tourism, Culture and Sport.

Natural Environment Report and EIS

The natural environment report and EIS were reviewed by Regional staff and the Region's Ecological and Environmental Advisory Committee (EEAC) with specific focus on the assessment of potential impacts to Regionally-designated environmental features and systems.

The proposed gravel pit is located on land contiguous to Core Environmental Features (the St. Agatha Forest Environmentally Sensitive Policy Area (ESPA 15) and a Significant

Woodland). The woodlands also contain a small wetland which is part of the larger Waldau West Wetland Complex.

The EEAC review resulted in a number of recommendations, including ground water monitoring and an ecological monitoring program, that have been included within the proposed Operation Plan notes.

As well, the EEAC recommended that the proposed Zone 11 area be expanded to include both the ESPA as well as a proposed enhancement area. This recommendation has been included within the draft amending by-law included as Attachment A.

Subject to the recommendations being adopted in the associated ARA plans and amending zoning by-law, EEAC concluded that they had no objection to approval of the zone change application.

The Grand River Conservation Authority also concluded that, given the revised extraction limit is greater than 30m from the nearest wetland limit, and with the inclusion of the wetland, surface catchment area/buffer as proposed within the draft amending by-law, they had no further concerns with the zone change application.

Dust Mitigation and Air Quality Assessment

A Best Management Practices Plan for Control of Fugitive Dust Emissions (BMPP) was completed to establish a plan to deal with potential dust and air quality impacts from the proposed pit operations. Additionally, a Cumulative Air Assessment was undertaken to consider the proposed pit operations and the operations of the four nearby licensed pits (made up of six licenses).

The cumulative impact assessment demonstrates that the proposed pit can operate in compliance with various regulatory air quality criteria and does not contribute in an adverse effect to the overall air quality in the area.

The Region retained a third party consult to peer review these studies. The consultant provided a formal clearance concluding that the final version of these reports was satisfactory.

The proposed ARA operations plan and notes include requirements for dust suppression and reference the requirement to follow the BMPP. The operations plan also establishes that the pit entrance will be paved from Snyder's Road East to the weigh scale located north of the railway tracks further mitigating potential for dust concerns generated along the pit entrance.

2. Demonstration that the proposed rehabilitation is consistent with the policies of this Plan and the Regional Official Plan

The plan proposes rehabilitation of the site to agriculture after use in conformity with the underlying agricultural designation of the property.

The peer reviewed AIA concluded that the extractive operations and its progressive rehabilitation back to agriculture will have minimal impact on surrounding agricultural activities.

The rehabilitation plan is consistent with the policies of the ROP and OP.

3. *The submission of all reports required by the Ministry of Natural Resources in accordance with the Aggregate Resources Act.*

All required reports were submitted and are included amongst the reports identified under item 1 above.

4. *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:*

- i) *to ensure provision of adequate buffering and/or screening 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;*

The accepted noise study mitigation measures, including berms and noise attenuation measures have been accepted by the Region of Waterloo, and its retained peer reviewer, as complying with the requirements of the MECP. The establishment of the berms and noise attenuation will be governed by the MNRF through the approval of site plans for the proposed pit under the ARA. Through the proposed ARA site plans, and comments contained within the recommendation of this report, staff are satisfied that the necessary mitigation measures will be secured through the ARA licensing process.

- ii) *that no new excavation or processing will take place until all required buffers and/or screenings have been installed;*

The establishment of the berms and screenings will be governed by the MNRF through the approval of site plans and licensing process under the ARA. The general operation notes contain the timing for construction of berms prior to commencement of phases of extraction. The recommendation of this report requests one adjustment to the operations plan notes to clarify that the berm along the pit entrance be constructed during the construction of the pit entrance.

- iii) *that no water or washing or screening operations will be discharged into any water course;*

The hydrogeological assessment and implementation through the ARA site plans, provides this assurance. The operations plan specifically excludes aggregate washing on the site.

- iv) that the applicant, in co-operation with the Township and the Region, will establish all haul routes for truck traffic;*

The internal haul route will be via a paved access from Snyder's Road East to the weigh scale north of the tracks. Truck traffic will enter and exit the site via a Regional road.

CN Railway has confirmed that they are agreeable to the railway crossing as proposed. The applicant is responsible to construct the crossing in accordance with CN requirements and pay any associated costs incurred by CN, after which CN will sign an access agreement. The recommendation of this report requests that the MNR license only be approved after CN the crossing has been constructed to the satisfaction of CN.

- v) that any required road improvements identified through the Transportation Impact Study are in place prior to the removal of aggregates from the site; and,*

The Region has confirmed through approval of the TIS that no road improvements are required (other than the construction of the pit entrance itself).

- vi) that no new excavation or processing will take place until all required fencing and/or security measures have been put in place.*

Fencing and security of the site are requirements of the ARA, are included within the operations plan, and will be implemented and enforced by the MNRF.

5. *The Township will encourage the construction of intra-pit road systems and new roads to support the movement of mineral aggregate resources so as to lessen the impact of truck traffic on Township roads and sensitive land uses.*

The subject property fronts only one public road, Snyder's Road East. The abutting Arriscraft pit obtains access via a shared driveway to Snyder's Road East; they do not own their access. The applicant was unsuccessful in obtaining permission to establish an intra-pit road system through the Arriscraft pit and ultimately over an existing shared access under private ownership.

The Region of Waterloo has no concerns with the proposed pit entrance to Snyder's Road East as a result of the supporting technical review conducted through the TIS.

6. *The Township will collaborate with the Region and the Province to ensure that all appropriate requirements resulting from the review of an application for a mineral aggregate operation are imposed and enforced as:*

- a) conditions on the license or notes on the site plan required under the Aggregate Resources Act, including but not limited to spill protection measures to prevent discharges to surface water and groundwater resources from on-site fuel storage, vehicle or equipment repair and equipment operation, and spills from salt storage, use and transfer, and other best management practices; and*

- b) regulations in site-specific zoning by-laws, development agreements and conservation easements, as may be applicable.*

The proposed ARA operational notes in combination with comments from the Region of Waterloo and Township recommendations within this report, ensure that these measures are in place.

Public concerns

The preceding paragraphs, and in particular, the discussion regarding each of the technical studies, addresses the comments received through the public circulation process. For additional clarity, the main themes of concerns are highlight further within the subsequent paragraphs.

Dust and air quality

A Cumulative Air Quality Assessment and Dust BMPP were completed that assessed associated dust and emissions related to the extraction activity and equipment. A conservative approach was taken while simulating cumulative impact of the pit operations on air quality, wherein it was assumed that the proposed pit and neighbouring pits are operating simultaneously at maximum capacity along with a representative background concentration also being used. The cumulative impact assessment demonstrates that the proposed pit can operate in compliance with various regulatory air quality criteria and does not contribute in an adverse effect to the overall air quality in the area.

The proposed pit entrance will be paved from Snyder's Road East to, at minimum, the weigh scale north of the railway. The weigh scale will include a grizzly screen with a wheel washing station to remove materials from truck tires before crossing the tracks and exiting the pit. All heavy vehicles will need to pass over grizzly screen prior to leaving site. The wheel washing station will be operated during conducive season such as Spring, Summer, and Fall.

Both the Cumulative Air Quality Assessment and Dust BMPP studies were peer reviewed and accepted.

Noise

As outlined in the prior discussion regarding Noise Impact, the study concluded that sound emissions from the proposed pit operations (including excavation and processing equipment as well as trucks) are expected to comply with MECP noise guideline limits at neighbouring noise sensitive receptors with the recommended noise control measures in place.

Impact on the natural environment

A combination of the Hydrogeological Assessment and the Natural Environment Report/EIS were considered in concluding that the proposed pit operations would have no impact on the ESPA, wetland or ground water.

The Hydrogeological Assessment, as implemented through the ARA site plans, demonstrates that the proposed extraction operations and accessory uses would not impact the wetland, ground water, or neighbouring private wells.

The Natural Environment Report/EIS concluded that with the proposed buffering and enhancement areas, that the proposed extraction operations would not impact the ESPA.

The Region's EEAC and the GRCA were satisfied with the conclusions of these reports and their findings with respect to the protection of ground water and the ESPA.

Traffic and road safety

As outlined in the prior discussion on the TIS, it was determined that no improvements are necessary to Snyder's Road East and there will be no negative impacts on Regional road infrastructure as a result of this application. Site lines from the proposed pit entrance are acceptable and there are no warrants for further improvements to the road cross-section including no warrants for turning lanes.

Although not identified in the TIS, the applicant approached the Region of Waterloo to look at a speed limit reduction in the area based on concerns raised from neighbouring residents.

The Region's assessment in the area showed that the average travel speed of motorists was 85km/h along Snyder's Road East between Notre Dame Drive and Trussler Road within the 80km/h speed limit zone. A general recommendation is that speed limits for roadways be set at or about the average speed of motorists as it is most likely to produce a uniformly moving traffic stream. The Region notes that traffic flowing at a uniform speed results in increased safety and fewer collisions.

Based on the review of speeds in the area, the Region did not recommend reducing the posted speed limit at this time.

Railway crossing

CN Railway is responsible for approving new or modified railway crossings. The application proposes to shift the crossing further east from the closest residence. CN Railway has confirmed that they are agreeable to the railway crossing as proposed. The location is identified on the Operations Plan and the crossing will be constructed prior to commencement of licensed extraction operations.

Need for another gravel pit

The existence of other pits where extraction has not started, been completed, or restored, does not influence the potential to zone and license additional extractive operations. The Provincial Policy Statement specifically prohibits municipalities from requiring a demonstration of need or making a decision on the basis of the availability, designation or licensing locally or

elsewhere. Policy 2.5.2.1 states that “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”.

Final comments

The review of this proposed aggregate operation has included significant technical review.

Having considered public comments, the detailed technical reports and peer reviews along with comments from the Region of Waterloo with respect to ROP conformity, as set out in the preceding paragraphs, staff support that the application conforms to the requirements of the OP.

Subject to the conditions outlined within the recommendation, the criteria outlined within the OP to be satisfied prior to Township support of a zone change application have been addressed. Staff support approval of the zone change application and have no objections to the MNRF licensing the operation.

ALIGNMENT WITH THE TOWNSHIP OF WILMOT STRATEGIC PLAN:

Public meetings and engagement in development application processes promotes an engaged community. The zone change application process along with utilization of expert agency and peer reviewers ensures that scientific and fact based evidence is in place to protect the natural environment.

FINANCIAL CONSIDERATIONS:

The application fees, established by the Township of Wilmot Fees and Charges By-law, were collected at the time of application.

ATTACHMENTS:

Attachment A	Draft amending by-law
Attachment B	Final comments: Grand River Conservation Authority
Attachment C	Final comments: Region of Waterloo
Attachment D	Final comments: CN
Attachment E	Public comments: unique letters and emails in opposition
Attachment F	Public comments: identical email submissions in opposition
Attachment G	Public comments: letters in support
Attachment H	Minutes of Public Meeting
Attachment I	ARA plans