



19 November 2019

Mr. Jeremy Vink
Acting Manager of Planning
Township of Woolwich
24 Church Street West
Elmira, Ontario
N3B 2Z6

**Attention: Mr. Jeremy Vink
Acting Manger of Planning, Township of Woolwich**

Dear Mr. Vink,

**RE: Peer Review of Visual Impact Review prepared by MHBC Planning Limited
Capital Paving Inc. Shantz Station Pit
Our File: 19554**

WND Associates Limited has been retained by the Township of Woolwich to conduct a peer review of the submitted Visual Impact Review (the 'VIR') prepared by MHBC Planning Limited (dated May 2019) and submitted in support of applications to amend the Official Plan and Zoning By-law to permit the establishment of a new aggregate extraction operation. Applications have also been submitted under the Ontario Aggregate Resources Act to permit the proposed extraction.

The Subject Site for the proposed extraction operation is located southwest of the built-up area of the community of Maryhill, and is comprised of a contiguous area located on the north side of Forester Road (Township Road 68) and comprised of two parcels of land known municipally as 1195 Foerster Road and 1472 Village View Road.

A review of the area surrounding the Subject Site identifies a wide range of land uses, including residential dwellings, agricultural operations, golf course operations (Merry Hill Golf Club), institutional uses (St. John's Kilmarnock School), and local-commercial uses clustered around the intersection of St. Charles Street and Maryhill Road (generally the 'main' intersection within the community of Maryhill). The topography of the surrounding area is varied, and generally slopes upwards along Maryhill Road from Regional Road 26 (north of the Subject Site).

As part of this peer review, WND Associates has reviewed the following documents as provided by the Township of Woolwich:

1. Visual impact Report, prepared by MHBC Planning Limited and dated May 2019, including all figures included therein.

As no terms of reference have been provided to guide this review, WND Associates has reviewed the provided materials in the context of industry best-practices and standards, along with the relevant policy, where applicable. As part of this peer review, we will asses the technical completeness of the VIR (including the revised materials provided) in accordance with the relevant policies of the Provincial Policy Statement, the Region of Waterloo Official Plan and the Township of Woolwich Official Plan. We will also evaluate the accuracy of the conclusions and proposed mitigation measures as recommended in the VIR.

Please note, our review does not involve any evaluation of, or draw any conclusions as to the appropriateness of the proposed land use for the Subject Site.

Relevant Visual Impact Policy Context

The following sections will provide a 'top down' review of the relevant Policy context regarding visual impacts and visual impact mitigation for the proposed aggregate extraction pit expansion.

Provincial Policy Statement, 2014

The Provincial Policy Statement, 2014 ('PPS 2014') provides guidance on minimizing social and environmental impacts associated with an aggregate extraction operation., stating that:

Section 2.5.1.1 Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts

It is therefore our opinion that the potential for visual impacts arising from an aggregate extraction operation should be minimized in order to address this Provincial Policy.

Aggregate Resources Act

The Aggregate Resources Act, 1990 governs aggregate resource operations within the Province of Ontario, and provides licensing, reporting and rehabilitation requirements among other matters. Part II Licences, Section 12(1) states that “in considering whether a license should be issued or refused, the Minister or the Board, as the case may be, shall have regard to:

- (a) The effect of the operation of the pit or quarry on the environment;
- (b) The effect of the operation of the pit or quarry on nearby communities;
- (c) Any comments provided by a municipality in which the site is located;
- (d) The suitability of the progressive rehabilitation and final rehabilitation plans for the site;
- (e) Any possible effects on ground and surface water resources;
- (f) Any possible effects of the operation of the pit or quarry on agricultural resources;
- (g) Any planning and land use considerations;
- (h) The main haulage routes and proposed truck traffic to and from the site;
- (i) The quality and quantity of the aggregate on the site;
- (j) The applicants history of compliance with this Act and the regulations, if a license or permit has previously been issued to the application under this Act or a predecessor of this Act; and
- (k) Such other matters as are considered appropriate [R.S.O. 1990, c A.8, s.12, 1996, c.30, s9(1,2), 2002, c.17, Sched F, Table

Regarding visual impacts, (b) is considered relevant. As such, in our opinion, visual impacts arising from the proposed expansion of the aggregate extraction operation should be appropriately addressed under the Aggregate Resources Act, 1990.

Region of Waterloo Official Plan

The Region of Waterloo Official Plan, 2015 provides policies relating to mineral aggregate resources and extraction within Section 9, which provides various land use policies and direction to guide the establishment of new aggregate extraction operations within the Region, and the protection of aggregate resources from land use conflicts that would preclude future extraction. With respect to the potential for visual impact associated with the establishment of new extraction operations, no specific policy requirement is provided, however the Regional Plan identifies that an area municipality may require other studies beyond those identified as require by the Regional Plan:

Section 9.C.3 *Development applications to permit a new mineral aggregate operation, expand an existing operation, or increase the depth of extraction, will only be permitted where the following studies have been submitted to the satisfaction of the Region or agency with jurisdiction over the issue addressed by the study:*

- (g) any other studies identified by the Area Municipality to meet requirements of a complete application under the provisions of the Planning Act.

In this case, the Subject Site is located within the Township of Woolwich and is therefore subject to the policies of the Township of Woolwich Official Plan, which provides specific policy requirements for the preparation of *Visual Impact Studies*. These policies are summarized in the following section of this Letter.

Township of Woolwich Official Plan

As discussed in the previous Section, the local area municipality Official Plan may identify further requirements for a complete application to establish and permit a new aggregate extraction operation. In the case of the Township of Woolwich, policies relating to aggregate resources are provided in Chapter 11, with required studies and materials for an application identified in Section 11.11.1, with Section 11.11.1 (d) identifying the requirement for a *Visual Impact Study* which “...satisfactorily demonstrates that the proposal will not have an unacceptable impacts”. Specific requirements for the required *Visual Impact Study* are provided in Section 11.11.6, summarized below for reference:

Chapter 11.11.6 The Visual Impact Study required by Section 11.11.(d) shall provide the following information:

- (a) An assessment of the significant views and how they might be impacted by the proposed operation. Significant views shall include views of people living around a
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proposed mineral aggregate operation site that may be impacted by the proposed site together with views that more generally hold local or regional cultural sensitivity an/or recreational or scenic value;

- (b) The nature of the visual impacts and how they can be mitigated through such means as berms, entrance designs, vegetation, landscaping and operational matters, such as small phases, screening of equipment or direction of extraction, which should seek to minimize visual impacts; and
- (c) The feasibility of the mitigation, the risks associated with mitigation, and any remaining significant impacts after mitigation.

These criteria require that any submitted VIR provide an assessment and consideration of various significant views, the criteria for the establishment of which are provided in subsection (a), and include views from residential areas in proximity to the proposed extraction operation. The policy also requires assessment of views that "...generally hold local and/or regional cultural sensitivity and/or recreational or scenic value".

In the case of the community of Maryhill, Township Staff have identified the potential for visual impact from St. Boniface Church (1355 Maryhill Road), which is located approximately 1.0 kilometres beyond of the northern limits of the proposed extraction area.

For the purposes of this review, WND Associates has evaluated the submitted VIR in consideration of these specific criteria, of which our findings are provided in this Letter.

Our Review

The purpose of this peer review is to review the submitted material and provide the Township of Woolwich with guidance on the validity of the method employed, the assumptions made, and the conclusions of the VIR. Given the criteria set out by the Provincial Policy Statement, the Aggregate Resource Act, the Region of Waterloo Official Plan and the Township of Woolwich Official Plan, our analysis is structured around the following issues:

- Potential visual impact on nearby residential land uses;
- Consistency with the relevant policy context; and
- The extent by which visual impact can be mitigated in the context of the various methods proposed in the VIR.

To address these key issues, our peer review is intended to answer the following questions:

1. Is the methodology and approach appropriate?
2. Are the baseline assumptions, and data utilized, including points of reference, potential view corridors and view sheds identified and dealt with so as to support the conclusions of the VIR and subsequent revised materials?
3. Do the conclusions logically reflect the mitigation measures proposed within the VIR and subsequent revised materials?

In preparing this peer review we have considered the submitted VIR as provided by the Township of Woolwich. We have also conducted a detailed mapping review, evaluation of existing intervening vegetation, proposed vegetation, and the proposed physical alterations (such as the proposed berms) which will ultimately determine the potential for visual impacts and the mitigation thereof.

WND Associates Limited conducted a detailed site and surrounding area visit. This site and area visit including visiting and evaluating the existing area context, the topographical character of the site and surrounding area, and the relationship between the proposed expansion area and the nearby residential uses and specifically, the St. Boniface Church.

Visual Impact Concerns

It is our understanding that concerns were primarily expressed for the potential views into the expanded aggregate operation from the nearby residential areas of the community of Maryhill, from the surrounding public roadways, and from St. Boniface Church, which is generally at a higher elevation than the local centre of Maryhill (at the intersection of St. Charles Street and Maryhill Road).

Timing of Off-Site Rehabilitation Planting

With respect to proposed off-site planting and rehabilitation of the former aggregate extraction pit located north of the Subject Site, Section 7.0 (b) of the VIR notes:

“Naturalization consisting of tree planting of the previous non-rehabilitated aggregate pit site, (located north of the subject lands in between the existing mature woodlot and Hopewell Creek) on the Cox property lands, is highly recommended and be implemented as outlined on the Rehabilitation Plan”.

The Rehabilitation Plan identifies this proposed planning area as “Area of Reforestation/Naturalization” and refers the reader to Notes 1.3.3 and 1.4.3 on the drawing. This planting is not identified on the *Proposed Mitigation Plan*, however such planting may contribute to overall size and mix of the existing vegetation north of the Subject Site and therefore increase the potential for screening of views into the proposed operation from the north. This off-site planting is expected to be provided as part of the rehabilitation process, and based on the Progressive Rehabilitation Sequence identified, within the first phase (Phase 1) of the proposed rehabilitation.

WND Associates has reviewed the proposed off-site rehabilitation planting areas and notes that they may contribute to the breadth of vegetation along the northern boundary of the Subject Site and screening of potential views from the north. While recognizing that the proposed rehabilitation planting is located off-site, consideration should be given to providing the planting prior to, or in conjunction with, Phase 1 extraction operations to contribute to the overall breadth of intervening vegetation adjacent to the Subject Site.

Potential for Visual Impact to Village View Road & Maryhill Road (Township Road 25)

Village View Road is a two-lane right of way generally aligned north-south between Forester Road and Township Road 25, where it connects to Maryhill Road in a three-way intersection. Maryhill Road briefly aligns in an east-west orientation before curving into a north-south orientation immediately south of St. Charles Street.

For the purposes of this peer review, WND travelled the roadway by vehicle and conducted reviews on foot of specific areas which were noted to understand the surrounding topography. We note that the fronting condition of the right of way transitions as one travels closer to the community of Maryhill. Between Forester Road the primary adjacency character is that of a typical agricultural area, including views to farm and agricultural operations or varying scales, woodlots and natural areas, and scattered residential dwellings.

Maryhill Road (northwest of the intersection of Village View Road) is generally characterized by single detached residential dwellings fronting the east and west sides of the right of way with varying front and side yard landscape conditions.

There are two sections of proposed berms that would contribute to the screening of potential views from Village View Road and Maryhill Road, which are both proposed to be 4.0 metres in height. There are also select areas identified for vegetative screening to enhance the existing intervening vegetation areas. The proposed planting is indicated to comprise of clusters of coniferous trees (Sumac, White Spruce, White Pine, Red Pine) and mixed deciduous and coniferous shrubbery. In our opinion, the proposed planting will contribute to reducing the limited visual impact of the proposed berms themselves, and as the planting matures, contribute to the further visual screening of the proposed expansion area.

There are further residential dwellings north of the Subject Site that have driveway access from Maryhill Road, known municipally as 1226 and 1230 Maryhill Road. 1230 Maryhill Road (Maryhill Maple) is located on the north side of extensive existing vegetation and views into the Subject Site are expected to be screened or limited in the existing configuration. The VIR notes that the 1226 Maryhill Road will experience “moderate to high” visual impact due to the existing topography, the existing wetland area and existing vegetation allowing for “framed views” into the Subject Site.

The *Proposed Mitigation Plan* identifies approximately 30 trees to be planted in the intervening area between 1226 Maryhill Road and the Subject Site which will screen views into the proposed extraction operation. This planting is to be provided in a double-row configuration, and be a mix of deciduous and coniferous planting.

There appears to be a new residence under-construction at 1224 Maryhill Road that was not identified within the VIR, likely due to the timing of the site visit by the author (understood to have taken place in March 2019) taking place prior to the commencement of construction of the building. A review of Google Streetview imagery identifies that the residence was under-construction in June 2019 (based on the date of the Google imagery, Figure 1).



Figure 1 1220 (left) 1224 (centre) and 1234 (right) Maryhill Road, Google Streetview June 2019

Figure 2 below demonstrates the view of the residence at 1224 Maryhill Road from St. Boniface Church taken during the WND Associates site visit.

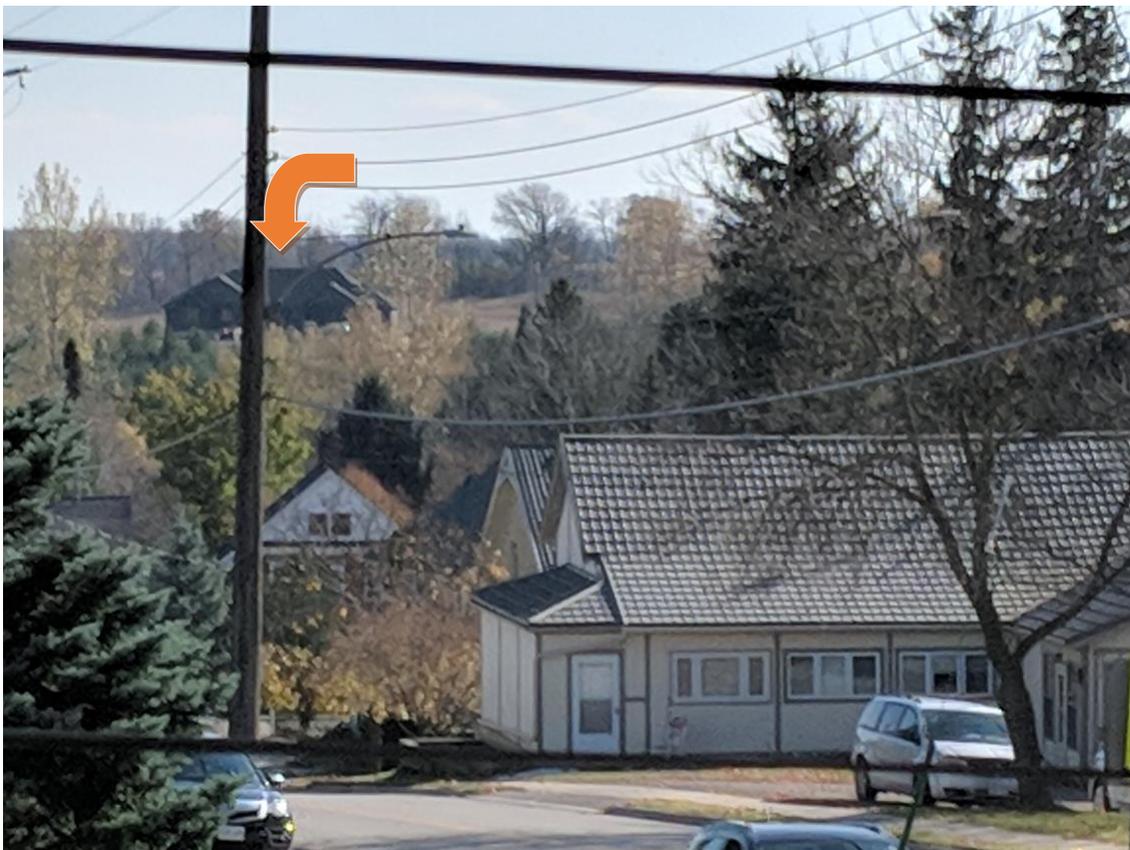


Figure 2 View of 1224 Maryhill Road from frontage of St. Boniface Church

WND Associates has reviewed the Proposed Mitigation Plan, and is of the opinion that the proposed berm heights, setbacks and planting are appropriate to adequately address the potential for visual impacts from Village View Road and Maryhill Road for

the residences identified within the submitted VIR. An addendum or update to the VIR should be provided to evaluate the potential for visual impact to 1224 Maryhill Road and whether further mitigation measures are required.

Potential for Visual Impact from St. Boniface Church (1355 Maryhill Road)

The submitted VIR includes an analysis of the potential for views and subsequent visual impact from St. Boniface Church (1355 Maryhill Road) and notes:

“The building is located on the high point of the village approximately 349masl and is over 1030m from the subject lands boundary. Due to the distance of over 1km from the site as well as screening by existing vegetation, buildings and topography, there are no views into the site”.

The photos included within the report are understood to have been taken in March 2019, and therefore represent a potential ‘worst case’ situation (with respect to vegetative screening) as existing deciduous vegetation is in a ‘leaf off’ state. The photograph demonstrates that there are no views to the Subject Site, due to being generally screened through intervening vegetation, buildings and the general topography of the area.

WND Associates conducted a site visit in October 2019 and finds that the potential for limited views into the site from the church property are effectively screened by existing intervening vegetation and are expected to continue to be screened by coniferous vegetation through the fall and winter months. A panoramic image of the view is provided in Appendix 1 of this Letter.

WND Associates has reviewed the findings related to 1355 Maryhill Road and agrees that the “limited and distant” views are effectively screened by existing vegetation, which is expected to be further enhanced through the Proposed Mitigation Plan.

Potential for Visual Impact from Forester Road

Forester Road is located along the southern boundary of the Subject Site and is oriented in an east-west configuration between Shantz Station Road and Village View Road. It is a two-lane roadway with a posted speed limit of 80 kmph within fronting residential dwellings well setback from the right of way.

The VIR notes that there are three existing residential dwellings along Forester Road within 350 metres of the Subject Site that gain views into the Subject Site (1065, 1090, 1158 Forester Road) and four residential dwellings (1056, 1057, 1175 and 1230) where views are screened by existing vegetation and topography. These relationships are further illustrated on Figure 6B *Cross Sections C and D* of the submitted VIR.

Along Forester Road, the *Proposed Mitigation Plan* identifies a 150 metre extraction setback along Forester Road along with approximately 30 trees at 5-10 metre spacing along the eastern portion of the Forester Road frontage. This vegetative planting is understood to be provided prior to any commencing any extraction operations and is recommended to be monitored through the first year of growth to ensure survival and growth of the planting. Three to four metre tall visual berms are proposed to be constructed prior to Phases 2 and 3-4 respectively, and will ‘wrap’ the proposed extraction areas to provide screening of oblique views from the southwest and southeast.

WND Associates has reviewed the Proposed Mitigation Plan and the Proposed Berm Phasing Plan and is of the opinion that the proposed berm and planting mitigation measures are appropriate and that when coupled with the existing deciduous and coniferous intervening vegetation and the 150 metre setback from Forester Road, potential visual impacts are adequately mitigated.

Potential for Visual Impact from Shantz Station Road

Shantz Station Road (Regional Road 30) is located west of the Subject Site and is oriented in a north-south configuration between Forester Road to the south and St. Charles Street West. South of Forester Road, Shantz Station Road continues approximately 7km before ending at Kossuth Road.

With respect to existing residential dwellings located along Shantz Station Road, the VIR categorizes such into several categories. For the purposes of this review, we have structured our analysis into these categories for consistency (noted below).

- “Residences near the intersection of Shantz Station Road and Forester Road”;
 - “Along Shantz Station Road”; and
 - “Residences near St. Charles Street West and Shantz Station Road intersection”.
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Residences near Shantz Station Road and St. Charles Street West

The VIR identifies six residences in proximity to the intersection, including 2721 Shantz Station Road and 169, 170, 173, 176 and 195 St. Charles Street West). There is a further residential dwelling located at 203 St. Charles Street that is identified on Figure 2 of the VIR.

The VIR notes that “any potential views to site [sic] are screened due to proximity of the existing woodlot”, referring the existing woodlot in the intervening area between the Subject Site and the residential dwellings on the south side of St. Charles Street. This woodlot provides for a range of deciduous and coniferous vegetation, and measures approximately 300 metres at its narrowest point.

WND Associates has reviewed these findings and is of the opinion that the existing condition does not provide for views into the Subject Site.

Along Shantz Station Road

There are seven residences located along Shantz Station Road between the proposed vehicular entrance and Forester Road. The VIR notes that mitigation measures are not required to screen views from 2490 Shantz Station Road, due to the intervening Merryhill Golf Course which consists of a rolling topography and bands of intervening vegetation.

The VIR notes that the remainder of these residences will experience framed views into the Subject Site. The *Proposed Mitigation Plan* identifies 3.0 to 6.0 metre berms along the western boundary of the Subject Site with a 15.0 metre vegetation setback to the extraction area. Tree plantings are proposed within the central-northern portion of the western boundary, generally adjacent to 2545 and 2597 Shantz Station Road and will contribute to the existing vegetative screening along the western boundary of the Subject Site. The *Proposed Mitigation Plan* further notes that existing vegetation is to be retained within the setback “where feasible”.

WND Associates has reviewed the Proposed Mitigation Plan and is of the opinion that the proposed planting and berm heights are adequate to provide visual screening of extraction operations to the existing residential dwellings. While the Proposed Mitigation Plan notes that existing vegetation will be maintained where feasible, WND Associates would recommend that any vegetation that requires removal be replaced within similar planting to that which is proposed in the identified “Tree Plantings” areas at similar spacing and density.

Residences near Shantz Station Road and Forester Road

The VIR groups existing residences at 2450, 2430 and 2388 Shantz Station Road into this category, and notes that “there are no existing views of the subject lands from these residences due to the intervening Merry Hill Golf Course, existing vegetation and topography”.

Based on our site visit, WND Associates is of the opinion that the VIR correctly represents the existing view condition from these residences and that no specific mitigation measures are required.

Potential for Visual Impact from Maryhill Golf Club

The Township of Woolwich Official Plan (Section 11.11.1 (d)(a)) identifies that a Visual Impact Study should consider and evaluate the potential for visual impact to adjacent recreational properties, noting:

“(a) An assessment of the significant views and how they might be impacted by the proposed operation. **Significant views shall include views** of people living around a proposed mineral aggregate operation site that may be impacted by the proposed site together with views that more generally hold local or regional cultural sensitivity **and/or recreational** or scenic value; (emphasis added)”

While a 3.0 metre berm is identified to be provided along the common property line with the golf club and is expected to screen views into the proposed extraction operation, the submitted VIA does not provide an evaluation of the potential for visual impact to the adjacent Maryhill Golf Club.

Policy Review

Table 1 provides a summary as to the consistency or satisfaction of the various applicable Provincial and County policies with respect to the proposed expansion to the aggregate extraction operation.

Policy Section	Criteria	WND Associates Limited Assessment
Provincial Policy Statement (2014)		
2.5.2.2	"Extraction shall be undertaken in a manner which minimizes social, economic and environmental impacts."	Based on a review of the submitted VIR, site photographs and our site-visit, WND Associates Limited is satisfied that potential social impacts related to visual impacts, will be minimized appropriately.
Aggregate Resources Act (1990)		
Part II s.12(1)(b)	"In considering whether a license should be issued or refused, the Minister or the Board, as the case may be, shall have regard to: (b) The effect of the operation of the pit on nearby communities"	WND Associates Limited is satisfied that the potential adverse effects relating to visual impacts on the surrounding community, will be adequately mitigated through the measures identified.
Township of Woolwich Official Plan (2012)		
11.11.6	The Visual Impact Study required by Section 11.11.1 (d) shall provide the following information: (a) An assessment of the significant views and how they might be impacted by the proposed operation. Significant views shall include views of people living around a proposed mineral aggregate operation site that may be impacted by the proposed site together with views that more generally hold local or regional cultural sensitivity and/or recreational or scenic value; (b) The nature of the visual impacts and how they can be mitigated through such means as berms, entrance designs, vegetation, landscaping and operational matters, such as small phases, screening of equipment or direction of extraction, which should seek to minimize visual impacts; and (c) The feasibility of the mitigation, the risks associated with mitigation, and any remaining significant impacts after mitigation.	With respect to (a), WND Associates Limited would recommend that an addendum or updated report be provided to inventory and assess the potential for visual impact to the residence at 1224 Maryhill Road and the Maryhill Golf Club. With the exception of 1224 Maryhill Road and Maryhill Golf Club, WND Associates Limited is satisfied that the submitted VIR appropriately assesses the identified significant views to the proposed mineral aggregate operation. With respect to (b) and (c), the submitted VIR assess the nature of the potential visual impacts and identifies how they will be mitigated through various means, including landscaping, operational plans (phasing), and berms and identifies the risks and requirements to ensure successful mitigation.

In our opinion the analysis provides adequate information to determine the extent of visual impacts and proposes appropriate mitigation plans for the identified views which will be affected. A further addendum or updated report should be provided to inventory and assess the potential visual impact to the residence at 1224 Maryhill Road and the adjacent recreational use (Maryhill Golf Club) to ensure all significant views have been included.

In our opinion the potential visual impacts for the identified views will be adequately mitigated by the proposed mitigation plans and the existing landscape and topography. We trust that this review is sufficient to your needs. We would be pleased to review any additional material which may be provided by the Township of Woolwich or the applicant. If you have any questions related to this peer review, please do not hesitate to contact the undersigned.

Yours very truly,

WND associates
planning + urban design



Andrew Ferancik, MCIP, RPP
Principal



Sean McGaffey, BES
Senior Urban Designer & Planner

APPENDIX 1





Figure 3 Panoramic view from St. Boniface Church looking towards the Subject Site