Peer Review – Prism Economics and Analysis' Economic Benefits Study – Upper's Quarry

Joint Agency Review Team (City of Niagara Falls, Niagara Region, and Niagara Peninsula Conservation Authority)

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Sean Norman
Senior Planner
Planning and Development Services
Regional Municipality of Niagara
1815 Sir Isaac Brock Way
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Dear Sean Norman:

Re: Peer Review – Prism Economics' Economic Benefits Study – Upper's Quarry

The following provides our preliminary observations and peer review with respect to the financial and economic impact report included in the applicant's 2021 submission package for development of a new quarry site. The report, undertaken by Prism Economics and Analysis (Prism), is dated October 2021. This review may be updated further upon completion of peer reviews by consultants with respect to other disciplines (e.g. hydrogeological, transportation/traffic, etc.). These subsequent peer reviews may identify additional items that should be considered in the final financial and economic impact analyses. Note, this review has been undertaken with respect to the Terms of Reference prepared by Prism and accepted by the Region.

1. Introduction

The Joint Agency Review Team (JART) is currently undertaking a review of an application for a new aggregate quarry site in Niagara Falls (Upper's Quarry). The JART is comprised of representatives from the City of Niagara Falls, Niagara Region, and the Niagara Peninsula Conservation Authority (N.P.C.A.). As part of the submission package submitted by Walker Aggregates (the applicant), a financial impact analysis and an economic benefits analysis was to be completed. The JART retained Watson & Associates Economists Ltd. (Watson) to conduct a peer review of the submitted analysis. The following provides Watson's peer review discussion with respect to the submission entitled; "Analyzing the Economic Benefits of the Upper's Quarry Construction & Operation" and dated October 2021, herein referred to as "the report".

2. General Observations

In general, the financial impact study focusses on revenues the municipalities will receive (e.g. property taxes, TOARC fees, etc.). With respect to municipal expenditures, no identification of operating or capital costs have been included. As this was not included in the accepted Terms of Reference, this has not been analysed as part of this peer review.

With respect to the anticipated tonnage of aggregate to be extracted, the study provides that a maximum of 1.8 million tonnes may be extracted annually, whereas on average the production may equate to 1.3 million tonnes annually. However, through initial conversations, it appears this site may act as a replacement of existing quarry operations at another site owned by the applicant. As a result, it should be identified if the amount to be extracted from the new site is in addition to existing amounts or will replace current levels of extraction.

With respect to the economic impacts, the employment and salary information appears to have been undertaken appropriately using the Statistics Canada input-output multipliers. However, the calculations should be provided in further detail to allow the JART to review the specifics.

Additionally, as the new proposed site is located on the border of Niagara Falls and Thorold, it is requested that the Financial and Economic Impact Assessment includes financial and economic benefits for the City of Thorold as well as the City of Niagara Falls and the Region.

3. Review of Submission

3.1 Economic Impact Analysis

3.1.1 Aggregate Production

The report provides that the maximum annual extraction limit is 1.8 million tonnes of aggregate, with an anticipated average extraction amount of 1.3 million tonnes annually. However, through initial discussions with the applicant, it appears this new quarry site may be replacing the existing quarry site which is approximately 2.5km away. As a result, the report should identify if the development of this quarry results in a continuation of existing operations or would result in 1.3 million tonnes of aggregate in addition to the current site.

3.1.2 Employment Impacts

The report notes the use of the Statistics Canada Input-Output multipliers. This approach is consistent with best practices in this field. However, the assumptions and approach to the calculations have not been identified. The anticipated construction price for the initial employment impacts has been identified at $23 million, however, the assumption of ongoing revenues has not been provided.

Further, if this site will be a replacement for the current site, the report should identify that these operations are a continuation of existing employment levels, with the addition of direct and indirect employment related to construction of the site.

3.2 Financial Impact Analysis

3.2.1 Introduction and Overview of Methodology

As noted above, in general, the report focuses on revenues and does not identify expenditures related to the development (as this was not included in the Terms of Reference accepted by the Region). As such, this section focusses on the anticipated revenues calculated as part of the Prism report. Additionally, as the new proposed site is located on the border of Niagara Falls and Thorold, it is requested that the financial analysis includes financial and economic benefits for the City of Thorold.

3.2.2 Assessment Assumptions

In estimating the assessment to be generated from the expansion of the quarry, Prism notes that they used the Income Approach in estimating the assessment, however, no calculations have been provided. Detailed calculations on the Income Approach estimate should be provided to allow the JART to undertake a review of the calculations. Based on the report, the total assessed value is $44.6 million. When applied to the total acres of the property (262.67 acres), the total assessed value per acre is $170,000. This estimate appears exceedingly high. The following provides for a comparison of quarries in various areas of Southern Ontario:

Municipality	Address	Total Assessed Value	Total Acres	Assessed Value per Acre
Niagara Falls	2841 Garner Road	4,161,000	406.77	10,229
Port Colborne	Concession Road 2	1,204,000	180.83	6,658
Lincoln	3614 Victoria Ave	2,548,000	250.66	10,165
Hamilton	834 Brock Road	6,061,000	666.35	9,096
Burlington	1775 King Road	1,652,000	111.16	14,861

Source: MPAC PropertyLine Databse

As noted in the above sample of quarry properties, the assessed values per acre range from a low of $6,658 to a high of $14,861. Therefore the assessed value of $44,600,000 (or $170,000 per acre) is significantly higher.

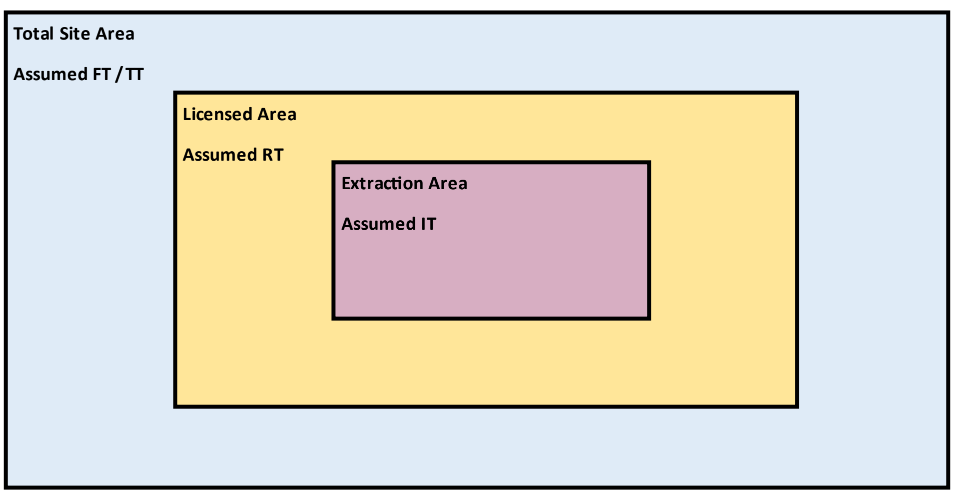
Rather than taking the Income Approach, in Watson’s opinion, it would be more appropriate to undertake a survey of assessed values of quarries. Further, it is most appropriate to review the assessed value of quarry properties in the Region, rather than quarries in other regions. As part of the Assessment Act, section 44 (3) (b) notes that land valuation will have reference to the value of similar lands in the vicinity and make adjustments to maintain equity with these lands. As a result, a survey of quarry properties in the Region should be undertaken in estimating the assessed value. Note that if the assessed value per acre was based on the 2841 Garner Road property (currently owned by the applicant), then the total assessed value would be approximately $1.1 million.

Additionally, MPAC provides assessment adjustments to residential properties abutting and within 1km of quarries. The proposed quarry may reduce assessed values of residential properties in the area, thus reducing tax revenues. This should be included in the analysis.

Finally, the loss of existing assessment and tax revenue should be included in the report.

3.2.3 Tax Class Assumptions

The analysis assumes that the proposed quarry will be assessed as 100% industrial. This includes the licensed area, extraction area, and remaining areas. In our experience and based on the regulations to the Assessment Act, the industrial assessment (IT) applies to the extraction area, residential assessment (RT) would generally apply to the remaining licensed area, and any remaining lands may be assessed as farmland (FT) and/or managed forests (TT). This is provided in the following diagram:



We would note that this would be a fair assumption as the actual assessment class would depend on the use of the land as per the Assessment Act. For example, if the use is farming by a bona-fide registered tenant farmer then it might be FT otherwise, if farmed it could be RT at farmland assessment rates. The same would apply for the Managed Forest portions if the owner applies to the Ministry of Natural Resources and Forestry for the TT tax class consideration.

The report only provides the total site area and does not identify the licensed area or extraction area. As a result of assuming industrial assessment only, the tax revenue has been overestimated since the tax rate for industrial properties is higher than that of residential and farm/managed forests. This should be recalculated to align with the Assessment Act.

3.2.4 Annual Aggregate Levy Fees

The report does not provide the details of the calculations for the aggregate licensing fee and is unclear. The aggregate licensing fee identified in the text is the 2020 rate and the percentage allocation to the City of Niagara Falls is incorrect. However, applying the correct percentages and 2022 rates, provides a similar result to that shown in Table 4 of the report.

The Government of Ontario website[1] provides the following breakdown of how the fees are allocated:

- Aggregate Resources Trust – 3%
- Local Municipality (City of Niagara Falls) – 61%
- Upper-tier Municipality (Niagara Region) – 15%
- Crown (Province of Ontario) – 21%

Based on the assumption that there will be 1.3 million tonnes extracted annually, the revenues would be as follows (based on 2021 and 2022 rates):

Aggregate Levy Calculations	Percentage Allocation	2021 Fee/tonne *$0.208*	2022 Fee/tonne *$0.213*
Aggregate Resources Trust	3%	$8,112	$8,307
Niagara Falls	61%	$164,944	$168,909
Niagara Region	15%	$40,560	$41,535
Ontario	21%	$56,784	$58,149
Total		**$270,400**	**$276,900**

Further, as the report is unclear if the extraction amounts from this site will be in addition to, or a continuation of, aggregate tonnages currently extracted, it is unclear if this revenue is in addition to the current revenue received or a continuation of revenues already received. This should be clarified in the report.

[1] https://www.ontario.ca/page/aggregate-resources#section-14

4. Summary of Initial Peer Review

Overall the report appears to address all of the requirements of the terms of reference, however, a number of revisions and updates should be provided as noted in this document.

Yours very truly,

WATSON & ASSOCIATES ECONOMISTS LTD.

Gary Scandlan
Managing Partner