

**APPENDIX A**

**Norval Quarry Rezoning Application (Brampton Brick)**

December 2, 2010

**Preliminary Peer of the Visual Impact Assessment Report Prepared by Todhunter Associates**

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This table provides a (preliminary) summary of the peer review work

| <b>Guideline Question</b>   | <b>Findings regarding the Brampton Brick Report</b>   | <b>Implications if this concern/issue is not addressed in the technical report</b>   |
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| <b>Purpose</b>  |   |  |
| Is the purpose of the work clearly and understandably stated in the applicant's report? | The purpose of the work is clearly stated – initial assessment in 2008 for the rezoning application, revised in 2010 following the development of a landscaping program to mitigate views of the quarry consistent with the cultural heritage context of the area and natural vegetation associated with the tributary of the Credit River. |  |
| Does the purpose set out the proper direction to undertake the study?                   | The stated purpose of this report is to accompany the 2008 rezoning application.  | The purpose should have been to identify and mitigate all visual impacts – nature and significance of the change in views. |
| <b>Methodology</b>  |   |  |
| Is the methodological approach technically sound? Is                                    | The methodology is based on the United  | <i>The concern is that the</i>   |

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| <p>the review of issues, data, facts objective and appropriate?</p>   | <p>States Forest Service Landscape Management Branch process and Guidelines for Landscape and Visual Impact Assessment (1<sup>st</sup> Edition, The Landscape Institute of Environmental Management and Assessment, 2002). The methodology involves identifying 'visual units' with field work and air photo interpretation and through this process identifies sensitive receptor locations. Cross-sections locations are selected to determine the extent and impact of the view from sensitive receptors.</p> | <p><i>selected methodology does not objectively assess where the quarry, plant, acoustic berms and stockpiles may be visible from. The methodology should be based on local standards for the preparation of visual assessment studies.</i></p> |
| <p>Does the peer review identify any technical concerns stemming from the methodology (and assumptions made to inform the methodology) that may compromise the analysis and/or conclusions of the report?</p> | <p><i>The technical concern is that not all of the sensitive receptors have been captured in the cross sections and as a result the conclusions are not accurate.</i></p>  | <p>The conclusions may have been different if other cross-section locations were prepared.</p>  |
| <p><b>Information</b></p>   |  |   |
| <p>Are relevant data and facts clearly and consistently presented in the technical report?</p>  | <p><i>The methodology for selecting the location of the cross-sections and the equipment and or software used for preparing the photographs was not been described and could not be replicated by the peer review team.</i></p> <p><i>The visibility of the stockpile was not adequately evaluated. Only one cross-section was prepared to illustrate the</i></p>  | <p>Peer Review Team can not replicate the results to determine if they are accurate.</p>  |

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|  | <p><i>visual impact. The stockpile may be visible from the property and other receptors to the north and west of the site, this impact has not been evaluated. The stockpile may be visible from the rear yards of homes along the east side of Pinecrest Road, this impact was not evaluated.</i></p> <p><i>The visual impact of the acoustic berms was not evaluated, immediately after construction (short term) when the landscaping is small and relatively ineffective. Illustrations identifying the effectiveness of the plant materials overtime has not been provided (short term, midterm, long term).</i></p> <p><i>The visual impact to the homes in the vicinity of the entrance has not been addressed. The impact of trucking activity, the need for access and egress improvements and the potential for road improvements (widening resulting in loss of landscaping, screening and privacy) had not been identified</i></p> |  |
| Is information gathered from appropriate sources? Is the information useful? Accurate? are there concerns regarding their quality or validity? | <i>The peer review team cannot verify the methodology.</i>   |  |
| Is the data used critical to the conclusions?  | Yes, the missing data is critical to the conclusions.  |  |
| Is the Brampton Brick report   | <i>The significance and location of the</i>  |  |

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| <p>thorough/comprehensive/complete?<br/>To respond to this question, peer reviewers must consider accuracy, appropriateness and timing/seasonality of the data collection (if applicable).<br/>Where specific technical report warrants, there may be a need to consider broader connections (i.e.: water inter-relationships). Please indicate if you feel this is lacking in the Brampton Brick report and what broader connections should be considered.</p> | <p><i>cultural heritage features and landscapes was not described. The evaluation indicated that the quarry and stockpiles are not visible, however cross-section H illustrates that the top of the stockpile was visible from the home. The evaluation did not address the visual impact of the acoustic berm and sound attenuation wall on the cultural heritage features.</i></p> |   |
| <p>How comprehensive and complete are the recommended mitigation and monitoring measures proposed by Brampton Brick? This includes assessing direct and indirect impacts; short and long term aspects.</p>  | <p>The report does not assess timeframe for the mitigation measures to become effective. There are impacts in the early stages.</p>  |   |
| <p>The gap analysis will assess the relative importance of the data gaps and limitations to the project and identify potential options for addressing them. As such, a recommendation from a peer reviewer could be that additional survey and baseline monitoring must be undertaken as the project proceeds, provided the necessary frameworks are in place to direct this data collection and any changes that are triggered.</p>                            | <p>Additional cross-sections should be prepared.</p>   | <p>Data needs to be completed.</p>                                    |
| <p><b>Certainty</b></p>   |  |   |
| <p>Are certainties and uncertainties of the proposal's success openly and objectively stated in the applicant's report/study?</p>   | <p><i>The report concludes that the acoustic berm and vegetative enhancement zone will effectively screen the quarry where exiting vegetation and topography are ineffective. The issue of the acceptability of the visual impact of the berm and fencing, as well as the loss of scenic</i></p>   | <p>Effectiveness of the mitigation measures need to be addressed.</p> |

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|  | <i>views has not been addressed. The acoustic berms create a significant visual impact because they are located close to sensitive receptors and the vegetative management plan will require time to provide an effective screen for mitigation.</i>   |  |
| Are all assumptions clearly stated? Are the assumptions reasonable? Analysis of assumptions and parameters.  | Assumptions are stated.  |  |
| Are the standards or thresholds commonly accepted in this type of technical area identified and appropriately utilized? (ie: transportation, soils, natural environment? Etc...) | <p><i>The methodology should be based on local standards for the preparation of visual assessment studies. This should include:</i></p> <ul style="list-style-type: none"> <li>• <i>Establishing a baseline for existing conditions</i></li> <li>• <i>Identifying which receptors will experience a change in views</i></li> <li>• <i>Identifying the physical changes</i></li> <li>• <i>Assessing the degree <u>impact</u> (not significant – very significant i.e. what</i></li> </ul> |  |

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|  | <p><i>is lost, is it important) of the change on the landscape and scenic resources</i></p> <p><i>The investigative methods should include:</i></p> <ul style="list-style-type: none"><li>• <i>Digital viewshed mapping to accurately identify where the proposed quarry and operations infrastructure (acoustic berms, SWM pond, spoil piles, product piles) would be visible from.</i></li><li>• <i>Ground truthing to field check the accuracy</i></li><li>• <i>Production of a viewshed (visibility) map and the identification of key viewsheds,</i></li></ul> |  |
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|  | <p><i>viewpoints and sightlines that require further study</i></p> <ul style="list-style-type: none"><li>• <i>Preparing photographic illustrations of the impacts</i></li><li>• <i>Preparing line of sight cross-sections from key sightlines without vertical exaggeration</i></li></ul> <p><i>Photographs taken for photographic simulation purposes should be prepared during leafless conditions, from locations with identifiable elevations (GPS, OLS) to ensure the accuracy of the simulations. The methodology used to fix the location and height of the quarry facilities horizontally and vertically should be</i></p> |  |
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|   | <p><i>described and replicable.</i></p> <p><i>Mitigation measures for features that change (trees) should be modeled at the appropriate size (initial plantings will be nursery stock, later phases should show appropriate growth rates depending on the timing of the phasing).</i></p> <p><i>Line of sight cross-sections should illustrate the impact from sensitive receptors including existing residences and their associated outdoor amenity areas.</i></p> |  |
| <b>Issue Gaps</b>   |  |  |
| Are there issue gaps arising from the review?                 | <i>The visual impact of the stockpile has not been adequately addressed.</i>   |  |
| Were the identified issues addressed in the technical report? | <i>The visual impact of the acoustic berms has not been addressed in sufficient detail to determine if the community</i>   |  |



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|  | <i>impacts are minimized.</i>   |                                  |
| Are there key issues, related to the specific technical report, that have not been considered?   | <i>The potential visibility of the quarry, the plant and the stockpile from the north and east as the lands urbanize has not been addressed.</i>  |                                  |
| <b>Mitigation/Monitoring</b>   |   |                                  |
| Are realistic mitigation measures/ rehabilitation plans proposed in the applicant's report? Is there sufficient detail?  | Mitigation measures are proposed.<br>There is insufficient detail to determine if they are effective.   |                                  |
| Do the proposed measures mitigate the impacts? Is the end result desirable from a technical point of view?   | <i>It has not been demonstrated that the mitigation measures including the vegetative enhancement zone will be adequate and function as intended. The plant materials are small (conifers at 80 cm ht), will require time to grow in order to screen the engineered appearance of the acoustic berms.</i> | Impact has not been illustrated. |
| Will the proposed measures be adequate to address outstanding concerns?  | <i>There is no mitigation proposed to address the intrusion of truck traffic and changes to Winston Churchill Boulevard at the entrance to the site to the homes in the vicinity of the entrance.</i>   | Not addressed                    |
| <b>Conclusion</b>  |   |                                  |
| Do the conclusions satisfy the applicable policies of the relevant policy documents that need to be consulted as per the specific discipline (ie: Official Plan, Provincial legislation, standards and guidelines, etc...). This | <b>1) Provincial Policy Statement 2.5</b><br>Mineral Aggregate Resources, 2.5.2.2<br><i>Extraction shall be undertaken in a</i>   | Not demonstrated                 |

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| <p>should be informed by the policy matrix.<br/>Have implications relating to required jurisdiction and agency approvals including environmental assessments been identified?</p> | <p><i>manner which minimizes social and environmental impacts.</i></p> <p><b>2) City of Brampton 2006 Official Plan</b><br/><i>Section 4.14.4.2 In conjunction with the Provincial and Regional regulations, the City shall regulate shale extraction operation and accessory uses to ensure that environmental and community impacts are minimized, consistent with the standards laid down in pertinent legislation and municipal regulations.</i></p> <p><b>3) Region of Peel Section 3.3</b> <i>“proper siting, design, management ,operation and rehabilitation are essential to minimizing impacts”</i></p> <p>4) <i>Aggregate Resources Act 12(1)(b), 12(1)(d)</i></p> |                                       |
| <p>Are the conclusions relevant to the purpose/objectives and supported by the work undertaken by the report authors?</p>   | <p><i>The report concludes that because of the distance to the acoustic berm and the presence of vegetative enhancement zone associated with the acoustic berm, that the visual impact will be minimal. The peer review does not agree with this conclusion.</i></p> <p><i>The peer review has identified that there are visual impacts that have not been</i></p>  | <p>More work should be undertaken</p> |

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|  | <p><i>mitigated and the proposed mitigation measures will be inadequate until the plants in the vegetative enhancement zone grow to become effective.</i></p> <p><i>The peer review concluded that the loss of scenic views and the replacement of these views with engineered berms represent a degradation of the scenic quality for the residents in the vicinity of the quarry.</i></p> <p><i>The report fails to address the type and scale of mitigation that will be required to address visual impacts when the lands to the north and east urbanize.</i></p> <p><i>The visual impact to the homes in the vicinity of the truck entrance (potential road widening) has not been identified nor have mitigation measures been proposed.</i></p> |  |
| Based on the peer review, would the same conclusions be determined?      | No   |  |
| <b>Adequacy</b>  |  |  |
| Does the applicant's report/study adequately address the stated purpose? | <p><i>The report does not adequately assess all of the visual impacts because all of the impacted sightlines were not evaluated.</i></p> <p><i>The study should have included the preparation of visibility mapping as the</i></p>   |  |

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|   | <i>basis for selecting the location of cross-sections.</i>                                   |  |
| Is there anything that should, in your opinion, have been done differently? | <i>The report should identify the effectiveness of the vegetative enhancements over time</i> |  |

**Conclusions Summary**

- *the methodology should include visibility mapping to identify all the sensitive receptors*
- *Views from each sensitive receptor should be identified (at a minimum all properties bordering the site)*
- *cross sections need to be prepared to better evaluate the impact of the stockpile*
- *photographic simulations should be prepared from sensitive receptors where the viewsheds will change (acoustic berm in foreground)*