CITY OF HAMILTON

PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Development and Real Estate Division

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<th>Report to:</th>
<th>Chair and Members Planning &amp; Economic Development Committee</th>
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<td>Submitted by:</td>
<td>Lee Ann Coveyduck General Manager Planning and Economic Development Department</td>
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<tr>
<td>Date:</td>
<td>November 18, 2005</td>
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<tr>
<td>Prepared by:</td>
<td>Robert Walters (905) 546-2424, Ext. 2809</td>
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SUBJECT: Application for a Licence Under the Aggregate Resources Act by Dufferin Aggregates, Northwest Quadrant of Brock Rd. & 4th Concession West (Flamborough) (PED05049(a)) (Ward 14)

RECOMMENDATION:

That the City of Hamilton advise the Ministry of Natural Resources (MNR) that it withdraws its objection to License Application, EBR Registry No. IB05E3042, under the Aggregate Resources Act, by Dufferin Aggregates of St. Lawrence Cement Inc., for the property located within the northwest quadrant of Brock Road and 4th Concession West, as shown on Appendix “A” to Report PED05049(a), on the following basis:

(a) That Dufferin Aggregates of St. Lawrence Cement Inc. enter into an agreement with the City, to the satisfaction of Corporate Counsel, to construct at its expense, traffic related improvements to the subject lands from Brock Road, comprising a new entrance to the site with a northbound left-turn lane.

(b) That the Mayor and Clerk be authorized and directed to sign and execute all appropriate documents and agreements between the City of Hamilton and Dufferin Aggregates, required to facilitate the construction of entrance improvements to the quarry.

Lee Ann Coveyduck
General Manager
Planning and Economic Development Department
EXECUTIVE SUMMARY:

Dufferin Aggregates has submitted a licensing request to the Ministry of Natural Resources pursuant to the Aggregate Resources Act for permission to increase the extraction tonnage limit under Licence 25476 from 750,000 tonnes to 3 million tonnes per year for lands in the north and east of its operation, within the northwest quadrant of Brock Road and 4th Concession Road West, as shown on Appendix “B”. As the deadline for comments to the MNR did not allow sufficient time for staff to report to Committee, staff submitted a letter of objection, citing insufficient information.

Staff has now had an opportunity to review additional information provided by Dufferin Aggregates, including a functional design plan for entrance improvements, geotechnical information, and information relating to dust, noise and vibration, environmental impact, and hydrogeology. Dufferin Aggregates has addressed a number of issues raised by area residents. Dufferin Aggregates has also agreed to construct the entrance improvements at its expense.

In view of the above, staff supports withdrawing the City’s objection to the license request on the basis that the applicant enter into an agreement with the City to construct the entrance improvements at its expense.

BACKGROUND:

Proposal

Dufferin Aggregates has submitted an application to the Ministry of Natural Resources pursuant to the provisions of the Aggregate Resources Act, for permission to increase the extraction tonnage limit under Licence 25476 from 750,000 tonnes to 3 million tonnes per year for lands within the north and west of its holdings, within the northwest quadrant of Brock Road and 4th Concession West (Appendix “B”). The request is made to accommodate the company’s current mining plan and to meet the increasing demand of its customers. The tonnage limits for Licences 5485 and 5712 (Appendix “B”) would remain as currently permitted, with unlimited tonnage and 500,000 tonnes, respectively. The company desires to move its active extraction to the area currently covered by Licence 25476 in order to improve the efficiency and flexibility of its operation. The proposed increase in production would occur over a five year period.

The proposed increase in extraction is designed to serve the company’s clients within the City of Hamilton and the Greater Toronto Area. The proposal would also use the company’s current truck route whereby the trucks travel south on Brock Road and use the regional road network to travel east on Highway 5 to Clappison’s Corners and then south to Highway 403 and the QEW.
A request for comments on the application was received by the City from the MNR on April 18, 2005, with a response deadline of May 26, 2005. Staff filed a letter of objection to the MNR, dated May 20, 2005, on the basis of insufficient information. On July 3, 2005, Item 8.1 (Report PED05049 – Dufferin Aggregates), which addressed the lack of information, was withdrawn from the Planning and Economic Development Committee Agenda at the request of Dufferin Aggregates, pending further discussions between the parties.

Dufferin Aggregates has since submitted additional traffic information, including a functional design plan for entrance improvements, geotechnical information, and information relating to dust, noise and vibration, environmental impact, and hydrogeology. At staff’s request, the company hosted a public Open House in August 2005 and responded to issues raised by area residents. The company has also provided a draft agreement to Legal Services for review, which requires the company to construct the entrance improvements at its expense.

Details of Submitted Application:

Owner/Applicant: Dufferin Aggregates of St. Lawrence Cement Inc.  
c/o Ken Zimmerman

Agent: N/A.

Location: Northwest quadrant of Brock Road and 4th Concession West, more specifically described as Lots 4, 5 and 6, Concession 4, Former Town of Flamborough

Description: Width: variable, maximum 1,150 metres
Depth: variable, maximum 2,000 metres
Area: approx. 170 hectares
EXISTING LAND USE AND ZONING:

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<th>Existing Land Use</th>
<th>Existing Zoning</th>
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<tr>
<td><strong>Subject Lands:</strong></td>
<td>Quarry</td>
<td>“EI” (Extractive Industrial) Zone</td>
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<td><strong>Surrounding Lands:</strong></td>
<td></td>
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<tr>
<td>North</td>
<td>Agriculture</td>
<td>“A” (Agriculture) Zone</td>
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<tr>
<td>South</td>
<td>Agriculture, industrial</td>
<td>“A” (Agriculture) Zone; “M3-13” (Rural Industrial) Zone, Modified</td>
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<tr>
<td>East</td>
<td>Quarry (Lafarge)</td>
<td>“EI” (Extractive Industrial) Zone</td>
</tr>
<tr>
<td>West</td>
<td>Agriculture</td>
<td>“A” (Agriculture) Zone</td>
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**ANALYSIS/RATIONALE:**

1. A Traffic Impact Analysis by Totten Sims Hubicki Associates, dated March 21, 2005, was submitted in support of the application and was reviewed by the City’s Traffic Engineering and Operations Section.

   The 2005 study indicates that the current operation has two one-way accesses to Brock Road, which connect through the regional road system to Highway 403 and the QEW as the primary haul route. The northerly access is for ingress and the southerly for egress. In terms of 2004 production, about 1,162,390 tonnes of aggregate was shipped from the quarry within 248 shipping days. The average number of trucks outbound and inbound was 15 per hour in each direction, with 26 trucks per hour in each direction during the peak production month of July. The study concluded that the proposed increase in extraction to 3 million tonnes per year would result in an average number of trucks at 40 per hour in each direction, and 66 per hour in each direction during the peak production month. The study also concluded that all of the key intersections would operate at acceptable levels of service for the next 10 years and a northbound left turn lane on Brock Road for inbound access would be warranted by 2015 given the current rate of background traffic growth in the area.

   Based on the information provided in the 2005 study, Traffic Engineering and Operations staff requested the applicant to further investigate issues relating to truck traffic impact on road and bridge structures, improved turning radius on to Brock Road southbound, and to address road construction and maintenance.
Staff also requested that a proposed northbound left-turn lane into the site be constructed earlier than warranted to reduce future maintenance.

In response, the applicant’s consultant provided Traffic staff with the previous 1993 and 1998 traffic impact studies relating to the quarry’s operation, responded to area resident traffic concerns, provided information regarding the provision of gravel for Brock Road (Comment 2 below), and provided a functional design plan of the entrance improvements. This information has satisfied the concerns of Traffic staff. Dufferin Aggregates has also provided Legal Services with a draft agreement which would require Dufferin Aggregates to construct the entrance improvements at its expense. Staff recommends an agreement to secure the works as a condition of releasing the City’s objection to the license request.

2. In response to City staff’s request, the applicant provided additional studies which had been completed to support their 1999 extension application to the MNR and to support previous Region of Hamilton-Wentworth and Town of Flamborough Planning Act approvals. These studies and related information also support the subject application since the overall limits of extraction would not change:

- Existing License 25476 currently has 3 conditions which will apply to control dust: dust will be mitigated on site; dust suppressant must be applied to internal haul roads and processing areas as required; and processing equipment must include dust suppressing or collection devices where the equipment creates dust and is operated within 300 metres of a sensitive receptor. The owner operates a water truck for dust suppression dedicated to the site.

- Geotechnical issues relating to the condition of Brock Road were addressed by an agreement between Flamborough Quarries Limited and the Regional Municipality of Hamilton-Wentworth in 2000 as part of that company’s original license application, which requires the owner to provide 4,600 tonnes of gravel for the road, as required.

- Noise and vibration reports were previously prepared for the quarry’s operation under parameters which reflect the latest license proposal. Noise and vibration levels are below provincial criteria and each blast is monitored to ensure compliance.

- An Environmental Impact Study was completed as part of the original license application, which required a Vegetation Management Plan, which continues to be implemented by Dufferin Aggregates. This includes field reconnaissance, inventory and monitoring; control of Common Buckthorn; and the establishment of appropriate plant species.
A 1997 hydrogeological study was submitted, along with an assessment of the impacts of the subject application by Gartner Lee Limited, dated October 6, 2005. The findings indicate that approval of the subject application by the MNR would not change the extraction boundary limits or the depth of extraction. Therefore, the overall water impacts, as predicted in the 1997 study, would not change. A groundwater monitoring program is currently in place as a requirement of the Permit-to-Take-Water for the dewatering of the quarry and no negative off-site impacts on private water well levels or water quality have been identified. An annual monitoring report is also required to be submitted to the MNR and the MOE. The only implication of the current license proposal would be that the predicted groundwater drawdown around the quarry could develop sooner but not greater in extent. It is noted that property owners in the vicinity of the site are protected under the *Ontario Water Resources Act*, which requires the quarry to restore any water supply that is lost or substantially impaired due to its operations. The quarry also maintains a water trust under agreement with the Former Town of Flamborough which provides additional protection for neighbours' wells at the quarry's expense.

Dufferin Aggregates has provided the City with a copy of its Licensee Compliance Assessment Report, dated September 12, 2005, pursuant to the *Aggregate Resources Act*. The report certifies that the quarry has complied with its current license requirements, including measures for site protection and rehabilitation.

3. At the request of staff, Dufferin Aggregates hosted a public Open House at its facility on August 11, 2005, which was attended by the Ward Councillor, staff and about fifty residents. Notice of the Open House and an update of the current license request were provided in the applicant's newsletter to all owners within 500 metres of the site. The purpose of the Open House was to tour the operation and to provide an opportunity for the public to ask questions.

Posting of the application on the Environmental Bill of Rights Registry resulted in four commenting letters to the MNR in May. Dufferin Aggregates also received one separate letter and one email. A summary of the applicant's response to the issues raised is attached as Appendix "C", which has been forwarded to MNR staff to assist them in making a decision. Staff generally concur with the applicant's responses.

**ALTERNATIVES FOR CONSIDERATION:**

The Ministry of Natural Resources is the approval agency for this license request and the City has been circulated the request for comment. Should the MNR not approve the request, the applicant would be required to operate in accordance with its current license requirements.
FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

Financial: N/A.

Staffing: N/A.

Legal: The City is not the approval agency and no public consultation is required. However, at the request of the City, Dufferin Aggregates hosted a public Open House on August 11, 2005, notice of which was provided by the company’s newsletter to owners within 500 metres of the site. Staff, the Ward Councillor and about fifty residents were in attendance. A number of issues were raised in six written responses submitted to the MNR and the company, which are addressed by the company in Appendix “C” of this report.

POLICIES AFFECTING PROPOSAL:

Greenbelt Plan 2005

The Greenbelt Plan 2005 designates the site “Protected Countryside”. Additionally, a Natural Heritage System overlay designation applies to the northern portion of the site. Policy 4.3.2d) of the plan allows an application for the expansion of an existing mineral aggregate operation in a Natural Heritage System, including within key natural heritage features and key hydrologic features and in any associated vegetation protection zone. The Plan directs, among other matters, that the Ministry of Natural Resources pursue mineral aggregate operations within the “Protected Countryside” to maximize rehabilitated areas and minimize disturbed areas during the life-cycle of an operation. An application for a mineral aggregate operation may be permitted only where the applicant demonstrates that the quality and quantity of ground and surface water will be maintained as per Provincial Standards under the Aggregate Resources Act. The Plan also provides that municipalities should ensure that land use activities related to post extraction rehabilitation are consistent with any relevant approved source protection plan and relevant watershed or sub-watershed plan. The proposed increase in tonnage would conform to the Greenbelt Plan.

Provincial Policy Statement

Policy 2.4.3.1 of the PPS requires that progressive rehabilitation of mineral resource operations should be undertaken wherever feasible. Policy 2.5 of the PPS requires that mineral aggregate resources be protected for long term use, and that these resources be made available as close to markets as possible. These policies also indicate that a determination of need, including any type of supply/demand analysis, shall not be required, notwithstanding availability, designation or licensing for extraction. Extraction shall be undertaken in a manner which minimizes social and environmental
impacts. The proposed increase in tonnage would be consistent with the principles and policies of the PPS.

**Hamilton-Wentworth Official Plan**

The subject lands are designated “Rural Areas/Mineral Aggregate Area” (stone aggregates) in the Hamilton-Wentworth Official Plan. The subject lands also contain an Environmentally Significant Area (Westover Lowland Forest and Drumlin Field).

The Plan states that mineral aggregate resources should be available with minimal environmental and social disruption. The Plan intends to protect and ensure the proper management (including the progressive rehabilitation) of aggregate resources in concert with the preservation of environmental features and agricultural lands.

The proposed increase in tonnage would conform to the plan.

**Flamborough Official Plan**

The Flamborough Official Plan designates the site “Extractive Industrial” and Site-Specific Area 43 applies to the area currently covered by Licence 25476. Policy B.7.9.1, which applies to Site-Specific Area 43, allows only aggregate storing, crushing and screening of aggregate, concrete and asphalt mix manufacturing, and asphalt mix manufacturing subject to complying with the Regulations and general terms and conditions of the *Ontario Water Resources Act* as they may apply to the taking of water. In addition to complying with Section 100 of that Act and concurrent with a licence under the *Aggregate Resources Act*, the owner must monitor and record pumping volumes, provide a detailed groundwater monitoring program, conduct a base line groundwater well analysis of all existing wells within the predicted groundwater zone of influence, restore all affected water wells within the zone of influence, provide an emergency water response program which will address the immediate needs of affected neighbours, and establish an “arms length” trust fund, to the satisfaction of the former Town of Flamborough, to pay for groundwater well restoration and related costs.

The proposed increase in tonnage conforms to the plan.

**RELEVANT CONSULTATION:**

The Traffic Engineering and Operations Section, Public Works Department reviewed the Traffic Impact Analysis, prepared by Totten Sims Hubicki Associates, dated March 21, 2005, which was circulated with the proposal. The Section’s initial comments were that:

- During field studies, it was noted that larger aggregate vehicles crossed the centreline of Brock Road to turn southbound. This type of movement is undesirable and the proponent should be requested to submit an access plan for review that
provides mitigating measures, such as improved curve radius to reduce the need to cross the centreline. Any change in access will require an access permit.

- The Section agrees with the findings of the study, which recommends the need for an exclusive left turn lane on Brock Road at the site ingress, and recommends that the left turn lane be constructed within one year of MNR approval to circumvent future road maintenance, even though not warranted until 2015. The applicant would bear the full cost. The proponent should also review the operation of the south access in regard to the full design of the exclusive left turn.

- The proponent should consult with the Director of Operations and Maintenance and the Director of Capital Planning and Implementation to determine measures for addressing road maintenance and road construction on Brock Road as a result of increased trucking.

In response to the above-noted comments, the consultant provided the previous 1993 and 1998 traffic impact studies relating to the quarry’s operations, responded to area resident traffic concerns, provided information regarding an agreement to provide gravel for Brock Road, and submitted a functional design plan (Dwg. 62-770035) comprising a new entrance to the site with a northbound left-turn lane. These matters have been reviewed by Traffic staff and have been found satisfactory. The applicant has also indicated it will agree to construct the entrance improvements at its expense.

**CITY STRATEGIC COMMITMENT:**

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

- **Community Well-Being is enhanced.** ☑ Yes ☐ No
  The public are involved in the definition and development of local solutions.

- **Environmental Well-Being is enhanced.** ☑ Yes ☐ No
  Human health and safety are protected.

- **Economic Well-Being is enhanced.** ☑ Yes ☐ No
  Investment in Hamilton is enhanced and supported.

- Does the option you are recommending create value across all three bottom lines? ☑ Yes ☐ No

- Do the options you are recommending make Hamilton a City of choice for high performance public servants? ☐ Yes ☑ No

:RW
Attachs. (3)
Location Map

File Name/Number: Dufferin Aggregates
Date: June 15, 2005
Appendix "A" Scale: N.T.S
Planner/Technician: RW/LMM

Subject Property
Dufferin Aggregates
Lots 4, 5 & 6, Conc. 4

Ward 14
Keymap
N.T.S

T&C File Name: Dufferin-Aggregates
Attachment: Dufferin’s Response to Public Comments

Glen and Christine Hills, 546 Offield Road North, Dundas

The Hills wrote to the MNR in May as part of the EBR posting with concerns related relating to truck traffic, noise, dust and the effects dewatering will have on groundwater quality and quantity. The Hills appear to be neighbours Lafarge’s Dundas Quarry and several kms away from the Flamboro Quarry. Based on this distance, there will be no noise, dust or ground water impacts for the Hills related to our quarry or this application.

As you are aware, Dufferin retained TSH Associates to assess the existing haul route and determine the effects of the increased traffic on Brock Road. The assessment determined that the road corridor is sufficient to service the quarry and the proposed tonnage increase. Highway 5 is part of the Regional Road network and designated for use by heavy vehicles as part of the City of Hamilton’s truck route.

Dufferin realizes that although the trucks the service our quarry are not direct employees of Dufferin Aggregates they are connected with the operation. Dufferin is proactive in resolving community issues and has implemented several initiatives to help minimize truck impacts on our neighbours and encourage road safety. Dufferin’s Truck Safety Policy outlines the Company’s expectations and code of conduct for the trucking companies and operators servicing the quarry. It requires compliance with the Ontario Occupational Health and Safety Act and the Highway Traffic Act. Over 300 trucking companies received Dufferin’s Truck Safety Policy in 2005. Dufferin does not accept or condone any breach of the statutory requirements. Violation of these rules can result in a suspension of loading privileges. We encourage feedback from our neighbours and work closely with the staff from MTO and Regional Police to encourage increased enforcement. We use this information to discipline offenders and find solutions.

Andrew and Helen Brink, 382 Moxley Road, Greensville

The Brinks wrote to the MNR in May as part of the EBR posting with concerns related to truck traffic on Brock Road and Hwy 5. Dufferin’s response to these issues is the same as described for the Hills.

Eric and Janet Trogdon, 737 Brock Road

The Quarry Manager and I met with the Trogdon’s at the quarry on June 21 and discussed their concerns about dust. We found this meeting to be very-constructive, improved the lines of communication and included a site tour to show how we control dust using wetting truck and the application of entac to the agline stockpile. As a result, we keep in regular contact with the Trogdons for feedback on our planned operation. The Trogdons have also been added to our blast notification program. Mr. Trogdon also attended the Aug 17 Open House.

Mr. Kawa, 633 Brock Road

I met with Mr. Kawa in June regarding the concerns he raised in his May 19, 2005 letter to MNR relating to truck traffic, blasting, dust and water supply. Mr. Kawa is concerned with truck traffic on Brock Road. Brock Road is regulated and designated as a truck route by the City of Hamilton. We expect the drivers to obey the rules of the road including posted speed limit. We will continue to implement our Truck Driver’s Safety Policy to help address his concerns and remind the drivers of their responsibilities.
Mr. Kawa's water supply is protected by the monitoring program which is in place to collect and analyze data and to identify and address impacts if they arise.

Each blast is monitored to ensure that they meet the provincial guidelines which are set much lower than levels required to result in structural damage to nearby homes. Additional blasting related to this application will not result in structural damage to this residence.

Reginald and Heidi Roarke, 816 Middletown Road

The Quarry Manager and I met with the Roarkes at their home on July 25 in response to the email forwarded to us by Robert Walters on July 21, 2005. Their concern related to low water supply this summer. During the meeting we outlined the monitoring program with the Roarkes and gave them an overview of how the quarry operates including water management. We also noted that there has been less than average rainfall this summer. The Roakes residence is over 1km from the quarry and the monitoring program has shown no impacts on private water wells. The Roarke’s water supply will continue to be protected by the monitoring program which is in place to collect and analyze data and to identify and address impacts if they arise.

Rosalynn Vanderboom, 933 Brock Road

We have had several telephone conversations with Ms. Vanderboom. We have rescheduled our meeting at her request for Oct 7 to discuss her concerns relating to truck traffic, water supply and noise. We will share the results of the traffic study with her and explain the Company’s programs in place to help minimize truck impacts on our neighbours and encourage road safety. We will also encourage Mrs. Vanderboom to call the quarry and help identify specifics operators who violate the rules of the road so that we can address the actions through suspension of loading privileges or request help from the regional police.

The Vanderboom residence is over 1 km from the operation. Based on this distance, there will be no noise or ground water impacts related to this application. Similar to the Roakes, we will outline the monitoring program and provide an overview of how the quarry operates including water management and equipment.