B. Bergsma

TO:	**CHAIR AND MEMBERS PLANNING COMMITTEE MEETING ON OCTOBER 18, 2010**
FROM:	**R. W. PANZER GENERAL MANAGER OF PLANNING AND DEVELOPMENT**
SUBJECT:	**BEST PRACTICES FOR ENVIRONMENTAL IMPACT STUDIES Deferred Matter 4.7 Planning Division Project 56**

RECOMMENDATION

That, on the recommendation of the General Manager of Planning and Development, the following report **BE RECEIVED** and staff **BE DIRECTED** to proceed with a Request for Proposal to hire a consultant to undertake performance monitoring of a number of completed plans of subdivision that were the subject of an Environmental Impact Study process, to evaluate the effectiveness of the EIS recommendations and draft plan conditions at protecting the natural environment features and functions through the pre-, during, and post-development processes; it being noted that the funding for this study would be available in the Planning and Development Department's 2011 capital budget submission.

PREVIOUS MEETINGS

On December 16, 2008 Municipal Council resolved:

That the Civic Administration **BE REQUESTED** to undertake a review of best practices used by other municipalities with respect to the quality of Environmental Impact Studies submitted by outside consultants.

ENVIRONMENTAL IMPACT STUDY BEST PRACTICES

1. PURPOSE OF AN ENVIRONMENTAL IMPACT STUDY

Environmental Impact Study (EIS) is a requirement at the provincial and municipal levels of government where development is proposed within or adjacent to natural heritage features and areas. As per the Provincial Policy Statement (Section 2.0, 2005) and the City's Official Plan policy (Section 15.5) development and site alteration is not permitted within or adjacent to natural heritage features and areas unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions.

The purpose of an EIS is to assist planners and approval authorities to make informed decisions about the potential direct and indirect impacts of development on natural heritage features, including the determination of which impacts are acceptable with and without mitigation, and those impacts that should be avoided. At the outset we must recognize that development in urban areas will result in some degree of change. The goal of an EIS is to scientifically predict the potential negative impacts of development and recommend avoidance or mitigation measures to eliminate, minimize or off-set those impacts – to balance the positive with the negative for an acceptable net effect.

2. DEVELOPMENT OF A MUNICIPAL PROCESS AND PROCEDURE FOR COMPLETING AN ENVIRONMENTAL IMPACT STUDY

Provincial guidelines were prepared that set out in general terms the how and why of completing an EIS. These were published in the Natural Heritage Reference Manual for Policy 2.3 of the Provincial Policy Statement (MNR, 1999), recently revised and updated in April of 2010. Municipalities were

encouraged to adopt the process and develop procedures that were in keeping not only with the provincial policies but also with municipal policies and approaches.

In 1997 the City's Environmental and Ecological Planning Advisory Committee (EEPAC) established an EIS Technical Working Group and prepared a checklist for completing an EIS. The City tested this checklist and developed a three-step process and procedure for completing an EIS based on the provincial model. This was done in consultation with environmental consultants working in the City on environmental impact studies, and other agencies over a 6-year period.

This process and procedure was formalized into a draft document. The Draft Guide for Environmental Impact Statements was presented at the "Take Carolinian Canada to the Limit Environmental Impact Statement Conference" held on February 13, 2003. This document represented best practice for the preparation and review of EISs and was prepared and presented by members of EEPAC and the City Ecologist. Subsequent to this conference the document was finalized in November, 2003 and on January 19, 2004, the Guidelines for the Preparation and Review of Environmental Impact Studies (EIS) were approved by Council pursuant to policy 19.2.2.

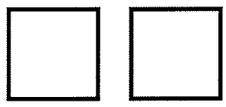
3. ENVIRONMENTAL IMPACT STUDY SUBMISSION AND REVIEW PROCESS

Environmental Impact Studies are prepared by ecological consultants on behalf of the proponent of the development proposal. While the consulting firm will be responding to the interests of the proponent, they are to provide professional, unbiased and science-based findings directed towards environmental protection. It was our practice for many years to accept all submitted draft EIS reports for review. The content and quality of EIS reports was found to vary considerably for many reasons. When reports are incomplete, it results in significant delay in the timing for processing the development application. This results in frustration for: the proponent who may have already invested time and resources on other design studies that have relied on the incomplete EIS; the reviewers, who will have to spend additional time reviewing subsequent addendums; and, planning staff who have a limited time to recommend approval after which the application may be appealed to the OMB.

To address these concerns Parks Planning and Design staff created a Report Deficiency Template in April of 2007 and informed the development community that upon submission of an EIS, it would be subject to a preliminary review to ensure that the content of the report satisfied municipal requirements and could be circulated for formal review. If deficiencies were found, they were noted and the reports returned for revisions. This was done to ensure that staff and commenting agency time could be focused on reviewing complete reports and on providing faster turn-around times for those files. DABU staff will be formatting that document to become a "template" in the File Manager process.

Requirements have been established by the Planning and Development Approvals Divisions for the acceptance of complete applications as per the *Planning Act.* In order to ensure that an EIS submitted as a requirement for complete application meets the minimal acceptable standards, the City Ecologist and EEPAC prepared an EIS Completeness Checklist in April of 2009. This checklist would permit the file manager to review the table of contents and report sections to ensure all required components were included. If not, the report could be sent back as incomplete. This screening for completeness cannot address the report analysis and recommendations based on the scientific and technical aspects of the impact assessment which requires the expertise of the reviewers.

One of the most important steps in the success of an EIS process is the communication and discussion of issues with the proponent and consulting team at the earliest stage and before significant pre-development investment has been made. This early dialogue ensures that study requirements, terms of reference are clearly documented and understood by all parties, and that all review agencies or groups with an interest in the application are identified and provided opportunity to comment on the scope of study. The File Manager process has, for the most part, ensured early discussion of key issues.



4. OUTCOME OF THE ENVIRONMENTAL IMPACT STUDY PROCESS

The recommendations arising from an accepted EIS are applied as:

1. Site specific requirements for area plans to implement land use changes
2. Conditions of approval for a subdivision that implement land use and zoning changes based on the identification of boundaries, buffers and setbacks
3. Agreements made at the time of site plan development
4. Standards and measures depicted on site engineering and landscape drawings
5. Monitoring programs for construction and post-construction where necessary.

Best practices for the preparation and review of EISs can ensure that the appropriate process is followed and the required elements are present but cannot dictate the quality of the product submitted for review or that the recommendations will be acceptable to reviewers. In this regard, the City of London's policies, guidelines and process meet or exceed the best practices of other municipalities for the completion of an EIS.

The recommendations of an EIS may be lost during the construction phase if insufficient mitigation and monitoring are provided to protect the resource against construction impacts. The resource may be further degraded post-construction due to insufficient buffers and setbacks from development that lead to encroachment, dumping and inappropriate use. Modifications to best practices for mitigation of impacts require evidence of negative impact to the resource despite the implementation of EIS recommendations that predicted no negative impact.

Therefore, a study to evaluate the best practices for the implementation of accepted EIS recommendations during the construction and post-construction periods is recommended. Funding for this study will be available, subject to Council approval, within the 2011 Planning Division budget.

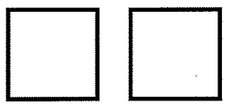
PERFORMANCE MONITORING FOR THE CITY OF LONDON TO REVIEW BEST PRACTICES FOR THE IMPLEMENTATION OF ENVIRONMENTAL IMPACT STUDIES

The main objective of the study is to undertake document review and field research to assess the performance of the City of London's Environmental Policies and Guidelines regarding Environmental Impact Studies. This will be accomplished by evaluation of development sites that have been undertaken since the Official Plan Policies were approved by Council as part of OPA88, and subsequently by the Ontario Municipal Board (OMB) in January 2000.

The study area will encompass lands that were annexed into the City of London and identified as Community Plan areas within the Urban Growth Boundary and evaluated under the new policies. Comprehensive and/or site-specific Environmental Impact Studies (EIS) were prepared for each of the community plan areas and subsequent plans of subdivision. Natural Heritage features within these lands encompass Environmentally Significant Areas, Significant Woodlands, Significant Wetlands and Significant Stream Corridors.

The subdivision files to be reviewed will have been subject to an Environmental Impact Study that recommended environmental management strategies including mitigation measures and buffers to deal with anticipated impacts of development. In some instances, the developments went to the OMB over the extent of buffers or other such matters. Recommendations of EIS are incorporated into specific conditions of draft approval and conditions for subdivision agreements.
The draft plan conditions will be reviewed for their effectiveness at protecting the natural environment features and functions through the pre-, during, and post-development process.

The establishment of ecological buffers was a large component of the EIS's completed for these subdivisions. The effectiveness and adequacy of the recommended buffers will be reviewed and compared with the recommendations for buffers based on the Guideline Document for the Determination of Ecological Buffers.



Field evidence will be obtained by investigating residential development already occupied by residents as well as those still under construction. Photo documentation will form part of the record. Field situations will be assessed according to the following categories and measures as designed and established by Dougan & Associates for their performance evaluation of the Town of Richmond Hill (July 2002):

Impact Category	Assessment Measures
Buffer adequacy	Buffer adequacy is based on the ability of the specified buffer to mitigate a) immediate impacts of construction and b) long term conflicts between residential uses and natural area features and functions. Potential conflicts include alterations of buffer landscape, compost dumping, noise, spread of exotic species, etc.
Adequacy of Lot Design	There should be adequate depth to residential backyards to permit backyard space for active recreation and typical infrastructure (decks, grassy area, gardens, pools, storage sheds) unconstrained by proximity to adjoining natural areas
Landform Conservation	Adequate buffers and setbacks should be provided to ensure that major land features are nor impacted by major grading, and that the interfaces between built areas and natural features are gradual and naturalized.
Habitat Protection Measures	Snowfencing or hoarding used to identify and protect natural areas and functions during construction, the maintenance of this protection through construction, and prompt remediation of problem sites based on active monitoring.
Erosion Control	Erosion control filter fencing, straw bale and rock check dams, maintenance of these measures, and prompt remediation of problem sites based on monitoring.
Minimal Exposure of Subsoil	The interim re-vegetation of large sites that have been stripped of topsoil and graded, where development may not occur for several months.
Maintenance	Protective measures that are in consistently good condition due to active monitoring and periodic action on deficiencies.
Exotic Species	Use of native species in naturalized buffer and linkage plantings, and avoidance of exotic species that are known to become problematic in natural habitats.
Refuse	The presence of garbage, either wind-blown or intentionally dumped, in construction areas and in natural areas close to existing development.
Injury to Vegetation	The presence of obvious damage to woody vegetation, as evidenced by broken branches, torn bark or exposed roots in proximity to active development sites.

SUMMARY

Best practices for the preparation and procedure for completing Environmental Impact Studies related to development applications in proximity to significant components of the natural heritage system in the City of London meets or exceeds those of other municipalities. However, the evaluation of best practices for EIS's should also extend to the construction and post-construction periods. These are the real tests of the EIS process that will demonstrate whether "no negative impact" has occurred to the natural feature or ecological functions as a result of development and whether mitigation measures were sufficient to protect the resource.

This type of performance monitoring by municipalities is encouraged by the PPS (2005) to monitor the implementation of the policies in their official plans. It will provide meaningful feedback and evidence of the success or failure of a wide variety of construction practices, mitigation measures and buffer widths at providing the level of protection and predicted effect of development on natural features and ecological functions.

It is recommended that the City hire a firm that specializes in ecological monitoring to assess that recommendations of Environmental Impact Studies are being correctly implemented and predicted outcomes achieved through the full development process.

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