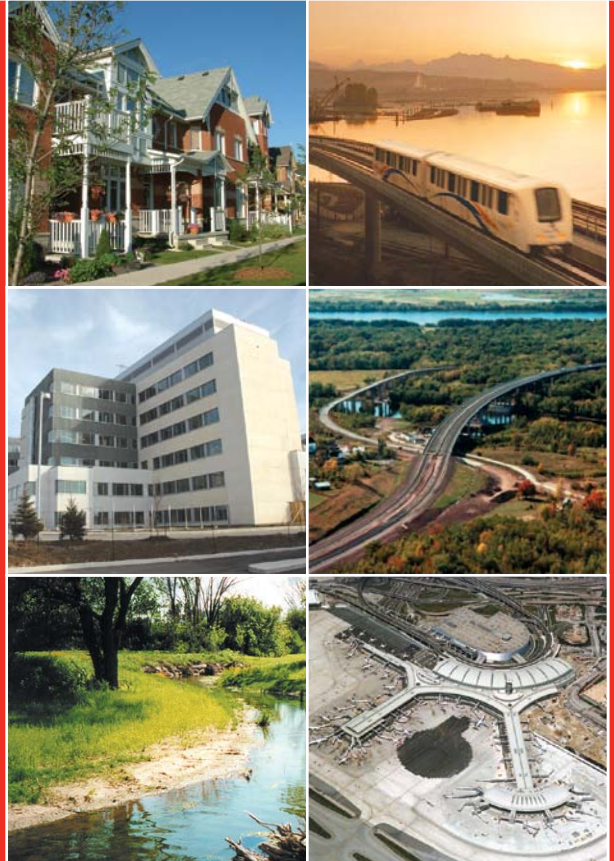


MMM Group Limited



Big Bay Point Resort Peer Review Report Stage 1A Tree Clearing

14.09221.001.P01

COMMUNITIES
TRANSPORTATION
BUILDINGS
INFRASTRUCTURE



January 14, 2010

EXECUTIVE SUMMARY

Kimvar Enterprises Inc. has requested permission to commence tree clearing activity on the Big Bay Point Resort site this winter, in order to ready the site for further site preparation works in 2010 and 2011. A number of reports have been submitted to the Town by Kimvar in support of this request.

The purpose of this report is to provide a description of the proposed tree clearing works, to outline the suggested general approach to addressing future requests for tree clearing and other forms of site preparation works, to provide an overview of the peer review process associated with the tree clearing request, and to provide our recommendations to the Town regarding the tree clearing request.

The proposed tree clearing works are to be staged, with Stage 1A generally being those lands required to accommodate future excavation of the marina basin, and Stage 1B being the remaining areas to be cleared, including the route of the public road, three golf course fairways and trees in closer proximity to Big Bay Point Road and existing residences to the east. The extent of Stage 1A and 1B tree clearing is identified in Figures 1A and 1B on pages 5 and 6 of this report.

Based on our peer review of this request, including a review of the relevant planning documents and the supporting information and plans submitted by Kimvar, we recommend that tree clearing be permitted within the Stage 1A area, in accordance with the plans identified in Section 7 of this report that have been endorsed by the peer review team, and subject to the following conditions:

- i. that Kimvar enter into a pre-grading and preliminary development agreement with the Town to require Stage 1A tree clearing in accordance with the approved plans and studies and to provide for necessary securities to protect the environment, and that the agreement be registered on the title of the lands;
- ii. that the County of Simcoe acknowledge in writing that the requirements of the County of Simcoe Forestry Conservation By-Law # 5635 are either satisfied or not applicable;
- iii. that Kimvar obtain a permit from the LSRCA under Ontario Regulation 179/06 prior to initiating Stage 1A tree clearing; and
- iv. that the Communication Plan (attached as Appendix 8A) be implemented in order to provide notice and information to area residents, the general public and public agencies regarding the commencement of tree clearing works.

We are not in a position to recommend approval of tree clearing within the Stage 1B area at this time. We require further information in order to assess the appropriate extent, timing and conditions of the tree clearing proposed within the Stage 1B area. In addition, further input from external agencies is recommended prior to the commencement of tree clearing in the Stage 1B area.

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9 SCS Response to MMM Comments (Jan. 12, 2010)

1. INTRODUCTION

MMM Group has been retained by the Town of Innisfil to assist in administering the remaining approvals for the Big Bay Point Resort, largely through peer review of supporting studies and plans to ensure that the proposed development is consistent with the policies and requirements of the implementing planning instruments. In addition to the peer review of the supporting technical studies, MMM will also assist the Town with review of detailed engineering and design submissions, review of development agreements and process coordination on an as-required basis.

The developer, Kimvar Enterprises Inc., has requested permission to commence tree clearing activity on the Big Bay Point Resort site this winter, in order to ready the site for further site preparation works in 2010 and 2011. A number of reports have been submitted to the Town by Kimvar in support of this request.

The purpose of this report is to provide a description of the proposed tree clearing works, to outline the suggested general approach to addressing future requests for tree clearing and other forms of site preparation works, to provide an overview of the peer review process associated with the tree clearing request, and to provide our recommendations to the Town regarding the tree clearing request.

2. CURRENT REQUEST FOR TREE CLEARING

Kimvar proposes to commence the clearing of trees on the site in the winter of 2010. The purpose of tree removal is to prepare the development areas of the site for future site preparation works, such as grubbing, grading, excavation of the marina basin, construction of a haul road along the route of the public road and shaping of the golf course. These further site preparation activities are scheduled to be undertaken from 2010 to 2012, and additional approvals will be required from the Town for these works.

Kimvar has indicated that there is urgency to their request for tree clearing, as the *Migratory Birds Act* restricts tree clearing activity during the bird nesting season from late April until the end of July, and they would like to complete the majority of tree clearing this winter to facilitate grubbing, topographical surveys and detailed engineering design in the spring and summer of 2010.

Kimvar submitted a number of supporting studies to MMM on November 30, 2009. These studies were also provided to Town staff as well as several interested agencies, including the Province through the Ministry of Municipal Affairs and Housing, the Lake Simcoe Region Conservation Authority and the County of Simcoe. The studies were intended to support the tree clearing proposal, but also addressed matters not directly relating to the tree clearing stage of site preparation, including stormwater management and amphibian habitat enhancement. The following studies were submitted on November 30th:

- i. Amphibian and Reptile Protection and Enhancement Plan, prepared by Beacon Environmental (Nov. 2009);
- ii. Butternut Survey and Management Plan, prepared by Beacon Environmental (Nov. 2009);
- iii. Collector Road Impact Study, prepared by Beacon Environmental and SCS Consulting Group Ltd (Nov. 2009);
- iv. Cost Estimate for Erosion Sediment Control Work Relating to Tree Clearing Work, prepared by SCS Consulting Group Ltd. (Nov. 2009);
- v. Edge Management Plan, prepared by Schollen & Company Inc. (Nov. 24, 2009);
- vi. Stormwater Management and Monitoring Plan, prepared by SCS Consulting Group Ltd. (Nov. 24, 2009);
- vii. Reforestation/Compensation Plan, prepared by Schollen & Company Inc. (Nov. 20, 2009);
- viii. Tree Clearing Construction Methodology prepared by SCS Consulting Group Ltd. (Nov. 2009); and
- ix. Tree Inventory and Assessment, prepared by Schollen & Company Inc. (Nov. 24, 2009).

Initially, Kimvar proposed extensive tree clearing of the development areas of the site in one stage, as well as tree clearing through the Environmental Protection Area along the route of the future public road. However, through the peer review process, the proposed tree clearing program was altered to stage the clearing of trees. Kimvar now proposes to undertake tree clearing in two stages, being Stages 1A and 1B, with the first stage being trees in the vicinity of the future marina basin and environs, and the second stage being, generally, the remainder of the marina district development area, several golf course

fairways and the route of the public road. The first stage of clearing is proposed in the winter of 2010, with the subsequent stage taking place once further approvals are obtained, potentially in the fall of 2010.

Revised information has been submitted by Kimvar in support of the modified tree clearing approach and based on peer review comments from the Town's consulting team and staff. This includes clarification relating to peer review comments as well as suggested protocols for the monitoring of potential negative impacts and associated mitigation strategies. The following additional information has been provided by Kimvar:

1. Revised tree clearing construction methodology (Jan. 12, 2010);
2. Cost Estimate for Phase 1A Tree Removal (Jan. 2010);
3. Revised detailed tree clearing plans TC-0 through TC-8 (Jan. 6, 2010);
4. Revised Tree Removal Control Plan 1 – Stage 1A and 1B 701A, and Tree Removal Control Plan 2 – Stage 1A and 1B 702A (Dec. 2009 stamped Jan. 13, 2010);
5. Revised Temporary Edge Buffering Plan EP-6A (Aug. 2009, stamped Jan. 7, 2009) for a temporary landscape buffer adjacent to the existing residential properties to the south of the existing marina;
6. Erosion and Sediment Control Plan Details – 705 (Dec. 2009 stamped Jan. 13, 2010);
7. Monitoring strategies including:
 - a. Ecological Monitoring Program Matrix, prepared by Beacon Environmental (Dec. 21, 2009, revised Jan. 6, 2010);
 - b. Monitoring Program Matrix Tree Removal Operations Stage 1A and 1B, prepared by SCS Consulting Group Ltd (Jan. 2010); and
 - c. Tree Clearing Monitoring Program Matrix – Tree Clearing Stage 1A, prepared by Schollen & Company Inc. (Jan. 6, 2010).
8. A response dated December 21, 2009 from Beacon Environmental to MMM peer review comments regarding the Butternut Survey and Management Plan and Collector Road Impact Study;
9. A response dated December 21, 2009 from Beacon Environmental to MMM peer review comments regarding the Amphibian and Reptile Protection and Enhancement Plan;
10. A response dated December 22, 2009 from SCS Consulting to MMM peer review comments regarding tree clearing/preservation plans;
11. A response dated Jan. 6, 2010 from Schollen & Company to MMM peer review comments regarding tree clearing/preservation plans;
12. Construction Phasing Plans 2010(01-06)-1 through 2014(01-12)-9 (Jan. 2010);
13. Stage 1A Public/Agency Communication Plan and Draft Information Bulletin (Jan. 13, 2010); and
14. A response dated January 12, 2010 from SCS Consulting to MMM peer review comments regarding tree preservation/clearing comments.

The following Figures 1 and 2 illustrate the proposed staging of tree clearing on the Big Bay Point Resort lands. Stage 1A includes the lands associated with the proposed marina basin as well as a construction staging area to the north. A minimum buffer of approximately 150 metres would be maintained from Big Bay Point Road. In addition, buffers would be maintained from the ultimate cleared forest edge adjacent to the EPA (to permit future assessment of forest edge management requirements when grading information is available), from the existing residences to the east of the existing marina and from an existing wetland that provides amphibian habitat (to permit relocation of amphibians in the spring). In order to provide a buffer for the existing residences to the south of the existing marina, where there are currently no or limited trees to provide screening, Kimvar proposes to plant a temporary buffer consisting of relocated trees from the site.

Stage 1B would include the remainder of required tree clearing, including the remaining trees in the marina district, three golf course fairways to the west of the Environmental Protection Area and the route of the public collector road. Kimvar proposes to maintain a treed buffer of 30 metres in width along Big Bay Point Road to serve as a buffer during site construction, as well as a treed buffer of 6 to 10 metres in width adjacent to the existing residences to the east of the existing marina. Ultimately, these buffers will be reduced in width, to a minimum of 10 metres along Big Bay Point Road and 8 metres adjacent the residences to the east of the existing marina, as required by OPA 17 and the conditions of draft plan of subdivision approval, and established as permanent landscaped areas.

The issue of the adequacy of buffers during the construction period will be further assessed through the review of the proposed Stage 1B tree clearing program.

3. TOWN AND AGENCY EXPECTATIONS RELATED TO TREE REMOVAL

3.1 Background

There are a number of policies and requirements within the implementing planning framework for the Big Bay Point Resort that are relevant to this kind of site preparation activity and to which the Town must pay heed. These include policies relating to protection of the natural environment and the timing of site works relative to the progress of the Class Environmental Assessment for expansion of the Town's sewage treatment plant. In addition, there are other matters of interest to the Town in considering the tree clearing request, such as the potential impacts of tree clearing on adjacent residents, including visual and noise impacts.

Draft plan of subdivision approval condition 23(c) states *"that no trees are removed or damaged prior to plan registration, or during any phase of the servicing and construction of the site, without prior approval from the County of Simcoe and the Town of Innisfil"*. This accords a much greater level of control over tree clearing on the Big Bay Point Resort lands than for other sites in the Town.

A thorough review and consideration of the tree removal request is warranted for the following reasons:

- i. The clearing of trees has potential negative environmental effects, including increased sediment transport and phosphorus inputs to surface water, impacts on significant vegetation (eg. butternut trees) and creation of new forest edges;
- ii. the project was ultimately supported by the Town, Province and County on the basis of very stringent planning instruments intended to protect the environment, and particularly Lake Simcoe, and site activity should proceed in a way that is consistent with the planning documents and the spirit in which these approvals were given; as an example, Section 8.7.1.d of OPA 17 states:
"Any development or site alteration must incorporate site processes, technology and designs to maximize protection of Lake Simcoe and its tributaries, and to ensure that there are no negative impacts on the natural heritage features and ecological functions on and adjacent to the site."
- iii. tree removal can have visual and noise impacts on adjacent residents; and
- iv. given the considerable interest in this project by the community and agencies, any site activity will be closely scrutinized.

3.2 Principles for Supporting Tree Removal

Tree clearing as a pre-construction activity should only be permitted where there is a clear plan, where the impacts are understood, where it is necessary and timely as part of a reasonable construction schedule and where the requirements of the planning documents are addressed. The following principles were established at the outset of our peer review to help guide our consideration of the tree clearing submission:

- i. the timing and staging of clearing activity must be reasonable and appropriate relative to the overall construction schedule (i.e., it would not be appropriate for the site to be cleared far in advance of further construction activity);
- ii. there must be a determination by the Town that the Class EA has demonstrated that sewage capacity can be made available, in accordance with Sections 8.10.1.e and 8.13.1.d of OPA 17;
- iii. there must be a clear plan that identifies the extent and nature of tree removal, identifies potential impacts and appropriate construction management and mitigation measures and reflects the findings of relevant technical studies;
- iv. relevant studies identified in the planning documents (eg. OPA 17, Section 8.13.1.h) must be completed and thoroughly peer reviewed and endorsed;
- v. an agreement must be entered into with the developer that ties the works to the approved plans and studies and provides for necessary securities to protect the environment;
- vi. consultation must be initiated with partner agencies with an interest in this matter; and
- vii. a public consultation program must be implemented to the Town's satisfaction to inform surrounding residents of the nature and timing of site works, in advance of commencement of those works and at intervals through the construction period.

3.3 Expectations for Further Site Works

In order to provide the developer with an indication of the Town's expectations in terms of prerequisites and conditions associated with future site works, we have prepared a "Site Activity Checklist" (attached as Appendix 1). This Checklist identifies the anticipated information, approval and process requirements associated with various site preparation and construction activities for Phase 1 of the Big Bay Point Resort project, which includes the marina, golf course and public road.

3.4 LSRCA Permit Requirement

The Stage 1A tree clearing area includes wetlands according to the Environmental Land Classification mapping prepared by Beacon Environmental. The removal of vegetation in a wetland requires permit approval from LSRCA under Ontario Regulation 179/06. The Stage 1A tree clearing area represents the main development area of the resort and is designated in the Official Plan, zoned and has been draft approved as such. The LSRCA has confirmed that the applicant has already applied for this required permit, and it is our understanding that issuance of the LSRCA permit is forthcoming. We recommend that issuance of this permit be required as a condition of Stage 1A tree removal.

4. PEER REVIEW PROCESS

The peer review process to date has entailed the following steps:

- i. An agency meeting on November 16, 2009, hosted by the Town of Innisfil, at which Kimvar provided a preliminary overview of the proposed site construction schedule and proposed tree clearing works, which was also attended by the Province (Ministry of Municipal Affairs, Ministry of Environment, Ministry of Natural Resources), the Lake Simcoe Region Conservation Authority, the County of Simcoe, and representatives of the Town's peer review team.
- ii. Review of the planning instruments for BBPR, including Official Plan Amendment No. 17, Zoning By-law No. 029-05 and the conditions of draft plan of subdivision approval;
- iii. Review of the supporting documents submitted on November 30, 2009;
- iv. Provision to Kimvar on December 9, 2009 of a list of additional information required to complete the peer review (attached as Appendix 2);
- v. Provision to Kimvar on December 16, 2009 of "preliminary observations" relating to our review of the submitted studies (attached as Appendices 3a - 5k);
- vi. A meeting between Kimvar and the peer review team on December 17, 2009 to discuss the preliminary peer review comments and the proposed program and schedule for site preparation works, including tree clearing;
- vii. Meetings between Kimvar and the peer review team on December 23, 2009 and January 6, 2010 to discuss and resolve the outstanding items related to the Stage 1 tree clearing; and
- viii. Finalization of our comments based on additional information submitted and the revised, staged approach to tree clearing.

5. PEER REVIEW FINDINGS

5.1 Review of Planning Instruments

A detailed review of the relevant planning documents, being OPA 17, Zoning By-law 029-05 and the conditions of draft plan of subdivision approval was undertaken to identify policies and requirements of relevance to the tree clearing request. There are a number of matters of relevance to the tree clearing proposal, which are summarized below.

a) The Class EA for the Alcona WPCP Expansion is Sufficiently Advanced

OPA 17 contains policies that are intended to restrict development of the Big Bay Point Resort until it has been confirmed through the Class EA process that the Alcona WPCP can be expanded to accommodate the resort, as well as other planned service areas. Section 8.10.1.g specifies that prior to final approvals of plans of subdivision or condominium, the Class EA shall be completed. However, Section 8.10.1.e makes provision for certain site activity in advance of completion of the Class EA. Specifically, Section 8.10.1.e states:

“Development or site alteration in the Secondary Plan Area shall not proceed until it has been demonstrated through the class environmental assessment process that sewage capacity can be made available to service lands currently designated for development within the Alcona Water Pollution Control Plant (“WPCP”) designated service area, the existing Big Bay Point residences as shown on Schedule ‘R3’ and the Secondary Plan Area.”

Section 8.13.1.d of OPA 17 similarly identifies the test that the ability to service be demonstrated through the class EA process.

At the time of settlement discussions with the Province, County and certain ratepayer groups regarding the Big Bay Point Resort project, this wording was reviewed by the Town and was considered acceptable on the basis of the flexibility it provided to accommodate preliminary site works in advance of final subdivision approvals and completion of the Class EA. This approach is consistent with common practice, where site preparation activity, such as grading, would take place prior to final subdivision or condominium approvals, subject to approval of engineering plans and pre-development agreements.

We understand that the test of demonstrating through the class EA process that sewage capacity can be made available has been satisfied. The Pilot Study that has been completed as part of the EA process has demonstrated that the technology exists to achieve the required effluent quality objectives. We understand that the findings of the Pilot Study are to be received and endorsed by Council on January 20, 2010. Consequently, we are satisfied that the policies of OPA 17 relating to undertaking the Class EA do not represent an impediment to commencing tree clearing.

b) Other Preconditions for Tree Clearing

There are a number of other requirements in the planning documents of relevance to tree clearing and other forms of site alteration.

Section 8.13.1.h of OPA 17 identifies a number of studies and plans that are to be completed prior to the approval of development applications, including plans of subdivision and condominium and site plan approvals. While Kimvar is not requesting approval of such development applications at this time, it is essential that certain of these studies be provided to support the tree clearing works. We are satisfied that the extent of studies provided is adequate to support tree removal and that the content of these studies and supplementary materials is adequate to support the commencement of Stage 1A of tree removal. However, we continue to have concerns with the adequacy of some of the information provided as it relates to Stage 1B of tree removal, including the details associated with edge management, amphibian and reptile protection and enhancement and the impacts of the identified public road corridor.

Section 8.7.1.j of OPA 17 specifies that *“prior to any vegetation removal, site alteration or grading in support of the Public Collector Road, a Collector Road Impact Study shall be carried out to define the specific alignment of the Public Collector Road as it traverses the Environmental Protection Area, based on an assessment of the possible negative environmental impacts from, and mitigation for, the Collector Road”*. The requirement for a collector road study is also identified in the conditions of draft plan of subdivision approval, as well as the requirement that the study be prepared to the satisfaction of a number of agencies. Condition 4b states *“There shall be no site alteration, grading, pre-servicing or construction of the Public Collector Road until the Collector Road Impact Study has been completed to the satisfaction of the Town, the County, the Conservation Authority and the Province”*. It is our opinion that tree clearing should not take place along the public road corridor within the Environmental Protection Area until the Collector Road Impact Study has been reviewed and endorsed by the identified agencies.

Section 8.7.2.b of OPA 17 notes that a Butternut Survey and Management Plan shall be completed prior to any development or site alteration and as part of the Collector Road Impact Study, to the satisfaction of the Ministry of Municipal Affairs and Housing and the County, in consultation with other public bodies. Butternut trees are accorded special consideration for protection under the Species at Risk Act and by the Provincial Policy Statement. It is our opinion that tree clearing should not take place until the Province, and in particular the Ministry of Natural Resources, has reviewed and endorsed the findings of the Butternut Survey and Management Plan. In fact, the Ministry of Natural Resources has provided comments on the proposed tree clearing works (attached as Appendix 7), noting that there are no butternut trees identified in the Stage 1A and 1B clearing areas (this is not accurate as there are butternut trees in the Stage 1B clearing area particularly on the golf course). The Ministry also notes that any new butternut trees identified during the course of tree clearing are to be reported. We are satisfied based on this letter from the Ministry that tree clearing may commence on the Stage 1A lands.

Condition 31.g of the conditions of draft plan of subdivision approval requires *“that prior to final approval and any site alteration, proper erosion and sediment control measures must be in place. Appropriate sediment and quality control facilities including both interim and ultimate measures, must be maintained throughout the construction period,*

through to the building phase". Effective erosion and sediment control measures are critical to ensure protection of water quality in Lake Simcoe, and must be implemented even at the tree clearing stage.

Section 8.13.8 of OPA 17 identifies a number of requirements relating to the monitoring of impacts of the Big Bay Point Resort. Given the potential negative environmental impacts associated with tree removal, it is appropriate that monitoring and contingency plans be established prior to the commencement of tree removal. Kimvar has provided proposed monitoring protocols relating to the following parameters:

- water quality of Lake Simcoe;
- tracking of mud to municipal roads;
- dust suppression;
- the populations of ebony spleenwort and shagbark hickory;
- the health of existing and planted butternuts;
- breeding birds;
- breeding amphibians;
- health of newly created forest edges and edge management plantings;
- health of temporary landscape screen plantings;
- integrity of trees and vegetation communities designated for retention; and
- the health of vegetation planted as part of the reforestation compensation plan.

We are satisfied that the proposed monitoring protocols satisfy the expectations of the planning documents.

Sections 8.6.1.k and 8.6.5.2 of OPA 17 identify policies intended to ensure adequate buffering between the Big Bay Point Resort and the surrounding areas. Section 8.6.5.2.d requires a landscape buffer strip of at least 10 metres in width along Big Bay Point Road, consisting of existing vegetation and new plantings where required to ensure effective screening of the resort, in order to foster the rural character of Big Bay Point Road. Condition 14.a of the conditions of draft plan of subdivision approval requires the provision of landscaped buffer strips of a minimum of 8 metres in width along the southern and eastern site boundaries where adjacent to existing residential development. Section 8.6.5.2.f requires the submission of detailed landscape plans to demonstrate the adequacy of proposed buffering measures. While the intent of these policies is to ensure long term compatibility, there should also be an expectation for buffering during the construction period.

We are satisfied that the tree clearing associated with Stage 1A maintains adequate buffering from Big Bay Point Road and from the existing residences to the east. There is very little in the way of vegetation along the southern boundary of the marina district to provide buffering during the construction period for the existing residents. Kimvar has apparently held discussions with these residents regarding the nature of permanent landscaping, and some of the residents have expressed a preference for no landscape screening so as to permit views of the resort project. However, we recommend the implementation of temporary landscaping to provide effective screening through what will be a lengthy construction period. Kimvar have provided landscape plans for this area that identify the transplanting of existing trees to this area. We are satisfied with this approach.

Further discussions are required with Kimvar regarding the buffering requirements associated with Stage 1B of tree clearing.

5.2 Review of Submitted Technical Plans and Reports

5.2.1 Construction Management/Erosion and Sediment Control

Stage 1A – Tree Removal

We are satisfied with the proposed tree clearing plans for Stage 1A.

Stage 1B – Tree Removal

Further review of the details of the public road design through the EPA is required to confirm that required grading and culverts can be accommodated within the identified alignment. In addition, further discussions are required to determine appropriate buffering measures through the period of major site alteration, including excavation of the marina basin.

We do not recommend that permission be given for tree clearing in Stage 1B until these issues, and others identified by the peer review team, are addressed.

Preliminary ESC Comments (not relevant to tree clearing)

- i. Provide calculation sheets for temporary sediment ponds – both permanent and active storage requirements.
- ii. Provide calculation sheet for orifice plate at outflow rate – confirming time for discharge. Drawdown and orifice sizing shall be based on equations 4.10 & 4.11 in section 4.6.2 of the “Stormwater Management Planning & Design Manual” (MOE, 2003).

5.2.2 Collector Road Impact Study

The following comments result from our review of Beacon Environmental’s Collector Road Impact Study. The comments relate specifically to issues related to clearing in Stages 1A and 1B. Stage 1B Clearing includes the collector road. Where it is identified that the comments are not related to clearing but their resolution is outstanding we also identify this.

Features Considered in the Impact Assessment

The features addressed in the impact assessment are vegetation, wildlife and endangered species. We agree that these are appropriate components of the natural environment to be addressed. We recommend that wetlands be included in the assessment. We recommend that the dug pond where Blanding's turtle was sighted be acknowledged as significant habitat. Without the benefit of any assessment of this matter by the proponent, the availability of a Recovery Plan and other management guidelines, it is our opinion that the pond can serve as both summer aquatic habitat and overwintering habitat. Our concern on this matter is not related to the collector road but rather to the proposed enhancement of the dug pond.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – we requested that further information be provided on the impacts to wetlands from the collector road. Although a response has been provided it does not provide the information suitable to complete the review. Specifically, the issue is with the response related to wetland hydrology. There is mention of the road traversing a wetland in the middle of the EPA but does not identify which one (hS12?). The comment then goes on to state that the road traverses the edge of the feature and that this will limit the potential negative effects to the hydrology of the wetland. The assessment does not adequately address the hydrology effects. Further assessment is required.

A response is provided that wetland units hS5 and hS12 are located greater than 30 m from the Collector Road and are not anticipated to be affected. We note that hS12 is downgradient of the collector road and therefore has the potential to be affected. An assessment of the potential effect needs to be presented.

Butternuts

The comments on butternut are specific to the review of the Collector Road Impact Study.

Table 4 identifies the distances of trees relative to “disturbance from Collector Road construction”. Clarification is required regarding the specific limits of “disturbance” from Collector Road construction.

It is identified that specimen B9 is retainable and occurs within 3 to 8 m of the roadway and will be indirectly impacted. At this close proximity to the road, excavation or fill placement would likely result in a direct impact to the tree. It should be identified as a direct impact unless further assessment related to the road profile indicates otherwise.

It is identified that retainable trees be monitored for 2 years following initiatives to provide canopy management. Two years is insufficient time to identify a response. We request that monitoring be for five (5) years following implementation of canopy management.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – we understand that as a conservative estimate that filling may encroach into the dripline of the specimen. Based on this we identify that the impact assessment should also be conservative in this regard and identify that there is potential for a direct effect. We recognize that the final outcome of this particular item will be addressed through review by the MNR.

Amphibian Habitat

The hydrologic conditions that support amphibian wetland habitat are not well defined and there is no impact assessment of this related to construction of the road. It is identified that amphibian habitat area BA-15 is groundwater fed, but there is no mention as to whether this important function would be affected by the road location and construction.

It is identified that the extent of impacts to BA-13 will be determined at detail design. We do not support that this be deferred to a later stage. The impacts should be addressed in this study.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – the response to this comment is partially addressed in item 1 above. We acknowledge that the potential hydrology issues associated with BA-15 have been addressed. The impact assessment for BA-13 identifies that 33% of the wetland will be removed but there is no indication as to how this affects the remaining wetland habitat. Further information is required to complete the assessment.

Wildlife Passage

The focus on providing wildlife passage is for reptiles and amphibians. We agree that these wildlife groups are more vulnerable and thus should be the focus for providing wildlife passage. The report should acknowledge why consideration for deer passage is not required.

The Collector Road Impact Study provides a good overview of considerations for locating and the design of wildlife passage. However, it does not make recommendations or declare what would be proposed. It is appropriate that the elements of the crossing be identified as proposed such that they can be presented in more detail.

The report mentions that a dry culvert crossing may be required along with the passage that is proposed. It should be clarified at this time whether or not a dry culvert is required.

The report mentions that the passage diameter would range from 0.5 to 1 m. The report should identify an openness ratio that is more specific to accepted opening sizes to support wildlife movement. It is important to identify what this would be as it may affect the road profile through this area which could also lead to either more fill or cut.

Cattle grates or other measures to provide more ambient air temperatures in the passage structure are beneficial. It should however be discussed along with road operations particularly winter plowing and sanding. The passage could receive an influx of high salt concentration if road salt is used through the winter and it is not flushed through the culvert.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – Deer Crossing - we accept the assessment related to deer crossing the roadway. No further assessment is required. Detail on Culvert Design – we accept the confirmation that dry/moist culverts will be used for amphibian reptile crossings. Based on this, confirmation is needed that the location of the amphibian and reptile culverts remain as proposed. With respect to the culvert size we request that that the information be presented in terms of an openness ratio and be compared to the commonly cited literature to confirm that the size is appropriate. Cattle grate crossing – we agree with the recommendation not to propose this type of wildlife crossing culvert design for the reasons stated.

Forest Edge Impacts

The report identifies the general range of impacts that occur when a new forest edge is created. However it does not assess these impacts specific to the collector road and the adjacent forest condition. This should be included.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – site specific assessment is required to document the forest edge effects.

Monitoring

We are satisfied with the monitoring protocols identified in the Ecological Monitoring Program Matrix from Beacon Environmental dated January 6, 2010.

5.2.3 Amphibian and Reptile Enhancement and Protection Plan

The following comments result from our review of Beacon Environmental's Amphibian and Reptile Enhancement and Protection Plan. The comments relate specifically to issues related to clearing in Stages 1A and 1B. In some instances we provide comments that are not related to tree clearing but are matters that are not yet resolved.

Dug Pond

A dug pond is the location where the provincially and nationally threatened Blanding's turtle (*Emydoidea blandingii*) has been observed. It is appropriate to consider the protection of existing habitat when considering enhancement works to the pond. The dug pond may provide suitable overwintering and/or summer habitat. Without information to the contrary, this pond should be treated as significant habitat for the Blanding's turtle. Significant habitat of threatened species is protected under the Endangered Species Act and Provincial Policy Statement.

The Amphibian and Reptile Enhancement and Protection Plan considers modifications to this pond designed to enhance amphibian and reptile habitat. While the objective is laudable, proposed enhancements must be consistent with the pond's continued suitability for Blanding's turtle. Proposed enhancements consist of reshaping to reduce pond depth, reduce bank slopes and increase shoreline length. Other proposed enhancements include the addition of organic soils to the dug pond's bottom to make it more suitable for the overwintering of turtles and amphibians and placement of sand adjacent to the pond to provide turtle nesting habitat. While proposed enhancements appear valuable to turtles, reductions in pond depth must still allow retention of water between winter ice and pond bottom to allow for the presence of overwintering Blanding's turtle. We request that this be considered in the enhancement plan.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – we are satisfied that this issue does not affect Stage 1B clearing

We are satisfied that the consultant has identified that Blanding's turtle habitat will be considered in the design of improvements to the pond for overall turtle habitat. We expect that this will be addressed in the updated Amphibian and Reptile Enhancement and Protection Plan.

Impacts from Wetland Creation

The Plan proposes the creation of two breeding ponds for frogs and toads to compensate for the loss of a pond presently used for breeding by frogs and toads. While the proposed enhancements may provide breeding habitat for frogs and toads, the Plan does not address impacts to existing natural features from construction of the two breeding ponds. Impacts would stem from the removal of vegetation to allow construction access, flooding of existing vegetation and flooding of existing wildlife habitat. In addition to impacts, the Plan should consider strategies to mitigate impacts realizable through such measures as selection of a construction access route, minimization of access route width and the possible use of non-mechanized means to create an earth dam.

The Plan suggests that frogs and toads will move from the ponds slated for removal to the two proposed ponds. This seems unlikely, particularly with such relatively simple animals where most behaviour is hard-wired and animals have limited capacity for learning. We suggest that the Plan recommend the removal of frogs and toads from the ponds slated for removal and transplantation to the proposed ponds.

Stage 1A Clearing – we are satisfied that clearing can be carried out subject to implementation of the proposal to not remove amphibian pond BA-3 until after enhancement pond 1 is constructed to allow for amphibians to find the created pond. We request a 30 metre vegetated undisturbed buffer around the feature and its connection to the EPA until such time that the feature is removed as discussed above. This is now reflected in the Stage 1A tree clearing plans.

Stage 1B Clearing – we are satisfied that this issue does not affect Stage 1B clearing, subject to transplantation of amphibians to the proposed new ponds.

Impacts from the Collector Road

A Collector Road will cross the Environmental Protection Area and breeding ponds for amphibians are found both north and south of this road. Measures to mitigate impacts to amphibians such as culverts and drift fencing are provided in the Collector Road Impact Study and with lesser detail, in this study. We request that additional details concerning mitigation such as cross-sectional area of culverts and the extent of drift fencing be provided in this study.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – we are satisfied that this issue does not affect Stage 1B clearing.

In order to endorse the Collector Road Impact Study, we require further detail on the amphibian crossing structures. Although we support the type of barrier proposed, the size of the culvert should be identified at this time. At the moment it is identified as a minimum 0.5 m diameter culvert. We request that this be detailed in an updated report. However, this is not an issue with respect to the tree clearing activities.

Monitoring

Monitoring is proposed to determine usage of created wetlands by frogs and toads and to determine water depth and duration of pooled water. The report should include a detailed monitoring plan in accordance with policies 8.13.8(n) and (o) of OPA 17.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – we are satisfied that this issue does not affect Stage 1B clearing.

5.2.4 Butternut Survey and Management Plan

The following comments result from our review of the Butternut Survey and Management Plan prepared by Beacon Environmental, November 2009. The comments relate to issues associated with tree clearing in Stages 1A and 1B. Where it is identified that the comments are not related to clearing but their resolution is outstanding we also identify this.

Our peer review “observations” are summarized in the following documents:

- i. MMM Peer Review Observations, Butternut Survey and Management Plan, Big Bay Point Resort Development, December 15, 2009. (attached as Appendix 3b); and
- ii. MMM Peer Review Observations, Revised Text and Supplementary Information Requests, Butternut Survey and Management Plan, Big Bay Point Resort Development, December 16, 2009. (Appendix 3k).

In general, we are satisfied with the information provided in response to these requests.

The adequacy of the information provided by Beacon Environmental, and the merit of positions advanced by the consultants, are matters to be determined by the Ministry of Natural Resources.

Comments from the Ministry of Natural Resources Regarding Butternut Health Assessment

In a letter dated January 6, 2010 (attached as Appendix 7) the Ministry of Natural Resources commented that there appear to be no butternut trees present or under review in the Stage 1A and 1B portions of the property. Clarification from the MNR will be required in regards to the Stage 1B tree clearing as there are butternut trees in the Stage 1B clearing area, particularly on the golf course. The Ministry also notes that any new butternut trees identified during the course of tree clearing are to be reported. We are satisfied based on this letter from the Ministry that tree clearing may commence on the Stage 1A lands.

5.2.5 Tree Inventory and Assessment

The following comments result from our review of Schollen & Company Inc. Tree Inventory and Assessment. The comments relate to issues associated with tree clearing in Stages 1A and 1B.

Our peer review “observations” are summarized in the following document:

- i. Ecoplans / MMM Peer Review Observations, Tree Inventory and Assessment Plan Big Bay Point Resort Development, December 15, 2009. (attached as Appendix 3j);

Stage 1A Clearing – we are satisfied that the outstanding issues do not affect Stage 1A clearing.

Stage 1B Clearing – Stage 1B Clearing – there are several outstanding issues which will affect the approval of the Tree Inventory and Assessment Plan. Specifically, all outstanding areas of inventory must be reviewed and assessed in the field prior to any work being undertaken within the Stage 1B Clearing areas. These areas include all newly created forest edges, the collector road, trees within the golf course area beyond the limits of clearing and buffers along Big Bay Point Road.

5.2.6 Edge Management Plan

The following comments result from our review of Schollen & Company Inc. Edge Management Plan. The comments relate to issues associated with tree clearing in Stages 1A and 1B.

Our peer review “observations” are summarized in the following document:

- i. Ecoplans / MMM Peer Review Observations, Edge Management Plan Big Bay Point Resort Development, December 15, 2009. (attached as Appendix 3e).

Stage 1A Clearing – Schollen and Company Inc. submitted Plan EP-6A to specifically address the temporary buffer concerns along the southern property limit. This plan addresses the concerns relating to the buffering of this edge. Additional temporary buffers have been provided along the western property limit and Big Bay Point Road. These buffers have not been included in the Edge Management Plan, however, they have been included on the Tree Clearing Plans (refer to 5.2.8). With the additional plans noted above we are satisfied that the outstanding issues do not affect Stage 1A clearing.

Stage 1B Clearing – there are several outstanding issues which will affect the approval of the Edge Management Plan. The following items must be addressed:

Inventory

All outstanding areas of inventory must be reviewed and assessed in the field prior to any work being undertaken with the Stage 1B Clearing areas. These areas include all newly created forest edges, the collector road, trees within the golf course area beyond the limits of clearing and buffers along Big Bay Point Road.

Hazard Tree Assessment

Hazard tree assessment along all newly created edges must be completed. It is noted that during the December 17, 2009 meeting there was discussions relating to the process of assessing hazard trees. Schollen noted that in some cases it may be necessary to remove trees along the edges prior to completing a detailed assessment, due to the woodlot density on the site. We understand the difficulties in assessing new edges and hazard trees within a woodlot setting. Therefore, in areas where assessments are not possible prior to tree clearing, please provide the methodology for the hazard tree assessment post-cutting. The use of temporary buffers should be considered to minimize impacts to newly created edges and to also facilitate the hazard tree assessments in challenging areas. Wherever possible the hazard tree assessments should be completed prior to cutting new forest edges.

Pre-Stressing Edges

The western edge of the EPA has had a 5.0 m temporary buffer along the newly created forest edge. This small buffer will provide a line of defense from the new stress that interior trees typically do not encounter (i.e., wind and sun). The intent of pre-stressing an edge is to use the buffer trees to mitigate the stresses and allow for the ultimate clearing limit to be maintained with limited impacts to these trees. Further refinement is needed to the pre-stressing methodology for this site. This methodology should include the anticipated timing for tree thinning and final removal of the temporary buffer.

Collector Road

The newly created edges of the collector road have not been included within this plan. Please provide tree assessments, hazard tree assessments and edge mitigation plans for the length of the collector road.

Golf Course Areas

There are holes that have been proposed within woodlot areas as well as several holes that are directly adjacent to woodlot. Please provide specific golf course management and mitigation plans for these impacts to woodlot areas.

5.2.7 Reforestation / Compensation Plan

5.2.7.1 Reforestation Compensation Calculation

The **Reforestation/Compensation Plan** prepared by Schollen & Company INC., November 20, 2009, outlines the methodology utilized in assessing the compensation measures for tree removal necessitated by the development of the Big Bay Point Resort.

The following policies from Official Plan Amendment No. 17 outline the expectations relating to compensation for tree removal.

8.7.1(h)

“Every hectare of woodland removed from the Secondary Plan Area shall be replaced with a minimum of two hectares of forested and reforested land, to the satisfaction of the Town, County and Conservation Authority.”

8.7.1(i)

“The Planting or Reforestation/Compensation Plan shall include requirements for planting trees within the Secondary Plan Area to expand existing wooded areas or create new forested areas, as well as approaches for stewardship of those lands. The Plan shall also include requirements for the reforestation of lands external to the Secondary Plan Area, where necessary to achieve adequate compensation for woodland removed and for the conveyance of those lands to a public authority for nominal consideration. Upon conveyance of lands external to the Secondary Plan Area to a public authority, the said lands shall be redesignated if necessary by the Town to a suitable designation to ensure the long term protection of those lands.”

Historical Context

The Big Bay Point Resort has had three significant layout configurations since the first design charrette was held in spring 2002. Each of these layouts has proposed significant tree clearing to accommodate the proposed development on the site. The original development concept proposed the removal of 75 ha of existing forest, the revised concept proposed the removal of 52 ha, and the current OMB approved concept proposes 45.87 ha of tree removal. Tree reforestation/compensation has long been contemplated as a mitigative measure to address the loss of on-site forest. The **Environmental Impact Statement Addendum (Natural Heritage)** prepared by Gartner Lee in October 2004, describes a methodology for compensating trees removed from the site. The Addendum, using the revised Big Bay Point Resort concept from 2004, uses a methodology for compensating the “Net Loss of Forest Cover” as follows:

Table 1. Forest Cover (Original Plan vs. Revised 2004 Plan)

	Original Plan (ha)	Revised 2004 Plan (ha)
Existing Forest (pre-development) ^a	131.7	131.7
Forest to be removed	74.8	52.0
Forest remaining (post development)	56.9	79.7
Area to be replanted ^b (post development)	17.1	23.8
Remaining forest and replanting area combined	74.0	103.5
Net Loss of Forest Cover	57.7 ha	28.2 ha

Note: a. Forest = those lands described as: forest (FO), swamp (SW) and cultural plantation (CUP) following southern Ontario Ecological Land Classification definitions.

b. Lands to be replanted include those which are currently: agricultural, cultural meadow (CUM), cultural thicket (CUT) or developed (e.g., access road). A provisional 10 m non-treed landscape allowance has been included in these calculations adjacent to most development areas on the plan (i.e., to roads and rear lot lines).

source: Gartner Lee, October 2004, p.9

The above methodology uses “Net Loss of Forest Cover” as the basis for determining compensation. This “Net Loss” is calculated by subtracting the “Area to be replanted” from the “Forest to be removed.”

The Addendum then outlines the “Off-site Compensation” (p. 17) measures, which were to be achieved through the following two mechanisms:

1. Acquisition and donation as a public resource of an existing high quality forest.
2. Acquisition and donation as a public resource of lands that can be allowed to regenerate (with planting assistance) to support and enhance existing forest functions.

The first mechanism was to be achieved through the purchase of a 20 ha block of “high quality” forested land immediately south of 13th Line. Known as the Smurthwaite property, it was described as being “completely forested” and as being similar in composition to the forest on the Big Bay Point Resort lands.

The second mechanism was to be achieved through the purchase of an additional block of land which was to be used as “direct compensation for forest cover removed.” This land was to have the following characteristics:

1. At least 36.5 ha in area;
2. Located in the Town of Innisfil;
3. Presently mostly non-forest;
4. Located adjacent or within existing forested areas;
5. Contributes to other wildlife functions such as connectivity; and,
6. Contributes to existing natural heritage systems.

At the time the Addendum report was prepared, it was noted that the purchase of such a property was “under negotiation.”

The compensation as outlined above, proposed the purchase of 56.5 ha of off-site lands by the proponent. This represents a ratio of 2 hectares of “Off-site Compensation” (56.5 ha total) for every one hectare of “Net Loss of Forest Cover” (28.2 ha total).

Confirmation of Compensation Calculation

Marshall Macklin Monaghan (now MMM Group Limited) prepared **Report #2 to Council**, dated November 26, 2004, in order to provide an assessment of Kimvar’s progress in addressing the required conditions of development approval outlined in Innisfil Official Plan Amendment 16 (OPA 16). OPA 16 was approved by Innisfil Town Council on June 30, 2004, and contained nine conditions of development approval that had to be fulfilled within two years of the approval date, or face the possible revocation of the land use approval.

Report #2 first outlined a number of revisions that had been made to the original Big Bay Point Resort concept plan, including a proposal to “*provide compensation for the loss of forest on the site through a program of on-site and off-site forestation...The compensation approach has been prepared in consultation with the Lake Simcoe Region Conservation Authority and is based on the principal of two hectares of planted forest for every one hectare of forest removed on the site*” (p. 5). This reforestation measure was proposed as a means of satisfying OPA 16 Condition 4 which required, “confirmation through an Environmental Impact Study completed to the satisfaction of the Town that the site can be developed without negative impacts on the key functions of the significant woodland feature.”

Report #2 details the measures Kimvar proposed to address Condition 4, the most significant being the reforestation compensation program. Consistent with the *Environmental Impact Statement Addendum (Natural Heritage)*, the Report describes Kimvar’s commitment to “acquire a forested parcel of land in the vicinity of the site and to convey this land to a public authority” representing the Smurthwaite property, and a plan to “acquire, plant and convey to a public authority a minimum of 36.5 hectares (90 acres) of land off-site” (p. 12). The Report indicates that this reforestation compensation program was based on discussions between the Applicant and LSRCA, and a “resolution of the Authority that compensation for forest removal be provided at a ratio of two hectares of off-site reforestation for every one hectare of forest removed.” On January 11, 2010, the LSRCA agreed with the net calculation for tree compensation as found in the *Beacon Environmental Impact Statement Addendum* subject to the following:

“That the area to be reforested on the golf course lands will result in forest blocks or connectivity (as opposed to planting trees in between the holes that provide little if any forest function).”

Current Reforestation/Compensation Plan

As an integral element of Kimvar's proposed tree cutting program, Schollen & Company INC. has prepared a *Reforestation/Compensation Plan*, dated November 20, 2009. The preparation and contents of this report are required by OPA 17 policy 8.7.1(i). Page 4 of the Plan document details the reforestation calculation as follows:

Compensation Area Calculation

A	Area of Trees to be Removed (AutoCAD)	45.87 ha
B	Area to be reforested within Golf Course (AutoCAD)	25.42 ha
C	Area of reforestation - Edge Management Plans (Area Calculation)	3.00 ha
D	Approximate area of forested lands acquired by Kimvar for compensation purposes (Smurthwaite Lands)	20.00 ha
E	Net Compensation area	A-B-C-D = -2.55 ha

Based on this calculation the report concludes that no further off-site compensation is required. However, this conclusion appears to be based a 1:1 compensation ratio. As required by policy of 8.7.1(h) of OPA 17 "every hectare of woodland removed from the Secondary Plan Area shall be replaced with a minimum of two hectares of forested and reforested land." As outlined in the *Environmental Impact Addendum* and as confirmed in *Report #2 to Council*, the "Net Loss of Forest Cover" measure is the basis for the calculation of this ratio. Based on the required 2:1 ratio, the reforestation calculation in the *Reforestation/Compensation Plan* (p. 4) should be revised as follows:

A	Area of Trees to be Removed (AutoCAD)	45.87 ha
B	Area to be reforested within Golf Course (AutoCAD)	25.42 ha
C	Area of reforestation - Edge Management Plans (Area Calculation)	3.00 ha
D	<i>Net Loss of Forest Cover</i>	17.45 ha
E	<i>Reforestation Required by OPA 17 = D x 2</i>	34.90 ha
F	Approximate area of forested lands acquired by Kimvar for compensation purposes (Smurthwaite Lands)	20.00 ha
G	Net Compensation area	E-F = +14.90 ha

Therefore, to comply with section 8.7.1(h) of OPA 17, Kimvar needs to obtain approximately 14.9 ha of additional Off-site Compensation Area. To be consistent with the methodology outlined in the *Environmental Impact Addendum* (p. 18), this 14.9 ha off-site parcel should be consistent with the following characteristics:

1. At least 14.9 ha in area;
2. Located in the Town of Innisfil;
3. Presently mostly non-forest;
4. Located adjacent or within existing forested areas;
5. Contributes to other wildlife functions such as connectivity; and,
6. Contributes to existing natural heritage systems.

However, the amount of land required as off-site compensation area needs to be confirmed through review and endorsement of a revised Planting or Reforestation/Compensation Plan. We recommend that Kimvar's commitment to secure this additional land be secured through agreement with the Town.

5.2.7.2 Comments

The following comments result from our review of the Schollen & Company Inc. Reforestation / Compensation Plan. The comments relate to issues associated with tree clearing in Stages 1A and 1B. Where it is identified that the comments are not related to clearing but their resolution is outstanding we also identify this.

Stage 1A Clearing – we are satisfied that this issue does not affect Stage 1A clearing.

Stage 1B Clearing – there are several outstanding issues which will affect the approval of the Reforestation/Compensation Plan. The following items must be addressed:

Reforestation

There has been no recommendation for the planting density or species provided within this plan. The density and species should be consistent with the existing woodlot on the development site. Plans should be provided that clearly show the planting locations and densities for all reforestation areas.

The methodology for the planting (i.e., phasing, mix aged planting and species densities) and long term maintenance should also be provided as part of this plan. Long term maintenance should include watering, replacement plantings as well as other conventional woodlot management recommendations.

The majority of the onsite reforestation has been proposed within the golf course. Please provide details for the golf course management plan for these areas and design rationale for the planting around the holes. Ideally, the reforestation areas will be out of bounds and golfer access will be restricted and monitored.

Compensation Lands

There has been no detailed information provided regarding the condition of the woodlot areas outside of the development area. There should be detailed assessments of the woodlot areas that include their condition, species mix as well as any additional management requirements for the long term success of a healthy woodlot. The legal land description and total land areas for all of the off property compensation lands should be provided.

5.2.8 Tree Clearing Monitoring Program and Plans

The following comments result from our review of Schollen & Company Inc. Tree Clearing Plans and Environmental Monitoring Program (Stage 1A only). The comments relate to issues associated with tree clearing in Stages 1A and 1B. Where it is identified that the comments are not related to clearing but their resolution is outstanding we also identify this.

Stage 1A Tree Clearing

We are satisfied that the outstanding issues do not reflect Stage 1A tree clearing.

Future Stages of Work

- i) Specific Comments regarding Plans TC-0 through TC-8
 - a. TC-0: No Comment
 - b. TC-1:
 - i. Tree Protection Fencing must be provided for all existing vegetation. Tree Protection Fencing must be installed prior to any work being undertaken within the Golf Course Area.
 - c. TC-2:
 - i. Tree Protection Fencing must be provided for all existing vegetation. Tree Protection Fencing must be installed prior to any work being undertaken within the Golf Course Area.
 - ii. All tree removals must be approved as part of the future tree clearing work prior to commencing clearing work on site.
 - d. TC-3:
 - i. Further discussion with the Town is required to determine the staging and timing of the removals of the trees within Stage 1B (Area 1B).
 - ii. Additional tree inventory along the Big Bay Point Road buffer is required to address previous comments on the Tree Inventory Plan. All additional inventory information must be provided as part of the revised Tree Inventory Plan.
 - e. TC-4A:
 - i. Further discussion with the Town is required to determine the staging and timing of the removals of the trees within Stage 1B (Area 1B).
 - f. TC-4B: All work within Stage 1A Clearing.
 - g. TC-5
 - i. There is grading shown within the existing trees to the west of the plan. All trees that will be impacted through the development of the golf course must be included within the tree inventory. These trees are to be protected until approved for removal.
 - ii. Butternut B-16 is to be retained as per the Butternut Survey and Management Plan, prepared by Beacon Environmental (Beacon). However, the grading shown on the plan is shown over the stem of the tree. Please confirm the limits of work and extents of impacts with Beacon's report.
 - iii. All tree removals must be approved as part of the future tree clearing work prior to commencing clearing work on site.
 - h. TC-6:
 - i. All issues relating to Butternut must be resolved with the OMNR prior to commencing clearing work on site.
 - i. TC-7: All work within Stage 1A Clearing.
 - j. TC-8:
 - a. Please provide details on how the buffer will be used to pre-stress the woodlot edge along the EPA.

6. PUBLIC/AGENCY COMMUNICATION PLAN

As noted in Section 3.2(vii), a public communication plan must be implemented to the Town's satisfaction to inform interested parties of the nature and timing of site works, in advance of commencement of those works and at intervals through the construction period. Kimvar has prepared a Stage 1A Public/Agency Communication Plan (attached as Appendix 8A). The Stage 1A Communication Plan includes the following elements:

- Provision of an information bulletin regarding the proposed tree clearing to:
 - All Big Bay Point residents
 - Innisfil District Association
 - Linda Street Residents Association
 - Residents of Innisfil Association
 - Sandy Cove Acres Homeowners Association
 - Innisfil Chamber of Commerce
 - County of Simcoe Council members and relevant staff
 - Local, Provincial and Federal members of the legislature and parliament
 - Relevant Provincial and Federal bureaucrats
 - Lake Simcoe Region Conservation Authority
- Post an update to the Town of Innisfil's Big Bay Point Resort website page;
- Post large notice signs adjacent to the resort along Big Bay Point Road and 13th Line;
- Provide public notices in Innisfil media (i.e., newspaper); and
- Post the information bulletin in public buildings to the satisfaction of the Town.

In addition, this Communication Plan will be expanded to address all stages of construction, and will require Town approval prior to initiating any future stages of site activity. A draft information bulletin, which is to be circulated to all residents in the Big Bay Point area, is also attached as Appendix 8B.

7. CONCLUSIONS AND RECOMMENDATIONS

Kimvar Enterprises Inc. has requested permission to commence tree clearing on the Big Bay Point Resort lands as the first stage of site preparation works. The proposed tree clearing works are to be staged, with Stage 1A being generally lands required to accommodate excavation of the marina basin and Stage 1B being the remaining areas to be cleared, including the route of the public road, three golf course fairways and trees in closer proximity to Big Bay Point Road and existing residences to the east.

Based on our peer review of this request, including a review of the relevant planning documents and the supporting material submitted by Kimvar, we recommend that tree clearing be permitted within the Stage 1A area in accordance with the following plans and documents endorsed by the peer review team:

- Tree Clearing Construction Methodology, prepared by SCS Consulting Group Ltd. (Jan. 12, 2010)
- Tree Clearing Plans TC-0 through TC-8, prepared by Schollen & Company Inc. (Jan. 6, 2010)

- Tree Removal and Control Plan 1 – Stage 1A and 1B 701A, prepared by SCS Consulting Group Ltd. (Dec. 2009 stamped Jan. 13, 2010)
- Tree Removal and Control Plan 2 – Stage 1A and 1B 702A, prepared by SCS Consulting Group Ltd. (Dec. 2009 stamped Jan. 13, 2010)
- Tree Inventory and Assessment Report – Appendix A, prepared by Schollen & Company Inc (Jan. 6, 2010)
- Tree Inventory and Assessment Plans TA7 and TA-4B prepared by Schollen & Company Inc (Jan. 6, 2010)
- Temporary Edge Buffering Plan EP-6A prepared by Schollen & Company Inc (Aug. 2009, stamped Jan. 7, 2010)
- Erosion and Sediment Control Plan Details, prepared by SCS Consulting Group Ltd. (Jan. 2010)
- Monitoring strategies:
 - Ecological Monitoring Program Matrix, prepared by Beacon Environmental (Dec. 21, 2009, revised Jan. 6, 2010);
 - Monitoring Program Matrix Tree Removal Operations Stage 1A and 1B, prepared by SCS Consulting Group Ltd (Jan. 2010); and
 - Tree Clearing Monitoring Program Matrix – Tree Clearing Stage 1A, prepared by Schollen & Company Inc. (Jan. 6, 2010).

We recommend the following conditions associated with tree clearing in the Stage 1A area:

- i. that Kimvar enter into a pre-grading and preliminary development agreement with the Town to require Stage 1A tree clearing in accordance with the approved plans and studies and to provide for necessary securities to protect the environment, and that the agreement be registered on the title of the lands;
- ii. that the County of Simcoe acknowledge in writing that the requirements of the County of Simcoe Forestry Conservation By-Law # 5635 are either satisfied or not applicable;
- iii. that Kimvar obtain a permit from the LSRCA under Ontario Regulation 179/06 prior to initiating Stage 1A tree clearing; and
- iv. that the Communication Plan (attached as Appendix 8A) be implemented in order to provide notice and information to area residents, the general public and public agencies regarding the commencement of tree clearing works.

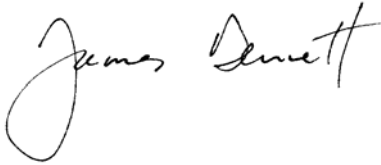
We require further information in order to assess the appropriate extent, timing and conditions of tree clearing within the Stage 1B area. In addition, input from external agencies is recommended prior to tree clearing in the Stage 1B area. Items to be addressed prior to the approval of the Stage 1B area include:

- i. that the peer review comments in Section 5 of this report be adequately addressed;
- ii. that the following revised plans and reports be submitted for approval by the peer review team:
 - a. Landscape Plans
 - b. Butternut Survey and Management Plan
 - c. Construction Management Plan
 - d. Tree Preservation Plan

- e. Collector Road Impact Study
- f. Planting or Reforestation/Compensation Plan
- g. Erosion and Sedimentation Control Master Plan
- h. Edge Management Plan
- i. Amphibian and Reptile Protection and Enhancement Plan;
- iii. that the Collector Road Impact Study also be reviewed and approved by the Ministry of Natural Resources, LSRCA and the County of Simcoe;
- iv. that the Butternut Survey and Management Plan also be reviewed and approved by the Ministry of Natural Resources;
- v. that a public/agency communication plan related to all construction stages be prepared to the satisfaction of the Town;
- vi. that the need for an effective buffer from major site alteration activity be identified and maintained;
- vii. that any negative effects indentified through monitoring of Stage 1A tree removal be addressed to the satisfaction of the Town; and
- viii. that the Pre-grading and Preliminary Development Agreement be updated to incorporate the approved Stage 1B tree clearing plans and/or reports.

Report Prepared By:

MMM GROUP LIMITED



Jamie Bennett, MCIP, RPP
Senior Planning Manager
Associate Partner

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