

Stage 1B/1B-2 Tree Clearing and Grubbing & Construction of Amphibian Enhancement Area 1

Construction Methodology:

The following is a summary of the steps that will be followed to complete the clearing and grubbing of the Stage 1B/1B-2 areas and the construction of an earth berm and pond enhancements to assist in the creation of Amphibian Enhancement Area #1 within the Big Bay Point Resort Development (BBPRD) site:

- ➔ The owner will obtain the necessary approvals to complete the clearing and grubbing works and construction of Enhancement Area #1 from the Town of Innisfil.
- ➔ The contractor will maintain any tree preservation and construction fence to remain in the existing locations as installed as a part of the Tree Removal Control Plans for Stage 1A. The trees to be preserved are as denoted on the Tree Inventory and Clearing Plans (Drawings TC-0 thru TC-8).
- ➔ Tree removal throughout holes 16-18 ('Treed Area' on Drawing 702) will take place in two stages. The first will be the removal of the trees within the tree preservation fencing as delineated on Tree Inventory and Clearing Plan Drawing TC-5 and Drawing 702. The second stage will consist of Schollen & Company Inc., Beacon Environmental and Carrick Design revisiting the holes once the first stage removals are completed and before final earthworks to fine tune the treed edges (remove selected trees and/or branches as necessary) to conform to the overall golf course design.
- ➔ Edge management plantings will be implemented immediately after the grading of the adjacent fairway areas has been completed.
- ➔ Three construction site access roads (#1, #2 & #3) will be maintained from Big Bay Point Road at the locations shown on Drawings 701 and 702 and as per the detail provided on Drawing 705.
- ➔ The Stage 1B/1B-2 sediment control works will be installed prior to any tree clearing or grubbing activities. These works include but are not limited to: associated temporary swales, additional sediment control fencing and rock check dams as shown on Drawing 701.
- ➔ The tree preservation and sediment control works to be installed prior to the clearing and grubbing of the existing treed areas on the proposed golf course lands include but are not limited to: additional tree preservation and sediment control fencing as shown on Drawing 702.
- ➔ The berm construction for Amphibian Enhancement Area #1 will be constructed once the final construction drawings have received the necessary approvals from the Town of Innisfil.
- ➔ The treed Buffer edges (existing trees to remain) will be maintained along the perimeter of the BBPRD as designated on the Tree Inventory and Clearing Plans.
- ➔ The Stage 1A/1B earthworks program remains scheduled for Spring 2011. These works will be the subject of further approvals anticipated for the Fall of 2010.

Timing:

- ➔ Stage 1B/1B2 tree clearing and grubbing is proposed to start in October 2010 (following the 2010 nesting season in compliance with the Migratory Birds Act) and will take approximately 12 weeks to complete.
- ➔ Amphibian Enhancement Area #1 will be constructed in Fall 2010 and will take approximately 4 weeks to complete. Construction of Amphibian Enhancement Area #1 must be complete prior to the removal of trees from the southern Stage 1B area as shown on Drawing 701A.



- ➔ The Stages 1A, 1B/1B2 and all golf course areas must be prepared to facilitate the bulk earthworks operation in 2011 in accordance with the project schedule. Extensive cuts are proposed and due to the nature of the soil and site conditions several excavation areas are required to be underway at all times to facilitate mixing of the available materials and select use of excavated materials.

Mitigation Strategies:

- ➔ No construction activity or machinery will be permitted beyond the tree preservation fence, erosion and sediment control fence or limits of the development.
- ➔ All trees to be removed in the vicinity of the forest edge will be felled into the fairway in order to minimize physical damage to limbs and trunks of trees that are to be retained.
- ➔ Trees within 5 metres of the limit of clearing will not be felled using heavy machinery in order to minimize soil compaction and potential root damage to trees that are to be retained. Trees in the vicinity of the edge of the forest will be felled utilizing standard chainsaws.
- ➔ Limbs/crowns of trees that are proposed to be retained along the forest edge that extend beyond the limit of the tree preservation fence are to remain intact in order to afford shade and protection for trunks below.
- ➔ The contractor will not refuel any equipment within 100 metres of the marina basin, Lake Simcoe, the existing drainage swales or in close vicinity to existing trees to be preserved or sensitive environmental features.
- ➔ Appropriate ESC measures will be implemented in accordance with the approved plans and the monitoring plans as proposed by SCS Consulting Group and Hutchinson Environmental Sciences Ltd. These measures shall include, but not necessarily be limited to: sediment control ponds, rock check dams, sedimentation control and tree preservation fencing as indicated on drawings, mulching of exposed soils adjacent sensitive areas during the tree removal operations and installation of geotextile silt curtains within the marina basin as noted in the Hutchinson Environmental report.
- ➔ The contractor is responsible for maintaining all construction fences, tree preservation fence, Erosion and sedimentation control measures etc. in working conditions at all times. The contractor and SCS Consulting Group along with Hutchinson Environmental Sciences Ltd. and representatives of the Town of Innisfil shall routinely inspect the Erosion and Sedimentation Control Measures a minimum of once a week and prior to and/or after each significant rainfall event or significant snow melt event to ensure that all ESC measures are in proper working conditions. Any damages will be repaired within 24 hours or sooner as warranted.
- ➔ All works shall be carried out and monitored in accordance with the Monitoring Matrix developed for each aspect of the project (as previously included in the Stage 1A tree clearing submission).
- ➔ All works associated with the Amphibian Enhancement Area #1 berm shall be monitored by Beacon Environmental to ensure minimal disturbance of existing vegetation.
- ➔ No works shall be undertaken within the existing marina basin except for purposes of installing and maintaining ESC measures or temporary sediment control pond outfalls.
- ➔ All construction vehicles must enter and exit the site only from the approved access routes as per the locations shown on the Erosion and Sediment Control Drawings 701 and 702 and the detail shown on Erosion and Sediment Control Drawing 705.
- ➔ The contractor is responsible to implement dust and mud tracking/control measures and construction practice guidelines as approved by the Town and LSRCA. Dust and mud tracking shall also be monitored by the consultants to ensure compliance with approved protocol and in accordance with the accepted monitoring program matrix.

