

Installation of Cofferdam Construction Methodology

Construction Methodology:

The following is a summary of the steps that will be followed to complete the installation of the cofferdam within the existing Big Bay Point Marina Basin:

- The owner will obtain the necessary approvals to complete these works from the Town of Innisfil and LSRCA.
- 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 and 1B and/or Stage 1 Earthworks outside of the existing marina. The trees to be preserved are denoted on the Tree Inventory and Clearing Plans (Drawings TC-0 thru TC-8).
- The contractor will initially install Turbidity Curtains as per Shoreplan Engineering Ltd. Drawing C-01. [The Turbidity Curtains will remain in place until dewatering occurs in the marina basin.](#)
- Contractor to remove any existing in water or shoreline structures that are required to be removed to facilitate construction of the cofferdam as per Shoreplan Engineering Ltd. Drawing C-01.
- The contractor is required to have Shoreplan Engineering Ltd. inspect the quarry run, boulders and geotextile material prior to installation.
- The installation of the cofferdam must be constructed from the north shoreline with no construction machinery to access the cofferdam from the southern shoreline as shown on Shoreplan Engineering Ltd. Drawing C-01.
- The cofferdam will proceed in two stages. The first stage will include the installation of the quarry run and boulders along with the required geotextile material. The second stage will include the installation of the steel sheet piles prior to the anticipated dewatering of the existing marina basin.
- Three construction site access roads (#1, #2 & #3) will be maintained from Big Bay Point Road at the locations shown on Drawings 702 and 703 and as per the detail provided on Drawing 705.
- The treed Buffer edges (existing trees to remain) will be maintained along the perimeter of the Big Bay Point Resort Development as designated on the Tree Inventory and Clearing Plans.

Timing:

- The first stage (initially installing the turbidity curtains and then installing the quarry run and boulder material and the required geotextile) will occur prior to the March 15th restricted activity timing window for the protection of spawning fish and developing eggs and fry for in water works as enforced by Fisheries and Oceans Canada. .
- The second stage (installing the steel sheet piles as per Drawing C-01 by Shoreplan Engineering Ltd.) will occur prior to the anticipated dewatering of the marina in summer 2011.



Mitigation Strategies:

- No construction activity or machinery will be permitted beyond the tree preservation fence, along the existing southern marina shoreline or limits of the development.
- The contractor will not refuel any equipment within 100 metres of the marina basin, Lake Simcoe, 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. (HESL) These measures shall include, but not necessarily be limited to: installation of turbidity curtains in the marina basin on both the marina basin and Lake Simcoe sides of the coffer dam during installation of the coffer dam as directed by Shoreplan and HESL.
- The contractor is responsible for maintaining all construction fences, tree preservation fences, erosion and sedimentation control measures etc. in working conditions at all times. The contractor and SCS Consulting Group, along with HESL and representatives of the Town of Innisfil, shall routinely inspect the Erosion and Sedimentation Control (ESC) 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 condition. Any damages will be repaired, if possible, within 48 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 (to be reviewed separately).
- 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, 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.

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