

## Plan Review and Permitting Services Memo

**To:** Matt Wilkinson  
**From:** Neil MacFarlane  
**CC:** File  
**Date:** February 17, 2022  
**Subject:** ORCA Engineering Review – 4034 Centre Road, Township of Douro-Dummer  
**Roll #:** 1522 010 004 08100  
**File:** PPLD-2219 & PPLD-2220

The Otonabee Region Conservation Authority (Otonabee Conservation) technical staff has been given the following items to review with respect to the proposed development project:

- 5883-02B Site Plan – 4034 Centre Road (M.J. Davenport & Associates Ltd., April 2021)
- Scoped Environmental Impact Study (sEIS) – Proposed Single Residential Development 4034 Centre Road (Oakridge Environmental Ltd., October 2021)
- Planning Report for ZBA & Site Plan Control – 4034 Centre Road (Ron Davidson land Use Planning Consultant Inc., December 13, 2021)
- Planting Plan (By Others, Email February 9, 2022)

ORCA technical staff has reviewed the above noted documents and has the following comments.

1. The site plan identifies a drainage swale along the eastern and southern property limit to capture and convey site drainage and external surface runoff.
  - a) The proposed 0.15m depth grass swale is not deep enough. Over time with sediment accumulation and grass growth, the proposed swale with minimal depth of 0.15m will eventually fill in and disappear. Please change the typical swale section to provide a swale with proper dimensions.
2. The Site Plan delineates fill and grading limits extending into this property along the south-west corner. The point grades delineated on the Site Plan show existing grades and two (2) proposed swale elevations
  - a) The proposed grades and note for swale slope indicate that removal of material is required to construct the swale.
    - i. How is the site being regraded? Provide the existing and proposed grades.
    - ii. Has the issue of regrading been discussed with the neighbour?
    - iii. Does the regrading require a retaining wall?
    - iv. Please provide a cross-section on the Site Plan for this area.

3. The Site Plan identifies that the main building is being raised approximately 1.0m above existing grade. However, the majority of grade point elevations delineate existing grade. Please provide the following information:
  - The proposed location of the driveway,
  - The proposed grades for the driveway and extent of fill placement,
  - The extent of fill placement for the septic bed,
  - The proposed grades for the pool & deck and extent of fill placement,
  - The proposed grades for the two accessory building and extent of fill placement.
  - Are the extent of fill placement meeting the recommended setbacks for no disturbance as outlined in the EIS?
4. What is the Township of Douro-Dummer minimum distance of no disturbance along the property boundary? Please apply this setback to all proposed works on site including filling extents and swale placement.
5. The Planting Plan
  - a) The plan suggests the planting of cedars in the vicinity of the proposed excavation of existing slope and construction of the overland drainage swale.
    - i. Using the cross-section being prepared by the consulting engineer for the post development grading of this area, please delineate the location of the trees.
  - b) The proposed plantings should not interfere with the long-term operation of the proposed grass swale.
6. With the site being mostly filled, providing positive drainage to swales along the property limits, we require erosion and sediment control around the entire perimeter of the site until revegetation is complete. Please provide an erosion and sediment control plan.
7. When drawings are updated, the revised date and description are placed within the revision block on the drawing. This assures all parties are referencing the most current design.

The above comments are based on the latest information received by this office, should additional information become apparent or changes to the plans occur in the future, ORCA engineering staff will review said changes and may provide additional comments. If you have any questions related to this correspondence, please contact our office.

Sincerely,



Neil MacFarlane  
Engineering Technologist