

895-905 SARNIA ROAD SCOPED EIS

Dated: November 11, 2014 by Stantec

Received by EEPAC after its November 2014 meeting
Reviewers: K. Delaney, S. Levin, Dr. Maddeford
December 2014

The site consists of a two small wetlands and part of a woodland that is not shown on Schedule B. The wooded area in the northwest of the subject site is obscured by a street map on the air photo (Figure 1 of the EIS). This wooded section is Block 118 and shown on the June 14, 2014 site drawing by Whitney Engineering as a Park Block. The proposed subdivision calls for a 15 m buffer (which appears to include a 4 m wide paved pathway in one of the drawings) between the western property line and the lot lines of the proposed homes. There is also a compensating constructed wetland proposed to be built adjacent to Block 118 to compensate for the loss of the south pond which is identified in the EIS as Significant Wildlife Habitat.

COMMENTS ON THE EIS COMPLETENESS

EEPAC believes the EIS is incomplete. There is no information on stormwater management and its impact on the Significant Woodland to the west of the subject site.

The data collected for the EIS seem to have not been consistent with the Issues Summary Checklist of April 2014 which was included in the consultant's submission. No data appears to have been collected from either the wooded section in the northwest corner of the site nor from the field. The only identified ELCs on Figure 1 are for the two ponds. If that was the intent, it is not clear in the Issue Summary Checklist. No data on birds other than incidental sightings within these specific ELCs appears to have been collected. No information at all is included for butterflies or odonata. None of the quality control sections of the ELC sheets were signed off. The Wildlife Assessment Forms were only completed for the wetlands and the adjacent CUT1.

NATURAL FEATURES AND FUNCTIONS

Roughly 0.63 ha of northwest corner of the subject site is wooded and is part of the larger patch 01004 which forms the western boundary of the subject site. The larger part of the patch outside of the subject property is designated as a Significant Woodland.

The remnant of Patch 01005 (not 01004 as noted on page 4.2 of the EIS) and two ponds (one dug) are the main subject of the EIS. The properties owned by the proponent to the south of the train tracks were not studied. Neither was the northwest wooded section.

Due to the confusion of the patch numbers (p. 4.2 and 4.3 including section 4.5.2), it is unclear if the reference to species records from the Hyde Park Community Plan (now over 10 years old) which appears on page 4.3 in the third bullet under 'South Woodland Feature' is for the subject site or for the Significant Woodland.

EEPAC believes that the best protection for the adjacent Significant Woodland is in implementing the following recommendations:

Recommendation 1: All lots adjacent to the Significant Woodland be fenced with no gates as a condition of the subdivision and/or development agreement.

Recommendation 2: Block 118 must not be for active recreation.

TRAIL PLANNING

The latest EIS includes a concept drawing of a 4 m wide (multi-use pathway?) in the buffer to the Significant Woodland. EEPAC has previously recommended that the buffer be re-vegetated with native hawthorns and other shrubs to eliminate the need for mowing and potential complaints about weeds from adjacent land owners.

EEPAC remains concerned that there are no Trail Standards for Woodlands and it is unclear from the EIS what the proposed trail system looks like and how it will protect and conserve the ecological features and functions of the Significant Woodland and the proposed constructed compensating wetland.

Perhaps the intent is to test the actual effectiveness of a paved path in reducing encroachment that was seen in one (and only one) of the newer subdivisions bordering Warbler Woods in the Beacon EIS effectiveness study. If this is the intent, then a true experiment should be established with a control area and a monitoring plan to determine effectiveness of this strategy.

Recommendation 3:

- a. The buffer be vegetated such time as standards for managed trails in Significant Woodlands is implemented.
- b. If the intent of the 4 m wide pathway is to limit encroachment, a monitoring plan is required. EEPAC would be pleased to review such a plan for the area if given the opportunity.

STORMWATER MANAGEMENT

We are unclear as to the plans for stormwater infrastructure. It is not clearly addressed in the EIS. There is no information in the EIS nor are any of the SWM facilities mentioned in the EIS shown on any figures or maps in the report.

It appears that the land from the south end of the south pond and 2/3rds of the eastern part of this portion drains due south to the CPR line mainly by a dry depression. Part of the southwestern end of the field also seems to do the same. The mid western part may go to the woodlot on the west. There is no information on flows to the Significant Woodland nor how the water balance and hydroperiod will be maintained.

EEPAC believes that not only the water balance to the Significant Woodland to the west must be maintained, but also the hydroperiod. The hydroperiod is the seasonal pattern of water level fluctuation within a natural feature. Hydroperiod refers to the seasonal pattern of both surface and groundwater fluctuations. Maintaining hydrological regimes and hydroperiods means that any anthropogenic changes to volume, duration, frequency, timing and spatial distribution of water do not cause negative impact to natural features or their ecological functions.

The Toronto and Region and Credit Valley Conservation Authorities have developed guidelines for addressing the hydrological impacts of urban development and groundwater extraction proposals on natural features, including wetlands, watercourses and woodlands. The current draft document is found at:

<http://www.sustainabletechnologies.ca/wp/home/urban-runoff-green-infrastructure/preserving-and-restoring-natural-features/water-balance-for-the-protection-of-natural-features/water-balance-guidelines-for-the-protection-of-natural-features/>

Our interest is protection of natural features and functions. As a result, we recommend the following:

Recommendation 4: No infrastructure should be located in the Significant Woodland.

Recommendation 5: The water balance including hydro-period to the Significant Woodland must be maintained. A holdback for two years should be retained by the city to compensate for any negative impacts to either the features or functions of the Significant Woodland.

Recommendation 6: The EIS be considered incomplete until the SWM plan details are provided.

HABITAT FOR SPECIES INCLUDING THOSE OF CONSERVATION CONCERN

Other than the amphibian survey which follows the Marsh Monitoring protocol to the letter (including starting each survey right at 30 mins after sundown), it appears that the consultant's work is incomplete.

We believe that page 4.6 of the EIS ignores the wooded corner of the subject site and the Significant Woodland adjacent to the subject site. There is no ELC sheet for the vegetated community in the northwest corner of the subject site. This is a glaring omission. Although EEPAC agrees that "Suitable habitat for Eastern Wood Pewee and Wood Thrush is not available in the wetland features of the subject lands," (p. 4.6) this trivializes the woodland habitat where these species have been observed. Eastern Wood Peewee and Wood Thrush are of Special Concern and PIF species. As well, there is also no discussion of possible Eastern Meadowlark, Bobolink or Savannah Sparrow habitat in the open field.

The consultants identified foraging Barn Swallows (page 4.6) despite the lack of any formal inventory of bird species for the EIS. Foraging Barn Swallows have also been observed by an EEPAC member on site this fall. At least one and perhaps 2 or 3 nesting pairs were present in 2014, as multiple Barn Swallow nests were observed and photographed by this same EEPAC member at the buildings on the subject site (site as defined on page 1.1 of the EIS). These buildings are south of Lawson Road and north of the CPR tracks. They are clearly shown in the April 2014 air photo available on the City's web site. They are still there as of this month.

The existence of these buildings appears to be ignored even after being noted by EEPAC in its review of the previous EIS version.

Disturbingly, the air photo shown in Figure 1 of the EIS cuts off north of these buildings. (Figure 1 also appears to be from earlier than April 2014 as the city's air photo shows a constructed house to the east of the south pond).

Research indicates that lack of foraging sites have contributed significantly to the dwindling populations of Barn Swallows (see Appendix 1 below for research references). Oddly, despite the April 2014 air photos on the city's web site showing buildings on the subject site, the EIS indicates that no appropriate nesting structures were present on the subject site (p. 5.6).

Therefore, EEPAC takes the position that **there are appropriate nesting structures on site. If they no longer exist, there has been a contravention of the Endangered Species Act.**

In addition, snakes may have hibernacula at the out buildings and house present on the lands on the southern portion of the subject site.

Recommendation 7: The outbuildings and house present on the southern portion of the subject site be studied for hibernacula.

Recommendation 8: The following requirements under the Endangered Species Act (ESA 2007) and its regulations **must** be communicated to the proponent immediately and form part of the requirements of development approvals if the buildings on site are to be removed.

The rules for altering a building or structure (e.g., a barn or bridge) that is habitat for Barn Swallow. Effective July 1, 2013.

<https://www.ontario.ca/environment-and-energy/alter-structure-habitat-barn-swallow>

You must:

- register the work and the affected species with the Ministry of Natural Resources (before work begins)
- minimize the effects of your activity on barn swallow
- create and maintain new habitat for barn swallow
- report sightings of rare species (and update registration documentation, if needed)
- monitor the habitat you create and report on certain observations
- prepare and maintain records that relate to the activity and the habitat

MITIGATION MEASURES (Section 7.3, page 7.2)

Construction timing and grading (starting on page 7.2)

Recommendation 9: Inspectors should have the authority to halt work immediately if disturbance to natural vegetation occurs. This must be written into the development agreement.

While EEPAC supports the notion that accidental damage must be made good, the EIS provides no direction as to what compensation is to be provided. EEPAC recommends the following be included in the development agreement.

Recommendation 10: If there is accidental damage to trees (EIS p. 7.3), replacement should be based on the dbh loss and the replacement ratio calculated on the basis of recouping the loss of tree mass in 5 years. Failing that, the ratio should be a minimum of 5 or 6 to 1 and trees planted in the buffer between the development and the Significant Woodland.

If there is accidental damage to other vegetation, a city ecologist shall be consulted regarding the appropriate compensating species to plant and the appropriate location for the planting.

Erosion and Sediment Control (starting on page 7.3)

Recommendation 11: In addition to standard erosion control measures, 30 m from the edge of the buffer should be silt fenced.

Recommendation 12: No equipment should be stored, fueled or maintained within 30 m of the buffer.

Recommendation 13: Vegetation cover, using species native to and appropriate to site conditions, must be restored if soils are not stabilized or left without protection for more than 3 months. If this occurs too late in the season, a city ecologist must be consulted to determine the best means to prevent sediment from entering the Significant Woodland or the constructed wetland. It must be other than hydroseeding of grass.

Disturbed areas within the woodland buffer (p. 7.4)

While EEPAC agreed that disturbed areas must be restored, we are unclear as to why there should be any disturbance.

Recommendation 14:

a. The proponent be asked to clarify why disturbance (other than the constructed wetland) to the 15 m buffer is expected and what will be done to avoid disturbance and compensate for any loss of ecological feature or function.

b. The City should clarify why the proposed pathway is appropriate in the buffer.

HABITAT COMPENSATION (section 7.4, p. 7.4)

In addition to the measures provided, EEPAC recommends the following also be included in the subdivision and / or development agreement.

Recommendation 15: Native species of milkweed be included in the plantings.

The consultant identified one wetland plant species (genus *Glyceria*) with a high (8) coefficient of conservation (see Appendix C of the EIS). If it is *Glyceria septentrionalis* it is Northern Glyceria, if manna grass, it is *Glyceria borealis*. Regardless, EEPAC recommends the following:

Recommendation 16: A native species of *Glyceria* be included in the species list for the constructed wetland.

While it is helpful to recommend a monitoring and adaptive management plan to control (*sic*) vegetation establishment (p. 7.5), there is no detail as to who will develop the plan, who will implement the plan, and the duration of the plan. EEPAC recommends:

Recommendation 17: The proponent and the City agree on the details of the monitoring plan as stated above and the details (including reporting) be incorporated into the development agreement. The agreement should include a hold back of security for at least three years so that there is some assurance that any additional work needed has a funding source.

It also appears likely that the construction of the wetland feature will cause some damage to Block 118.

Recommendation 18: The proposed adaptive management plan include additional plantings to compensate for any damage to wooded lands on the subject site.

Monitoring and Adaptive Management Plan (section 7.4.2, page 7.5)

Recommendation 19: The monitoring report be in the spring and fall seasons for the first two years rather than annually. If annually, the report must be prepared and submitted in the fall so that action may be taken in the spring

Wildlife Use (section 7.4.1, page 7.5)

EEPAC is unclear as to what the proponent proposes in moving wildlife “to a nearby location that is suitable for the animal in consideration of species-specific seasonal requirements, including the woodland feature to the east, and the proposed compensation pond and associated riparian area.”

EEPAC points out that the woodland feature (the Significant Woodland), is to the **west** of the subject site.

EEPAC assumes that wetland species will not be moved until the approved compensation pond is “ready for occupancy.” If there is a need to move wetland species prior to the completion of the compensation pond, there is an intact wetland to the east near Aldersbrook that could be considered.

In order to help in the success of this project, EEPAC offers the following recommendations:

Recommendation 20: A detailed plan for the actual move from the ponds to the constructed wetland be developed by the proponent and approved by a City Ecologist. The plan should at a minimum include a list of species expected to be moved and a “window of opportunity” for the move based on the time of the year and weather conditions.

Recommendation 21: Moving of flora and fauna from the Significant Wildlife Habitat:

- a. only be done after the approval of a City Ecologist has been given.
- b. the actual move take place only at a time period previously approved, during appropriate weather conditions and forecasts, and under the supervision of a qualified ecologist approved by the City.

MISCELLANEOUS

The woodland that is to be protected from construction impacts is to the **west** of the subject lands, not east as shown in the first bullet under 7.3.1 on page 7.2.

We remind staff that page 38 of the Environmental Management Guidelines require the principal author's CV to be included in the EIS. We note this has been missing of late in other EISs as well.

APPENDIX 1

(Source: General Habitat Description for the Barn Swallow (*Hirundo rustica*), MNR)

Barn Swallows depend on nearby open areas that provide good sources of flying insects, such as waterbodies, pastures with livestock, and woodland edges (Brown and Brown 1999, Evans *et al.* 2007). The stage of the nesting cycle influences foraging distance. The period of greatest energy demand for a swallow is during nestling rearing (Bryant and Westerterp in Turner 1980). Turner (1980) found the average distance traveled by Barn Swallows while feeding the first brood to be 188 m and 138 m for the second. Weather plays an important role in the variation in food availability for swallows and therefore also influences foraging distance.