

Review of: **1959 Wharncliffe Road South EIS (dated July 22, 2014)**

Reviewers: Jeremy Bird , Sandy Levin, Dr. Chris Smart and Randy Trudeau,
London's Environmental and Ecological Advisory Committee (EEPAC)

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SCOPE

The matter at hand should be an evaluation of the entire Patch 10070, not just the part of the patch in the subject site. The 2012 EIS by Biologic for Auburn Developments for the site directly to the west states that "The City of London woodland guidelines were applied to patch 10051 and 10070. Both are considered significant." If the Patch is significant and the portion on the subject site is part of the Patch, then it should be protected until the entire patch is studied.

This kind of "piece meal" work is contrary to the intent and spirit of the OMB hearing on SWAP which, in part, included the following as part of the settlement reached that designate the entire Patch as Environmental Review (highlights ours):

*75] Mr. Tegler, an experienced ecologist, indicated that he supported the agreement reached and that he had no difficulty with any modifications which changed an open space designation to an environmental review designation. In simple terms an open space designation represents an area of natural features deemed significant through study whereas an environmental review designation is reserved for natural features known to exist but **a full and complete evaluation for which has not yet been done. (highlights ours)***

The City should live up to the decision of the OMB and direct the proponent and the adjacent landowner to do an EIS on the entire woodland. Given the overlap between the original SLRS and the OMB decision on SWAP:

Recommendation 1 EIS

The City should require and pay for an EIS for the entire patch.

PATCH INTEGRITY, PROTECTION AND ENHANCEMENT**“Cutover areas”**

The consultant’s references to “cutover areas” should be changed to “clear cutting contrary to city by law.” Contrary to page 15 of the EIS which states “The woodland component to the north has been cutover historically” sections of Patch 10070 were “cored out” by a previous owner in 2006 contrary to city by laws. Deadfall from the clearing was left on site. Penalties for this unapproved clearing were assigned to the previous owner. Deadfall was cleared by Auburn (the current property owner) with approval of the city, in 2009. However, these areas are expected to become dominated by buckthorn in the future without aggressive management. Despite EEPACs comments on the Lambeth Walk/Colonel Talbot Road EIS prepared by Biologic for Auburn Developments in 2012, it appears that no action has taken place to restore the illegal clear cut.

Hence EEPAC does not support the proposed continuation of Debra Drive into a “cutover area” of Patch 10070.

Recommendation 2 – “areas of cutover”/”cutover areas”

The lot pattern be redesigned so that no roads are continued into the woodland to the north.

Schedule B-1 (shown as Figure 2 in the EIS) identifies the area on the subject site, between the “triangle” on the Hunt Lands and the section of Patch 10070 on the subject site as a Potential Re-naturalization Area. In the last Draft Plan of Subdivision for Auburn Development that EEPAC saw in 2012, the “triangle,” which is 2.5 hectares, was shown as park. The current EIS is deficient in addressing this opportunity. It is mentioned obliquely on page 28 where it states the farm field west of Community 4 is not included as part of the boundary because it is active farm land. However, as development proceeds, farming will cease. Hence it is EEPAC’s position that it does meet Guideline 7 to fill in woodland bays as the field will be old field in short order. It is unclear why the EIS recommends removal of Community 2a which creates new forest edge which is not beneficial to the health of the woodland. Coupled with the apparently lack of consideration for the native Hawthorne noted in the ELC for Community 2 and 2a, EEPAC cannot recommend the removal of either Community.

Recommendation 3 – Patch integrity, protection and enhancement

- a. The EIS should be revised to include an explanation of why this Potential Renaturalization Area was not included in the proposed Environmental Management Strategy.
- b. The EIS be revised to include the farm field west of Community 4 as part of the boundary.
- c. EEPAC does not support the removal of Communities 2 and 2a

STORMWATER MANAGEMENT AND HYDROLOGY

The church stormwater facility is working very well. The SWM pond is clear and did not overflow in recent months despite some very intense storms. (This is in marked contrast to Longworth.)

The hydrological characterisation in the report is quite good though we think they have the "flow path" (figure 6) incorrect because runoff from the church parking lot appears to be routed west to the SWP from where water drains SW and then south through the forest (where this water almost certainly drains into the creek west of the subject lands. However, it may also recharge the shallow perched aquifers that are almost certainly the source of water for the dug pond. This sustained relatively clean supply (recharge is in the forest not agricultural land) accounts for the relatively pristine quality of the pond. The pond and its source deserve protection as it is one of the rare (MAM is less than 6% of regional vegetation communities, source Bergsma and DeYoung 2006) upland wetlands with good quality perennial flow. It has a buffered supply from the church, woodland acreage as protection, and some provision for protection in the proposed plan of subdivision. (Dr. Smart has studied these rare systems and they have *extremely* high ecological significance because of their drought resistance and high water quality.)

The EIS has not demonstrated that development in Community 4 (FOD 4-1) will have no negative impacts to the feature or function of the pond, in particular the hydrologic regime.

Also, it is not clear that the pond will be adequately buffered. It is inferred to be fed by shallow groundwater- probably sourced from the north. The North=North east sector is set aside (figure 12a) which is good as this is likely the main groundwater discharge axis. Our concern is that the housing on the east side of proposed street C (lots 118-124 figure 12a), if built, will have foundation drainage that will capture groundwater and so drain the pond. Ideally, no development should occur in that sector. There would be a significant reduction of risk if the houses were constructed to the west of the road leaving open space to an enlarged management area. Prohibiting basements would also help. This issue is not only a conservation matter, as the basements of houses in the shallow aquifer will be prone to moisture and flooding.

Page 32 of the EIS proposed a 10 m buffer of grassland around the meadow marsh, a Significant Wildlife Habitat. It is unclear if this is sufficient. Page 42 of the EIS indicates the buffer calculations in Appendix H would indicate 13 m. The City Guidelines do not include reduction of the buffer due to mitigation. Furthermore, Beacon, in its Ecological Buffer Guideline Review (2012, Figure 2) demonstrates that a feature like the pond, should be considered core habitat, which includes a Critical Function Zone (CFZ) and the buffer, or Protection Zone (PZ). EEPAC believes the consultant's proposal lacks a CFZ for any turtles in the pond and for the terrestrial crayfish in the Meadow Marsh. Furthermore, EEPAC is unclear if a grassland is appropriate in either location. It certainly does not replicate existing features.

Recommendation 4 – Protection of the pond and MAM community

- a. Lots 118-123 should not be included in the Plan of Subdivision unless it is demonstrated by hydrogeological evidence that they will have no negative impact on the pond features and functions.
- b. Lot 124 should be deleted from the Plan.
- c. If Lots 118-124 on Figure 12a are built, they should not have basements.
- d. During and post construction, strict requirements to ensure surface road runoff and debris and sediment are not allowed to enter the pond or its surroundings are necessary.
- e. Careful grading, drainage, and silt fencing are required, as well as regular monitoring during construction to ensure protective measures are in place and functioning (unlike Longwoods Road and the Buttonbush PSW).
- f. Additional hydrologic work be required prior to final approval of the subdivision plan, to determine if water from roof leaders and rear yards (as recommended on page 42 of the EIS) should be directed to the pond.
- g. Applying Beacon's Ecological Buffer Guideline Review, a Critical Function Zone must be included for both the pond and the Meadow Marsh as well as a buffer consisting of vegetation consistent with maintaining the features and function of the Significant Wildlife Habitat.
- h. The vegetation planted as part of the Environmental Management Strategy/ Landscape Plan for this part of the development must be consistent with the communities currently present in each ecosite.
- i. The proposal on page 44 to set logs in the pond as basking sites be reviewed with the Upper Thames River Conservation Authority's species-at-risk biologist. If approved, the same biologist should be retained to supervise the work.

SPECIES AT RISK

The EIS notes the presence of Barn Swallow. In the EMS (page 41 and 47) it references the protocols of the SAR Act but does not enunciate them. Barn Swallows were nesting in the unfinished townhouses outside the subject lands (page 18). It is unclear if the consultant notified the owner of the adjacent property.

Recommendation 5 – Protection of SAR species

The following requirements under the SAR Act and its regulations should be communicated to the proponent and the adjacent property owner immediately:

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

Effective July 1, 2013.

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

Recommendation 6 – Construction and post construction impacts

a. In addition to the recommendations in the EMS, a qualified biologist visit the site during construction and review the site protection measures. This person should have the authority to stop work if site protection measures are failing or in failure due to weather or accident.

b. Recommendation 5 on page 45 be revised to indicate that re-seeding must be with ecosite appropriate seed mix. If the contractor requires more direction, City Environment and Parks Planning staff must be consulted.

c. Recommendation 7 on page 45 be revised to say that until rear yards have been vegetated and stable for housing backing on to the woodland, roof leaders must only be directed to the street.

d. Recommendation 8 on page 45 be revised to say all stormwater must be directed away from the natural heritage feature.

ENVIRONMENTAL MANAGEMENT STRATEGY (EMS)

This Section is at a high level with many “should” instead of “shall” or “must” “should consider” instead of “must require” in regards to its recommendations. Also lacking is any direction for who does what. For example, page 27 regarding the retention of the east part of Community 4 as a “management area.” Who manages?. The EMS lacks the following:

- assignment of responsibility for the recommendations
 - timing of the recommendations
 - cost
 - length of monitoring required to ensure the recommendations on re-naturalization actually succeed
- (e.g. p. 34 – “Without management of the ground layer, long term monitoring would be needed to ensure the east portion continues to succeed to a healthy forest stand.” How long is ‘long term’?).

The EIS is also deficient in dealing with the future development of the Medium Density and Commercial Blocks leaving buffers and setbacks to the “detailed design” phase. This means either another EIS or similar work at a future date. This piecemeal approach is not acceptable.

Waiting for the detailed design phase (page 32, etc.) is too late to ensure that the required strategies are carried out by the proponent. Even if the city Development Services group is diligent, the City must become more stringent in ensuring that the promises laid out in an EIS including a landscape plan, do indeed come to pass.

Recommendation 7 – EMS

- a. A detailed Environmental Management Strategy (including landscape plan) for the entire site including the Medium Density and Commercial blocks be prepared including costs, responsibilities, monitoring, security required (if work undertaken by the proponent) and timelines before this EIS is considered complete.

OR

- b. The same level of detail outlined in 6a be required as part of the requirements of lifting a holding provision or final approval of a Plan of Subdivision.

Recommendation 8 – Commercial Blocks (170-173)

- a. The site plan must require fencing on the east side to limit blowing litter entering the watercourse, and deter anyone from climbing down the bank.
 - b. Outdoor trash storage must be on the west side of the block and in closed containment.
 - c. Beacon’s Ecological Buffer Guideline Review be used to determine an appropriate buffer.

ECOLOGICAL BUFFER CALCULATIONS (page 33)

The EIS proposed no buffer (“zero meter buffer”) is contrary to the City’s Guidelines. The reason given is that “otherwise, there would be ownership issues related to the retention of the buffer. Instead, the feature to the north can be buffered through mitigation (i.e. fencing, home owner education packages) particularly as much of the area abuts highly disturbed cut over areas.”

EEPAC will address the issues of fencing and “education” packages later in this submission (Communication with Home Buyers). EEPAC believes the recommended non buffer is contrary to the City’s Guidelines which state on page 122 of the Environmental Management Guidelines:

Absolute minimum of 5 m and minimum 10 m beyond the dripline for woodlands. The minimum is required **unless compelling evidence is provided that feature or function will be adequately protected.** (highlighting ours)

No compelling evidence is provided in the EIS for this or the buffer to the watercourse in the SW part of the property. This leads us to the following recommendation:

Recommendation 9 – Buffers

- a. In addition to fencing with no gates, a minimum buffer of 5 m from the woodland edge (dripline) be required for all lots that border the woodlands.
- b. The buffer must be vegetated with native species appropriate for the ecosite, the land use designation be Open Space and conveyed to the City.
- c. The buffering of the watercourse at the SE corner of the site be reviewed. The proposed amount seems less than the minimum indicated on p. 122 of the City’s Environmental Management Guideline document.

TREE PRESERVATION and REPLACEMENT

While EEPAC agrees that a tree preservation report is necessary for Area A (p. 39), maintaining specimen trees in a backyard is not protecting them unless there is the ability to require the homeowner to consult or be permitted to cut a specimen tree that has been retained in a backyard.

The naturalization plan recommended in the EIS on page 39 for the 0.4 ha north of the rear lot lines of Lots 136-143 should incorporate woodland species as recommended in the EIS. In general, given the loss of a number of healthy specimen trees, the proponent be required to replace them with similar native species of significant size and in a ratio greater than 1:1. Hence, EEPAC recommends the following.

Recommendation 10 – tree cutting limitation on title

There be registered on title a requirement that the homeowner be required to get approval from the city’s Urban Forester before any of the protected specimen trees are cut.

Recommendation 11 – tree replacement

- a. The proponent calculate the loss of timber volume and proposed a replacement plan that will recoup the loss in 5 years using native species appropriate to the present site. (DBH is used in estimating the amount of timber volume in a single tree or stand of trees utilising the allometric correlation between stem diameter, tree height and timber volume, (Mackie, 2006)
- b. Alternatively, the replacement ratio should be a minimum of 5 or 6 for each tree lost.

HOLDING PROVISIONS/CONDITONS OF SUBDIVISION OR DEVELOPMENT APPROVAL

In addition to the matters in this report that EEPAC recommends the following (modified from page 47 of the EIS) prior to approvals rather than waiting for detail design:

Recommendation 12: The following supporting studies will require acceptance by the City **prior** to approvals:

1. water balance report
2. stormwater management plan
3. sediment and erosion control plan

POST CONSTRUCTION – COMMUNICATION WITH HOME BUYERS

The report has recommendations regarding protecting the feature and functions post development including the standard requirements on page 43:

Rear yard fencing should be installed at the lot limit to prevent human encroachment into natural heritage areas.

Develop a homeowner’s brochure to educate landowners on appropriate measures to protect the natural heritage components within and beyond their property boundaries. This is important for preservation of the woodland and corridor. While most landowners will respect property limits, the brochure should also educate landowners about the problems with encroachment and introduction of non-native species.

Recommendation 13 – Fencing

EEPAC recommends that rear yard fencing (and side yard for lot 124 and 126 if built) be required for all lots along all of the features and naturalization areas, not just the woodland, noting the requirement must be fencing with NO gates. Fencing between the lots and the re-naturalization areas should increase the success rate of the re-naturalization work.

However, we are concerned that there is currently no limit on creating gates in fences after the homeowner moves in. Therefore EEPAC also recommends:

Recommendation 14 – Maintaining gates with no fences

- a. City staff investigate how best to control the creation of gates in fences through either by law enforcement or requiring a building permit for such work, or through notification to contractors.
- b. The proposed homeowner booklet be required to impress on the homeowner why no gates were installed on the fencing and why it is important not to gate the fence.

PREVENTING DAMAGE FROM ENCROACHMENT AND YARD WASTE

EEPAC has seen other brochures. Such brochures are provided to the new homeowner concurrently with a whole host of other information from the builder. It is unclear if it is even read let alone retained. We doubt its efficacy and are nearly certain that it is not passed along to subsequent home owners. EEPAC proposes the following:

Recommendation 15 - Getting compliance

Each homebuilder be asked to hold a session for all new homeowners from time to time during build out, attended by EEPAC or city staff members so that the brochure can be reviewed and the importance of protecting the natural heritage features and functions can be explained.

Recommendation 16 - Related recommendations for city consideration

- a. City Staff meet with the LHBA to discuss better ways to get compliance from new homeowners who buy homes adjacent to environmental features, perhaps through including an Adopt An ESA/Woodland section in the homeowner brochure
- b. City staff meet with the London St. Thomas Real Estate Board to discuss ways to better educate real estate agents where a re-sale home abuts a natural feature and how such lots have an enhanced value to prospective customers.

MISCELLANEOUS

To reduce confusion, the common name Burning Bush used (p. 40 for example) for *Euonymus atropurpureus* be replaced in the report to Eastern Wahoo so that is it not confused with the ornamental non-native invasive *Euonymus alatus*.

It would be helpful to EEPAC if maps and figures were made available as GIS files so that overlay viewing can be done. The current format of flipping back and forth particularly with printed figures and maps, sometimes of different scales, is less effective.