

Victoria on the River, Block 153

Site Plan EIS dated June 29, 2017, received by EEPAC August 24, 2017, ZBA Planning Rationale Report dated May, 2017 received by EEPAC September 15, 2017 (after request to Planner)

Reviewers: C. Dyck, S. Levin, R. Trudeau

Submitted to September 28 2017, EEPAC meeting

OVERVIEW - **Achieving a Net Benefit**

1. Eliminate the controlled outlet to enhance the PSW.
2. Monitor the restoration sites for many years as restored areas are prone to invasive species for a long time.
3. Fencing areas which border the ESA prevents encroachment and contributes to a 'net benefit'
4. Educating homeowners about the presence of SARs and SWHs is crucial to achieving a 'net benefit'

Separately, the working group is asking EEPAC to pass the following motion:

EEPAC requests a copy of the present neighbourhood connection plan so that it has a better understanding of staff's plans so that its recommendations can be better targeted.

As noted on page 5 of 16 in the ZBA Report, "... In addition, as there is extensive open space in the immediate vicinity for passive and active recreational uses (e.g. – multi-use trail to the east)..."

EEPAC also notes that at the April 11, 2016 Scoping meeting, its representative asked (see p. 4 of meeting minutes, Appendix C2 of the Site Plan EIS) about concerns about access to the ESA in the absence of a CMP. There is nothing in the Site Plan EIS regarding this matter.

THEME #1 – Compliance with OP policy

3.5.18 of the OP indicates that *its intent is to restore ecological functions and provide a net benefit for the east Meadowlily ESA and the Thames River corridor.*

It is unclear how a net benefit is achieved. Section 5.1 of the Site Plan EIS starts by discussing the existing environmental impacts which seems to set a low bar for the restoration.

For example, the proposal is to create a controlled outlet for the pond at the new laneway.

THEME #2 – Controlled Outlet

EEPAC would appreciate knowing why a controlled outlet is to be installed rather than letting the Tributary run freely. It would appear that before the pond was created, the extent of the wetland would have been larger. There is no commentary in the Site Plan EIS to address this. Did the proponent examine if a different design such as allowing the tributary to resume its natural flow, enhance the aquatic environment and the wetland feature?

Recommendation 1: the EIS not be accepted until a net benefit is clearly demonstrated to the satisfaction of the City and the UTRCA.

Theme #2 - Official Plan mapping

Page 3 of the Site Plan EIS and the ZBA Report p. 3 of 16 note that the Official Plan designation does not reflect the results of the ESA boundary amendment as recommended and accepted in the Victoria Ridge Plan of Subdivision Environmental Impact Study (AECOM 2009). Appendix A2 of the ZBA report provides a copy of Map 4 from the Victoria Ridge Plan of Subdivision Environmental Impact Study (AECOM 2009) showing the recommended delineation of the Meadowlily Woods ESA in the Block 153 area and surrounding Victoria on the River subdivision lands.

Recommendation 2: The Planning report for the ZBA include a recommendation to Council that the OP and London Plan be amended to reflect the ESA boundary as recommended by the Victoria Ridge Plan of Subdivision.

Theme #3 – Restoration Plan and Monitoring

Recommendation 3 : For the tributary, the best vegetation to plant on the stream banks would depend on the width of the watercourse, but you would ideally want something that is relatively fast growing and could provide adequate shading to protect the tributary from solar radiation. A good mix of grasses, shrubs, and trees would help to provide shade, run-off control, and habitat for invertebrates.

EEPAC is aware from the Site Plan EIS that work has been done in Area 1 and is considered successful. It is unclear to EEPAC what the plan was for that area and what the outcomes measures were that determined that the work was a success. Recommendation 16 on page 60 of the Site Plan EIS speaks to the development of an Environmental Monitoring Program prior to the commencement of construction. EEPAC recommends this following instead:

Recommendation 4 : An Environmental Monitoring Program be a condition of the development or site plan agreement. The Program must be to the satisfaction of a City Ecologist and the UTRCA. It should have clear outcome measures such as survival rates of trees and shrubs.

Recommendation 5: The Program should have a monitoring period of no less than 5 spring seasons from the completion of plantings, with a particular emphasis on the Significant Wildlife Habitat. Ideally, monitoring would be by an independent consultant reporting to the City. It should include requirements for watering new plantings during dry periods, warranties, replanting/reseeding requirements, invasive species management.

Recommendation 6: The plantings in Area 3 should be similar to the species in the FOD 6-5. It is unclear to EEPAC if the suggested list of plants listed on page 57 (EMP, #10, Site Plan EIS) is similar to the dominant species in this ecosite.

Recommendation 7 : All trees that are planted must be 15 cm or greater at dbh and any trees that are lost to construction must be replaced at a minimum ratio of two for every tree lost.

Recommendation 8 : All buffers must be planted and seeded consistent with the abutting vegetation in the ESA. If the development agreement allows for regeneration without active restoration, the agreement must include a condition that if the regeneration results in a majority being invasive species within 3 years, the proponent must initiate active restoration.

Recommendation 9: Monitoring of the restoration planting should follow the regime suggested at the end of this report from the Nature Conservancy, noting the City's standard time frame is likely insufficient:

THEME #4 – OTHER PARTS OF PROPOSED ENVIRONMENTAL MANAGEMENT PLAN

Page 10 of 16 of the ZBA report notes: "The boundary of the Site Plan and ESA buffer along the rear (and where relevant, side yards) shall be fenced (without gates) to prevent the encroachment and access of ESA lands from Block 153 residential lots." EEPAC agrees. The recommendation for fencing is included with other recommendations on page 17 of the ZBA EIS:

In order to further ensure minimal to negligible impacts, we recommend the following mitigation measures:

- Rear yard fencing to prevent residents from entering ESA lands from rear yards;
- Shielded or other forms of lighting that reduces light impacts on adjacent ESA lands;
- Provision of condominium by-laws that restrict access to ESA lands, disposal of yard waste in ESA lands, feeding of wildlife, etc.

Recommendation 10: These recommendations from the ZBA EIS should be further detailed in Site Plan provisions or Conditions of Site Plan approval.

Recommendation 11: Recommendation #14 in the Site Plan EIS (p. 59) be amended to say fencing of the ESA – development limit be **required** to reduce encroachment into the ESA. This be a requirement of either conditions of development or of site plan approval

EEPAC also proposes these additional steps which should also be considered conditions in the development agreement:

Recommendation 12: Turtle and / or Snake Crossing signs we installed at either end of the access to the condominium.

To deal with the indirect impact of human intrusion, In addition to the standard homeowner package and the condominium restrictions listed in Recommendation 15 of the Site Plan EIS on page 59, EEPAC recommends the following:

Recommendation 13 : An information sign about the ESA and the species present be installed in a common area of the Condominium development. The text should be to the satisfaction of a City Ecologist and include the recently developed “cat brochure” and Living with Natural Areas.

Theme #5: Remainder of Environmental Management Plan (Site Plan EIS)

EEPAC is generally supportive of the recommendations except as follows:

Recommendation 14: Recommendation #6 of the EMP dealing with buffers should be strengthened by including monitoring of the buffer plantings in the proposed Monitoring Program.

Recommendation 15: Recommendation #7 should be strengthened to include the removal of non-native and invasive species as mentioned in the text on page 54 of the Site Plan EIS that precedes the recommendation.

Recommendation #10 on page 57 indicates trees will be planted on the slope but there is no information about removal of trees or whether the new plantings will be of the same or similar species nor what mass will be lost and what mass will be planted to replace the loss. What is the compensation for the loss of forest species? (EEPAC notes there are no drawings showing existing mature trees as Appendix M just shows the extent of vegetation).

Recommendation 16: Recommendation #10 on page 57 of the Site Plan EIS should be revised to reflect EEPAC’s concerns noted in the preceding paragraph.

As per page 18 of the ZBA EIS, the following be added to the EMP

Recommendation 17: Provide increased wildlife habitat within through the installation of bird & bat boxes, sentinel rocks/perch posts and brush piles

THEME #6 - Species at Risk

Recommendation 18: As per Appendix K, page 21 of the Site Plan EIS, a species specific survey for the Eastern Ribbon Snake be conducted before construction starts. This must be added to Recommendation 18 on page 60 of the Site Plan EIS.

As per Appendix K p. 23-4 and Appendix L, pps 4 and 15, the following be required as part of Recommendation 17 on page on page 59-60 of the Site Plan EIS:

Recommendation 19:

- a. Sedimentation and erosion control measures be installed prior to any works within 30 m of aquatic or semi aquatic habitats, specifically, the pond and the MAM at the south end of the pond.
- b. Work take place outside of turtle overwintering and nesting season.
- c. Photos of the SAR turtles be posted with a number to call if turtles are encountered during construction. The # should be for the Species at Risk biologist (Scott Gillingwater) at the UTRCA.

Theme #7 Existing Berm

There is very little mentioned about the work to be done to remove and reconstruct the existing berm (see p. 41 of the Site Plan EIS). It is unclear if this is to support a future road or for some other purpose as no road is shown in any of the drawings or figures. Is it to remove the perched culvert to restore flow within the channel? It is not clear in either document.

It is unclear what compensation for loss of aquatic habitat immediately north of the existing lane way and loss of FOD6-5 (.13 ha) within the ravine north of the existing berm caused by the removal of the this berm. It appears from the Site Plan EIS that the removal of the existing perched culvert can improve function of the aquatic habit.

Recommendation 20: Plantings must be required to shade the water as well.

It is unclear though if there is any compensation at the location of the existing berm. It is not included as one of the Compensation Areas shown on the various Figures.

Recommendation 21: This deficiency should be resolved before the EIS is accepted.

THEME #8 – Construction conditions

Recommendation 22: On site monitoring should occur when the weather forecasts any heavy rain events during the construction period (to avoid the potential for excess run off from piles of top soil)

Recommendation 23: Refueling and other activities listed on page 59 of the Site Plan EIS be 30 or more metres from the Significant Wildlife Habitat, the River and Tributaries.

Recommendation 24: Construction practices follow the Clean Equipment Protocol to reduce the chance of introducing/spreading Phragmites and other invasive species into the area.

Recommendation 25: Any construction must be outside the nesting season of bank swallows.

It is likely they are nesting in the banks of the river. Construction will change their foraging. Construction should not be permitted during this species nesting season at a minimum.

Recommendation 26: In constructing access road, consideration be given to permanent measures to reduce the chance of turtles climbing on to the road surface.

Recommendation 27: In constructing the access road, Best Management Practices be employed so that salt, sand and other road contaminants do not end up untreated into the watercourse or the pond.

Theme #9 – ERRORS and OMISSIONS and OTHER

Recommendation 28: The extent of the ESA should be clearly shown on all Figures. For example, Figure 1 in both EIS seems to suggest the limit of the ESA is just west of the Study Area. This is wrong.

Recommendation 29: There should be one air photo showing the total extent of the ESA and the PSW's within it, including the unevaluated wetlands to the east. Although this appears on B-1 which is included, it is not apparent to the casual reader.

Recommendation 30: The builder/condo corporation advise prospective buyers of the sensitivity of the ESA prior to purchase.

Recommendation 31: The UTRCA map should be in the main section with the other Figures rather than in an Appendix as it better shows the extent of the PSW.

Recommendation 32: There is a recommendation in the Dec 24, 2015 letter from AECOM to M. Zunti regarding removal of agricultural waste from within the ravine slopes. This should be included as a requirement provided it does not cause additional degradation to the slopes.

Appendix – Nature Conservancy comments on restoration:

In the first summer, expect a range of non-native, common agricultural weeds, often annuals. In year two, expect to see these give way to the planted, native species. The objectives of restoration are first and foremost to establish as many native plant species as possible, and to not allow the establishment of non-native invasive species. Monitoring should focus on this. For example, look for autumn olive, buckthorn, quack grass and Canada thistle, common reed, and conduct monitoring to deal with them upon sight whenever possible. Looking for these species can be easier later on in the fall, as they remain green for longer than the native plants.

- We simply wander around and write down every species we come across; it might be useful to append some sort of abundance code, but again, a focus on what you need to know is important
- We need to know if we need to come back with a chainsaw or just loppers, and what sort of volume of glyphosate we might need, so we're not going to bother counting lamb's quarters, for example. For native species, we compare our list of observed species with our planting list.
- We are able to "get away with" a fairly low key monitoring approach like this because we do actually have a much more detailed system on one key restored site – we have 170 2 x 2 m plots set up, and have been collecting % cover for each species for 10 years now. We collect these data in the 3rd week of July (Norfolk County). We miss flowering season for asters and goldenrods, and similarly miss really early season stuff, but we do our best. This is fine, but does take a lot of time and our ongoing objectives with this work are something we are constantly trying to clarify. I don't necessarily recommend that every site needs such a detailed system – again, thinking hard about what you need to know is paramount.
- Some species do take a while to establish in an easily identifiable way. One example we have found of this is butterfly weed – it seems to take a few years to really show up. If you really need to know if every species you planted establishes, then you might consider checking in on the site for longer than just 2 years – 3 or even 4 years.
- If you are trying to create habitat for a specific species, via planting native plants, I would still recommend a focus on native vs non-native plants, especially early on, but you would also want to add in a check for your species of interest, and perhaps other components of its habitat e.g. structure, specific species composition, etc. This sort of data collecting might need to happen over several months – i.e. breeding bird season, fall, even winter.
- Photos are always good! Collect some actual data too, but take some pics from a few standardised angles each year.
- On a somewhat related note, I would also recommend that restoration sites are maintained with regards to invasives many years down the line. I appreciate how unrealistic this may be or seem, but restored areas are prone to invasive species for a long time, and I have seen several which had a lot of restoration money poured into them for 1 – 2 years, but then have been ignored and have turned into an autumn olive or buckthorn mess, which is of very limited value to anything.