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Otonabee Conservation Files: PPLS-4410 and PPLS-4544
Our ref: 11214535

30 June 2023

Triple T Holdings Limited

**Plan of Subdivision – Lakefield, EIA Comment Response
Tower Road, Part Lot 26, Concession 7, Selwyn, Ontario**

Dear Mr. Ash

Thank for asking GHD to provide a comment response to the Otonabee Region Conservation Authority (ORCA) ecological review memorandum from Jasmine Gibson to Matt Wilkinson, dated June 28, 2021 on the project Environmental Impact Assessment (EIA) (GHD, November 2020). The ecological review was regarding the EIA written as part of planning applications for a proposed subdivision development at a property located on Part Lot 26, Concession 7, in the Town of Lakefield, Township of Selwyn, Peterborough County.

A second submission set of comments were also provided to GHD from an ORCA review from June 30, 2022 and related more to the severances proposed on Seaforth Crescent and Lakefield Road. Those were responded to by GHD in February 2023.

As the first set of comments was provided almost 2 years ago, many of the issues and concerns have already been addressed and reports and figures updated.

In the following letter, ORCA comments and GHD responses re the first submission, have been provided and any resulting changes made to the EIA report or figures have been identified. A revised version of the EIA with the additional information and updated figures is attached.

Regards

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Copy to: Matt Wilkinson
Jasmine Gibson
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Table 1
submission

Response to Comments on Ecology Review of the EIA for Draft Plan of Subdivision Application-ORCA first

ORCA Ecology Review Comments (June 28,2021)	GHD Response
<p>Based on GHD and technical staff observations (pre-2021 and June 14, 2021), portions of the development Areas 1, 2 and 3 are traversed by hydrological features including Ray's Creek, unevaluated wetlands, groundwater seeps, and/or watercourses/headwater drainage features (HDFs). The development proposal includes removing or "interfering" with some of these hydrological features (see yellow ovals in image) to accommodate stormwater management infrastructure, sanitary sewer line, residential lots, internal roads, and recreational trails.</p> <p>It is understood that SWM/outlet #3 will discharge to wetlands and SWM/outlet #4 will discharge to an intermittent HDF/watercourse (see purple ovals in image) located on adjacent lands. Impacts to wetland hydroperiod and flow regimes of the receiving hydrological features downstream of the outlets has not been assessed in the EIA given their location.</p>	<p>Noted.</p> <p>See breakdown below of those areas as per the review comments.</p>
<p>The following hydrological features are proposed for removal:</p> <ul style="list-style-type: none"> ▪ Area 1 – portions of Wetland Community 9 and buffer. ▪ Area 2 – portions of Wetland Community 22 and HDF/watercourse #10a, portions of HDF/watercourse #7 within Community 18 (if seasonally saturated, FOC4-1 is most likely cedar swamp), and all of Wetland Community 19 (linked to offsite wetlands) and its associated HDFs/watercourses #6a, 6b, 6c, and 6d, as well as the proposed 30-metre buffers. HDFs 6 and 7, and 10, which is connected to HDF 11, are fish habitat. <p>Area 3 – all of Wetland Communities 38 and 39 (these wetlands are larger in the field than depicted on Figure 1.1 in the EIA), as well as the associated HDFs/watercourses #5a and 5b. These HDFs/watercourses provide intermittent fish habitat downstream to Otonabee River.</p> <p>Based on staff observations on June 14, the size of wetlands (see red rectangles and red arrows – drainage flow in image) and the number of drainage channels (see blue arrows in image) that would be impacted is greater in Areas 2 and 3 than depicted on Figure 1.1, EIA.</p>	<p>Area 1 wetland- additional rationale and detail was provided regarding the services required through this small wetland.</p> <p>Area 2-The southwest wetland and the associated HDF has been retained in the latest site plan with a 15 m buffer. The rationale for the buffer is included as well as mitigation to maintain surface and seepage flows to HDF and the wetland.</p> <p>Area 3: wetlands 38 and 39 were GPS and mapped as per our field work. Additional text is included regarding loss of those unevaluated wetland pockets and the HDF.</p>
<p>1. Wetlands</p> <p>Technical staff concur with GHD (Section 4.3.2, EIA) that the hydrological features on the property could be complexed with the Lakefield South Complex Provincially Significant Wetland (PSW) because they are hydrologically</p>	<p>Noted. It was not within GHD's scope of work to evaluate the wetland. A 30-meter buffer has been implemented from all wetlands, with the exception of one location within lot 2 (community 27) off of Seaforth Crescent. This lot was severely constrained due to the presence of an HDF feature and small wetland surrounding it. As this was directly positioned close to the proposed access to this lot, the largest possible</p>

ORCA Ecology Review Comments (June 28, 2021)	GHD Response
<p>connected via Ray's Creek and HDFs/watercourses. However, no provincial correspondence regarding wetland status on site has been provided.</p> <p>In the absence of a provincial OWES review, the wetlands, as well as the hydrological connections (watercourses/HDFs), should be regarded as significant.</p>	<p>buffer was applied to maintain access into this lot. A 15-meter buffer was applied to the HDF feature, which would encompass the small wetland surrounding the HDF. No negative impacts are anticipated on this feature or surrounding wetland given mitigation measures are implemented as identified within Section 7.0 of the EIA report.</p> <p>A memo was completed by GHD (Oct 12, 2022) assessing the wetland complexing rules for Provincially Significant wetlands and whether the unevaluated wetlands on the property would be considered for complexing. The conclusions in the memo identified they would not be considered for complexing due to their small size (<0.2 ha) and lack of connectivity hydrologically to the PSW (Attachment 2).</p> <p>Changes to OWES manual in 2022 no longer have complexing rules or ability of adding unevaluated wetlands to nearby PSW. As such these wetlands are hydrographic features and wetlands but are not being considered as provincially significant. Recommendations to retain the southwest wetland but to have minor impacts to several isolated parcels are described in this response and the EIS.</p> <p>Community 29 is a deciduous forest, as such the comment regarding PSWs is not applicable to this portion of the property. Community 8 is entirely within a 30-metre buffer, while the portion of Community 21 that contains black ash also falls within a 30-metre buffer area.</p>
<p>2. Watercourses/HDFs and Fish Habitat</p> <p>Ray's Creek, HDFs/watercourses, and associated riparian wetlands support fish habitat. Given the proposed disturbance to the hydrological features on site will cause a HADD – the harmful alteration, disruption, or destruction of fish habitat, technical staff concur with GHD that the current proposal is not consistent with the Fisheries Act (Section 6.1, EIA).</p>	<p>Watercourse/Habitat Zone 9</p> <p>No fish habitat present, groundwater/wetland habitat and surrounding lands to FOC4-1. Watercourse #9 is associated with wetland (community 27).</p> <p><i>"Habitat Zone 9 was the headwater drainage feature located at the most northern section of Area 2. The feature originated east of Seaforth Crescent and flowed 55 m east, where it dissipated before connecting to Ray's Creek (Figure 3.1). The feature type appeared to have defined natural channel with minimal flows to no flows. The average water depth ranged from 0.02 m to 0.15m with a wetted width of 0.38m to 0.41 m. The feature roughness ranged from <10% minimal to 10-40% moderate There was no evidence of sediment transport adjacent to or in the feature and no signs of sediment deposition within the feature. This segment was dry during the July 15th 2020 site visit. The feature vegetation was dominated by forest, (Table 3.11). Refer to Section 3.2.1.2 for full vegetation community details." (Section 3.2.9 EIA, pg 70.)</i></p> <p>The proposed building envelope will be outside the Ray's Creek watercourse. A set feature setback has not be proposed, however, the feature form and hydrological function will be maintain. GHD will work with the project designer to avoid any physical alteration, maximize the feature setback and incorporate LIDs to reduce hydrological impacts.</p> <p>Watercourse/Habitat Zone 12</p> <p>The habitat was a large seepage area with no defined channel. There was no direct connection to Ray Creek and therefore, was not direct fish habitat. The feature was located within community 26 (cedar coniferous forest-FOC4-1).</p> <p>Similar to watercourse 9, the proposed building envelope will be outside the HDF/seepage area. A set feature setback has not be proposed, however, the feature form and hydrological function will be maintain. GHD will work with the project designer to avoid any physical alteration, maximize the feature setback and incorporate LIDs to reduce hydrological impacts.</p> <p>If erosion hazards are present, it should be addressed during detailed design.</p>

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<p>3. 30-metre Vegetated Buffer Around Hydrological Features</p> <p>To be consistent with planning and permitting policies, as well as minimize risks to property and people from functional changes to hydrological/wet features resulting from alterations to drainage regimes (e.g., SWM, grading, increased imperviousness, changing climate, site occupancy, etc.), a minimum 30-metre vegetated buffer around these features is recommended. Staff note that the 30-metre buffer is missing around some wetlands and watercourses/HDFs on the subject lands.</p> <p>It is understood that Block 11, which includes Ray's Creek, unevaluated wetland, HDFs, and the proposed 30-metre buffer, is proposed for Environmental Protection. However, passive recreational opportunities, as well as sewer/SWM infrastructure, wetland compensation, and landscaping, are also proposed within the buffer. Recognizing walking trails, and other disturbances, already exist, no details of the work proposed has been provided in the EIA. Staff note that an environmental protection designation and development/site alteration are typically mutually exclusive, and any unnecessary disturbances appears to defeat the purpose of establishing a protective buffer</p>	<p>There are some crosses of the sanitary sewer into the buffer at 2 points. The EIS provides additional discussion on using methods such as vegetative matting to install the pipe but be able to replace natural in situ vegetation back on top of the trench or directional drilling.</p> <p>At detailed design the method of construction will be reviewed in consultation with GHD biologists.</p> <p>No formal trails or a connected trail network have been requested by the Township and as such no crossings are proposed. If this changes we can provide advice on design, preferred crossing point from a fisheries perspective and any permitting or authorizations required.</p> <p>We will work with ORCA and Township on any of those amenities or facilities to minimize impacts and opportunities for restoration or enhancement.</p>
<p>Technical staff concur with GHD that the woodlands associated with Ray's Creek in Area 2 are significant (Table Significant Woodland and Significant Valley Lands)</p> <p>Technical staff concur with GHD that the woodlands associated with Ray's Creek in Areas 1 and 2 are significant (Table 4.1). While this feature, as well as its minimum 10-metre dripline, appear to be protected within the 30-metre wetland buffer associated with the creek corridor, some treed components may be impacted by the proposed uses within this area.</p> <p>There is a valley system associated with the wetlands and HDFs in Area 3 (northern limit of FOC4-1, Community 18), which has not been assessed. Based on the grading/site plans, this area would be filled in to support SWM infrastructure. Please see engineering comments for policy requirements..</p>	<p>Noted.</p>
<p>Significant Wildlife Habitat and Species at Risk</p> <p>Areas 1 and 3 supports "habitat" for the threatened bobolink, eastern meadowlark, and barn swallow, as well as for significant wildlife/special concern species. Community 29 within Area 2 also supports habitat for the endangered Butternut Tree; three Butternut trees were documented and assessed for health. Wetlands receiving discharge from SWM outlet #3 offsite, also support western chorus</p>	<p>As discussed in GHD's responses to comments from June 2021, the three butternut trees identified in the study area were determined to be Category 1 – not-retainable. A Butternut Health Expert's Report (BHE) will be prepared for submission to MECP.</p> <p>With regards to black ash, MECP has temporarily suspended protections for this species until January 2024. Until that time, proponents do not need to seek authorizations for activities that impact this species or its habitat. Regardless, the wetlands with the black ash are outside of the development envelope.</p>

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<p>frog, which are federally listed as 'threatened' (not subject to the ESA).</p> <p>The subject lands also support seasonal concentration areas, specialized wildlife habitat (seeps and springs), and habitat for species of conservation concern (habitat for species of special concern and regionally rare species). community 19. Technical staff is of the opinion that Ray's Creek corridor may also support habitat for other species listed in the EIA, including roosting and foraging habitat for endangered bats, which may be impacted by the proposed uses.</p> <p>Given that "habitat", as defined by the Endangered Species Act (ESA), for the threatened birds will be removed, in the absence of MECP approvals technical staff concur with GHD that the application currently does not comply with the ESA (Section 6.2, EIA).</p>	<p>Although GHD staff looked for evidence of bat maternity roosts in the study area, none were found. That said, the majority of the Ray's Creek corridor is being protected by buffers/setbacks from the wetland and/or the creek. As a mitigation measure, prior to any woodland clearing, a biologist shall identify and ensure no bat cavity/snag trees are within the clearing area. GHD will provide appropriate documentation to MECP to ensure compliance with the ESA.</p> <p>Lot-level recommendations to minimize impact to species at risk will be made at the detailed design stage.</p> <p>Where necessary to comply with ESA and associated regulations (eg for loss of meadowlark habitat) we will complete the required documentation from MECP to fully comply with the Endangered Species Act.</p>
<p>1. Hydrological Features</p> <p>Removing wetlands, especially with unknown provincial status, and watercourses/HDFs to create developable lands is not consistent with the intent of PPS policies 2.1.4 a), 2.1.6, 2.1.8 and 2.2.1, or the Official Plan Policy 6.2.15.4 a), to protect or enhance existing hydrological features.</p> <p>Contrary to the EIA, removing wetland features to create residential lots and install SWM infrastructure is not consistent with Otonabee Conservation policies 7.1(1) and 7.1(2) or 7.2(8) and 7.2(14). Small interferences with wetlands may be supported on existing lots of record to facilitate a single residential use where wetlands are not PSW, or for public infrastructure (see policy 7.1(7) and 7.2(8)), where the erosion, pollution, flooding, and conservation of lands regulatory tests can be satisfied. Staff note that SWM infrastructure, including ponds and outlets, cannot be placed within wetlands according to regulatory policy, and should be setback 30-metres from features.</p> <p>Technical staff is of the opinion that wetlands and watercourses remain undisturbed and are appropriately buffered from development and site alteration to be consistent with provincial and regulatory policies. As such, these features should remain designated "Environmental Constraint" in municipal planning document(s).</p>	<p>The revised site plan shows the wetlands and HDF in the southwest corner of Area 2 will be retained and a buffer applied. The buffers from the LID features and stormwater ponds are shown on the figure the attached revised EIS and also in the Stormwater Management Plan report figures. The appropriate designation of land outside of the development envelope will be left to the planning consultant and the Township to determine.</p>
<p>2. Significant Woodland and Significant Wildlife Habitat</p> <p>It is unclear whether the application is consistent with PPS 2.1.5 due to the lack of information regarding the proposed uses within the Ray's Creek corridor.</p>	<p>The potential uses in the creek corridor have not been determined or requested. Some additional text has been added to the report.</p>
<p>3. Species at Risk</p> <p>It is unclear whether the application is consistent with PPS 2.1.7 in the absence of MECP consultation/approvals.</p> <p>To demonstrate consistency with policy, technical staff offer the following comments, which are consistent with some of GHD's recommendations and will require additional work/clarification from</p>	<p>As a condition of draft plan of submission of approval, MECP will be contacted and appropriate process and documentation provided to ensure compliance with the ESA.</p> <p>See response above re complexing of wetlands in Ontario and how the wetlands on site will remain unevaluated.</p>

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<p>the applicant, to planning and permitting staff in support of application approvals:</p> <p>1. Confirmation of provincial status of the wetland features on the subject lands from MNRF/Ministry of Northern Development, Mines, Natural Resources and Forestry Peterborough District is recommended to demonstrate consistency with PPS policies 2.1.4 (a) and 2.1.8 and required to comply with Otonabee Conservation wetland policies 7.0(1), 7.1(7) and 7.2(8), as well as confirm extent of regulated area. ▪ Technical staff note that Traditional Knowledge from Indigenous Communities is not included in the EIA with respect to interfering with natural heritage and water.</p>	<p>The developer and the consulting team have worked closely with Curve Lake First Nation, including a site walk, provided all documentation requested and had discussions with them.</p>
<p>2. Please provide alternate locations for residential lots and SWM ponds that avoid wetlands and watercourses/HDFs, as well as the 30-metre buffer, where feasible, to satisfy Otonabee Conservation wetland policy 7.2(14). ▪ If wetlands are significant, development/site alteration is prohibited within the wetland per provincial policies and, therefore, an alternate draft plan design is recommended for planning and required for permitting approvals.</p> <p>▪ SWM inputs should be directed to permanent lotic/flowing systems to minimize impacts to intermittent flows and wetland hydroperiods from too much or too little water, especially in the absence of downstream data from adjacent lands.</p>	<p>See updated EIA report and revised site plan that protects most wetlands on site.</p>
<p>3. Fish surveys have not been conducted for hydrological features proposed for removal within Areas 2 and 3. If interference with fish habitat is still unavoidable, including SWM outlets, a HADD assessment of the proposed work (outlet location and design) by a fisheries biologist, and DFO authorization/letter of advice/relevant correspondence, is required to demonstrate compliance with the Fisheries Act and consistency with PPS 2.1.6. In addition to the following: ▪ Please provide HDF management recommendations based on ecological and hydrological findings in the EIA using the "Linking Classification to Management" flow chart (Figure 2- Flow Chart in TRCA and CVC's 2014 "Evaluation, Classification and Management of Headwater Drainage Features Guidelines").</p>	<p>See updated EIA report and revised site plan that discusses fish habitat and additional field work completed on those HDF features in Areas 2 and 3.</p>

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<ul style="list-style-type: none"> ▪ Additional field work/information may be required to satisfy Otonabee Conservation watercourse policies 8.1(9) and 8.4(1). <p>It is unclear from the information provided how the engineered solutions to replicate wetland and watercourse/HDFs functions were chosen given the HDFs are linked to seeps/springs and other functional attributes that should be conserved or protected.</p>	<p>The wetland and HDF in the southwest portion of Area 2 is being retained with a 15 m buffer and the development envelope redesigned accordingly as well as providing LID and other sources of water.</p>
<p>4. Provided the wetlands are not PSW, where interference with wetland or watercourse/HDF on the subject lands is required for public infrastructure purposes, a Compensation 'Plan' is recommended to demonstrate consistency with PPS policies 2.2.1 and required to satisfy Otonabee Conservation wetland and watercourse policies. ▪ Since SWM infrastructure is designed for maintenance, "Wetland Compensation" in the form of a SWM Wetland Pond is not acceptable to satisfy the regulatory requirements of "net gain in wetland function". Please find an alternate location/solution outside of features and buffers and submit a 'Plan' for review.</p> <ul style="list-style-type: none"> ▪ Wetland Compensation is proposed at 2:1; however, 3:1 is the preferred solution to satisfy the intent of regulatory policy. The application and 'Plan' must demonstrate the site's lack of feasibility to support a 3:1 ratio. ▪ Given the extent of wetlands appear larger on site than what is currently mapped on Figure 1.1 (EIA), please provide soil information used to confirm wetland and FOC4-1 community boundaries for review in Areas 2 and 3. 	<p>The wetland and HDF in the southwest portion of Area 2 is being retained with a 15 m buffer and the development envelope redesigned accordingly as well as providing LID and other sources of water.</p> <p>Wetland compensation for the other wetland areas will be provided for on site adjacent to the larger wetland associated Ray's Creek.</p> <p>A wetland compensation plan can be provided as part of the conditions of draft approval.</p>
<p>5. While technical staff support the 30-metre wetland buffer, please provide details of the following work/mitigation measures proposed within this buffer for review: ▪ What are the SWM features proposed to reduce thermal impacts?</p> <ul style="list-style-type: none"> ▪ Please provide details on trench plug installation and contingencies if plugs fail to minimize erosion and impact to local seeps and wetlands. ▪ Open trench cuts and/or directional drilling has been proposed in support of the sanitary sewer line installation. Please confirm construction details and overlay the proposed locations onto Figures 1.1 and 2.1 (EIA). ▪ Please provide details on the "passive recreational uses" proposed 	<p>See updated EIS for additional information on those specific points. As well as updated FSR and stormwater reports.</p>
	Noted .

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<p>6. While technical staff support in principles the recommendations outlined in Section 7.0, staff note additional review is required in consideration of the information discussed in this memo.</p>	
<p>7. Given the proposed alterations to the landscape, a minimum 5-year post build-out 'Effectiveness Monitoring Plan' is recommended, which includes an OLS survey of the "as built" features. The intent is to monitor the effectiveness of the performance targets of the "as built" engineered infrastructure, the 30m buffer, wetland compensation area(s), if applicable, and other mitigation measures proposed to mitigate ecological and hydrological impacts</p>	<p>As part of the conditions of draft plan approval, a monitoring plan can be included. This would assist with the ORCA permit conditions.</p> <p>GHD will work with ORCA on the scope of the monitoring, areas to be included and the survey methods and design at that time.</p>

Attachments

Attachment 1

Soil Core Information

Attachment 2

Wetland Complexing Memo

Attachment 3

Figure 1.1 and 2.1-Updated