

August 5, 2022

MP File: CCO-13-9668-02

Julie Stewart, County Planner
Lanark County
99 Christie Lake Rd.
Perth, Ontario
K7H 3C6

Re: Perthmore Subdivision Phase 6
Draft Plan of Subdivision (File No. 09-T-21001)
Zoning Amendment Application (File D14-PE-12-20)
Part Lot 3, Concession 2, Geographic Township of Drummond, now the Town of Perth

Dear Ms. Stewart,

The initial Draft Plan of Subdivision application as filed with Lanark County on December 23, 2020, received for processing on February 16, 2021, and subsequently deemed complete on March 10, 2021. The ZBA application was filed with the Town of Perth on December 23, 2020, and deemed complete on March 25, 2021. Comments were provided on both the Draft Plan of Subdivision and the Zoning By-law Amendment applications by the RVCA on April 15, 2021, following which an April 19th Public Open House was scheduled by the Town of Perth to present the development to the public and to receive comments.

Please note that additional reporting and correspondence followed the April 15th comments provided by the RVCA, as follows:

- An April 19th Staff Report to Committee of the Whole that recommends a deferral of consideration.
- April 19th report to Planning Advisory Committee.
- May 11th Staff Report to Committee of the Whole recommending deferral.

Despite in depth consideration of the original proposal in these reports provided to the Town committees, none of these documents constitute formal comments.

This letter, and the following updated plans and reports, are provided in electronic format in response to technical comments received by the RVCA:

1. An updated Draft Plan of Subdivision;
2. An updated Planning Rationale prepared by McIntosh Perry Consulting Engineers Ltd., dated August 5, 2022;
3. An updated Zoning Sketch, prepared by McIntosh Perry Consulting Engineers Ltd., dated August 5, 2022;

4. An updated Environmental Impact Statement prepared by McIntosh Perry Consulting Engineers Ltd., dated August 5, 2022;
5. An updated Traffic Impact Report prepared by McIntosh Perry Consulting Engineers Ltd., dated August 5, 2022; and
6. An updated Preliminary Servicing and Stormwater Management Report prepared by McIntosh Perry Consulting Engineers Ltd., dated August 4, 2022.

The above is provided to Lanark County by way of five (5) USB flash drives. ***Please confirm the number of hard copies required at your earliest opportunity.***

As staff are aware, comments received focused on impacts on the Perth Long Swamp and associated natural features, and the proposed future development of lands on the periphery of the subdivision adjacent to the proposed future arterial. These lands were identified on the previous Draft Plan of Subdivision as Blocks 66, 67, 68, and 69. In part as a result of these comments, the subdivision proposal has been scaled back generally to limit the current development to the residential lots previously proposed. The development of lands on the periphery will be pursued separately in the future by way of separate applications and supported by separate technical studies.

The responses provided below acknowledge the new Draft Plan of Subdivision proposal, as discussed with County and Town Staff in recent weeks.

Further, a revised Zoning Schedule has been included as part of this resubmission package and it is proposed by way of this letter that the Zoning By-law Amendment application previously filed is reactivated and that the materials provided as part of this package are circulated to relevant staff and agencies.

Rideau Valley Conservation Authority

Planning Rationale

1. The total area of the landholding is not clear based on the submission. It is understood that 15.8 hectares is proposed as part of the application for subdivision, however confirmation of the total landholding (including areas occupied by wetlands) should be indicated.

MP Response: The area within the current draft plan of subdivision measures 5.6 hectares. The total area of the land holding is 29.7 hectares.

2. Regarding Section 2.1.1. of the PPS, the rationale seems to rely on the EIS as the document guiding the impacts from the arterial road, however the previous EA for the arterial road also needs to be consulted.

MP Response: The EA for the arterial road has been consulted; however, the current Draft Plan of Subdivision has been adjusted such that it is no longer immediately adjacent to the location of the future arterial road. Please also note that this submission considers that the arterial road may be developed at some point in time in the future, but acknowledges that this is not necessarily imminent.

3. The rationale concludes that the development, as proposed, is consistent with matters of Provincial Interest. However, this statement appears to be contrary to the conclusions of the EIS which indicate that there are still the potential for negative impacts to the wetland and adjacent lands, even with recommendations and mitigation measures for the proposed development.

MP Response: The development has been adjusted. The proposal is consistent with matters of Provincial Interests, as represented by the Provincial Policy Statement.

4. The rationale notes that as per the EIS, the arterial road is anticipated to isolate the existing natural heritage features rendering them no longer significant. However, the reviewing planner's reading of the arterial road EA suggests that this matter was considered during that process and it was ultimately concluded that the road would need to maintain hydrologic and ecological connections with the wetland on either side of the proposed arterial road.

MP Response: The future arterial road, when pursued, is expected to negatively impact the natural heritage features; however, it is expected that mitigation measures proposed as part of the EA will substantially reduce these impacts. This topic may no longer be relevant though, as the status of the Town's pursuit of the future arterial road has changed since the original application.

5. The rationale discusses conformity with the Town's Official Plan in Section 4.3 of the rationale. Regarding the Town's OP policy 5.3, in the opinion of the reviewing planner and professional geoscientist, the current stormwater management report has not demonstrated how natural hydrological characteristics are maintained and where possible enhanced. It also seems that more information is required to determine how natural infiltration of water would be maximized, how alterations to the natural drainage system would be prohibited or at least minimized and how a sustainable environmental approach has been utilized to protect water resources.

MP Response: A water balance has been prepared and included within the report to illustrate the necessary infiltration trenches in order to meet post- to pre-development infiltration volumes. These volumes will be further expanded in the detailed design to illustrate the locations and sizing of trenches, however at this stage of the design, the total volume has been provided for the subdivision and then individual blocks that will be developed.

6. The rationale indicates that cash-in-lieu of parkland will be provided to address Section 8.1.1 of the Town's OP. It is not clear to the reviewing planner if this will address the requirement for efforts being made to maintain existing natural features, such as the Perth Long Swamp. In addition, it is not clear if cash-in-lieu of parkland would be consistent with the EA recommendations to ensure that land along the proposed arterial road is placed into public ownership.

MP Response: Parkland dedication is now being provided by way of parkland, and has been discussed with the Town Planner. Please refer to Block 58 on the Draft Plan of Subdivision. Please also note that it is our position that the road allowance contemplated as part of the arterial road project includes all public lands to be dedicated to the facility (i.e. no additional right-of-way is identified as required).

7. The rationale relies upon the completed EIS to address Sections 8.1.3.20, 8.6.4 and 9.12.15.1 of the Town's Official Plan. However, notwithstanding the arterial road EA, it is not clear if the submitted EIS properly addresses these sections of the Town's OP. The rationale, throughout, concludes that because the arterial road will be constructed, there are already anticipated negative impacts and seems to justify further loss of natural heritage features west of the arterial road as a result. This conclusion does not seem to agree with the findings of the arterial road EA, the PPS, nor these sections of the Town's OP.

MP Response: The current Draft Plan of Subdivision has been adjusted and includes a 30-metre buffer from the updated (proposed) boundary of the Provincially Significant Wetland. As described within the updated EIS and Planning Rationale, the current proposal is consistent with the PPS and conforms to the relevant policies of Town's Official Plan.

8. The rationale indicates that zoning will go from R1 and EP to R3 and R4, however, to our knowledge a schedule showing the proposed areas requesting a zone change has not been included with the rationale. A schedule should be included specifying the location of the proposed zone changes prior to a decision being made by the approval authorities to ensure common understanding of requested changes.

MP Response: A zoning schedule is provided as part of the resubmission.

Environmental Impact Statement

1. Specific methodologies used for the wildlife field study are not referenced in the EIS (and should as per OP policy 8.6.4.h.3.ii). More information on the occurrence of other wildlife (i.e. amphibians, mammals and reptiles) aside from that provided in the more detailed avian surveys conducted in June 2019 would be useful when assessing the habitat needs of species that utilize adjacent lands to the identified natural heritage features.

MP Response: Migratory Bird Breeding Atlas methodologies were utilized. Other wildlife observations were incidental. This is indicated in the updated EIS.

2. The EIS notes that vegetation communities were characterized using the Ecological Land Classification (ELC) protocol, although ELC data cards/field sheets for community description and classification, stand and soil characteristics, plant species list, management, disturbance and wildlife are not appended to the EIS.

MP Response: Vegetation was characterized utilizing ELC. Field notes are often only legible to the author and the information on them is detailed clearly in the report making them somewhat redundant. We have not ever included these nor been asked to. It is our opinion that the write up within the report satisfies EIS requirements.

3. Updates to the wetland boundary are identified within the EIS. In some areas the boundary is proposed to increase and in others to decrease. This proposed updated wetland boundary will be required to be approved by the Ministry of Natural Resources and Forestry under the Ontario Wetland Evaluation System (OWES). Confirmation that the evaluator was OWES certified will be needed. RVCA can assist the Ministry with its review of the proposed wetland boundary changes if necessary.

MP Response: This has been completed in communications with Scott Smithers at MNDMNRF.

4. The proposed 30 metre setback from the boundary of the revised wetland boundary is not substantiated in the opinion of the reviewer. A formal analysis should be written to substantiate the recommended setback of 30 metres and, in addition to relying upon the Natural Heritage Reference Manual, should further rely upon:

- a. Section 2.1.3 “amount of natural vegetation adjacent to the wetland” from Environment Canada’s Third Edition of “How Much Habitat is Enough”.

MP Response: ‘How Much Habitat is Enough’ was created for protection of wetlands in the great lakes area of concern, however is a good document for consideration for restoration of wetlands. Protection of wetlands should be considered on a landscape context. A number of the studies that have been completed recommend a buffer in the vicinity of 30 m however this is dependent on available habitat, slopes, adjacent lands, etc. There are known SAR turtles within the wetland however their overwintering and summering habitat are not known to be adjacent to the development. Turtle nesting is unlikely to occur on the adjacent lands due to the forested stands and residential development. Waterfowl use and dragonfly use of adjacent habitat is possible however would be sparse. Adjacent lands are generally gently sloped helping nutrients to be absorbed by the adjacent habitat that will be left in place. The rear yard property line is recommended to be 30 m from the wetland, therefore the development setback will be greater than this. The EIS indicates that the landowner is willing to restore unvegetated buffers with plantings providing opportunity for some restoration and incorporating wildlife habitat into the stormwater pond. Stormwater ponds are going to be developed for sediment runoff. The recommendation from the author remains a 30 m buffer to protect the adjacent Long Swamp. The swamp wetland itself is highly vegetated including the dense cattail marsh at the northern portion of the property.

- b. Ecological Buffer Determination Methodology of the Ecological Buffer Guideline Review – prepared for Credit Valley Conservation.

MP Response: This document references similar reports to How Much Habitat is Enough. The conclusions are similar. The greatest minimum setback recommendation of 50 m from one report is related to sediment attenuation. The stormwater pond on site is constructed to attenuate sediment. Also the low grade and vegetated forest surroundings would reduce the impacts of sediment runoff. Mitigation measures will be employed during construction to reduce sedimentation from construction when the surrounding site is most disturbed.

5. Until a formal analysis is written to substantiate the recommended setback from 120 metres to 30 metres, a 50 metre setback should be utilized for planning purposes as it is a baseline minimum width.

MP Response: The author recommends a 30 m setback based on the above. The EIS has been updated to discuss further.

6. The EIS includes varied statements regarding the significance of wildlife habitat. In Section 5.4, it is indicated that “the proposed plan for Phase 6 can’t meet the requirements of the Perth OP which indicate that there will be no site alteration in Significant Wildlife Habitat because 12 acres of vegetation clearing is proposed within this habitat of the Eastern Wood-peewee and Wood Thrush. Although there will be direct loss of usable breeding habitat for both species, there is no shortage of suitable habitat within Lanark County.” This is questionable and uses the “splitting up” of the existing Significant Woodlands as an argument for downgrading the status and functionality of the Significant Wildlife Habitat and is an inadequate argument within the current planning context for the Town of Perth.

MP Response: The woodlands on site are significant woodlands based on the species present. The Eastern Wood-peewee is a habitat generalist and can be found in most wooded habitats including hedgerows. The thrush is slightly more specific in its habitat, however will find an abundance of habitat within the surrounding landscape. The author is not downgrading the status and functionality of SWH but simply putting it in context so decision making at the local level is not isolated. Habitat use at a larger landscape scale is very important when making planning decisions. With the Eastern Wood-peewee being a habitat generalist and finding habitat in much of the extensive woodlands within Lanark County would potentially restrict large tracts of forest across the County. This is not the intent of the protection of SWH. In understanding the local landscape having over 20 years of experience locally, Eastern Wood-peewee are a common species within Lanark as is the Wood Thrush. The better way to protect these special concern species is to identify areas of high-quality habitat and protect this habitat on a planning scale for a larger landscape. One nesting pair of each of these species would not indicate high quality habitat.

7. For Significant Woodlands, the EIS states that the development: “currently plans to remove approximately 22 acres of the significant woodland, with the construction of the Perth by-pass road, [and] its ecological function would be significantly impacted....[L]ooking at future conditions, it is doubtful that the woodland will continue to meet the significant woodland criteria for being within 30 metres of a PSW its ecological benefit will be minimal based on the presence of the roadway corridor between the two features.” This statement is dependent upon the approval of the current Phase 6 proposal along with future phases of the Perthmore Development and the construction of the proposed arterial road. As for the significance of the on-site woodland, it is important to note that the Town of Perth currently has 13 percent woodland cover which is well below the 30 percent threshold required to sustain forest birds and other wildlife. The Phase 6 proposal will reduce the area of woodland cover in the Town of Perth within one of the few, remaining larger woodlands in the municipality. The reasons given for a possible downgrading of the significant

woodland must be properly substantiated and documented using criteria developed by MNRF Kemptville District staff for Eastern Ontario - which the RVCA can assist with - before a decision can be made.

MP Response: The new proposed subdivision plan proposes the removal of 1.5 hectares of the significant woodland. This would be primarily edge habitat and the woodland would remain significant post construction. The author used the Town of Perth's OP for review of the wetland along with the MNDMNRF's NHIC manual. The forest met the criteria for significant woodland based on the Perth OP, however based on the local context of forest habitat within the greater study area (not isolating the forest to just Perth), this area would not be considered Significant Woodland.

Further, and as concluded within the EIS, the subject lands are within a settlement area and the large majority of them are designated for development under the Perth Official Plan. It is our opinion that the proposal satisfies the intent of applicable policy, including those addressing Significant Woodlands.

8. While the EIS concludes that the proposed development is located greater than 30 metres from the eastern tributary, the delineation of potential pike spawning habitat (which can be greater than the banks of the tributary) should be shown on a schedule in the EIS to demonstrate that the proposed development area is at least 30 metres from the extent of the potential pike spawning habitat.

MP Response: Northern Pike spawning habitat is potentially located close to County Road 10 and not in the vicinity of the subdivision. It is not expected that they would access the cattail wetland to the north. With the subdivision now proposed to be 30 m from the wetland boundary at a minimum, this would be guaranteed.

9. The indicated groundwater discharge near the eastern tributary means that the Perth Long Swamp functions as an important feature by providing base flow to the Tay River.

MP Response: Agreed. This should not change with the Phase 6 development.

10. The EIS concludes that negative environmental impacts will occur to the identified significant natural heritage features as a result of this development. It also notes that it does not endorse the potential removal of wetlands prior to the construction of the Perth bypass road and indicates that the wetland habitat should be assessed again after the road's construction to determine if the wetland still provides a valuable function. This summary and conclusion claim that there may be a future downgrading of provincial significance. However, this is unsubstantiated and cannot be addressed until the arterial road is constructed. At that future time, there is no certainty that the significant status of the natural features will

change and therefore the road should not be used as an argument in favour of rezoning lands from Environmental Protection to Residential. It is worth noting that within eastern Ontario there are numerous natural heritage features, including PSWs, that are bisected by arterial roads yet retain their provincial significance status.

MP Response: The proposed subdivision is now proposed to be a minimum of 30 from the wetland with areas that are greater than 30m.

Draft Plan

1. The boundary of the current and proposed boundary of the Perth Long Swamp should be plotted on the draft plan as should the 120 metre adjacent lands.

MP Response: It is acknowledged that wetlands are to be identified on the Draft Plan of Subdivision pursuant to Section 51(17)(g) of the Planning Act. To avoid over complicating the Draft Plan, we believe it is appropriate in this instance to identify only the proposed wetland boundary and the associated 30 m setback. It is further acknowledged MNDMNRF approval of the adjusted PSW boundary will be required, and it is noted that the Ministry has recently indicated that the approval is being processed.

2. The boundary of the 1:100 year regulatory floodplain and its 15m regulatory setback should also be plotted on this plan.

MP Response: A preliminary review of mapping provides that the Subdivision area is not constrained by the floodplain.

3. Once the above-noted lines are plotted on the draft plan, it will be clear which lands are potentially located within portions of the Perth Long Swamp. From our review, it appears that portions of Block 66-70 as well as lots 38-43 may be proposed within the current wetland boundary.

MP Response: Please refer to the above responses; the area proposed for development is neither within the PSW nor the floodplain.

4. An outcome of the arterial road EA was that the lands on either side of the road are proposed to be placed into public ownership to achieve the social environment recommendations of the EA. In reviewing the proposed lot layout, it appears to show lands in private ownership adjacent the arterial road. This should be remedied to be consistent with the arterial road EA.

MP Response: We responded to the contention that lands adjacent to the proposed arterial are intended to be public in our letter of September 27, 2021. Respectfully, we are of the opinion that the ESR recommends a 15 m buffer between the physical roadway and the boundary of the wetland.

SWM Report

1. Hydrologic Considerations

- a. The preliminary stormwater management plan does not address the province’s long-standing technical guidance about maintaining the hydrological cycle / water budget on-site, which is currently used to support several policies from the PPS, especially policy 2.2.2.
- b. The adjacent PSW should be recognized as a sensitive surface water and ground water feature, as per the PPS, where related hydrologic functions are to be protected, improved and restored.
- c. The hydrologic function of the immediately adjacent PSW and related on-site controls / linkages should be assessed.
- d. The stormwater management plan currently only directly addresses peak flow conditions, which is only part of Ontario’s long-term stormwater management strategy.
- e. The stormwater management plan does not provide “mitigative measures or alternative development approaches to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions”.
- f. A revised stormwater management plan should therefore include numerous lot-level and conveyance controls (treatment train approach), trees and pervious space, in addition to an end-of-pipe solution (if one is needed). This approach is widely described as Low Impact Development (LID) and is part of the recognized Green Infrastructure development tool-kit, which otherwise includes development methods (e.g green-roofs, reflective materials / coatings) that mitigate urban heat island effects and the extreme heat events that are predicted under the various climate change scenarios.

MP Response to items 1a through 1f: The stormwater management strategy has been revised to move the pond further upstream of the wetland complex. The stormwater management strategy of the development will include compensation for a combination of blocks being developed as well

as residential lots. The individual blocks will be required to provide a stormwater management design per site to ensure that both quality and quantity controls are achieved. The runoff from these relatedly large blocks will also require a site-specific balance to ensure that appropriate mitigation measures have been included. A water balance has been requested and included within the revised plan to illustrate the volume and general sizing parameters to meet the pre-development water balance criteria, specifically including infiltration. Given that the blocks will be developed at a later date, requirements such as green roofs or reflective materials/coatings would be premature at this time to specify. During the site plan control phase, these elements can be discussed with the appropriate developer to facilitate further discussions. The development application's stormwater management strategy is in our belief consistent with others developed within the RVCA watershed.

2. Stormwater Management Considerations

- a. Stormwater management ponds should not be located within a regulated wetland.

MP Response: The SWM pond has been relocated as requested.

- b. In reference to Section 5.4, it appears that the total flow to the pond is not the sum of the flow from Area 1 and Area 2. Please provide explanation / resolution.

MP Response: Please note that the total peak flow to the pond is calculated with respect to the time of concentration of each outlet, i.e.: the two areas are not linear and would not peak at the same time. The Visual Otthymo model is available at the RVCA's request to review.

- c. Table 5 indicates a total detention storage of 9000 m³. Please explain how this value was determined. This relates to Section 5.6, which states that "Tables 5 and 6 show the calculated post-development and controlled flow values outletting from the proposed reconstructed SWM facility. To provide the quantity control as shown in the tables would require a total of 9000 m³ of detention storage."

MP Response: The total volume of the pond has been reviewed and revised based on the contributing drainage area flowing towards the outlet. The SWM facility is no longer linked to the previous phase and therefore, the volume of the pond is reduced greatly, especially given that each block will have its own SWM requirements.

- d. Please provide the conceptual design for each component of the proposed stormwater management system.

MP Response: The SWM pond complete with conceptual calculations for the forebay, permanent pool, extended detention drawdown, sediment cleaning, pre- and post-development calculations and post- to pre-development comparisons are all included in the revised design.

Discussion

1. Based on the information submitted to date, it is the opinion of the reviewing planner that the subject application is not consistent with the Provincial Policy Statements, the Town's Official Plan or the original recommendations of the EA process for the arterial road.

MP Response: The application and associated technical studies have been adjusted and updated and it is our opinion that the proposal is consistent with the Provincial Policy Statement, and conforms to the Town's Official Plan. The recommendations of the EA have also been considered.

2. Regarding Section 1.6.6.7 of the PPS, the information provided has not yet demonstrated how the proposed development would, at a conceptual level, provide sewage and water services which prepare for the impacts of a changing climate and protect human health and safety and the natural environment. Stormwater management is required to be integrated at all stages of the planning process. At this point, it is not clear to the reviewing planner, nor qualified professionals within our office, how the stormwater system will minimize changes in water balance or maximize the extent and function of vegetative and pervious services and promote best management practices including attenuation and re-use, water conservation and efficiency and low impact development.

MP Response: The stormwater management approach has been adjusted within and as part of the current proposal. With respect to the stormwater management and water balance criteria, MP has included the conceptual calculations for pre-development, post-development and post-development with mitigation to illustrate the requirements of the site to ensure that there are no detrimental impacts downstream.

3. Regarding Section 2.1 and 2.2 of the PPS, it is the opinion of the reviewing planner that the adjacent Perth Long Swamp is a sensitive surface water feature based upon information from the ecologist, professional geoscientist and the RVCA catchment report. While development is proposed within the wetland (as approved through the previous EA exercise) the PPS still requires that natural features be protected for the

long-term and that diversity and connectivity of natural features in an area and the long-term ecological and biodiversity of natural heritage systems be maintained, restored or improved. As noted by RVCA's ecologist, to proactively remove a wetland zone category on the basis of a future road which is not yet constructed is not an acceptable argument in favour of pre-zoning lands to no longer be wetlands. The submitted EIS acknowledges that negative impacts will result to the Perth Long Swamp from the arterial road, but also seems to extend negative impacts outside the bounds of the arterial road and justify them because of the road. This seems to be inconsistent with Section 2.1.1 and 2.1.8 of the PPS and the requirements of the arterial road EA to maintain ecological and biological connections and linkages on either side of the arterial road.

MP Response: As previously discussed, the area being developed has been adjusted and it is our opinion that the development is consistent with the policies of the PPS.

4. Other methods to protect, improve or restore the quality and quantity of sensitive surface water features include consideration of cumulative impacts of development. This phase of Perthmore Estates is proposed immediately adjacent and within portions of the Perth Long Swamp. The information submitted to date, while it has commenced with addressing water quality and quantity from a stormwater perspective, has not also evaluated the hydrologic linkages between the adjacent lands and the wetland nor made recommendations to implement necessary restrictions on development or site alteration to protect, improve or restore this vulnerable surface water feature and its hydrologic functions. It should be noted that development is required to take a restrictive approach near these features to protect, improve or restore their hydrologic functions. The PPS notes that may mean requiring alternative development approaches.

MP Response: A water balance analysis has been completed and is included within the resubmission package.

5. In relation to Section 3.0 of the PPS, it needs to be understood where the proposed development is in relation to the existing mapped floodplain. In addition, organic soils can constitute hazardous sites and geotechnical information will be required to demonstrate that there are no risks associated with these hazards in the vicinity of proposed and future development.

MP Response: The adjusted development area is north of the floodplain. Mapping can be provided in the future as necessary.

6. Based on our review, it appears that the proposed development may not fully address Sections 5.3, 8.1.1, 8.1.3.20, 8.6.4, 8.6.4.h.3.ii or 9.12.15.1 of the Town's Official Plan as:

a. Regarding Section 5.3, the current stormwater management report has not demonstrated how natural hydrological characteristics are maintained and where possible enhanced.

MP Response: A revised report including water balance criteria consistent with previous RVCA applications has been enclosed.

b. Regarding Section 8.1.1[a], greater efforts to maintain existing natural features are possible and these efforts are required as per this section.

MP Response: The proposal has been adjusted and the updated EIS addresses any remaining impacts to existing natural features.

c. Regarding Section 8.1.3.20[f], the Plan requires new residential areas, including Perthmore Glen, to include a mix of parks that provide or enhance pedestrian links. The EA process identified the potential for public ownership lands adjacent the arterial road rather than lands in private ownership.

MP Response: A park has been provided in satisfaction of parkland dedication requirements. As previously stated, we are of the opinion that the ESR for the future arterial recommends a 15 m buffer between the physical roadway and the boundary of the wetland; however, we are not sure that this topic is of current relevance given the status of the arterial and the adjusted development area.

d. Regarding Section 8.6.4, the EIS indicates that even with implementation of recommendations and mitigation measures negative impacts are still possible. Therefore, it appears that the EIS, as prepared has not demonstrated no negative impacts to the adjacent lands as required by this section. The application also appears to be seeking to pre-zone wetland out of the EP category which does not appear to be supported by this section.

MP Response: The EIS has been updated pursuant to the adjusted development which is nearly entirely within lands designated residential area on Official Plan Schedule A. A Zoning amendment to the EP zoned category is still proposed as communicated on the proposed Zoning Schedule and

it is our opinion that the zone change (which occurs in the area proposed for a Stormwater Management Pond) is appropriate.

- e. Regarding Section 9.12.15.1[d] of the Town's Official Plan, if the subdivision has not demonstrated that the proposed subdivision will comply with policies of the plan it shall not be supported

MP Response: The current proposal conforms to the policies of the Town of Perth Official Plan.

Recommendations

1. The provision of a hydrologic impact statement which considers water balance and is integrated with the stormwater management report. This should also demonstrate presence or absence of organic soils in the areas indicated on our mapping through geotechnical evaluation. Before work is commenced on this report, we recommend a specific pre-consultation meeting to ensure appropriate scoping of any report;

MP Response: The proposed servicing and stormwater management report has been updated to include the water balance components that are consistent with previously accepted developments in the RVCA's watershed. Based on the conceptual nature of this submission, it is anticipated that this should be sufficient at this time and more detailed studies (if deemed necessary) can be addressed during the detailed design phase.

2. Confirmation or clarification regarding the EIS as raised in this letter (delineation of potential pike spawning habitat, use of a 50 metre setback from the regulatory boundary until a more fulsome analysis is completed, discussion regarding significant woodlands and wildlife habitat);

MP Response: This recommendation has been addressed by way of development adjustments, the updated technical studies, and the comment responses above.

3. Plotting of current and proposed regulatory boundaries of the Perth Long Swamp, the 1:100 year floodplain and their related regulatory setbacks

MP Response: This recommendation has also been addressed with the exception of the identification of the floodplain on the Draft Plan of Subdivision as stated supplemental mapping can be provided as necessary.

4. Reconciliation between the arterial road EA, the EIS and the proposed development (lands in public ownership, maintenance of connections on both sides of the arterial road).

MP Response: As stated above, the status of the Town's pursuit of the arterial road is somewhat uncertain at this juncture, and the current development has generally been adjusted such that it is no longer adjacent to the area identified for the arterial road.

5. Provision of a schedule indicating which lands are seeking to be re-zoned.

MP Response: A schedule is now provided.

Wetland Hydrologic Functions and Stormwater Management

1. The preliminary stormwater management plan does not address the province's long-standing technical guidance about maintaining the hydrological cycle / water budget on-site, which is currently used to support several policies from the Provincial Policy Statement, especially policy 2.2.2. See Chapters 3.1, 3.2, and 4.5 etc. of Ontario's 2003 Stormwater Management Planning and Design Manual.

MP Response: As noted a revised report with accompanying water balance has been included in the submission.

2. In addition, the preliminary stormwater management plan does not address Ontario's mandatory 2021 Stormwater Management Criteria for Consolidated Linear Infrastructure (CLI) Environmental Compliance Approvals (ECA) which requires that the water budget be maintained at a site or the total runoff volume be addressed on-site. The 2021 CLI ECA criteria effectively entrenches the aforementioned guidance.

MP Response: As noted a revised report with accompanying water balance has been included in the submission.

3. The municipal stormwater management system operator, who will be responsible for the Town's CLI ECA, must accept the preliminary system design, as they will be responsible to the province for all related regulatory compliance considerations, maintenance, and related aspects of the Town's asset management inventory / plan.

MP Response: Acknowledged.

4. RVCA will align all later regulatory requirements with the expectations from this memorandum and an accepted revised stormwater management plan.

MP Response: Acknowledged.

5. 1, 2, and 4, as above, indicate the following for the project.
 - a. The adjacent PSW should be recognized as a sensitive surface water and ground water feature, as per the Provincial Policy Statement, where related hydrologic functions are to be protected, improved and restored.

MP Response: A minimum 30 metre setback is proposed from the updated boundaries of the provincially Significant Wetland. A water balance has also been provided.

- b. The hydrologic function of the immediately adjacent PSW and related on-site controls / linkages should be assessed.

MP Response: Per above, a water balance has been provided.

- c. The stormwater management plan currently only directly addresses peak flow conditions, which is only part of Ontario's long-term stormwater management strategy.

MP Response: This comment has been addressed within our responses to SWM commentary above.

- d. The stormwater management plan does not provide "mitigative measures or alternative development approaches to protect, improve or restore sensitive surface water features, sensitive ground water features, and their hydrologic functions". Although it is acknowledged that simple best practices are recommended.

MP Response: This comment has been addressed within our responses to SWM commentary above.

6. For all future submissions, an assessment of the hydrologic function of the subject lands should include but not be limited to the following.
 - a. Relevant characterization of site-specific and receiving surface water resources by an experienced water resource engineer.

- b. Relevant characterization of the immediate area's hydrogeology by an experienced hydrogeological geoscientist.
- c. A pre-development water budget assessment that provides site-specific infiltration, evapotranspiration, storage and runoff targets. Targets should directly reflect the volumes, locations, and alignments needed to mimic the natural hydrologic cycle, in consideration of pre-development drainage patterns/features and site-specific constraints (water table elevation etc.) The targets are to form the conditions under which detailed system design will later be evaluated / accepted.
- d. A conceptual / preliminary post-development water budget assessment that demonstrates the feasibility / suitability of recommended mitigative measures (proof of concept). It is understood that models such as the Sustainable Technologies Evaluation Program's Low Impact Development Treatment Train Tool can be used in this effort. (<https://sustainabletechnologies.ca/low-impact-development-treatment-train-tool/>).
- e. All other information required to assess related constraints as per Table 2. Stormwater Management Practices Site Constraints from Appendix A – Stormwater Management Criteria, in Ontario's CLI ECA for a Municipal Stormwater Management System.
- f. All other information required to determine site-specific runoff volume control targets, such as per Aquafor Beech's 2016 Runoff Volume Control Targets for Ontario (or the equivalent, if this approach is chosen) http://www.downloads.ene.gov.on.ca/envision/env_reg/er/documents/2017/012-9080_Runoff.pdf

MP Response to items 6a – 6f: A revised stormwater management report complete with water balance calculations has been enclosed.

- g. Assessment of likely on-site impacts from and design considerations for the arterial road should that is expected to be built along the eastern boundary of Phase 6 of the subdivision. This is because road placement within a wetland can impound water on the up-gradient side of the road, which can cause wetland expansion and exacerbate poor drainage conditions etc.

MP Response: The design of the arterial road will need to accept flows from the subdivision, which is typical of a design of a new roadway. That said, this development does not include the design of the arterial road. Further, the Town’s pursuit of the future arterial road is uncertain.

7. A revised stormwater management plan should therefore include numerous lot-level and conveyance controls (treatment train approach), trees and pervious space, in addition to an end-of-pipe solution (if one is needed). This approach is widely described as Low Impact Development (LID) and is part of the recognized Green Infrastructure development tool-kit, which otherwise includes development methods (e.g. green-roofs, reflective materials / coatings) that mitigate urban heat island effects and the extreme heat events that are predicted under the various climate change scenarios.

MP Response: See response above.

8. The revised stormwater management plan should also include provisions to provide the municipal system operator with an inventory of the system components, in the form that they intend to add them to their core infrastructure asset management plan and related CLI ECA (e.g. alignments and component type and diameters as GIS data)

MP Response: See response above.

9. Stormwater management ponds should not be located within a regulated wetland.

MP Response: See response above.

10. Drawing 100, which is referenced in Section 6, Sediment Erosion Control, is missing from the report. (Section 4.4 states that “As previously noted, the pond will be upgraded in this phase of the development as detailed in Section 6.0. See Drawing 100 – General Plan of Services for details pertaining to the layout of the storm sewers”.)

MP Response: The report has been updated and these references are no longer applicable. A Sediment and Erosion Control Plan will be provided at the detailed design stage.

11. In reference to Section 5.4, it appears that the total flow to the pond is not the sum of the flow from Area 1 and Area 2. Please provide explanation / resolution.

MP Response: See response above.

12. Table 5 indicates a total detention storage of 9000 m³. Please explain how this value was determined. This relates to Section 5.6, which states that “Tables 5 and 6 show the calculated post-development and controlled flow values outletting from the proposed reconstructed SWM facility. To provide the quantity control as shown in the tables would require a total of 9000 m³ of detention storage.”

MP Response: See response above.

13. Please provide the conceptual design for each component of the Proposed stormwater management system.

MP Response: See response above.

Closure

Supported by information to be provided by Township and County Staff, we trust that the above responses address the comments received to date from the public.

Should you require any additional information, please do not hesitate to contact our office.

Thank you,



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Encl.

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