

Condition	Agency responsible for Condition	Responsible Consultant(s)	Response
1. Raw pump test data should be provided to allow PGL to further assess the suitability of the pump tests completed at the Site; and	PGL	Hydrogeological Assessment-Cambium	Hydrograph data is provided in updated hydrogeological assessment report. Raw data will also be provided in MS Excel format.
2. A statement indicating that “the probable well yields determined on the basis of their investigations are representative of the yields which residents of the development are likely to obtain from their wells in the long term” should be provided.	PGL	Hydrogeological Assessment-Cambium	The assessment was completed as per (and in excess of) Procedure D-5-5 criteria. As such long term yields are considered to have been inherently addressed.
3. Further discussion should be provided on the impacts of the exceedances of the Ontario Drinking Water Quality Guidelines, and treatment options should be provided as mitigation measures;	PGL	Hydrogeological Assessment-Cambium	Addressed, see section 4.6.2 of updated hydrogeological assessment.
4. Additional groundwater sampling within the same formation (onsite or from a neighbouring site) should be completed to ensure groundwater sampling results are representative of long-term water quality;	PGL	Hydrogeological Assessment-Cambium	Additional onsite sampling of existing test wells has been completed. See section 4.6 of the updated hydrogeological assessment.
5. Comments should be provided on whether the pumping test wells were developed prior to testing and sampling, as development of wells prior to pumping tests is recommended within Procedure D-5-5;	PGL	Hydrogeological Assessment-Cambium	The test wells are considered to have been sufficiently developed. See section 4.6 of the updated hydrogeological assessment.
6. Discussion should be provided on the potential influence of turbidity on the water supply and water treatment;	PGL	Hydrogeological Assessment-Cambium	This comment is addressed see section 4.6 of hydrogeological assessment.
7. Additional sampling should be completed to ensure the minimum parameters are analyzed;	PGL	Hydrogeological Assessment-Cambium	The test wells were resampled for the parameters outlined in Procedure D-5-5. No additional parameters were deemed necessary due to hydraulic isolation from surface conditions. This is detailed in the updated hydrogeological assessment.
8. Discussion on whether conditions specific to the Site or surrounding areas require the inclusion of additional test parameters should be provided; and	PGL	Hydrogeological Assessment-Cambium	See response to comment 7.
9. Documentation of sampling times, any onsite analytical methods, and all analytical results (including laboratory reports with a report of the chlorine residual measured at the time of sampling) should be provided.	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.
10. Comments and discussion should be provided on the long-term safe yield of the aquifer and the impact of the development on any nearby sensitive water courses.	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.
11. Discussion on the past and present onsite land uses and any contaminant spills should be provided. Their impact on groundwater should be evaluated if any uses or spills that may affect water quality are identified;	PGL	Hydrogeological Assessment-Cambium	Due to hydraulic isolation the on-site supply aquifer is considered to not be at significant risk of any conditions that may be present at surface. This is addressed in the updated hydrogeological assessment.
12. Discussion on applicable municipal and regional requirements should be provided, and additional testing should be completed if required by municipal or regional regulations;	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.

13. Information and discussion should be provided regarding the construction specifications for further domestic wells that will support the development. Information should include the number of wells that will be constructed to service the Site, target depths, and locations to ensure that the Proposed Development can be serviced. Information should also be provided regarding the protection of wells from contamination by effluent;	PGL	Hydrogeological Assessment-Cambium	A recommendation is provided in the updated hydrogeological assessment which states that all future wells be installed in the deep confined aquifer in which the three test wells were installed.
14. Discussion should be provided on the potential for cross-contamination between aquifers; and	PGL	Hydrogeological Assessment-Cambium	This is addressed in the updated hydrogeological assessment.
15. The following items should be included for completeness: all well logs, water well records, and hydrogeological cross-sections.	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.
16. Additional testing should be completed to ensure that the proposed water supply meets the Ontario Drinking Water Quality Standards.	PGL	Hydrogeological Assessment-Cambium	This is addressed, see comment 7.
17. If the Assessment is intended to meet the LSRCA guidelines, the guidelines should be stated within the Assessment, and the Assessment should be updated to explicitly state whether the guidelines have been met. If the scope of the analysis required has been adjusted through consultation with the municipality and the LSRCA, supporting documentation and discussion should be provided.	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.
18. Further discussion related to the intake protection zone 3 and the impact of the development on an area of significant groundwater recharge and highly vulnerable aquifer should be provided, including discussion on the source of groundwater recharge for the deeper aquifer;	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.
19. While the evaluation of the onsite sewage system is beyond the scope of this peer review, once a design of the sewage system is provided, it should be evaluated against the Ontario Building Code Act requirement; and	PGL	Hydrogeological Assessment-Cambium	This is beyond the scope of the hydrogeological assessment and should be addressed at a later date.
20. Discussion on whether an inspection program is required based on the vulnerability of the Site should be provided.	PGL	Hydrogeological Assessment-Cambium	This is beyond the scope of the hydrogeological assessment and should be addressed at a later date.
21. A review of the policies should be completed, and comments (including those on the policy deficiencies noted above), should be provided.	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment.
22. Additional sampling should be completed to ensure that a background nitrate-nitrogen concentration, which is representative of Site conditions, can be provided.	PGL	Hydrogeological Assessment-Cambium	This work program is ongoing. Onsite nitrate concentrations in the receiving aquifer are low. The results collected to date are included in the updated hydrogeological assessment.
23. The predictive assessment should be revised to use the available dilution based on the post-development water balance scenario; and	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment (and references the updated water balance report).
24. Comments on the impact of onsite discharge of sewage effluent into surface water and subsequent impact assessment of phosphorus and other parameters of concern should be provided.	PGL	Hydrogeological Assessment-Cambium	This is included in the updated hydrogeological assessment. See section 5.0 of the updated hydrogeological assessment.

25. The Phase 1 northwest catchment landscape area runoff rate for the pre- and post-development scenarios should be verified; and	PGL	Hydrogeological Assessment-Cambium	This is addressed in the updated water balance report.
26. The Water Balance comparison (the changes in infiltration and recharge) should be based on changes in the Phase 2 area.	PGL	Hydrogeological Assessment-Cambium	This is addressed in the updated water balance report.
27. If LID measures are to be implemented, specific measures should be suggested and included within the Water Balance to determine whether they will allow for infiltration to be maintained at the Site.	PGL	Hydrogeological Assessment-Cambium	This detail will be determined at a later date.
28. A copy of the complete Terms of Reference should be appended, along with any correspondence with applicable agencies and authorities.	PGL	Natural Heritage Evaluation GHD	GHD Response: This has been added as an appendix to the updated NHE.
29. A more comprehensive description, including the clearing area and both temporary and permanent impacts, should be included to support a better understanding of the proposed mitigation measures.	PGL	Natural Heritage Evaluation GHD	GHD Response: Updated Site plans and grading plans part of resubmission. Updates to lotting and grading were made to mitigate impacts to the wetland features. Development envelope was reviewed for temporary construction and permanent impacts.
30. Conduct a follow-up Site investigation to confirm the Ecological Land Classification (ELC) communities, including all wetland features.	PGL	Natural Heritage Evaluation GHD	GHD Response: A site visit was conducted on July 25, 2024 and the updated NHE has been updated.
31. The Evaluation should be updated to include reference to the Migratory Bird Regulations (2022) and a field study to determine whether any Schedule 1 species are present within the project area;	PGL	Natural Heritage Evaluation GHD	GHD Response: Referenced new MBCA. No S1 species identified.
32. Evaluation should be updated to include the Fish and Wildlife Conservation Act (1997) and a field study to determine whether any species with protection (i.e., raptors) are present within the project area; and	PGL	Natural Heritage Evaluation GHD	GHD Response: Referenced the FWCA 1997 in 1.4.2.5. Latter was updated in Section 4.1.4
33. Any communications with relevant provincial or federal agencies should be appended for review.	PGL	Natural Heritage Evaluation GHD	GHD Response: No communications with provincial or federal agencies
34. All items identified as not present (i.e., those marked with an “x”) should be completed or a rationale for their absence should be provided.	PGL	Natural Heritage Evaluation GHD	GHD Response: Included incidentals were recoded in 2022. Only one BBS survey was completed in 2022 due to the timing of surveys. Added section 9 and 10 of the ESA to section 1.4.2.1. SAR screening and bat survey info added in to section 4.1.4. Targeted survyes for Schedule 1 species and added to section 4.1.4. Schedule 1 species were assesed during our 2024 surveys.
35. A cumulative impact assessment section should be included, which references significant wildlife, sensitive species habitat, and natural heritage features immediately surrounding the project area and within the region; and	PGL	Natural Heritage Evaluation GHD	GHD Response: The revised site plan minimizes impacts to wetlands, sensitive species, SWH and natural features and proposes a naturalized buffer. The protection of those features and ecological functions will be maintained or enhanced by this development. As such no cumulative ipm impact is anticipated on those from the proposed development.
36. Should additional field studies (e.g., bat surveys, survey for Schedule 1 species) result in additional observations, the impact assessment and recommendations section should be updated.	PGL	Natural Heritage Evaluation GHD	GHD Response: No Schedule 1 species found.
37. A copy of the SAR screening results should be included in the Evaluation report;	PGL	Natural Heritage Evaluation GHD	GHD Response: SAR screening was part of GHDs literature background review. Sources reviewed have been outlined in Section 1.5 of the NHE and results listed within the Discussion section (Section 4.0) of the NHE.

38. The following items should be completed with respect to birds and/or bats: • An additional field survey to inspect existing buildings in Community 3 for presence or evidence of bird nests (e.g., barn swallow) and bats. If suitable roosting habitat is identified during the initial inspection, bat exit surveys may be necessary. Surveys should be conducted during the roosting season (i.e., mid-May to the end of July); and	PGL	Natural Heritage Evaluation GHD	GHD Response: Site visit- July 25/24. Inspection of existing buildings for nests/bats. Bat habitat on site searched for. Report updated to state no suitable roosting habitat in Section 4.1.4.
• Bat acoustic surveys to identify species using the area for foraging and roosting;			GHD Response: The development envelope is within the former golf course with minimal tree loss. The protection of the wetland and woodland and potential bat habitat is proposed. Acoustic surveys not completed as no specific trees were identified and mitigation recommended includes timing windows.
39. A survey for species protected under Schedule 1 of the Migratory Bird Regulation (i.e., pileated woodpecker, great blue heron) and the Fish and Wildlife Conservation Act (i.e., raptor species) should be completed. Existing structures should be inspected for nests;	PGL	Natural Heritage Evaluation GHD	GHD Response: Site visit- July 25/24. NHE report updated in 4.1.4
40. A figure indicating the location of the black ash should be included in the Evaluation, and the project should incorporate a tree protection zone buffer in design; and	PGL	Natural Heritage Evaluation GHD	GHD Response: The black ash locations were not recorded at the time of 2017 field work due to being an unlisted species at the initial onset of field work. 2024 field visits based on the field notes of previous field work in 2017 showed that the black ash were off property and within the PSW .
41. The Evaluation should be updated to reflect that the project area provides breeding and nectaring habitat for monarch butterflies. Additionally, the Management Plan for the Monarch in Canada (Government of Canada, 2016) should be reviewed, and applicable habitat protection measures should be included in the Evaluation’s recommendation section.	PGL	Natural Heritage Evaluation GHD	GHD Response: Habitat protection measures have been added, including vegetation removal timing windows
42. A monitoring plan for pre-, during, and post-construction phases should be developed.	PGL	Natural Heritage Evaluation GHD	GHD Response: Recommendations for monitoring have been included in Section 7.1 of the updated NHE. A detailed monitoring plan will be required during the next phase of the project and discussed with LSRCA.
A connection of the proposed roadway to Concession Road 3 shall be provided to provide connectivity to the existing road network. The connection would also provide an alternative outlet to address the increased road grades identified in comment 1 (c) below and for fire/emergency access.	AECOM	General	Please see the attached updated Draft Plan. An entrance has been added to Concession Road 3.
The plan does not show a defined Block for the SWM pond and Trail/ Maintenance Access Road for the SWM pond. A defined block of land shall be transferred to the Township for the maintenance of the SWM pond. Blocks 12, 15 and 16 would need to be reconfigured to provide the Block to the Township	AECOM	General	Block 2 is defined as the SWM facility area. There is access to this block from the right of way in front of Lot 13.

The Developer requested a deviation from the Township Design Criteria for the maximum slope for an open ditch cross-section within the Phase 1 development for Phase 1 and 2 lands. The maximum slope identified in Section B6.01 of the Township Design Criteria is 3.5%. The Developer is proposing a roadway grade of 5.0% in Phase 2. The Developer's Engineer, C.C. Tatham and Associates Ltd. completed reports dated June 20, 2018, and February 8, 2019, requesting an increase in the maximum grade to 5.5%. The request for deviation was for the Phase 1 and Phase 2 lands. AECOM completed a report on March 19, 2019, which went to Council for their approval on the increased grade of ditch which identified several conditions for the increase in slope. The measures identified in the March 19, 2019, letter would need to be implemented for this design.	AECOM	Tatham	The conditions summarized in AECOM's report dated January 8, 2019, for increased roadway grade up to 5.0% are addressed in the proposed design.
The back of the proposed lots on the west side of the site (Lots 1-7) are not straight. The Township/ Developer could review co-ordination with the adjacent property owners to re-align the rear lot lines to provide more usable property for both properties (particularly on Lot 2). If the adjacent property owners to the west were not agreeable to revisions to the lot line this would not preclude the development from preceding as per the current design	AECOM	General	The lots have been adjusted to accommodate the right of way going out to Concession Road 3. As such a minor re-aglinment of the lots occurred however, the lots remain to follow the property boundary.
Provide fill management plan and/or provide a cut/fill chart on these plans. The plans should be designed such that there is a cut fill balance for the site.	AECOM	Tatham	A fill management and/or cut/fill chat will be provided with a subsequent submission following receipt of 1st submission detailed engineering design comments. It is noted that there is sufficient cut area within the site to balance the required fill needs and it is expected that surplus fill will be available for additional filling within the large estate sized lots (i.e there are no plans to import or export fill to/from the site).
The existing contours shall be extended onto adjacent properties such that the direction of drainage can be determined, and it can be verified that construction of the subdivision will not have a negative impact on adjacent properties	AECOM	Tatham	Additional topographic survey was completed by Richmond Surveying in March 2024 and captures sufficient information to verify that construction will not have a negative impact on adjacent properties.
The report should provide a detailed description of the drainage path from the proposed outlet from the SWM pond to the existing watercourse to the east. A block of land will require to be provided to the Township from the SWM pond to the existing watercourse to the east. The location should be laid out in the field and a site visit should arranged between the Developer's Engineer, the Township and the LSRCA to review the outlet from the pond and any remediation measures which would be required by the Developer to ensure that no detrimental effects are caused by the outlet	AECOM	Tatham	The drainage path from the proposed outlet from the SWM pond to the existing watercourse is detailed on Drawing SWM-2. A site vist can be arranged between the design team and the Township and LSRCA to review review the outlet and any remediation measures required by the Developer, following our receipt of first submission comments.
The report must be revised to reflect any external drainage areas to site during both existing and proposed conditions.	AECOM	Tatham	There are no external drainage areas to the site during either existing or proposed conditions as confirmed using the elevation contours shown on the Existing Condition Drainage Plan (DP-1) and Proposed Condition Drainage Plan (DP-2)

A more detailed grading plan for the SWM pond area shall be provided such that the required size for the block of land to be transferred to the Township can be confirmed. In particular, the grading from the end of Street B to the SWM pond appears steep. In general, a buffer between the top of the roadside ditch and the embankment to the pond should be provided	AECOM	Tatham	The SWM pond has been reconfigured and is located beyond the rear lot line of lots 23 and 24. Detailed SWM pond grading is provided on Drawing SWM-2.
The section of the report regarding soak-away pits should be revised to identify measures to be taken in the field on a lot-by-lot basis to confirm the suitability of the soil for infiltration facilities.	AECOM	Tatham	Soakaway pits have been eliminated from the design.
The applicant should review providing a piped outlet from the end of Street B to the SWM pond to reduce the potential for erosion.	AECOM	Tatham	The SWM pond has been reconfigured and is located beyond the rear lot line of lots 23 and 24 thereby alleviating the potential for erosion.
All external drainage areas to the site shall be shown on the plan.	AECOM	Tatham	There are no external drainage areas to the site during the existing condition as confirmed using the elevation contours shown on the Existing Condition Drainage Plan (DP-1).
All external drainage areas to the site shall be shown on the plan.	AECOM	Tatham	There are no external drainage areas to the site during the proposed conditions as confirmed using the elevation contours shown on the Proposed Condition Drainage Plan (DP-2).
The Road 'A' profile shall be extended to within Phase 1 of the subdivision. The applicant shall review options of reducing the 5% grade from Station 0+000 to 0+100 by co-ordination of the grading on the Phase 1 and 2 lands. The vertical curve to connect to the Phase 1 lands must be shown	AECOM	Tatham	The Phase 1 and 2 road profiles are shown on the plan and profile drawings, Dwgs. PP-1 - PP-4. Vertical curves are provided.
The Region of Durham will complete a peer review of the hydrogeological report to determine the suitability of the water supply for the proposed development. A well monitoring program for adjacent private wells will require to be completed prior to and during construction that ensures that sufficient baseline testing is completed to determine if the construction will have any negative impacts on adjacent wells	AECOM	. Hydrogeological Assessment by Cambium Inc. dated May 8, 2023	This testing program has commenced.