

Attn: Theodhora Merepeza, Manager, Planning
Tel: 905-885-2431

From: Cody Oram
Tel: 905-376-8574
Date: December 23, 2022

Via email: TMerepeza@porthope.ca

**RE: Garden Hill Estates (3852 Ganaraska Rd, Garden Hill)
Applications for Zoning By-law Amendment and Draft Plan of Subdivision
Submission 3 - in Response to Stakeholder Comments**

Dear Ms. Merepeza,

Monument is pleased to re-submit the supporting documents to support the Zoning By-law Amendment and Draft Plan of Subdivision related to 3852 Ganaraska Road on behalf of Mistral Land Development Inc.

In receipt of stakeholder and public comments, a revised Draft Plan has been prepared for approval of 31 Rural Residential lots and a single condominium/apartment block. The Draft Plan also includes regulated lands to be assumed by the Local Authorities and “Other Lands Owned by the Developer” within environmentally sensitive areas that could be considered for future development under a separate draft plan approval process.

The following table provides a list of the revised items accompanied with a response matrix to all comments attached to this letter.

Revised Submission Requirement	Prepared by:
Environmental Impact Study	Cambium Inc.
Planning Justification Report	EcoVue Consulting Services Inc.
Servicing and Stormwater Management Report	Monument Geomatics
Site Plan	Monument Geomatics
Draft Plan of Subdivision	Monument Geomatics
Traffic Impact Study	Tranplan Associates
GRCA Hydrogeology Comment Response	Greer Galloway Group

Previous items submitted in our first and second submission on April 20, 2022, and September 16, 2022, respectively, that have not been revised are listed below.

Submission	Previous Submission Requirement	Prepared by
1 st	Evaluation of ANSI	GHD Limited
1 st	Geotechnical Report	Terraspec Engineering Inc.
1 st	Hydrogeology and Servicing Assessment	Greer Galloway Group Inc.
1 st	Phase I Environmental Site Assessment	Greer Galloway Group Inc.
1 st	Site Access Letter	Monument Geomatics
1 st	Legal Reference Plan	IBW
1 st	Block 104 Site Plan	Monument Geomatics
1 st	Application forms and fees	Refer to complete applications forms
2 nd	Northeastern Archaeological Associates Ltd.	Stage 1 and 2 Archaeological Assessment
2 nd	Response Letter to Ganaraska Conservation's Hydrogeology Review Comments	Greer Galloway Group Inc.

We trust the following letter and accompany revised submission items represent a full resubmission to provide response to comments related to the propose Zoning By-law Amendment and Draft Plan of Subdivision for 3852 Ganaraska Road. If you have any questions or would like to discuss further, please feel free to contact the undersigned at 905.376.8574.

Respectfully,



Cody Oram, P.Eng.
Sr. Project Manager
Monument Geomatics and Estimating Inc.

Municipality of Port Hope - Public Works & Engineering

Comment Number	Category	November 2022 - 2nd Round Comments	Response	Response Provided By
1	General	MPH requires both phases of construction to be completely accounted for including but not limited to the road network, grading/drainage, stormwater management on the next submission. If a phased approach is maintained, all roads in phase 1 must have an appropriate cul-de-sac installed to MPH standards.	The cul-de-sac at the end of Street A and Street B have been designed as per Municipal Standards. The current phase and future phases beyond the development boundary have been considered in the road network, grading/drainage and stormwater drainage design.	Monument
2	Cost Estimate	The cost estimate needs to reflect the costs for both phases of on-site & off-site works.	Acknowledged. The cost estimate will be provided at detailed design.	Monument
3	Site Plan	MPH won't accept a turning easement over their property as suggested by the proponent, must install cul-de-sac at the end of Frost Ave as per our standards at the developer's expense.	The municipal right of way at the end of Frost of Avenue is not large enough to facilitate a turning circle designed to meet municipal standards without encroachment into the existing private properties. The turning movements for emergency services and maintenance vehicles will need to be accommodated within the block and designed at time of site plan control.	Monument
4	General	We require the Owner to pay for any third-party peer review requested/required moving forward. (Hydrogeology potentially & confirm that North South Environment has already satisfactorily peer reviewed Cambiums original report and recommendations have already been applied)	Noted.	Monument
5	Detailed Design	When the arborist is hired as part of detailed design, we require the setbacks for tree preservation plan be outlined on the plans and details of tree protection standards accompanied with the drawings if/when fencing is required to delineate the areas around certain trees.	Noted.	Monument

Northumberland County Public Works Department

Comment Number	Category	November 2022 - 2nd Round Comments	Response	Response Provided By
1	TIS	The site address in the report title should be corrected (3862 vs 3852).	Site address has been revised	Transplan
2	TIS	The report assumes that the proposed development will include 50 residential lots and 10 apartment units. Relative to the proposed draft plan (43 lots), the number of residential lots is conservative. However, the draft plan notes up to 21 apartment units on Block 104. Given that the number of residential lots is conservative, the overall volume of traffic introduced to the County road network is sufficiently captured and the County would not require the traffic report to be updated unless the total proposed number of apartment units exceeds 21 or there is also an increase in the number of individual residential lots.	Noted.	Transplan
3	TIS	Minor notes for section 2.3.1/2.3.2: a. County Road 9 becomes Durham Region Road 9 at Durham/Northumberland boundary at Cold Springs Camp Road. b. The County would consider County Road 9 and County Road 10 to be rural/semi-urban arterial roads with continuous roads such as 7th Line to the south being rural collectors. c. Estimated 2021 ADT values are agreeable.	Noted.	Transplan
4	Sensitivity Analysis	The County is in agreement with the rationale presented in this analysis / report that no eastbound left turn lane on County Road 9 will be required at the Street "A" entrance.	-	-
5	SWM	In discussion with the GRCA, the preferred alternative is twinning of the culvert on County Road 9 to provide relief capacity and minimize the increase in downstream flows.	Noted. Twinning the culverts is supported by Option 3 covered under Section 7 of the Servicing and SWM Report. As described in this Section, a twinning configuration can be used to alleviate the development area from flooding under the Regional Storm. Option 3 will be carried forward into detailed design stage.	Monument
6	Site Plan Drawings	Previous Northumberland County Public Works (NCPW) comments advised the cul-de-sac layout should provide for a minimum radius of 13m to the edge of pavement in order to accommodate curbside waste collection vehicles in the event that this service is provided in the future for the rural (Ward 2) area of the Municipality of Port Hope. NCPW notes that Monument Geomatics advised "Cul-de-sac's have a minimum 15m radius as per OPSD 500.010 for rural Turning Basins for Terminated Rural Roadways". Please include the minimum radius on all site plan drawings.	Based on comments of increasing the woodland setback, Monument has since revised the turning circle radius to 13m instead of 15m to meet target lot areas. All cul-de-sacs have a 13m radius as per the minimum described by NCPW and has been labelled on the revised Site Plan drawing.	Monument
7	Site Plan Drawings	Site plan should be updated to show a temporary cul-de-sac layout in front of lot 9 (and potential 10) for Phase 1 to accommodate curbside waste collection vehicles in the event that this service is provided in the future for the rural (Ward 2) area of the Municipality of Port Hope.	A temporary cul-de-sac has been included in front of lot 9. See updated site plan.	Monument
8	Site Plan Drawings	It is understood based on the response matrix, that the test well located in Service Block 104 is proposed to remain. Please confirm the distance from the centreline of County Road 9 and please note that as per the County's Entrance and Setback Policy, all structures, which include wells are required to meet the 30 m setback from centreline of County Road 9.	The well is 29.4m from the centreline of Ganaraska Rd. Through discussion with the County this was deemed acceptable.	Monument
9	Permit Requirements	The owner/authorized agent is required to apply for an Entrance (for the proposed access onto County Road 9/Ganaraska Rd approximately 200m east of Mill St) and a Setback Permit (prior to constructing anything on the property). A two-week turnaround time is required once a completed permit has been received.	Noted.	Monument
10	Permit Requirements	The contractor will be required to apply for road occupancy permits from the County for the proposed culvert work and road cut on County Road 9/Ganaraska Rd. Roadway to be reinstated as per the County's standard. A two-week turnaround time is required once a completed permit has been received.	Noted.	Monument

Municipality of Port Hope - Public Works & Engineering				
Comment Number	Category	November 2022 - 2 nd Round Comments	Response	Response Provided By
1	Plan of Subdivision	The Phase 2 of the proposed plan of subdivision consists of 12 residential lots in two distinct locations for detached dwellings. It is our understanding that the proponent intends to address outstanding natural features matters impacting the Phase 2 development at a later date. Until such time, any references to the future Phase 2 development should be omitted from both the plan of subdivision and all other supporting documents. References to Phase 2 should only be illustrated on the draft plan of subdivision and supporting documents when the proponent is prepared to comprehensively review the Phase 2 development.	As per the updated Draft Plan a phased approach is not proposed and all environmentally sensitive areas have been blocked out as additional land owned by the developer. Please see revised draft plan.	Monument
2	Site Plan	A (temporary) cul-de-sac designed in accordance with municipal standards should be included either on and/or adjacent to Lot 9 (and possibly Lot 10) to accommodate waste collection vehicles and possibly other emergency vehicle). If a cul-de-sac is proposed on Lot 9, the proponent should ensure that the lot is still a viable lot from a private servicing perspective. If confirmed that Lot 9 is not viable, it should be converted into a future development block.	Noted. See updated site plan.	Monument
3	Site Plan	The proponent should consult with the Municipality to ensure that a vehicle and pedestrian connection/access capable of accommodating private waste collection and emergency vehicles are built to municipal standards is made between the proposed condominium lot and Frost Avenue. The road connection should also have regard for environmental setback requirements of the Ganaraska Region Conservation Authority (GRCA).	Acknowledged. Vehicle and pedestrian connection/access to the block will be coordinated with the Municipality and designed at the time of Site Plan Control.	Monument
4	Site Plan	Although outside of the proposed development, the Municipality may want to coordinate a program with the developer to remove the cul-de-sac at the end of Porter Crescent.	Noted. It is the intention of the developer to work with the Municipality to terminate this cul-de-sac. The connection details will be coordinated with the Municipality at detailed design.	Monument
County Inspection Services Comments				
1	Septic Setbacks	Amongst other comments, generally, the location of proposed sewage systems servicing selected lots must demonstrate appropriate setbacks/clearance distances from existing natural features, ponds, and the new stormwater pond block.	Noted.	Monument
County Public Works Comments				
1	TIS	The County requires an updated Traffic Impact Study (TIS) from Tranplan Associates. Outstanding requirements outlined by the County are provided in our second attachment.	Updated TIS is provided.	Monument
2	Left Turn Lane	The County agrees that no eastbound left turn lane on County Road 9 will be required for this development.	Noted.	
3	SWM	In consultation with the GRCA regarding Monument Geomatics Servicing and Stormwater Management Report, the preferred alternative is to twin the culvert on County Road 9.	Noted. Twinning the culverts is supported by Option 3 covered under Section 7 of the Servicing and SWM Report. As described in this Section, a twinning configuration can be used to alleviate the development area from flooding under the Regional Storm. Option 3 will be carried forward into detailed design stage.	Monument
4	Site Plan	Regarding the Site Plan Drawing, previous comments have provided the minimum requirements for cul-de-sacs to accommodate curbside waste collection (additional details are provided in the attachment).	Based on comments of increasing the woodland setback, Monument has since revised the turning circle radius to 13m instead of 15m to meet target lot areas. All cul-de-sacs have a 13m radius as per the minimum described by NCPW and has been labelled on the revised Site Plan drawing.	Monument
5	Site Plan	Similar to Point 2 above, a (temporary) cul-de-sac designed in accordance with municipal standards should be included either on and/or adjacent to Lot 9 (and possibly Lot 10) to accommodate curbside waste collection vehicles if this service is provided in the future for Ward 2 in the Municipality of Port Hope.	Note. See updated site plan and response above.	Monument
6	Hydrogeology	The proponent intends on keeping the test well located in Service Block 104. The proponent must confirm its distance from the centreline of County Road 9. As per the County's Entrance and Setback Policy, all structures (including wells) must maintain a minimum setback of 30 metres from the centreline of County Road 9.	The well is 29.4m from the centreline of Ganaraska Rd. Through discussion with the County this was deemed acceptable.	Monument
7	Permit Application	The proponent must apply for an Entrance (for the proposed access onto County Road 9/Ganaraska Road – approximately 200 metres east of Mill Street) as well as a Setback Permit (prior to physical construction).	Noted.	Monument
8	Permit Application	The proponent's contractor must apply for road occupancy permit(s) from the County for the proposed culvert work and road cut on County Road 9/Ganaraska Road. The roadway must also be reinstated in accordance with the County's standard.	Noted.	Monument

Northumberland County Plumbing Department

Comment Number	Category	November 2022 - 2nd Round Comments	Response	Response Provided By
	Review Fee	Review fee of \$300 per lot (lots 1 to 10) paid and for each lot after 10 \$150.00 per lot has been paid. Please make payable by cheque which can be dropped off at 600 William St, Cobourg or by credit card by calling the inspection line on this report.	9/27/22 Phase 1 fee to be provided.	Monument
1	Septic	The proposed 10 - 21 unit condominium on Blk 104 may be outside of the scope of the Ontario Building Code for the sewage system. Please confirm that the daily loading rate "Q" is 10,000 L/day or under. If it is not, please contact MOE for approvals.	9/27/22 confirmed that it is under 10,000 L/day and falls under the jurisdiction of the Ontario Building Code	Monument
2	Septic	Lot 2 has an existing pond on the property, the sewage system appears to be located within the pond. Please relocate the proposed sewage system location.	9/27/22 Lot 2 is now lot 43 and is now Phase 2	Monument
3	Septic	Lot 3 appears to have the sewage system location too close to the pond, please relocate the system or confirm the clearance distance	9/27/22 Lot 3 is now lot 42 and is now Phase 2	Monument
4	Septic	Lots 7 and 8 appear to have their sewage systems located too close to the SWM pond, please relocate them or confirm the clearance distances.	9/27/22 Now lots 26 and 27 have had their sewage systems relocated to the opposite sides of the lots	Monument
5	Septic	Lot 43 appears to have the sewage system located too close to the wetlands, please relocate the system or confirm the clearance distance.	9/27/22 now lot 1 has had the clearance distance confirmed to be greater than 15m	Monument
6	Septic	Lot 1 also appears to have the sewage system sandwiched between the existing pond and the new SWM pond, please confirm clearance distances.	9/27/22 Lot 1 now lot 43 is part of phase 2	Monument
7	Septic	Please indicate on the drawings that a sewage system permit is required to be obtained from Northumberland County.	9/27/22 This will be provided on the design drawings.	Monument
8	Septic	Please provide a data matrix for the 10-21 unit condominium.	9/27/22 this will be provided with a future site plan control approval application	Monument
9	Septic	Please confirm if a fire main is being provided along with fire hydrants.	9/27/22 none being provided	Monument
10	Septic	When applying for a septic permit, a BCIN qualified installer or designer is required to design and install the septic system.	9/27/22 This was noted.	Monument
ADDITIONAL COMMENTS				
1	Septic	Please identify the location of wells and their clearance distances for properties along Caldwell Court, Frost Ave, Porter Crst, Mill St and County Rd 2 to ensure the new lots abutting these properties do not have sewage systems located too close their wells.	Well locations and clearance distances will be confirmed at detailed design. Refer to Servicing Plan for approximate locations to demonstrate adequate setbacks can be accommodated.	Monument
2	Septic	Ensure the sewage system located on Mill St is not too close and meets the setback requirements to the SWM pond located on Blk 107	Noted.	Monument

North South EIS Peer Review Comments

Comment Number	Category	NSE Comment - June 2022	Cambium Response - September 2022	NSE Response - November 2022	Cambium Response
1	EIS			Section 5.1.1 and 5.1.2 provide an assessment and recommended mitigation measures for the protection of the form and function of the woodland. A 10 m setback is proposed from the significant woodland to buffer the woodland from the proposed development. The assessment of an ecologically appropriate buffer to the significant woodland has not factored in the ecological functions associated with the woodland including SWH that supports Eastern Wood-pewee as well as the wetlands / vernal pools and woodland habitat that supports a complex of productive amphibian breeding habitat. While the later function has not been confirmed as SWH at this time, additional amphibian surveys may confirm SWH for amphibian breeding (woodland) is present.	Based on discussions with NSE during the follow up meeting held November 28, 2022, a variable width setback was determined to be an appropriate mitigation for the development proposal to increase the ecological buffering capacity of the setback in proximity to the more sensitive features within the woodland (i.e. vernal pools). The new setback includes an increase in setback width to 15 m along the rear yard of Lot 20 and the side yard of Lot 9. Due to the size of Lot 21 the increased setback could not be accommodated due to on-site servicing needs. Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland.
2	EIS			Section 5.2.1 identifies mitigation measures for the wetlands. Recommendation #4 suggests the "Porter Crescent road connection should be graded to the south to direct stormwater away from the wetland". If the slope of the road cannot be designed to ensure runoff of salt-laden water does not enter the wetland it is recommended that a curb and gutter be installed with a catch basin that conveys water through a storm pipe to the SWM pond rather than potentially runoff to the wetland.	Installation of a curb/gutter is not feasible for this location due to maintenance/plowing. The road will be appropriately graded to the south and drainage from the road will be linked with the existing drainage at Porter Road. The setback will be robustly planted with vegetation, as will be presented in the Planting Plan to be prepared at Detailed Design.
3	EIS			Setbacks are identified in the EIS. There is no discussion of ecological buffers, which are a standard form of mitigation to impacts resulting from development. Setbacks, which are a Peer Review of a Mistral Land Development EIS for The Municipality of Port Hope • November 2022 4 physical separation of development from a feature and area, are not the same as buffers which are naturally vegetated areas between natural features and development and are designed to mitigate impacts to the feature and associated ecological functions. Minimum setbacks identified by conservation authorities are intended to ensure risks associated with hazards are avoided and impacts to hydrological functions are minimized; setbacks do not necessarily factor in the ecological sensitivity of features, nor are they required to consist of naturally self-sustaining vegetation. Given that the PPS requires the test of no negative impact to be met as it relates to natural heritage features and areas and associated ecological functions, the EIS should identify ecological buffers between natural features and areas and the proposed development that are sufficient in width to protect the feature and associated ecological functions.	The EIS has been updated to integrate the language and intent surrounding 'ecological buffers' as discussed in the November 28 meeting. Recommendations were made in the report for the setbacks to be planted to increase the ecological function of these areas. The language surrounding these recommended measures has been clarified within the report to use the terminology requested by the reviewer.
1st Round Comments - Continued Correspondence					
1	Wetland Delineation	Section 3.2.2 describes the approach to delineate wetland boundaries. Please confirm with the GRCA that wetland boundaries were formally delineated and staked with GRCA staff present. Please indicate on Figure 2 within the legend the date when wetland boundaries were delineated.	Wetlands were delineated, staked, and surveyed with GRCA staff on August 31, 2021. Figure 2 has been updated to reflect this date.	Confirmation from GRCA required to address comment.	GRCA confirmed that it is not a regulated feature. This comment is considered to be satisfactorily addressed.
2	Breeding Bird Surveys - Barn Swallow	The breeding bird survey locations shown on Figure 2 are at the furthest distance recommended for completing surveys within forested habitats (i.e., 250 m). In addition, point count stations BBS2 and BBS3 are located on the edge of forest units rather than within the forested habitats. Moreover, given the proposed development includes the removal of an area of woodland, a point count station should have been located within this portion of the woodland to ensure habitat for breeding birds within that part of the woodland was thoroughly assessed. The need for a more complete survey of breeding birds became apparent during the site visit on May 31st, 2022, where bird species calling from the eastern portion of the southern woodland such as Eastern Wood-pewee, or Winter Wren heard from the central portion of the northern woodland, could not be heard from the area of BBS2 or BBS3.	Cambium acknowledges that the positioning of the BBS stations was the maximum allowable distance under the relevant protocols; however, Cambium respectfully disagrees with the recommendation for further breeding bird surveys at this time. Woodland removals are not proposed under Phase 1 of the revised development concept; therefore, additional breeding bird surveys to address comments related to woodland and interior breeding bird habitat are not currently relevant. Cambium agrees that a revised survey of breeding birds should be completed in advance of any future application for a subsequent Phase of the development.	Comment not addressed. While development proposed within a feature warrants more rigorous surveys and greater certainty regarding wildlife use and potential impacts to significant features, sufficient survey effort, coverage and certainty remains necessary when large-scale development is proposed adjacent to features. Adequate baseline information will be necessary to measure cumulative impacts resulting from the construction of Phase 1 and potential impacts resulting from Phase 2. Given the limited ability to detect some bird species from within the woodland at a distance of 250 m, more thorough bird surveys should be completed within the woodland prior to any construction related to development of the subject property.	Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland. This comment is considered effectively addressed.
3	Breeding Bird Surveys - Barn Swallow	Section 3.2.4 notes that "confirmatory field investigations are planned for breeding season in 2022 to determine the number of active nests, to guide compensation requirements under the ESA and its Regulations". Please note that the direction provided by the Province is that "you must replace any nests that you remove, damage or destroy with a nest cup" (source: https://www.ontario.ca/page/alter-structure-habitat-barn-swallow). Therefore, the field investigations should document the total number of nests within the barn, regardless of activity/use, to inform compensatory requirements. This should be updated in Section 3.2.4 and Section 7.2 of the EIS.	In past years, Cambium has received guidance from the Province to replace active nests only. Following receipt of this comment from NSE, Cambium contacted MECP to confirm NSE's interpretation. MECP confirmed that all nests must be compensated for, as indicated by NSE. Fifteen nests were documented in the barn in June, 2022, by Cambium. As such, the EIS has been updated to reflect this and the compensation strategy will be updated accordingly.	Comment addressed.	n/a

North South EIS Peer Review Comments					
Comment Number	Category	NSE Comment - June 2022	Cambium Response - September 2022	NSE Response - November 2022	Cambium Response
4	Amphibian Breeding Surveys	Please note that there are records of Spotted Salamanders within the Ontario Reptile and Amphibian Atlas square that overlap the subject property (square ID 17QJ08). Due to these records and the subject property containing vernal pools and woodland habitat that could support Spotted Salamander (an indicator species for Significant Wildlife Habitat for Woodland Amphibian Breeding Habitat – see comment #11 below), salamander surveys should have been undertaken. It is recommended that salamander surveys be undertaken as part of thoroughly characterizing and assessing the natural features and areas and their ecological functions.	Cambium respectfully disagrees with this recommendation. The development concept has been revised and no direct alterations to the woodland are proposed under Phase 1 of the development plan. Further, Cambium ecologists conducted amphibian surveys in 2021 and further surveys to confirm presence/absence of wood duck SWH habitat in 2022. The SWH surveys were completed in the area of the woodland occupied by the vernal pools/potential salamander habitat. Observations were made on a bi-weekly basis from mid-April through mid-July. No salamander egg masses were observed in the pools during any of the surveys. Searches for individuals were not completed; however, no salamanders were observed during our routine surveys, which include flipping logs and exfoliating bark of deadfall. Cambium supports the recommendation that targeted surveys for salamanders be completed in advance of any future development applications that may require alterations to the woodland.	Comment not addressed. As noted in the response to comment #2 above, a sufficient effort of surveys are required as part of an EIS to fully understand sensitivity of features and functions that inform the proposed development, including adequate mitigation measures such as buffers. The revision of the plan to exclude development from the woodland does not preclude the need to fully understand the sensitivity of the features and functions. Development remains proposed adjacent to the feature, and the determination of the mitigation measures, particularly buffers, should consider the potential impacts to sensitive species and habitat, such as vernal pools. As such, it is recommended salamander surveys, specifically using minnow traps, be completed to confirm the presence or absence of salamanders from the vernal pools in the woodland.	Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland. This comment is considered effectively addressed.
5	Vegetation Communities	Section 4.2 provides a table of each vegetation community. A detailed description of each vegetation community will permit the reviewer to assess the natural features and functions more thoroughly as part of the review of the EIS. Please provide a description of each vegetation community, noting the dominant and subdominant species within each vegetation layer, and percent cover and height within each stratum.	Cambium respectfully disagrees with this request. While this may be the preference of the reviewer, it is not a requirement of standard practice. Vegetation information is provided in Section 4.2 and Appendix E of the EIS. Cambium has provided a professional presentation of the information collected on the Site. The revised development concept includes physical development within the open, agricultural areas of the Site. Vegetation within the development footprint is composed primarily of non-native/cultural species associated with the historical agricultural land use. Providing additional detail as requested by the reviewer is not considered to be relevant to confirming Cambium's evaluation of potential impact to these cultural communities. Setbacks to natural features will be respected in accordance with setback widths determined in consultation with GRCA. For any future development applications that may be submitted, Cambium will provide the requested level of detail for any natural communities overlapped by any future development phases.	Comment not addressed. Like comment #4 above, an EIS should provide sufficient survey effort, including a description and characterization of the features adjacent to an area where development is proposed. The fulsome characterization of a feature and its ecological function is a standard requirement of an EIS where a large-scale change in land use is proposed.	Field data sheets have been updated with a brief summary of composition information to satisfy reviewers request.
6	Vegetation Communities	During the site walk completed on May 31st, 2022, with representatives from the proponent, the GRCA and the Municipality of Port Hope, a wetland was observed adjacent to the southern watercourse. This wetland is currently classified as a Mineral Cultural Meadow and should be reclassified as a meadow marsh. This wetland also has a hydrologic connection via a tile drain/pipe to the southern watercourse. The implications of this wetland having a connection with a surface watercourse via a tile drain/pipe should be discussed with the GRCA to determine if this wetland should be treated as a regulated feature in accordance with Conservation Authority regulations.	The vegetation communities identified on Figure 2 of the EIS are accurate. Cambium acknowledges that a small area (<0.5 ha) of land occupied by wetland plant indicators was observed within Community 3 (CUM1-1) on May 31, 2022. This area is considered an inclusion within Community 3 due to the small size of the area exhibiting >50% wetland plant indicators. A broken drain was observed that appeared to have a potential connection/outlet to the southeast (i.e., toward the southeast watercourse and associated wetland); however, the current function of this historical connection has not been established. Cambium delineated, staked and surveyed the wetland boundaries with GRCA in the field on August 31, 2021. This area was actively excluded from the delineation, as evidenced by the agreed upon boundary illustrated to the south of this feature.	Comment not addressed. A vegetation community comprised of >50% wetland plan indicators is a wetland and this should be acknowledged in the EIS. The hydrologic connection to the creek should be acknowledged and discussed with the GRCA to determine if the wetland should be treated as a regulated feature in accordance with the Conservation Authority regulations. Should the wetland be identified as a regulated feature, Lot 1 should be revised/removed and an appropriate buffer be provided to the wetland.	GRCA confirmed that it is not a regulated feature. This comment is considered to be satisfactorily addressed.
7	Significant Woodlands	The assessment of Significant Woodlands should consider proximity to other woodlands or other habitats as per the direction from the Natural Heritage Reference Manual (NHRM, p. 69) where: <ul style="list-style-type: none"> • Woodlands that overlap, abut or are close to other significant natural heritage features or areas could be considered more valuable or significant than those that are not. • Patches close to each other are of greater mutual benefit and value to wildlife. In addition to other criteria such as size, woodlands should be considered significant where “a portion of the woodland is located within a specified distance (e.g., 30 m) [note that 30 m is an “example” not a set distance] of a significant natural feature or fish habitat likely receiving ecological benefit from the woodland and the entire woodland meets the minimum area threshold (e.g., 0.5–20 ha, depending on circumstance)” (p. 69).	The first submission of the EIS, reviewed by NSE, does include proximity to other woodlands/habitats as meeting the criteria for significance, as outlined in EIS Table 4. Due to the revisions to the development concept, which no longer includes development within the woodland boundary or woodland setback, further discussion of significant woodlands is not considered warranted at this time. The EIS has been revised based on the Phase 1 development concept.	Comment not addressed. See response to comment #4 above regarding the need to characterize and assess natural features and functions adjacent to areas of proposed development, particularly where this is a large-scale change in land use.	Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland. This comment is considered effectively addressed. The discussion of woodland significance provided in the past submission is considered sufficient at this time, in consideration of the lack of change to this feature under the current proposal.
8	Significant Woodlands (cont.'d)	The consideration of proximity is an important factor on the subject property as it relates to habitat for interior bird species. While the woodlands do not qualify as SWH for Area-Sensitive Bird Breeding Habitat due to the break in the woodland resulting from the hydro corridor (approximately 40 m), the woodlands above and below the hydro corridor clearly function together to provide habitat for interior bird species as is evident by the number and diversity of forest interior bird species (five species, including Veery, Black-throated Green Warbler, Black-throated Blue Warbler, Ovenbird and Winter Wren) and area sensitive bird species (five species, including Hairy Woodpecker, Pileated Woodpecker, White-breasted Nuthatch, Black-and-white Warbler, American Redstart) recorded in these woodlands. The distance from the northern edge of the north woodland unit to the southern edge of the southern woodland unit is on average over 400 m, whereas the width is over 475 m. This means that when considered together, the two woodland units have the potential to provide interior forest habitat (where interior forest habitat is at least 200 m from forest edge). The Hydro corridor does not appear to result in a functional break in forest habitat that precludes the use of the woodland north and south of the hydro corridor from functioning as habitat for interior forest bird species or area sensitive bird species. The functions associated with proximity to other woodlands or other habitats should be evaluated in the update to the EIS. In addition, these functions should be considered in the Impact Assessment section when discussing impacts to the Significant Woodland.	The revised development concept (Phase 1) does not require alterations to the woodland or woodland setback. As such, further discussion of interior habitat and the potential for this habitat to support area sensitive birds is not warranted at this time. An update to the breeding bird survey would be completed in advance of any future development applications for the Site, and a thorough evaluation of interior/area sensitive habitat would be completed to accompany that application.	Comment not addressed. See response to comment #4 above regarding the need to characterize and assess natural features and functions adjacent to areas of proposed development, particularly where this is a large-scale change in land use proposed.	A statement of no expected impact to interior habitat has been made in the EIS. This is supported by the lack of change to the woodland, and restricted access to the wooded area by means of a permanent fence.

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9	Significant Valleyland	The watercourse that traverses through the north and south woodland on the subject property is contained with a topographic valley feature that has not been assessed. While the topography of the valley is not apparent as it crosses under Mill Street where the Garden Hill reservoir has flooded the landscape, it appears that the valley feature reappears south of Ganaraska Road where the watercourse continues through the forested area to the south. Please assess the potential that the valley associated with the watercourse is a Significant Valleyland.	As stated in the Natural Heritage Reference Manual (NHRM) the identification and evaluation of significant valleylands is the responsibility of planning authorities. Neither the County or Township have identified significant valleylands within the jurisdiction. The Northumberland County Official Plan Section D1.8b) confirms that significant valleylands are to be designated by the County and local municipalities as a component of their natural heritage system. The Draft NHS shows Natural Heritage Area overlapping the woodland on the Site. The graphical representation of the NHA does not differentiate between the feature types being protected under that designation; however, the overlay appears to be associated with the significant woodland which is a focal point of the draft NHS. As such, the overlay is not interpreted to be related to the small-scale valley feature present on the Site, and as such this feature is not considered to be designated as a significant valleyland under the Draft NHS. Further, no development is proposed in proximity to the valley/watercourse through the protection of this feature through standard hydrologic feature setbacks. As such, an evaluation of significant valleylands is not applicable.	Comment addressed.	n/a
10	Significant Wildlife Habitat (SWH) - Turtle Wintering Areas	During the site walk on May 31st, 2022, five (5) Midland Painted Turtles were observed in the pond located in southwest area of the subject property, adjacent to amphibian breeding station #5. SWH for Turtle Wintering Areas is confirmed when there are five or more over-wintering Midland Painted Turtles or one or more Northern Map Turtle or Snapping Turtle. Surveys for overwintering habitat are to be conducted in the fall (September -October) or the spring (March - May). Given the observation of five Midland Painted Turtles in May, this pond would qualify as SWH Turtle Overwintering Areas. This should be acknowledged and discussed where appropriate in the update to the EIS.	Cambium concurs that the observation of 5 Midland Painted Turtles in the pond qualifies this feature as SWH; however, the site visit occurred on May 31, which is at the extreme end of the assessment period for overwintering SWH. Due to the proximity of the pond to the Mill Pond on the opposite side of Mill Street, it is plausible that the observed turtles overwintered in this larger pond feature and subsequently migrated to the warmer waters of the agricultural pond sometime after emergence. In order to determine with certainty whether overwintering habitat exists in the pond, surveys would be required in the spring starting at ice out. As no alterations to the pond are currently proposed, additional surveys are not warranted at this time. Moreover, Cambium has consulted with MNRF with respect to the designation of SWH, and has received the following response: "Since SWH is intended to be reflective of the best available habitats, the determination of whether a habitat should be deemed significant also depends on the broader context of available habitat within that landscape." This correspondence has been provided in Appendix A of the updated EIS. Based on this, Cambium would argue that the agricultural pond does not constitute the "best available" habitat within the landscape, where similar habitat is provided within other agricultural ponds, and better habitat is certainly provided in the Mill Pond. Based on this evaluation and discussion with MNRF, Cambium does not recommend that the agricultural pond be confirmed as turtle overwintering SWH, despite the observations made in May 2022. Further, Cambium questions whether the Municipality is prepared to set a precedent of designating all agricultural ponds that have 5 Midland Painted Turtles (not at risk) designated as SWH when there are other, higher quality features available in the immediate vicinity.	Comment partially addressed. It is acknowledged that the turtles observed in the pond may have moved from the Mill Pond, but the only way to determine this is to complete basking turtle surveys at the appropriate time of year within both the Mill Pond and the pond on the subject property, which were not completed as part of the EIS. Surveys should also be required to be completed within the Mill Pond to determine the relative significance of the pond on the subject property compared with the Mill pond. There also may be more than five turtles overwintering in the pond on the subject property as well as Snapping Turtle. Regarding the MNRF's comment, SWH criteria have been developed to identify the "best available habitats", otherwise all habitat would be considered significant. It should also be acknowledged that multiple habitats within close proximity to each other are important regarding their role in providing redundancy in habitats and functions that are necessary to increase the long-term resiliency of wildlife populations, especially with compounding impacts from changes in land use and climate change. In response to the comment regarding setting a precedent, identifying the pond on the subject property as SWH for turtle overwintering habitat is not setting the precedent that "all agricultural ponds" that meet criteria would be considered significant. The determination of SWH for turtle overwintering ponds should be evaluated in the context of the development being proposed, and yes, with consideration of surrounding habitat. At this time, the EIS has not provided sufficient information to assess the relative contribution of the pond on the subject property to overwintering habitat for turtles. This should still be undertaken consistent with the response provided by NSE to comment #4.	Basking surveys are proposed to be conducted in the spring of 2023 to confirm the function of this habitat for turtle wintering. At this time, the lands associated with the agricultural pond have been removed from the development application. A permanent fence is proposed to be installed along the development limit which will allow turtles continued free passage to the Mill Pond (expected to be the primary resident habitat in the local area) but to mitigate potential mortality associated with the on-site roads and domestic animals.
11	Significant Wildlife Habitat (SWH) - Special Concern and Rare Wildlife Species	This type of SWH was not discussed in Section 4.7 as there were no Special Concern or Provincially Rare (S1-S3, SH) plant and animal species recorded during the field surveys. However, during the site visit on May 31st, 2022, an Eastern Wood-pewee was heard within the southern forest unit, on the eastern area of the woodland. Eastern Wood-pewee is listed as Special Concern in the Province, as such, the habitat for Eastern Wood-pewee, which includes the eastern portion of the southern woodland (ELC units #9 and #10) is considered SWH for Special Concern and Rare Wildlife Species. This should be acknowledged and discussed where appropriate in the update to the EIS.	Cambium acknowledges that Eastern Wood Pe-pee calls were documented within suitable habitat on May 31, 2022. Based on this observation, Communities 9 and 10 within the woodland on the Site qualify as SWH for Special Concern and Rare Wildlife Species.	Comment addressed.	Comment Addressed
12	Significant Wildlife Habitat (SWH) - Amphibian Breeding Habitat (Woodlands and Wetlands)	The paragraph in Section 4.7 that discusses amphibian breeding habitat (woodland and wetland) suggest that the criteria for this SWH type requires two or more frog species with >20 individuals or Call Code 3 (full chorus). NSE has received directly or reviewed correspondence from staff at the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNR) that has clarified that two species with a collective total of 20 individuals is considered SWH. This can include one frog species with a call code of 3 (assuming this represents 20 or more individuals) and a second species with any call code, or observations of adults and call codes that total more than 20 individuals between two or more species. Based on this interpretation and clarification from the MNDMNR the following breeding ponds associated with amphibian breeding survey stations are confirmed SWH: a. MMP #2 - Amphibian Breeding Habitat (Woodlands) due to Spring Peeper (code 3), Wood Frog (1 individual), and Gray Tree Frog (4 individuals). In addition, dozens of tadpoles were observed in the pond indicating successful breeding. b. MMP #3 - Amphibian Breeding Habitat (Woodlands) due to Spring Peeper (code 3) and Gray Treefrog (2 individuals). In addition, dozens of tadpoles were observed in the pond indicating successful breeding. c. MMP #5 - Amphibian Breeding Habitat (Woodlands) due to Spring Peeper (code 3), Wood Frog (4 individuals), Gray Treefrog (2 individuals) d. MMP #7 - Amphibian Breeding Habitat (Woodlands) due to Spring Peeper (code 3), Wood Frog (3 individuals), Gray Treefrog (6 individuals). In addition, hundreds of tadpoles were observed in the pond indicating successful breeding.	Upon receipt of this comment from NSE, Cambium consulted directly with MNRF to confirm NSEs interpretation of amphibian breeding SWH criteria, which is inconsistent with MNRF direction we have received in Peterborough District. MNRF confirmed Cambium's interpretation that 2 or more listed species must be documented with at least 20 individuals (each) or with Call Code 3 (2 species). MNRF staff reiterated that this interpretation was confirmed at the Regional level. Accordingly, Cambium's interpretation of Amphibian Breeding SWH as provided in the EIS remains accurate. A copy of this correspondence has been included in Appendix A of the updated EIS.	Comment addressed.	Comment Addressed

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13	Significant Wildlife Habitat (SWH) - Amphibian Breeding Habitat (Woodlands and Wetlands) (cont.'d)	<p>The habitat is considered the wetland area plus a 230 m radius of woodland area. In the case of the southern woodland, it should be recognized that the vernal pools scattered throughout the woodland would also contribute to the available breeding habitat and are contained with the SWH. As such, the ecological functions of these ponds need to be assessed and considered as part of the complex of SWH for Amphibian Breeding Habitat (Woodland).</p> <p>Please note that there are also records of Spotted Salamander within the Ontario Reptile and Amphibian Atlas square that overlaps the subject property. The subject property contains vernal pools and woodland habitat that could support Spotted Salamander. Surveys for salamanders were not completed. The Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E note that the presence of one (1) or more of the listed salamander species meets the criteria for Amphibian Breeding Habitat (Woodland). In addition to the vernal pools and woodland meeting criteria as SWH for Amphibian Breeding Habitat (Woodland), the potential for these vernal ponds and other ponds within the woodland to provide habitat for Spotted Salamander should also be factored into assessing the woodland as SWH for Amphibian Breeding Habitat (Woodland). With the confirmation of SWH for Amphibian Breeding Habitat (Woodland), this should be acknowledged and discussed where appropriate in the update to the EIS.</p>	<p>As discussed in the response above, the criteria for Amphibian Breeding SWH was not met on the Site, in consideration of current guidance from the Peterborough District/Regional MNR.</p> <p>With regard to Spotted Salamanders and salamander habitat, no salamander egg masses were observed in the pools or pond during any of the Site visits conducted during appropriate seasonal conditions in 2021 or 2022. As woodland alterations are not proposed under the current development application, further investigation of salamander habitat within the woodland is not considered warranted at this time. Should a future application be submitted that includes alteration to the woodland, a dedicated salamander search/surveys would be included in the scope of work.</p>	<p>Comment not addressed.</p> <p>NSE had requested an interpretation from the MNR regarding vernal pools and wetland complexes within a woodland (see attached). Based on the MNR's response, it is appropriate to total the number of individuals heard calling, seen and egg masses observed within a woodland when evaluating the habitat for amphibian breeding (woodlands). For wetlands or vernal pools within 230 m of one another within a continuous forest community it would be appropriate to consider the complex of vernal pools and the surrounding forest within 230 m of the ponds/wetlands in the determination of SWH for Amphibian Breeding. Should development be proposed within the woodland, amphibian surveys should include audio surveys, visual encounter surveys, observations of egg masses, and dedicated salamander using minnow traps should be undertaken.</p>	<p>Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland. This comment is considered effectively addressed.</p>
14	Seeps and Springs	<p>During the site walk on May 31, 2022, two seepage areas were observed along the lower slope of the valley associated with the coldwater creek within the Fresh-Moist White Cedar Coniferous Forest (FOM7-1). According to the SWH Criteria Schedules for Ecoregion 6E the presence of a site with two (2) or more seeps/springs should be considered SWH, whereby the ELC forest ecosite is the SWH. As such, the FOM7-1 ELC unit is confirmed SWH for Seeps and Springs and should be acknowledged and discussed where appropriate in the update to the EIS.</p>	<p>Cambium did not observe the seepage areas noted by NSE on May 31, 2022, nor were they observed during our other field investigations. Seeps generally occur during periods of high groundwater elevation and may not be visible year round, therefore it is possible that these seepage areas were not observable during our other investigations. The comment indicates that the seepage areas were noted in ELC Type FOM7-1, but the description of Fresh-Moist White Cedar Coniferous Forest applies to ELC Type FOC4-1 (Community 8). Based on topography, stream characteristics (coldwater creeks are generally presumed to be groundwater fed), and observations over the duration of study, it is probable that seeps occur in the vicinity of the watercourse on a periodic/intermittent basis. Based on topography and vegetation type, Cambium interprets NSE's comment to apply to Community 8 (FOC4-1). Based on the observations made by NSE, Cambium concurs that Community 8 should be designated SWH for Seeps and Springs, as per the criteria listed in the SWH Technical Guide (6e).</p>	<p>Comment addressed.</p>	<p>Comment Addressed.</p>
15	Species at Risk	<p>The woodlands on the subject property have the potential to provide habitat for Species at Risk bats as noted in Section 4.8.1 of the EIS. While the woodland may not qualify as Significant Wildlife Habitat - Bat Maternity Colonies, habitat for SAR is addressed in accordance with the Endangered Species Act, irrespective of whether the woodland is SWH for Bat Maternity Colonies. As such, the Ministry of Environment, Conservation and Parks (MECP) should be consulted by way of an Information Gathering Form (IGF). Correspondence from the MECP should be provided to demonstrate that matters related to the habitat of endangered species and threatened species have been addressed in accordance with the Endangered Species Act, as per policy 2.1.8 of the Provincial Policy Statement and section C5.2.1 g) of the Municipality of Port Hope Official Plan.</p>	<p>Tree removals within the woodland are not proposed under the revised development concept (Phase 1). Should future applications for development be put forward that would require alteration to the woodland, Cambium agrees that MECP should be consulted by way of an IGF to confirm that the proponent is in compliance with the ESA (2007) and associated regulations.</p>	<p>Comment addressed.</p>	<p>Comment addressed.</p>
16	Earth Science and ANSI	<p>Section 4.9 provides a description of the Earth Science Area of Natural and Scientific Interest (ES-ANSI). This section refers to an assessment of the ES-ANSI completed by GHD. This assessment concluded that the ES-ANSI does not overlap the proposed development. The mapping and evaluation (or re-evaluation in this case) of the extent of an ANSI is the responsibility of the Ministry of Northern Development, Mines, Natural Resources and Forestry (MNDMNR). As such, any proposed revision to mapping of the ES-ANSI needs to be reviewed and accepted by the MNDMNR prior to concluding that the ES-ANSI does not require further discussion or consideration as part of the EIS. In addition, the "pitted" nature of an outwash plain is often evident in the topography where small depressions of variable size are found throughout this geologic formation. These depressions are easily visible on orthoimagery of the surrounding area, including on the subject property where ephemeral/vernal pools are present. Please consult with the MNDMNR regarding revisions to the extent of the ES-ANSI and provide correspondence where the MNDMNR has accepted the conclusions of the assessment completed by GHD.</p>	<p>Please refer to attached email received from NDMNR identifying that they no longer have a Conservation Geologist and they recommend using someone qualified in geology to demonstrate to the municipality, that the planned development would not have any negative impacts.</p>	<p>NSE defers to the Municipality of Port Hope regarding any further requirements to demonstrate no negative impact to the ES-ANSI.</p>	<p>Comment addressed.</p>

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17	Impact Assessment	<p>General note on the Provincial Policy Statement (PPS) and application of the test of no negative impact. The PPS is intended to provide direction on matters of provincial interest related to land use planning and development. This includes providing direction for “appropriate development while protecting resources of provincial interest, public health and safety, and the quality of the natural and built environment” (p. 1). The PPS has provided direction that settlement areas is where growth and development shall be focused (s. 1.1.3), where the subject property is located within a settlement area. That said, the PPS also recognizes “Ontario’s long-term prosperity, environmental health, and social well-being depend on conserving biodiversity, protecting the health of the Great Lakes, and protecting natural heritage, water, agricultural, mineral and cultural heritage and archaeological resources for their economic, environmental and social benefits” (Section 2.0). Accordingly, the PPS provides direction for development in and adjacent to natural features and areas where:</p> <p>2.1.1 Natural features and areas shall be protected for the long term.</p> <p>2.1.2 The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.</p> <p>It should first be recognized that not all natural features and areas are considered significant and protected through policy. The criteria established to identify significant features recognizes this, and where a feature meets those criteria, the features and functions should be protected adequately to meet policy 2.1.1 and 2.1.2.</p>	Acknowledged, and agreed.	Response has acknowledged the comment. No further action needed.	
18	Impact Assessment (cont. d)	<p>The PPS also provides flexibility regarding development in some natural features and areas through an assessment of negative impacts on the natural features or their ecological functions. This is recognized through the later part of policy 2.1.5 where there can be some impacts to significant features provided these impacts are not ‘negative impacts’, where negative impacts are defined as “degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities.” Degradation can be associated with the removal of a portion of a natural feature, and where this removal threatens the “health” and “integrity” of natural features or ecological functions, would be considered a negative impact. The natural features and areas identified on the subject property include:</p> <ul style="list-style-type: none"> • Significant Woodlands • Fish Habitat • Significant Valleyland (candidate) • Significant Areas of Natural and Scientific Interest • Significant Wildlife Habitat <ul style="list-style-type: none"> o Turtle Wintering Areas o Special Concern and Rare Wildlife Species o Amphibian Breeding Habitat (Woodlands) o Seeps and Springs <p>The ecological functions associated with natural features and areas must be thoroughly assessed in order to evaluate impacts and determine if these impacts constitute a negative impact. The following comments pertain to the assessment of impacts and determination of negative impacts.</p>	<p>Cambium is familiar with the PPS and the application of its policies. The reviewer asserts that there are 5 significant natural heritage feature types present on the property. Cambium has completed numerous investigations on the property in the past 18 months, and respectfully disagrees with several assertions of the reviewer. Based on our work and the applicable technical guidance and policies, the following significant natural heritage features are present on the property:</p> <ul style="list-style-type: none"> • Significant Woodlands • Watercourses • Fish Habitat • ES-ANSI (Defer to GHD) • Significant Wildlife Habitat <ul style="list-style-type: none"> o Special Concern and Rare Wildlife Species o Seeps and Springs <p>With respect to Significant Valleyland (candidate) - candidate significant features are not afforded the same protections as confirmed significant features. As discussed previously, as per the NHRM the identification and designation of Significant Valleylands rests with the Municipality. At this time, the approved Municipal and County OP policies do not identify nor contain provisions for Significant Valleylands. The Draft NHS does not appear to designate Significant Valleylands overlapping the property. As such, the small-scale valley feature on the property is not protected under the PPS.</p> <p>With respect to the ES-ANSI, Cambium defers comment on this item to GHD.</p> <p>With respect to SWH - as discussed previously, the woodland did not meet the criteria for designation as SWH - Amphibian Breeding Habitat (Woodlands or Wetland). Further, while the pond appears to meet the minimum criteria for designation as SWH - Turtle Wintering Areas, Cambium asserts that further study would be required to confirm whether this designation should apply (i.e., turtle emergence surveys starting at ice out). Additional study is not considered warranted at this time, in consideration of the pond remaining in the current state under the revised development concept (Phase 1). Further, the Municipality may wish to consider whether designating agricultural ponds with not at risk turtle observations as SWH is in the best interest of the Municipality.</p>	<p>Comment partially addressed. See NSE response to comment #4 regarding a fulsome assessment and comment #9 regarding an evaluation of significant valleylands. See NSE response to comment #10 and #13 above regarding SWH for turtle overwintering habitat and amphibian breeding habitat (woodlands). See NSE response to comment #16 related to the ES-ANSI.</p>	<p>Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland.</p> <p>Turtle basking surveys are proposed for the spring of 2023 to support an evaluation of Turtle Wintering SWH.</p> <p>The EIS acknowledges that the valley on the property is not a significant valleyland.</p> <p>Evaluation of the ES-ANSI is deferred to GHD.</p>
19	Significant Woodland	<p>The discussion on impacts to the woodland in Section 5.1 suggests that providing a 10 m setback “will result in a net ecological gain to the woodland over existing conditions”. This statement related to achieving a “net ecological gain” has not considered the impact associated with the proposed removal of 1.5 ha of woodland and increased occupancy. An assessment of net ecological impacts, whether net gain or net loss, requires consideration of all impacts together. It is recommended the EIS provide a comprehensive net impact assessment including a review of cumulative impacts as per section C20.3 I) of the Municipality of Port Hope OP and section C4.1 of the Northumberland County Official Plan (2021).</p>	<p>The revised development concept (Phase 1) does not require alterations to the woodland or woodland setback. As such, further discussion of ecological gain/loss with respect to the woodland is not required at this time.</p>	<p>Comment addressed.</p> <p>While it is acknowledged that a vegetated buffer (referred to as a “setback” in the EIS) can provide habitat for wildlife and improve edge conditions, the net outcome of a buffer when considering the impacts and intended function of a buffer to mitigate impacts from the proposed development is not an overall “ecological gain”. A change in the EIS is not required, however, the comment above is provided to note the disagreement with the statement made in the EIS.</p>	<p>Comment addressed.</p>

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20	Significant Woodland	Section 5.1 of the EIS suggests that variable zoning, such as an environmental protection provision, be applied to the lots that overlap the woodland and associated buffer. Based on professional experience monitoring natural areas adjacent to or within private lots, leaving natural features and buffers under private ownership, even with some type of zoning, has little to no effect on preventing impacts to natural features and their ecological functions. Impacts to natural features where under private ownership often include vegetation clearing (often understory), removal of trees (including hazard trees), construction of small structures, use of insecticide on vernal pools/ponds to eliminate mosquito larvae, predation of wildlife by domestic pets, spread of invasive species, dumping of yard waste and other debris, creation of ad-hoc trails, fire pits, etc. The Natural Heritage Reference Manual notes that "buffers should not be located on lots privately owned by individuals. Rather, buffers should be included into the same ownership as the feature that is to be protect. When buffers are incorporated into individual lots, consistent management of buffers is not possible. In such cases, different landowners will treat the buffer in various ways, and planning authorities will have little ability to enforce any zoning or covenants intended to preserve buffer function" (p. 131). Section D1.10 of the 2016 Northumberland County OP, and section C.4.2 of the 2021 Northumberland County OP suggests that there be a transfer of lands containing natural heritage features and areas into public ownership through the development process. It is recommended that the Municipality of Port Hope require all buffers and natural features and areas to be transferred into public ownership.	The revised development concept (Phase 1) maintains lot lines outside of all natural heritage features and associated setbacks, with the exception of a slight reduction in the 15 m setback on the wetland at Porter Crescent to allow for the road connection. All lands outside of the Phase 1 development footprint will remain in ownership of the proponent. No transfer of land to the public domain is considered warranted at this time.	Comment addressed.	Comment addressed.
21	Significant Woodland	Section 5.1.1 of the EIS proposes a permanent fence along the rear lot line of each of the lots that extends through the woodland. This fence will not protect the woodlands contained on private lots which would occupy approximately 3.25 ha of the remaining woodland after the removal of 1.5 ha of woodland. The concept plan should be revised to exclude the lots from woodlands and buffers and any fencing be at the limit of the buffer to the woodland to ensure adequate protection of features and buffers. In addition, the SWM block extends beyond the permanent fence. The northern SWM block should also be located	The development concept (Phase 1) has been revised to exclude all lots from woodlands and the associated setback. Based on the revised development concept, Cambium recommends that a permanent fence be installed along the rear lot lines of Lots 20-24 to prevent inadvertent encroachment into the woodland and woodland setback.	Comment partially addressed. The sediment fence appears to bisect the wetland on the southside of the woodland (see Figure 4). Please relocate the sediment fence around the perimeter of the wetland where it should coincide with the limit of the buffer.	The alignment of the sediment fence was a simple error that has been corrected in the current submission of the EIS.
22	Significant Woodland	I am of the opinion that the proposed removal of 1.5 ha of woodland does result in a negative impact and therefore does not conform with natural heritage policies of the PPS and municipal official plans (see comment #24, below). That said, section 5.1.1 of the EIS suggests compensation for the removal of 1.5 ha of the woodland in the form of off-site woodland habitat enhancement and creation; for completeness, please provide more details of this woodland habitat enhancement and creation, including a description and mapping of the location where this would occur.	Alterations to the woodland are not proposed under the revised development concept (Phase 1); therefore, no woodland compensations are proposed at this time.	Comment addressed.	Comment addressed.
23	Significant Woodland	Section 5.1.2 provides an assessment of impacts to the woodland function. This assessment should include an evaluation of impacts and address the following: a. As noted in comment #6 above, the review of impacts should consider ecological functions associated with proximity, in particular those functions that support interior forest and area sensitive forest bird species. Please update the EIS to include a discussion on impacts to wildlife habitat for interior forest birds and area sensitive forest birds resulting from the proximity of the forest patches. In particular, this section should discuss impacts resulting from creating a new edge and the effect of the change in form and function on all ecological functions, which are defined as "natural processes... that living and non-living environments provide or perform within or between species, ecosystems and landscapes" (PPS, p. 42). b. Changes in impervious surface that could impact groundwater contributions to seeps fish habitat (coldwater creek), vernal pools and wetlands. While the woodland contains Significant Wildlife Habitat for Special Concern and Rare Wildlife Species, Amphibian Breeding Habitat (Woodlands) and Seeps and Springs, impacts to Significant Wildlife Habitat associated with the woodland should be discussed in Section 5.5.	a. No woodland removals are proposed under the revised development concept (Phase 1). The EIS has been updated to reflect this change, including within the impact assessment sections. b. An assessment of SWH and potential impacts to confirmed/relevant SWH types is provided in Section 5.5.	Comment not addressed. While Phase 1 of the development concept does not propose development within the natural heritage features, the potential for impacts to these features and their ecological functions must still be adequately assessed given the largescale proposed change in land use. See NSE response to comment #4 above.	Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect the existing form and function of the woodland.
24	Significant Woodland	As noted in comment #7 above, if the valleyland is deemed to be a Significant Valley, the Impact Assessment section (Section 5.0) should also assess impacts to the features and functions associated with the Significant Valleyland.	As previously stated, the small-scale valley feature on the property is not a Significant Valleyland.	Comment addressed.	Comment addressed.

North South EIS Peer Review Comments

Comment Number	Category	NSE Comment - June 2022	Cambium Response - September 2022	NSE Response - November 2022	Cambium Response
25	Significant Woodland	<p>Section 5.2 provides a discussion on impacts to wetlands. Recognizing that the wetlands on the subject property have not been evaluated and are not identified as Provincially Significant Wetlands the following comments are provided for consideration by the GRCA, which regulates wetlands:</p> <p>a. The wetland in the northeast corner of the agricultural field, adjacent to the Significant Woodland qualifies as SWH for Amphibian Breeding Habitat (Woodlands). The EIS must demonstrate conformity with natural heritage policies of the PPS and municipal official plans in addition to GRCA policies and regulations.</p> <p>b. The EIS has stated that this wetland is "isolated". While not connected to a surface watercourse, this wetland is physically and functionally connected to the Significant Woodland and is therefore not isolated. Moreover, this wetland relies on and contributes to the ecological functions of the Significant Woodland in part by providing overwintering and foraging habitat for the amphibians that breed in the wetland. The EIS should be updated to recognize the physical connection and ecological interactions between the wetland and the woodland.</p> <p>c. It should be noted that the extension of Porter Crescent does not require the removal of the wetland. There may be a minor encroachment into the buffer to the wetland, but even this can be minimized by angling the road to the south. While essential infrastructure projects may be permitted to impact or even remove wetlands, there does not appear to be adequate justification for the removal of the wetland related to the development of a lot.</p> <p>d. While I am of the opinion that the removal of the wetland would not be permitted as it would not conform with natural heritage policies of the PPS and municipal official plans, it should be noted that a 5 m buffer to a created wetland would not be considered sufficient to mitigate impacts to the water quality and ecological functions of the wetland.</p>	<p>a. The wetland in the northeast corner of the agricultural field does not meet the criteria for designation as SWH - Amphibian Breeding (Woodlands or Wetland) as per guidance received from MNRF specific to the local and regional area of the Site. As such, this feature is not protected under the PPS. This feature is however regulated by GRCA; a permit will be sought/obtained for any work within the area of interference to this wetland (i.e. 30 m).</p> <p>b. The term isolated was intended to relay the lack of connectivity to any other surface water feature on the Site. Cambium acknowledges that there are functional connections between the wetland and the surrounding terrestrial features. The EIS has been updated to include confirmation that wildlife certainly use these features in concert with one another and some amphibians are expected to use these habitats in combination; however, the wetland does not qualify for designation as SWH - Amphibian Breeding (Woodland).</p> <p>c. Acknowledged. The wetland will remain in the current position and encroachment into the 15 m setback will be addressed through enhancements to the reduced setback. No alterations to the wetland are proposed under the revised development concept (Phase 1).</p> <p>d. Wetland creation/compensation is no longer proposed.</p>	<p>Comment 25 a) partially addressed. See NSE response to comment #13 above regarding amphibian breeding habitat. Comment 25 b) addressed. Comment 25 c) addressed. Comment 25 d) addressed for the Phase 1 proposed development plan.</p>	<p>Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient SWH types that may occur within the woodland.</p>
26	Significant Woodland	<p>Section 5.4 provides an evaluation of impacts to fish habitat. The northern watercourse has been identified as a coldwater stream. Coldwater streams rely on groundwater inputs which in part support the permanent nature of this watercourse. The subject property is largely comprised of permeable soils that allow for groundwater contribution that supports the watercourse. The proposed development will increase the amount of impervious cover thereby reducing infiltration and groundwater inputs. This impact on infiltration and groundwater contributions to the watercourse has not been discussed in the EIS.</p> <p>Furthermore, the impact of discharging stormwater from the northern SWM pond into the watercourse has not been discussed. Please update the EIS to discuss impacts to groundwater contributions to the watercourse as well as impacts resulting from the discharge of stormwater into the watercourse.</p>	<p>The EIS has been updated to include best practices for maintaining infiltration on the Site. Under the revised development concept, no stormwater will be discharged to the northern watercourse.</p> <p>On a technical basis, Cambium defers all other aspects of this comment to the engineers responsible for the stormwater management plan, and recommends that LID principles be applied to the proposed development.</p>	<p>Comment addressed. It is recommended that the municipality require a water balance be completed with appropriate LID measures and grading details provided to ensure water balance to wetlands and groundwater infiltration which supports seepages is maintained.</p>	<p>Comment addressed.</p>
27	Significant Woodland	<p>Section 5.5 Significant Wildlife Habitat should be updated to discuss impacts to SWH for the following SWH types:</p> <p>a. Turtle Wintering Areas b. Special Concern and Rare Wildlife Species c. Amphibian Breeding Habitat (Woodlands) d. Seeps and Springs</p>	<p>The following SWH types apply to the Site: b. Special Concern and Rare Wildlife Species d. Seeps and Springs</p> <p>The impact assessment section of the EIS has been updated accordingly.</p>	<p>Comment partially addressed. See NSE response to comment #10 and #13 above regarding SWH for turtle overwintering habitat and amphibian breeding habitat (woodlands).</p>	<p>Cambium understands that further surveys are no longer required with the removal of all development from the woodland and the understanding that further surveys would be required in advance of any future alterations to the woodland (if proposed). The mitigation measures (permanent fence, ecological buffers, no public access) recommended are considered sufficient to protect SWH types that may occur within the woodland.</p>
28	Policy Conformity	<p>Section 6.0 provides a review of policy conformity with respect to the policies of the Provincial Policy Statement. This section should also be updated as part of addressing the preceding comments (e.g., SWH, ES-ANSI, Significant Valley, etc.). In addition, this section should provide a review of policy conformity with the GRCA Policies for the Implementation of Ontario Regulation 168/06 (January 2014).</p>	<p>The EIS has been updated to include a statement of PPS conformity for the relevant natural heritage feature types, and GRCA policies.</p>	<p>Comment addressed. However, the EIS should address outstanding comments prior to confirming that the proposal conforms to relevant policies and regulations and approving the application.</p>	<p>Commend addressed.</p>
29	Policy Conformity	<p>Table 6 suggests that a compensation strategy would offset the loss of 1.5 ha of woodland through enhancement of 3 ha of woodland off-site. While the Natural Heritage Reference Manual recognizes that mitigation may include replacement of woodlands, "factors such as successional status and replaceability of the woodland components and functions within a reasonable timeframe (e.g., 20 years)" must be considered (p. 119). In the case of the woodland proposed for removal, it is a mature woodland (over 70 years in age based on 1954 historical air photos) that provides habitat for area sensitive forest birds and interior forest bird species, as well as contains vernal pools and habitat that support a diversity of frog species. It is not feasible to replicate the complex ecological functions associated with this mature woodland within a reasonable timeframe. As such, the compensation strategy is not sufficient to offset the loss of 1.5 ha of woodland on the subject property nor is it considered sufficient mitigation for impacts resulting from the removal of the woodland and associated ecological functions.</p>	<p>The revised development concept (Phase 1) does not include alteration to the Significant Woodland, and there are no compensations proposed at this time.</p>	<p>Comment addressed.</p>	<p>Commend addressed.</p>
30	Wetland Compensation Feature	<p>Please note that given the wetlands proposed for removal have been confirmed as SWH (Amphibian Breeding Habitat, Woodlands), wetland compensation as proposed in Section 7.1.1 is not considered acceptable. That said, the following comments are provided for completeness:</p> <p>a. The wetland compensation area is proposed in an area this is currently a wetland which may be regulated by the GRCA due to a connect to a surface water feature via a tile drain/pipe. The potential for the GRCA to regulate the existing wetland adjacent to the southern watercourse should be discussed with the GRCA.</p> <p>b. The compensation wetland is only provided with a 5 m buffer. Based on a review of literature examining buffers to wetlands, 5 m is not considered sufficient to mitigate impacts to water quality and ecological functions for a wetland that will be partly surrounding by residential lots.</p>	<p>The wetlands are not SWH - Amphibian Breeding (Woodlands or Wetland). Alterations to the wetland are no longer proposed; therefore, the wetland compensation has been excluded from the development proposal. No further discussion of compensation is required at this time.</p>	<p>Comment addressed regarding the revision of the plan that no longer proposes the removal and compensation of the wetland.</p>	<p>Commend addressed.</p>

North South EIS Peer Review Comments

Comment Number	Category	NSE Comment - June 2022	Cambium Response - September 2022	NSE Response - November 2022	Cambium Response
31	Woodland Enhancement	Should woodland enhancement be pursued, additional description of the location, existing conditions of the woodland enhancement area, and mapping of the proposed woodland enhancement area should be provided as part of the EIS.	Woodland alterations are no longer proposed; therefore, no woodland compensation is proposed at this time.	Comment addressed.	Commend addressed.
32	Conclusion and Next Steps	<p>The EIS is generally well organized and follows a logical approach. However, the comments provided above identify some shortcomings in the field surveys, assessment of significance, as well as the impact assessment that should be addressed in an updated EIS.</p> <p>The development as currently proposed includes the removal of a 1.5 ha of Significant Woodland which also supports Significant Wildlife Habitat. The EIS has not demonstrated that the development would avoid negative impacts: "degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities". Based on the review of the EIS and observations from the site visit on May 31, 2022, it is recommended that the development concept plan be revised to remove all lots and development from the Significant Woodland, Significant Wildlife Habitat associated with the Significant Woodland, and outside of the buffer to the woodland and Significant Wildlife Habitat.</p> <p>While there are other constraints associated with the subject property in addition to the woodland and SWH associated with the woodland (e.g., fish habitat and wetlands associated with the southern watercourse, and their buffers), there is an opportunity to develop the remainder of the subject property, including the SWH associated with the pond, and avoid negative impacts to SWH if the following is demonstrated:</p> <ul style="list-style-type: none"> • alternative habitat is created and designed to support overwintering turtles and amphibians • prior to removal of the existing pond that supports SWH, demonstration that the created wetland/pond has the ability to support overwintering turtles and amphibians; • wildlife rescue and relocation to the newly created habitat is undertaken prior to any site alteration activities commencing. 	The development concept (Phase 1) has been revised to exclude all lots from woodlands, SWH, wetlands and associated setbacks. As such, the items the reviewer suggested be demonstrated to not apply.	Comment addressed as a result of the proposed development no longer being proposed within features.	Commend addressed.

Ganaraska Region Conservation Authority				
Comment Number	Category	November 2022 - 2 nd Round Comments	Response	Response Provided By
1	SWM	It is imperative that the acceptance and feasibility of Phase 2 be firmly established prior to draft plan approval of Phase 1; otherwise the draft plan for Phase 1 will change. At this time, the feasibility of Phase 2 is unclear.	As per the updated Draft Plan a phased approach is not proposed and all environmentally sensitive areas have been blocked out as additional land owned by the developer. Please see revised draft plan.	Monument
2	SWM	Previous comment Paragraph 6.1 states that "a small external area within received [?] in Catchment 107B within the hydro easement. Since development is not propose past the hydro easement, Monument did not model these catchment areas in either the pre- or post-development conditions." While area 107B may not be developed, it is still contributory to either the north tributary or the south tributary and should be included as an external drainage area similar to area 104EXT. The response to this comment states that "Catchment 107B was modelled ... but was not included in the model." Please clarify.	Catchment 107B is modelled and was modelled in the previous submission. Paragraph 6.1 and other locations in the report have been updated to clarify this statement.	Monument
3	SWM	Confirm that the 43m setback on the north tributary (to include toe erosion allowance plus stable slope allowance plus a 6m access allowance) does not straddle the creek but is applied to the south side of the tributary.	The entirety of the erosion hazard limit (43m) is applied landward from the bank of the tributary on the south side of the creek. It does not straddle the creek.	Monument
4	SWM	The County of Northumberland and the GRCA have been in discussion with respect to increasing the hydraulic capacity under County Road 9. The County and GRCA prefer Option 3 (twinning the culvert at a higher invert elevation). Please identify and address.	Noted. Twinning the culverts is supported by Option 3 covered under Section 7 of the Servicing and SWM Report. As described in this Section, a twinning configuration can be used to alleviate the development area from flooding under the Regional Storm. Option 3 will be carried forward into detailed design stage.	Monument
5	SWM	The culvert under Street A must have the capacity to convey 100 year post-development flows from the west side of the street to the pond. Please address.	Understood. Through the first submission, the culvert under Street 'A' was set downstream of the south SWMF. In order to eliminate backwater effect this crossing was proposed to convey the 100-yr flow. Following submission 2, the SWMF has been relocated to the east side of Street 'A' adjacent to the watercourse. This now puts the required culvert crossings upstream of the facility and does not act as a critical crossing to maintain the function of the SWMF. Therefore, Monument recommends that's the inlet roadway crossings to each SWMF be reviewed/designed as per the Ministry of Transportation 2008 Highway Drainage Design Standards. Which recommends that for local road culvert crossings; with a span of less than 6.0m, be sized to convey the 10-yr design flow (WC-1) and a relief flow depth of 0.30m over the crown of the road under the Regulatory Storm (WC-13). Whereas, the Regulatory Storm event is either the greater of the 100-yr or Hurricane Hazel within the GRCA jurisdiction. Further details will be provided at time of detailed design.	Monument
6	SWM	Every effort should be made to direct the runoff from Catchment 400 to SWM Facility #2. Rear yard swales may have to be constructed.	Understood. However, due to grading constraints in order to match existing grades along the south border of Catchment 400. Tying the rear yard swale into the SWMF will put the invert below the elevation of the active storage. Also under the post-development conditions, the drainage area to the corresponding outfall has been reduced in order to meet pre-development peak flows. Therefore, satisfying the quantity control objective.	Monument
7	SWM	The invert of the outlet from both SWM ponds must be higher than the 25 year water surface elevation on the receiving waterbodies.	Noted. Details on the pond outlet inverts will be provided at the time of detailed design.	Monument
8	SWM	Please note that depending on what is approved in terms of a culvert replacement under County Road 9, no development will be permitted within the regulatory flood lines on the subject lands.	Understood.	Monument
9	SWM	Table 9-5 indicates that the capacity of Outfall#3 will be exceeded sometime before the 50 year event under post-development conditions. GRCA recommend that the pond volume be increased or that the capacity of the culvert be increased. Please address.	This culvert is a located in a local municipal road. As per the MTO Highway Drainage Design Standards, these type of culvert typically are only designed to convey the 10-yr flow with a minimum of 0.30m of freeboard depth over the road in the regional event. This will not be the case in the Regional Event since Hurricane Hazel will be 2m over the top of the road. However, the culvert can convey up to the 25-yr event in both pre and post-development conditions, which satisfies the 10-yr design criteria and therefore is not recommended for replacement.	Monument
10	SWM	It is confusing in Appendix H to have Drawings FLD-1 through 4 and also sub-catchments FLD-1 through 4 shown on Drawing FLD-1. Please clarify and address.	Drawing numbers have been revised to FL-1 to FL-4.	Monument
11	SWM	Drawing SWM-02 shows the direction of flow in the ditches but does not show the direction of overland flow and sheet flow. It is difficult to follow how and where each sub-catchment outlets. Please address.	See revised SWM-02 drawing with overland flow directions.	Monument
12	SWM	It is recommended that proposed lots are "squared" off to the extent feasible rather than having an irregular shaped rear yard provided that the yards continue maintain all setbacks from and not extend into the hazards.	Noted. We have squared off as best as possible to reduce the number of property lines per lot while still maintaining the minimum lot size.	Monument
	Draft Plan	Notes: - It is recommended that Phase 2 is removed from the proposed Draft Plan of Subdivision for Phase 1. - Please be advised that additional comments may be generated upon receipt of the above. It would be recommended the consulting engineer contact GRCA staff to discuss upon receipt of a new submission and/or contact GRCA staff regarding the above in advance of a submission to ensure that Authority concerns are addressed.	As per the updated Draft Plan a phased approach is not proposed and all environmentally sensitive areas have been blocked out as additional land owned by the developer. Please see revised draft plan.	Monument
13	Hydrogeology	As stated previously, the hydrogeological report should speak in more detail to the potential impacts of the development site, including reduction in infiltration potentially leading to reduced interflow and baseflow discharge, raised or lowered water levels in shallow aquifers, changes in shallow groundwater flow direction, and creation of preferential pathways that may increase susceptibility of contamination in the subsurface. A figure or schematic indicating the movement of subsurface water would be beneficial to clearly show the difference between pre- and post development preferential pathways. This is especially important since the site contains a wetland, which is likely linked to the groundwater it receives. It is noted that the groundwater level within an aquifer fluctuates constantly in response to rainfall, evapotranspiration, barometric pressure, groundwater movement, and groundwater pumpage. As such calculating hydraulic gradients and groundwater velocity would quantify those changes. A description and figure of the proposed site alteration that clearly outlines groundwater elevations and change in subsurface drainage patterns should be addressed.	See HydroG Response Letter.	Greer Galloway
14	Hydrogeology	The report should address the issue of whether the groundwater withdrawals in the proposed development will exceed the long-term safe yield of the aquifer or whether there is a significantly decrease of baseflow that may affect sensitive water features in more detail. Stress levels assessed by Source Water Protection do not represent a site-specific water balance that includes wetlands or individual wells.	See HydroG Response Letter.	Greer Galloway
15	Hydrogeology	Well interference reduces the available drawdown, it also reduces the maximum yield of a well. Well interference is, therefore, an important matter in the design of well fields where it is desirable for each well to be pumped at the largest possible rate. Since the wells are located on the proposed properties 3 and somewhat resemble a grid pattern considerations should be given to the minimum distance for the well location. Excessive well interference is avoided by increasing the spacing between wells. As pointed out within the report that "meeting regulatory setback distances plus a reserve area will limit the areas where wells can be drilled". GRCA suggests a well field design prior to approval of the number of lots to determine the optimum distance between wells.	See HydroG Response Letter.	Greer Galloway
16	Water Balance	The water balance within the storm water report on page 6 mentions an annual moisture surplus of 372mm. The water balance in appendix O however calculates a surplus of 342mm. Please clarify.	See HydroG Response Letter.	Greer Galloway
17	Water Balance	The second submission says that no adverse effects to water quantity are predicted, however page 39, last paragraph of the Servicing and Stormwater Management Report mentions that over time post development conditions would decrease the infiltration volume as recharge to regional groundwater flow system and interflow within the shallow unsaturated zone would be expected to decrease. Please clarify.	See HydroG Response Letter.	Greer Galloway
18	Water Balance	As much as possible, calculations should estimate the amount of infiltration necessary to maintain pre-development conditions. Detailed information on the proposed mitigation measures should be provided to account the loss of infiltration. These details should include location of enhanced infiltration, the volume/rate and condition of the soils to support water being infiltrated. This is especially important as the site contains a wetland – Please demonstrate that there will be no negative impacts on the natural features or their ecological functions due to the development.	See HydroG Response Letter. Further to the Hydrogeological Response Letter the Servicing and Stormwater Management Report has provided verbiage in the Water Balance Section acknowledging the recommendations from the response letter that will be completed at the time of detailed design.	Greer Galloway
19	Natural Heritage	A detailed planting plan must be provided to the GRCA, including a map illustrating the location of the trees, the number of trees, types of vegetation to be planted and the appropriate planting requirements.	Planting Plan to be submitted at Detailed Design as a condition of Site Plan approval.	Cambium
20	Natural Heritage	On page 53 of the report, under Domestic Animals, which states, "Signage should be posted at the stormwater blocks and wetland compensation area to encourage residents to properly dispose of pet waste, which can contain pathogens harmful to wild animals." –This should say wetland only as wetland compensation has no longer been proposed for Phase 1 development.	Revised.	Cambium

21	Natural Heritage	Figure 4 of the EIS shows the proposed sediment fencing cutting directly into the wetland. Please address.	Revised.	Cambium
22	Natural Heritage	As previously identified by GRCA staff, the Subject Lands contain woodlands, wetlands and vernal pools. Although the majority of the vernal pools are less than 500m ² , it still makes the Subject Lands a candidate for Amphibian Breeding Habitat. Further analysis/study should be conducted to confirm the significant wildlife habitat (SWH) status of salamanders and their habitat.	Cambium and NSE have agreed that further study is not required at this time. Additional surveys would be completed in advance of any woodland tree removals.	Cambium
23	Natural Heritage	Peer reviewer identified area within Community 3 as a wetland. The EIS needs to address if this is a wetland, and therefore confirmation if the feature is regulated.	GRCA agreed in the meeting on November 15, 2022 that this small inclusion does not meet the classification threshold to be designated as a wetland (>50 wetland vegetation) and is not a regulated feature.	Cambium
24	Natural Heritage	GRCA is in agreement with the Peer Reviewer, that the EIS needs to address proposed setbacks and while development proposed within a feature requires an EIS with additional information. This also the case when development is proposed within and/or adjacent to natural heritage features. The features and functions within the proposed development, including buffers needs to be considered. Phase 1 of proposed development does not extend into the Significant Woodland or wetland, but this does not mean there will be no negative impact to the features or functions. As development has been proposed adjacent to the feature, there should be consideration regarding the potential impacts to sensitive species and habitat. Please address.	Further rationale for setbacks has been integrated into the EIS based on our discussions with NSE.	Cambium
25	Natural Heritage	Notes: - GRCA notes that the previous submission indicated that the wetland was to be removed. However, the current submission does not show the wetland will be removed. - Page 26 of the report states, "During on-site discussions with GRCA, Cambium staff were informed that the Conservation Authority identifies the southeast watercourse as exhibiting a warm water thermal regime; therefore, this feature has been treated as a warm water feature for the purpose of this Study." a. GRCA is not set fisheries timing windows. All timing windows should follow the recommendations of the MNDMNR. b. GRCA has no objection with a 15m setback as opposed to a 30m setback.	Noted.	Cambium
Notes to the Municipality				
1	Hydrogeology	The geotechnical reports states that groundwater was encountered at depths of 1.5m to 3m "below the ground surface". The houses may be required to be slab-on-grade (no basements).	Noted.	Monument
2	SWM	The SSM Report states that the 400mm culvert under Mill St. identified as Outfall #4 is "undermined with runoff not being conveyed through the culvert ...". Catchment 105 will outlet to this culvert, and it should be repaired, assumedly by the developer.	Monument respectfully disagrees that it would be the developer's responsibility to repair the culvert. The culvert is not functioning as intended in the current conditions and would need to be replaced regardless of whether or not Garden Hill Estates is developed.	Monument
3	EIS	GRCA has some concerns with the snow removal required for the subject property, specifically in the vicinity of Street A located in front of Lot 9. This area of the property may become a dumping ground for snow removal, as well as the salt run-off for winter maintenance needs to be addressed. The wetland is adjacent to an area where road salt run-off is expected, or provide evidence that salt run-off will have no negative impacts to the wetland. This should be addressed in the EIS.	Ditches will be graded to capture and convey roadway runoff to the designated SWMF separating it from the catchment of the wetland.	Monument
4	EIS	Lot 32 appears to have increased in size since GRCA received the 1st submission of the EIS from April 14th, 2022. Lot 32 now encompasses the entire wetland, whereas in the 1st submission of the EIS that same location was severed into two lots. It appears this lot size increase may be for a potential proposal for a future dwelling. GRCA has not been provided any details or mentioned a building envelope for that lot.	Lot 32 was located in the proposed Phase 2 lands and has since been removed from the draft plan.	Monument

Municipality of Port Hope Fire and Emergency Services

Comment Number	Category	November 2022 - 2 nd Round Comments	Response	Response Provided By
1	Fire Protection	An on-site water supply for fire protection will be required. The volume of the supply shall be calculated to protect the largest structure on the site. The proposed location and design of the water supply shall be submitted to Fire and Emergency Services for review and approval.	Water supply for the 31 rural residential lots is available from the dry fire hydrant in Mill Pond adjacent to the development on Mill Street. A gated emergency access to the development is proposed within the north SWM block, putting this access 450m from the hydrant. For the multi-unit building, water supply can be provided on-site through a cistern supply chamber. Given the multi-unit building will likely require two wells to meet water demands, there will be ample water available to supply the cistern. Further details for the multi-unit building will be provided at the time of detailed design.	Monument

KPRDSB Planning Services				
Comment Number	Category	November 2022 - 2 nd Round Comments	Response	Response Provided By
1		Planning staff have no objections to the proposed draft Plan of Subdivision and Zoning By-law Amendment.	Noted.	Monument
2		KPR Planning staff would like to request the following conditions be included as part of draft plan approval: "Prior to the final approval of the draft plan, Kawartha Pine Ridge District School Board (KRP) shall be satisfied that appropriate clauses are contained within the Subdivision Agreement as follows:	Noted.	Monument
i.	Subdivision Agreement	All offers of purchase and sale shall contain a statement advising prospective purchaser(s) that accommodation within a public school in the community is not guaranteed and students may be accommodated in temporary facilities; including but not limited to accommodation in a portable classroom, a "holding school", or in an alternate school within or outside of the community.	Noted.	Monument
ii.	Subdivision Agreement	All offers of purchase and sale shall include a statement advising prospective purchasers that if school buses are required within the development in accordance with Kawartha Pine Ridge District School Board Transportation policies, as may be amended from time to time, school bus pick up points will generally be located on the through street at a location as determined by the Student Transportation Services of Central Ontario.	Noted.	Monument
iii.	Subdivision Agreement	That the Owner(s) shall agree to provide a pedestrian walkway or dedicated pedestrian use only area throughout the subdivision to accommodate and promote safe walking routes to the nearby school property and elsewhere. To clear this condition, KPR staff will require a copy of the proposed plan and details for the pedestrian route prior to entering into the Subdivision Agreement. Any Subdivision Agreement shall reflect these proposed plans and details."	Noted.	Monument

Hydro One Networks

Comment Number	Category	November 2022 - 2nd Round Comments	Response	Response Provided By
1	Grading/Drainage	Prior to HONI providing its final approval, the developer must make arrangements satisfactory to HONI for lot grading and drainage. Digital PDF copies of the lot grading and drainage plans (true scale), showing existing and proposed final grades, must be submitted to HONI for review and approval. The drawings must identify the transmission corridor, location of towers within the corridor and any proposed uses within the transmission corridor. Drainage must be controlled and directed away from the transmission corridor.	Noted. To be provided at detailed design.	Monument
2	Construction	Any development in conjunction with the subdivision must not block vehicular access to any HONI facilities located on the transmission corridor. During construction, there must be no storage of materials or mounding of earth, snow or other debris on the transmission corridor.	Noted.	Monument
3	Construction	At the developer's expense, temporary fencing must be placed along the transmission corridor prior to construction, and permanent fencing must be erected where subdivision lots directly abut the transmission corridor after construction is completed.	Understood.	Monument
4	Construction	The costs of any relocations or revisions to HONI facilities which are necessary to accommodate this subdivision will be borne by the developer. The developer will be responsible for restoration of any damage to the transmission corridor or HONI facilities thereon resulting from construction of the subdivision.	There are no anticipated relocations or revisions to HONI facilities with this development.	Monument
5	Easements	HONI's easement rights must be protected and maintained.	Agreed.	Monument
6	Safety	In addition, HONI requires the following be conveyed to the developer as a precaution: The transmission lines abutting the subject lands operate at either 500,000, 230,000 or 115,000 volts. Section 188 of Regulation 213/91 pursuant to the Occupational Health and Safety Act, require that no object be brought closer than 6 metres (20 feet) to an energized 500 kV conductor. The safe vertical distance for 230 kV conductors is 4.5 metres (15 feet), and for 115 kV conductors it is 3 metres (10 feet). It is the developer's responsibility to be aware, and to make all personnel on site aware, that all equipment and personnel must come no closer than the safe vertical distance specified in the Act. All parties should also be aware that the conductors can raise and lower without warning, depending on the electrical load placed on the line.	Noted.	Monument

Canada Post Delivery Planning				
Comment Number	Category	November 2022 - 2 nd Round Comments	Response	Response Provided By
1	Post Service and Location	Canada Post will provide mail delivery service to this development through Community Mailboxes.	Noted.	Monument
2	Post Service and Location	Detached and Townhouses dwellings: Will be serviced through Community Mailbox. The location of these sites are determined between my department (Canada Post Delivery Planning) and the Developers appointed Architect and/or Engineering firm.	Noted.	Monument
3	Post Service and Location	If the development includes plans for (a) multi-unit building(s) with a common indoor entrance, the developer must supply, install and maintain the mail delivery equipment within these buildings to Canada Post's specifications.	Agreed.	Monument
4	Post Service and Location	Please see attached linked for delivery standards: http://www.canadapost.ca/cpo/mr/assets/pdf/business/standardsmanual_en.pdf	Noted.	Monument
5	Post Service and Location	Please update our office if the project description changes so that we may determine the impact (if any).	Agreed.	Monument
6	Post Service and Location	Should this subdivision application be approved, please provide notification of the new civic addresses as soon as possible.	Agreed.	Monument
7	Post Service and Location	Please provide Canada Post with the excavation date for the first foundation/first phase as well as the date development work is scheduled to begin.	Agreed.	Monument
8	Post Service and Location	If applicable please ensure that any street facing installs have a depressed curb or curb cut. Contact Canada Post Corporation – Delivery Planning for further details.	Agreed.	Monument
9	Post Service and Location	If applicable please ensure that any condominiums apartments with more than 99 units, incorporates a mailroom with rear loading lock box assemblies (mailboxes).	Agreed.	Monument
10	Post Service and Location	Finally, please provide the expected first occupancy date and ensure the future site is accessible to Canada Post 24 hours a day.	Agreed.	Monument
Appendix A				
1	Post Service and Location	Garden Hill Estates covenants and agrees to provide the Municipality of Port Hope with evidence that satisfactory arrangements, financial and otherwise, have been made with Canada Post Corporation for the installation of Lockbox Assemblies as required by Canada Post Corporation and as shown on the approved engineering design drawings/Draft Plan, at the time of sidewalk and/or curb installation. Garden Hill Estates further covenants and agrees to provide notice to prospective purchasers of the locations of Lockbox Assemblies and that home/business mail delivery will be provided via Lockbox Assemblies or Mailroom.	Agreed.	Monument
Appendix B				
1	Post Service and Location	The developer will consult with Canada Post to determine suitable permanent locations for the Community Mail Boxes or Lock box Assemblies (Mail Room). The developer will then indicate these locations on the appropriate servicing plans.	Agreed.	Monument
2	Post Service and Location	The developer agrees, prior to offering any units for sale, to display a map on the wall of the sales office in a place readily accessible to potential homeowners that indicates the location of all Community Mail Boxes or Lock Box Assemblies (Mail Room), within the development, as approved by Canada Post.	Agreed.	Monument
3	Post Service and Location	The owner/developer will be responsible for officially notifying the purchasers of the exact Community Mailbox locations prior to the closing of any home sales with specific clauses in the Purchase offer, on which the homeowners do a sign off.	Agreed.	Monument
4	Post Service and Location	The Builder/Owner/Developer will confirm to Canada Post that the final secured permanent locations for the Community Mailboxes will not be in conflict with any other utility; including hydro transformers, bell pedestals, cable pedestals, flush to grade communication vaults, landscaping enhancements (tree planting) and bus pads.	Agreed.	Monument
5	Post Service and Location	The developer agrees to include in all offers of purchase and sale a statement which advises the purchaser that mail will be delivered via Community Mail Boxes or Lock Box Assemblies (Mail Room). The developer also agrees to note the locations of all Community Mail Boxes or Lock Box Assemblies (Mail Room), within the development, and to notify affected homeowners of any established easements granted to Canada Post to permit access to the Community Mail Boxes or Lock Box Assemblies (Mail Room).	Agreed.	Monument
6	Post Service and Location	The owner/developer will agree to prepare and maintain an area of compacted gravel to Canada Post's specifications to serve as a temporary Community Mailbox location. This location will be in a safe area away from construction activity in order that Community Mailboxes may be installed to service addresses that have occupied prior to the pouring of the permanent mailbox pads. This area will be required to be prepared a minimum of 30 days prior to the date of first occupancy.	Agreed.	Monument
7	Post Service and Location	The owner/developer will install concrete pads at each of the Community Mailbox locations as well as any required walkways across the boulevard and any required curb depressions for wheelchair access as per Canada Post's concrete pad specification drawings	Agreed.	Monument
8	Post Service and Location	The developer agrees to provide the following for each Community Mail Boxes or Lock Box Assemblies, and to include these requirements on the appropriate servicing plans: (if applicable) <ul style="list-style-type: none"> Any required walkway across the boulevard, per municipal standards If applicable, any required curb depression for wheelchair access, with an opening of at least two meters (consult Canada Post for detailed specifications) 	Agreed.	Monument