Submission **#2** Peer Review Comment Matrix

Updated: December, 2024

**168 County Road 49, Part Lot 19, Concession 19**

**Biddle Job Number: 122169**

**Planscape File Number: 146800**

|  | **Comment** | **Consultant** | **Response** |
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| # | **2024-03-15 Functional Servicing & Stormwater Management Report, DG Biddle and Associates** | **Commenter: Stantec Consulting Ltd. (Peer Review on behalf of the County of Peterborough)** |
| 1 | The report doesn’t include the design criteria for the proposed water supply system. Please include the design criteria used to design the proposed water supply system  | Biddle | As outlined in the Functional Servicing and Stormwater Management report, the domestic water supply for each dwelling will be supplied by individual water wells on each lot installed by well driller, licensed by the Ministry of Environment.  |
| 2 | Please provide calculations for the domestic water demand for the proposed development based on the above design criteria and confirm that the design will satisfy these criteria.  | Biddle  | As outlined above, drilled wells will be installed on each lot. |
| 3 | Please provide details to confirm that the drinking water supply to the proposed development will satisfy all quality requirements. Please include additional measures if the quality requirements are not satisfied.  | Biddle  | As outlined above, the drilled wells to be provided are to be installed by a well driller licensed by the Ministry of Environment. It is their responsibility to ensure water quality requirements are satisfied.  |
| 4 | Section 3.2 states that detailed sizing of the individual septic systems will occur at building permit submission. The report doesn’t include any information related to the proposed sanitary, therefore review of the proposed system will be completed when the design is submitted. | Biddle | Noted.  |
| 5 | Section 5, stormwater quantity control, provides brief information about the four existing and proposed drainage areas. Please include all the necessary details to describe the existing and proposed drainage patterns, the runoff coefficients, the total area of each of the four segments.  | Biddle | The requested information with respect to description of existing and proposed drainage patterns, the runoff coefficients and the total area of each of the four segments have been added to the corresponding sections of the report, Sections 5.1 to 5.4.  |
| 6 | The report should include a section about the stormwater management design criteria, which includes information about all the municipal and conservation authority criteria for quality control, quantity control, water balance and erosion control.  | Biddle | Quality and quantity control were designed in accordance with the MOE SWM Planning and Design Manual, March 2003. Infiltration galleries have been sized to address the stream erosion concerns. A feature-based water balance will be completed through detailed design.  |
| 7 | Sections 5.1 to 5.4 of the report provides information about the existing and proposed conditions of the areas draining to the four outlet pints (A, B, C & D). Please include the area of each catchment and show the boundary of each area clearly in the drawings.  | Biddle | The area of each catchment is included on the storm drainage schemes, drawings SD-1 to SD-5.  |
| 8 | The site includes a Provincially Significant Wetland (PSW). Please state the requirements for development in the vicinity of the PSW, and details of the measures adopted to satisfy these requirements.  | Biddle | To ensure no adverse effects on the provincially significant wetland (PSW), a 30m wetland buffer has been illustrated on the provided plans.  |
| 9 | The report doesn’t include any information related to the water balance requirements, and the measures proposed to satisfy these requirements. Please provide a section about water balance requirements, and how it will be satisfied.  | Biddle | The water balance will be done through detailed design.  |
| 10 | Section 5.4 states that “The post-development area draining to the second low point with similar imperviousness compared to pre-development area, is proposed to be reduced, therefore, this was not assessed. “Please provide further details and analysis to confirm this statement.  | Biddle | As part of this resubmission, analysis has been provided to confirm this statement. It now reads that the post-development flows have been attenuated to the pre-development levels due to a decrease in impervious surface area. The area under pre-development draining to this point was 2.43ha and under proposed conditions will be 1.88ha at the same runoff coefficient.  |
| 11 | Section 5.4 states that “The first low point on the southeast corner will attenuate the post-development flows to the pre-development levels.” Please provide further details and analysis to confirm this statement.  | Biddle | This low point is denoted as Post-Development Hydraulic Point D. As outlined in Section 5.4, Table 4, the post-development flows were effectively reduced when compared to the pre-development levels. Therefore, analysis has been provided to confirm this statement.  |
| 12 | Please confirm that the bottom of the infiltration trench is above the maximum ground water elevation and that the minimum distance is satisfied at all the locations.  | Biddle | As outlined in the Hydrogeological Report, the groundwater at Infiltration Gallery A was found to be 2.29mbgs. Based on a ground height of 293.10m at the borehole, the groundwater elevation would be 290.81m. The bottom of the gallery is proposed at 292.42m, which is 1.61m above groundwater levels. This meets the required 1.0m of vertical separation to the bottom of the LID feature. Boreholes 111-23 and 112-23 were dry upon completion, dry 4.60m down. As such, there are no concerns about groundwater at the infiltration gallery in the Western proposed SWM pond. Borehole 108.23 was reviewed to confirm groundwater levels at Infiltration Gallery C. Borehole 108-23 was found to be dry upon completion up to a depth of 4.72m. As such, there are no concerns about groundwater at the infiltration gallery in the Eastern proposed SWM pond. Borehole 107-23 was reviewed to confirm groundwater levels at Infiltration Gallery D. Borehole 107-23 was found to be dry upon completion up to a depth of 4.80m. As such, there are no concerns about groundwater at Infiltration Gallery D.  |
| 13 | Please provide information about the type of soil and percolation rate at the infiltration trench locations and confirm that the drawdown period will satisfy the design criteria.  | Biddle | As outlined in Table 2, Particle Size Distribution, of the Hydrogeological Assessment Report prepared by Cambium dated April 19, 2024, the percolation times (T) ranged from 45min/cm to 20min/cm for the soils ranging in depth from as shallow as 0.80mbgs to as deep as 2.9mbgs, with a geometric average of 27.2min/cm. This indicates moderate drainage and infiltration potential for the overburden soils at the site. It will be a condition of approval to have in-situ testing completed at the infiltration gallery locations to confirm the drawdown period will satisfy the design criteria.  |
| 14 | **DRAWINGS COMMENTS:** * **Drawings SD-3 and SD-4, Post-Development Storm Drainage Plan**: Please show all the drainage ditches, direction of flows and outlet at all the lots boundaries.
* **All Drawings:** Please show the proposed development boundary and add this boundary line in addition to the flow line to the legend in all drawings.
 | Biddle | Development boundaries are clearly delineated by a bold border. All drainage directions are illustrated on the site grading plans.  |

|  | **Comment** | **Consultant** | **Response** |
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| # | **2024-05-03 RPT HydroG – Bobcaygeon Development, Cambium**  | **Commenter: Stantec Consulting Ltd. (Peer Review on behalf of the County of Peterborough)** |
| 1 | The high groundwater table and shallow groundwater flow direction needs to be defined using a shallow groundwater monitoring well network to assist with: * Setting basement elevations
* Assessing the suitability of various infiltration deficit mitigation measures
* The placement of supply wells and sewage system envelopes on each lot (i.e., what direction(s) is groundwater flowing to assist with the placement of this infrastructure)
* Assessing the relationship between the shallow groundwater table and the wetland (i.e., does the wetland depend on shallow groundwater inputs to maintain its form and function)
* Septic system design (i.e., will raised beds be required because of a shallow groundwater table or low permeability soils)
* Assessing the need for construction dewatering.

In response to this comment, Cambium advanced 14 additional boreholes and installed four monitoring wells. Groundwater level measurements were collected in November 2023, with a commitment from Cambium that spring water level monitoring would be completed between March and June 2024 to obtain high groundwater levels. **Stantec’s Response** The borehole investigation indicated that overburden conditions were found to be mostly dry with the exception of the west end of the Site fronting on County Road 49. It would have been preferred to see additional monitoring wells installed, particularly in the central area of the property around the wetland and in areas where LIDs are proposed. * Only one spot level measurement of groundwater levels was collected in November 2023; however, Cambium committed to collecting more data between March and June 2024 to assess high groundwater table conditions. It is noted that there seems to be a mistake for the information presented in Figure 4 for BH113-23. The water level elevation shown is situated 13.3 m below the screen elevation. Please correct the information for BH113-23 on Figure 4 and reassess the groundwater flow direction, as needed.
 | Cambium  | Water supply wells and septic system assessment will be completed at detailed Site plan approval stage.Cambium will complete a long-term water level monitoring at the Site as part of feature based water balance assessment to be completed concurrently with the Phase II detailed design and application. This approach was reviewed and agreed upon with KCA in a meeting held on December 2, 2024. |
| 2 | The function of the wetland needs to be evaluated to determine if the wetland is a groundwater recharge or discharge feature. If the wetland is a groundwater discharge feature then Jp2g must discuss how groundwater flow to the wetland will be maintained under the post-development condition. **Stantec’s Response** Cambium installed a drive point piezometer in the wetland and determined that the wetland was a groundwater recharge feature. Efforts should be made in the detailed Stormwater Management Design to maintain similar levels of surface water runoff to the wetland to maintain its form and function and this should be determined through the completion of a feature-based water balance. | Cambium | Feature based water balance will be completed to evaluate the developmental impacts on the wetland feature concurrently with the Phase II detailed design and application. This approach was reviewed and agreed upon with KCA in a meeting held on December 2, 2024 |
| 3 | A pre- and post-development water balance must be completed to assess the infiltration deficit and identify appropriate mitigation measures to maintain pre-development infiltration rates. This exercise is important to establish whether sufficient infiltration will be available for nitrate dilution to occur under the post-development condition. **Stantec’s Response** Cambium completed a pre- and post-development water balance and it was determined that rooftop runoff will offset 56% of the post-development infiltration deficit by 56%. The remaining 44% of the infiltration deficit will need to be offset using other LID measures and this should be detailed in the Stormwater Management Report.  | Cambium | SWM report addresses the issue of compensating the water balance deficit based on the soil infiltration rates received from Cambium. |

|  | **Comment** | **Consultant** | **Response** |
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| **#** | **2024-05-01 RPT EIS – Bobcaygeon, Cambium** | **Commenter: Stantec Consulting Ltd. (Peer Review on behalf of the County of Peterborough)** |
| 1 | Page 5 and 6 of 8**IMPACT ASSESSMENT AND MITIGATION MEASURES** It was noted in Section 5.1 of the report (Unevaluated Wetlands) that “*Two (2) wetlands (Wetlands 2 and 3) are proposed to accommodate the development.*” Both were noted to not be suitable for turtle overwintering habitat, fisheries habitat nor SWH for amphibians (although Wetland 2 is recommended to be reassessed for SWH during early spring amphibian surveys). It is further recognised that Wetland 1 will be retained and buffered. However, it is not clear on the impacts to the other ponds. Based on the discussion in the report it appears that only Pond 5 will be retained; however, it is not implicitly clear. Furthermore, Section 5.2.1 (Turtle Wintering Habitat) Stated “*it is recommended that basking logs are installed within Pond 5, prior to the removal of Pond 4, to enhance basking conditions and mitigate removal of the Pond 4 feature*.” The removal of Pond 4 nor the other three ponds was not mentioned in Section 5.1 under impacts to wetlands. The removal of Ponds 1, 2, 3 and 4 seems consistent with the plan provided in Appendix A, however, Stantec is unsure. Also, it is unclear whether the inputs into Pond 5 and Wetland 1 will be appropriately balanced to maintain pond function, although Table 14 does state that “*The Stormwater Management Plan prepared for the Site should specifically address potential stormwater-related impacts to water quality and quantity of the surrounding wetlands and watercourse, through quality control measures and a feature-based water balance study.”* ***Some discussion is recommended regarding the specific removal of ponds and regulatory and ecological considerations regarding the removal of the ponds and the consideration for condensing wildlife from Ponds 1 – 4 into Pond 5/Wetland 1.*** *Stantec assumes that the water balance study will be completed to maintain the function of Pond 5.* *In addition, it is not clear what the buffer for Wetland 1 is on Figure 2. The watercourse and the turtle wintering habitat is provided a 15 m buffer but the enhancement area does no implicitly show the proposed buffers.* ***Some discussion on a minimum buffer is recommended.*** *Stantec assumes that the KCA will be reviewing and commenting on the enhancement area plan as part of the Wetland Buffer Enhancement Area.* *Section 5.2.2 (Amphibian Breeding Habitat) stated: “Wetland 3 (Phase I lands) is not considered SWH for amphibians… Within Wetland 2 (Phase 2 lands), a call code of 3 was documented for a single amphibian species (Gray Treefrog) at both the ACS5 and ASC6 stations, but otherwise breeding activity was low. Further investigations are recommended to confirm if the complex should be considered SWH.” There were no mitigation measures provided to reduce potential impacts to amphibians should Wetland 2 be considered SWH. Section 7.0 (Recommendations) indicated: “An early season amphibian survey is recommended at ACS5 and ASC6, within the Phase 2 lands, to confirm amphibian call levels and subsequent categorization of Wetland 2 as candidate or confirmed SWH for amphibian breeding. Further discussion is provided in Section 5.2.”* ***Some discussion is recommended to indicate the implications of Provincial Policy on the development if the wetland is classified as SWH.*** | Cambium | With respect to additional ecological considerations, pond dewatering and removal should occur between late summer and early fall to mitigate impacts to turtles that may be present. In addition, the ponds should be inspected during dewatering activities, or prior to removal, to ensure no turtles are present. If present, the turtles should be moved to Pond 5. A Wildlife Scientific Collector’s Authorization will be required from the MNR to facilitate the relocation of wildlife species, as applicable. The SWM report prepared by Biddle has been prepared to ensure adequate quality and quantity controls for the proposed development. Nominal changes to flow patterns are expected post-development with further refinement available during Phase II and the detailed design process. In particular, a feature-based water balance will be completed to better understand the hydraulic capacity of Wetland 1 and inform site-specific mitigation strategies to the wetland. A hybrid constraint limit was applied to Wetland 1 that took into consideration the natural heritage features on site, enhancement potential, and existing/future ecological function. The minimum recommended setback to Wetland 1 is 30 m (shown in yellow hatching); the setback to the associated Pond 5 is 15 m. In addition, several areaswithin and beyond the 30 m wetland setback have been identified as potential enhancement areas. This approach was informed and supported by KCA during a meeting held on December 2, 2024.With respect to Wetland 2, early spring surveys were completed on April 15, 2024 at ACS5 and ACS6 as recommended in the first EIS submission. We note that through the review of field data, individual Grey Treefrogs were tabulated at the ACS5 and ACS6 stations in 2023. As such, call intensity should have therefore been represented as call level code 2 per the Marsh Monitoring Protocol. Amphibian breeding results from all three visits (2023 and 2024) have been updated in Section 4.7.2 and Table 9. Based on these results, the defining criteria for amphibian breeding SWH was not met at either station which requires two species with a call level code of 3, or call level code of 2 with at least twenty individuals. |
| 2 | Page 6 of 8General discussion on erosion and sediment control (ESC) measures were included in the report; however, **Stantec recommends to the County that an ESC plan be prepared prior to construction either as part of the KCA permitting or included with the Site Plan.** | Cambium | Noted and agree. See recommendations in Section 7.0. |
| 3 | Page 6 of 8It was noted in Section 4.10.1.6 (Black Ash) that: “*This species was documented during vegetation surveys in Community 7. No impacts are proposed to Community 7 from the proposed development*.” Recent guidance from the MECP has indicated that a radial distance of 30 metres around the stem of a protected Black Ash tree that represents the tree’s habitat as described in O. Reg. 832/21. **It is recommended that Cambium determine whether ESA section 10(1)(a) prohibitions apply to Black Ash trees located on the site.** | Cambium | No Black Ash will be directly impacted from the proposed development as Community 7 / Wetland 1 (i.e., where they were documented) will be retained and buffered by a 30 m setback (see Figure 3).A tree inventory and health assessment of Black Ash was not completed given the policy framework in place at the time of the investigation and is not recommended based on the development setback that has been proposed. The development can therefore be carried out in a manner that does not impact Black Ash or impair the function of their habitats that are afforded protection under Sections 9(1) and 10(1) of the Endangered Species Act, 2007. |
| 4 | Page 7 of 8Regarding bats (including SAR species) Section 4.7 (Bat Acoustic Monitoring) indicated that guidance from the MECP stating *“If a proposed activity will avoid impairing or eliminating the function of habitat for supporting bat life processes (e.g. remove, stub, etc. a small number of potential maternity or day roost trees in treed habitats) but the timing of tree removal will avoid the bat active season (April 1 – September 30 in Southern Ontario / May 1 to August 31 in Northern Ontario), then there is no need to conduct species at risk bat surveys of treed habitats. The damage and destruction assessment may vary geographically as the availability of other nearby maternity and day roost trees differs across the province of Ontario.*” While Stantec does not disagree with this conclusion, we note bats protected under the ESA are the jurisdiction of MECP. As such, we recommend consultation with MECP to confirm if authorization under the ESA is required for removal of forested habitats.Furthermore, the EIS indicated: “*Given that the proposed tree removals will be minor, utilization by SAR bats is low, and extensive habitat will remain on the landscape in the immediate vicinity, we are of the opinion that impacts to SAR bats can be avoided provided clearing activities occur during the appropriate timing window (i.e., clearing to occur between October 1st and March 31st). A summary of recommendation mitigation is provided in Section 7.0*.” As stated above, consultation with MECP is recommended to confirm they agree with this conclusion. | Cambium | Guidance from MECP outlines that *“**if a proposed activity will avoid impairing or eliminating the function of habitat for supporting bat life processes (e.g. remove, stub, etc. a small number of potential maternity or day roost trees in treed habitats) but the timing of tree removal will avoid the bat active season (April 1 – September 30 in Southern Ontario / May 1 to August 31 in Northern Ontario), then there is no need to conduct species at risk bat surveys of treed habitats”.* Based on our assessment of the bat maternity roosting survey and bat acoustic monitoring results, and provided that recommendations identified within Section 7.0 of the EIS, Cambium is of the opinion that the proposed development can be carried out in a manner that does not impact SAR bats or impair the function of their habitats that are afforded protection under Sections 9(1)and 10(1) of the Endangered Species Act, 2007. Given the low potential for utilization, and subsequently impacts, Cambium is of the opinion that consultation with MECP regarding SAR bats is not necessary in this situation. |
| 5 | Page 7 of 8Wildlife exclusion fencing should be installed to prevent turtles in Pond 4 from entering the construction site. Should SWM ponds be installed, mitigation measures should be implemented to prevent turtles from entering the pond. Table 14 indicates that “Sediment fencing can function as wildlife exclusion fencing.” **Stantec disagrees with this statement as support stakes/T-bars, etc., are installed on the opposite side to be an effective wildlife exclusion barrier and will potentially compromise the intended use. A layer of sediment fence and a layer of exclusion fencing should be installed.**  | Cambium | Noted. Installation of wildlife specific exclusion fencing can be installed surrounding Pond 5 to prevent turtles from entering the Site during construction, as per industry standards. Recommendations have been updated in the EIS accordingly. |
| 6 | Page 7 of 8**Please note that since Eastern Meadowlark was identified on the property, any disturbance within the grassland habitat must not occur between May 1 and July 31.**  | Cambium | Noted and agree. |
| 7 | Page 7 of 8Section 6.2 (Conservation Authority Policies) of the EIS indicates that the infilling of 2 wetlands (and potentially 4 ponds is required) and compensation will occur based on discussion and permitting with the KCA. However, there were no mitigation measures provided to avoid impacts to the wetlands (timing windows for amphibians, turtles, salvages, etc.) and/or associated species (including special concern turtle species) occurrences in the wetlands prior to infilling. **Stantec recommends mitigation measures are documented to reduce impacts to semi-aquatic species.**  | Cambium | See response to Comment 1. |
| 8 | Page 7 of 8There was no discussion regarding the recently released *Migratory Bird Regulations* (2022). **Stantec recommends that additional mitigation measures should be considered to maintain conformation with the regulations.**  | Cambium | The *Migratory Birds Convention Act*, 1994 [MBCA; (Canada, 1994)] prohibits the killing or capturing of migratory birds, as well as any damage, destruction, removal or disturbance of active nests. In 2022, new Migratory Birds Regulations (MBR) were adopted that afford year-round protection to the nests of sixteen migratory species, until the nest is deemed to be abandoned. Nest abandonment must be reported through the Abandoned Nest Registry, administered by ECCC, if there is a need to damage, disturb, destroy, or remove a nest of a species listed in Schedule 1 of the MBR.The extensive investigations completed during leaf-off conditions to evaluate candidate bat maternity roost habitat throughout the forested area proposed for removal also served to inventory potential cavities/nests suitable for migratory birds. No active stick nests or cavities were observed during these investigations. Further, none of the species listed in Schedule 1 of the MBR were documented during the breeding bird surveys conducted on the Site. As such, Cambium is of the opinion that no impacts to birds protected under the *Migratory Birds Convention Act*, 1994 are anticipated provided the timing window for vegetation clearing outlined in the EIS is implemented (i.e., no clearing between April 1 to August 31). |

|  | **Comment** | **Consultant** | **Response** |
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| **#** | **Transportation Impact Study 168 County Road 49, Nextrans Consulting Engineers** | **Commenter: Stantec Consulting Ltd. (Peer Review on behalf of the County of Peterborough)** |
| 1 | What is the split of the lots between east and west parcels? | **Nextrans** | As noted previously in our reporting, there is an environmental feature that separates the east and west parcels |
| 2 | It is recommended that jurisdictions and approximate paved width for each road be identified. | **Nextrans** | Acknowledged. This information has been detailed in Section 1.0 of this Addendum |
| 3 | The existing lane configuration for eastbound right/left turn movements on Ranch Road and Moon Line Road N intersection; sounds to be shared. Please confirm. | **Nextrans** | Acknowledged. It is noted that this comment has no bearing on the findings of our previously stated conclusions and recommendations. |
| 4 | The AM/PM Peak Hours and signals are not relevant to Figure 2-1. The legend should be updated | **Nextrans** | Acknowledged. It is noted that this comment has no bearing on the findings of our previously stated conclusions and recommendations. |
| 5 | It is recommended that Figure 2.2 be relocated under this section or that a reference to Figure 2.2 be attached at the end of the report. | **Nextrans** | Acknowledged. It is noted that this comment has no bearing on the findings of our previously stated conclusions and recommendations. |
| 6 | The HCM 2000 unsignalized intersections traffic operational criteria will be added to a new table. | **Nextrans** | Acknowledged. It is noted that this is an informational comment that does not affect the conclusions or recommendations of our study. Based on the results of the Future Total Traffic Assessment, all movements of the study area intersections analyzed are projected to operate with volume to capacity ratios below 0.40, with levels of service (LOS) B or greater, with no delay exceeding 12 seconds and with 95th percentile queue lengths shorter than 2m during both AM and PM peak hour. Based on the County’s Traffic Impact Assessment Guidelines, all unsignalized public road study intersections must operate with an acceptable LOS ‘E’ or better, with an average delay of 80 seconds of delay per vehicle (s/veh) and must operate with a v/c ratio of less than or equal to 0.85. Furthermore, the County’s TIA Guidelines state that 95th percentile queue lengths must not exceed the storage capacity of existing auxiliary lanes. Given that the Future Total traffic analysis conforms to the County’s TIA Guideline standards, our previously stated conclusions remain. |
| 7 | The actual peak hours used should be discussed. Also, was a common peak hour across all intersections derived/assumed for each period? | **Nextrans** | Appendix B of our previous reporting provided the detailed traffic data collection sheets. Morning peak period data was collected between 7AM and 10AM, and afternoon peak period traffic data was collected between 4PM and 7PM. The AM and PM peak hours varied per intersection, and as noted in our previous reporting, the peak hour factor (PHF) was calculated per intersection, per peak hour. The Synchro reports enclosed in Appendices C, D and E all detail the PHF used per intersection. |
| 8 | Future scenarios and horizon years should be identified. | **Nextrans** | A 5-year horizon from the baseline year was used. Given that the original report was prepared in early 2024, a horizon year of 2029 was assessed for future traffic scenarios. |
| 9 | AADT data within the study area that has been used to identify the growth rate to be referenced, also Suggest adding that 2% growth rate as per County TIA guidelines and clarify if the 2% is compounded as per guidelines | **Nextrans** | As noted in our original reporting, a 2% growth rate, compounded per annum was utilized to project future traffic growth in the area |
| 10 |  It is recommended that Figure 3.1 be relocated under this section, or ther should be a reference that Fig 3.2 is attached at the end of the report | **Nextrans** | Acknowledged. It is noted that this comment has no bearing on the findings of our previously stated conclusions and recommendations. |
| 11 | What is the split of the lots between east and west parcels? | **Nextrans** | As noted previously in our reporting, there is an environmental feature that separates the east and west parcel |
| 12 | In Table 4.1 what are gross rates different between east/west parcels if LUC 210 is being used for both | **Nextrans** | It is to be noted that trip generation was calculated separately for the east and west parcels, resulting in a difference of gross rate. |
| 13 | Please relocated Figure 4.1 after Table 4.2, or there should be a reference that Fig 4.1 is attached at the end of the report. | **Nextrans** | As noted previously in our reporting, there is an environmental feature that separates the east and west parcels. |
| 14 |  It is recommended to relocated Figure 5.1 before Table 5.1, or there should be a reference that Fig 5.1 is attached at the end of the report | **Nextrans** | Acknowledged. It is noted that this comment has no bearing on the findings of our previously stated conclusions and recommendations. |
| 15 | Have or will these 59 spaces be provided (i.e. 1 per residence)? | **Nextrans** | Acknowledged. The detailed parking supply will be confirmed at SPA. |
| 16 | There should be a reference to Fig 7.1 is attached at the end of the report. | **Nextrans** | Acknowledged. It is noted that this comment has no bearing on the findings of our previously stated conclusions and recommendations. |
| 17 | Please include a section to discuss the sight distances for the accesses | **Nextrans** | Acknowledged. Sight lines are discussed in Section 2.0 this Addendum. |
| 18 | Add split of lots between east and west parcels. | **Nextrans** | It is to be noted that the analysis was undertaken with the assumption that there would be east and west parcels, and the trip distribution was done accordingly |

|  | **Comment** | **Consultant** | **Response** |
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| **#** | **2024-05-01 RPT – GEO – Bobcaygeon Residential Development, Cambium** | **Commenter: Stantec Consulting Ltd. (Peer Review on behalf of the County of Peterborough)** |
| 1 | Page 6 of 13The Cambium report states a reasonable assumption that the design grades will be close to the existing grades. However, as also noted in the report, there are localized high points in the topography. It is recommended that a brief comment be provided regarding general cutting and filling for purposes of grading the overall site, including a limit to the depth of cut consistent with avoiding any concerns with respect to the presence of groundwater (focused on the west portion of the site as discussed further in the comment below). | Cambium | Statement regarding grading has been revised in Section 2.0. General grading recommendations (cut and fill) are provided in Sections 5.6 and 5.5. Recommendations with respect to the high groundwater and limitations, are now included in Sections 5.3 and 5.4. |
| 2 | Page 6 of 13As stated in the report, concerns with respect to encountering and handline of groundwater will likely be avoided provided footings for the residences are founded above the groundwater table level. However, Section 4.5 of the report includes specific reference to the presence of shallow groundwater in one borehole/monitoring well. Further to this, the initial geotechnical report reference the presence of shallow groundwater in three test pits excavated in the same area of the site. These shallow groundwater conditions, if present, could preclude basements in this are of the site or require additional and more extensive consideration for temporary (construction) and permanent groundwater control if basements are adopted for residences in this area. It is recommended that additional comment be provided for this purpose and at a minimum, a cautionary / warning note specific to the area adjacent to the west boundary of the site be included in Sections 5.54 and 5.4 in the context of the intended scope of design and construction. | Cambium | High water and discussions/warning included in Section 5.4.Subdrainage recommendations for any proposed basements are also included in Section 5.7 |
| 3 | Page 9 of 13The Cambium report (Section 5.8) includes recommendations for lateral earth pressures. The recommendation refers to “…yielding retaining structures.: This may no reflect the conditions associated with non-yielding walls for residence basements. It is recommended that this be reviewed and revised if an as appropriate. | Cambium | Brief edit has been made in the report. |
| 4 | Page 9 of 13The Cambium report (Section 4.5) includes specific reference to the presence of shallow groundwater in one borehole / monitoring well on the west side of the site. The initial geotechnical report by others also reports the presence of shallow groundwater in that area. Section 5.7 in the Cambium report includes recommendations regarding required subdrainage for residences with basements. It is recommended that this section be reviewed (and revised as appropriate) specific to the potential encounter shallow groundwater conditions on the west side of the site. Comment regarding whether basements should be considered for this area, if additional subdrainage be included if the developer intends to include basements in the residences in this area of the site, sand/or if additional investigation is warranted to confirm conditions should be provided. | Cambium | Section 5.7 includes subdrainage for basements. Comments on basements in this area are provided in Section 5.4 and 5.7. |
| 5 | Page 11 of 13The Cambium report (Section 5.5) discusses reuse of the exiting soils; However, the section is focused on engineered fill and wall backfill, without specific reference to backfill in service/utility trenches. The report includes recommendations for utility bedding and cover in Section 5.9 but this section does not address trench backfill. It is recommended that a comment be provided in one of the referenced sections, addressing the reuse, placement and compaction of existing soils and/or imported soils, specific to service and utility trench backfill. | Cambium | Utility trench backfill is discussed at the bottom of Section 5.5, and additional information has been provided in Section 5.9. |
| 6 | Page 12 of 13Consistent with Cambium’s response to this comment, it is acknowledged that the design of the development may not be within the City of Peterborough limits. Can Cambium confirm that there are no Township or Municipality requirements that may apply in this respect?Reference to Recommendation 21 | Cambium | No public County of Peterborough road design standards found |
| 7 | Page 12 of 13Can Cambium confirm that there are no Township or Municipality requirements that may apply in this respect? In addition, can Cambium comment on whether sub-drains at the curb line should be recommended consistent 3with current, typical development requirements in many jurisdictions.Reference to Recommendation 22 | Cambium | No public County of Peterborough road design standards are found. Comments on subdrains for curb lines are now provided in Section 5.9. |
| 8 | Page 13 of 13The Cambium report (Section 2) states that the development is to potentially include two stormwater management blocks. However, the current FSR prepared by D.G. Bille and Associates states that stormwater is to be conveyed to existing drainage infrastructure and water course tributaries and/or to infiltration galleries. It is suggested that commend be included in the report in this respect and direction be provided to the hydrogeological report should details associated with the design and construction of infiltration galleries be required. | Cambium | The stormwater management blocks line has been removed. Information on infiltration galleries is to be found in the hydrogeological repot. |