TRITON ENGINEERING SERVICES LIMITED
Consulting Engineers

Memorandum

DATE:	August 21, 2025
TO:	Shavindra Fernando
FROM:	Dustin Lyttle
RE:	Briarwood Subdivision Submission No.1 Review
FILE:	A4195A

Submitted Items List:

- Cover Letter and Requirements Table, dated June 3, 2025, prepared by Innovative Planning Solutions.
- OPA & ZBA Application Form, dated April 23, 2025, signed by Enzo DiGovanni (Owner)
- Architectural Plan Set, dated January 9, 2025, prepared by S&C Architects Inc.
- Survey Plan, dated June 7, 2018, prepared by J.D Barnes Limited.
- Functional Servicing and Stormwater Management Report, dated January 2025, prepared by Valdor Engineering Inc.
- Sanitary Collection system, dated October 2024, prepared by Valdor Engineering Inc.
- Hydrogeological Report, dated January 29, 2025, prepared by Soil Engineering Limited.
- Archeological Study Phase 1 & 2, dated January 29, 2019, prepared by Earthworks Archeological Services Inc.
- Archeological Report Submission Letter, dated January 15, 2020, prepared by Ministry of Heritage, Sport, Tourism, Culture Industries.
- Geotechnical Investigation Report, dated December 2024, prepared by Soil Engineering Limited.
- Traffic Impact Study, dated January 2025, prepared by Paradigm Transportation Solutions Limited.
- Environmental Impact Study, dated May 2025, prepared by Birks Natural Heritage Consultants.
- D-4 Landfill Impact Assessment, dated November 18, 2024, prepared by Palmer.
- D-2 Land Use Compatibility Study, dated November 18, 2024, prepared by Sonair Environmental.
- Floodplain Analysis Report, dated December 2024, prepared by Valdor Engineering Inc.
- Planning Justification Report, dated May 2025, prepared by Innovative Planning Solutions.
- Comment Response Matrix, dated May 2025, prepared by Innovative Planning Solutions.
- Landscape Plan, dated December 6, 2024, prepared by Adesso Design Inc.

Current Submission Comments:

General:

1.1 Fisheries and Oceans Canada (DFO) comments and permit (as applicable) are to be provided for Township record once available.

1.2 Grand River Conservation Authority (GRCA) comments and permit (as applicable) are to be provided for Township record once available.

1.3 Compensation plan as discussed within Section 6.3 the Environmental Impact Study (EIS) is to be provided for Township review.

1.4 The findings of the additional boreholes as discussed within Section 6.0 of the Geotechnical Report are to be provided for Township review.

1.5 Typical commercial entrances, complete with stop signs, are to be provided where the proposed entrances connect to Ida Street.

1.6 The east side of Ida Street is to be brought to an urban standard along the Development frontage and up to Victoria Street to provide safe access and pedestrian connectivity to the proposed development. The details of this urbanization are to be discussed further.

Functional Servicing Report:

1.7 Ensure the latest Municipal Servicing Standards (MSS) dated June 2022 have been referenced. We note that an older version is discussed within Section 7.0 of the Functional Servicing Report.

1.8 Multiple watermain connections into a single property are not acceptable. Revise the design and associated calculations accordingly.

1.9 All design parameters and calculations are to be as per the MSS and/or Ministry of Environment Design Criteria. (i.e., Maximum Day Demand Factor, Peak Hour Factor and Minimum Hour Factor for water demand are to be 2.5, 3.75 and 0.45 to align with MECP standards). Revise accordingly.

1.10 Existing watermain on Ida Street is 200mm diameter. Ensure information shown within the Functional Servicing Report is correct and consistent (i.e., Section 2.2 indicates 250mm).

1.11 Provide details for watermain, sanitary and storm infrastructure crossings to ensure sufficient separation is provided.

Stormwater Management:

1.12 Provide a sectional view of the stormwater management control structures MH.7, MH.9 and the outlet showing proposed orifice(s), sewers and the ponding elevations.

1.13 An impermeable liner is to be provided surrounding the proposed stormwater storage tank to separate high groundwater infiltration and/or exfiltration of run-off collected from parking/driving areas.

1.14 Indicate Catchment 101, as mentioned in Tables E3-A to F, within the post development drainage area map.

1.15 Provide detailed calculations confirming how the high-water level elevations were determined for the different rainfall events. *Note: The use of more advanced modelling techniques (MIDUSS, VO OTTHYMO) is preferred for a large site such as this, in lieu of the Rational Method provided.*

1.16 Provide additional details for all proposed storm infrastructure (i.e. material, invert, sewer length slope etc.) on all applicable drawings.

1.17 Provide Storm Sewer Design Sheets for the 5-year event.

1.18 Confirm the size of the downstream storm sewer from control MH.7. This is larger than the upstream sewers, however that structure will be restricting flows.

1.19 Indicate major overland flow routes in pre-development drainage area map and update legend accordingly.

1.20 A major overland flow route assessment and inlet capacity assessment is to be provided that addresses the requirements of Section 5.1.7 of the new “Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains for Alterations Authorized under Environmental Compliance Approval”. It is our expectation that the maximum depths of flows at the surface and maximum hydraulic grade lines in the Storm Sewers will be verified for up to the 100-year design storm.

1.21 Details (drawings, sizing etc.) regarding the proposed “StormTank” manufactured by Brentwood Industries are to be provided.

1.22 Confirm Table: E1 headings; they indicate “POST” however they appear to be the pre-development conditions.

1.23 Provide the design details of the “enhanced grass swale” as this site is within a Significant Groundwater Recharge Area.

1.24 Confirm a typical foundation tile system is sufficient to effectively reduce the high groundwater elevation surrounding and below the proposed below-grade parking structure. Additionally, confirm how groundwater will be controlled from entering the structure in the event of a prolonged power outage.

Note: collected groundwater does not need to be stored and controlled with the collected surface run-off, rather this should be re-infiltrated within the site to achieve water balance to the extent feasible.

1.25 The Functional Servicing Report is to be revised to discuss the available reserve capacity of the municipal water supply, storage, or wastewater treatment systems. This is to be completed in reference to the latest Reserve Capacity Calculations. This is to include, but not limited to the following:

- Quantify the number of ERUs required for the proposed development.
- Confirm that sufficient reserve capacity is available in the water and wastewater systems; and
- Provide specific reference to the Township’s Servicing Capacity Allocation & Retention Policy (Development Policy D-8), including how the proposal aligns with the policy’s requirements for allocation and retention of servicing capacity.

Archaeological Study:

1.26 Provide the recommended Stage 3 site-specific assessment of the Kerr (BaHc-3) as specified.

1.27 Provide a letter confirming that the MTCS is satisfied, as discussed within the Archaeological Report.

Traffic Impact Study:

1.28 The TIS is to assess the operational impacts at the Ida Street and Eco Parkway intersection, and the future intersection of Eco Parkway and Highway 10, as contemplated in the previous completed Municipal Class EA and the Eco Park Subdivision draft plan. Please refer to the Township’s Planning Applications and Public Notices website.

1.29 Include an evaluation of pedestrian connectivity, including safe and direct access to and from the site to the downtown businesses and schools. This is to consider sidewalk continuity, and crossings at key intersections and completed in the context and reference to how it is in alignment with the Southgate Official Plan.

If you have any questions, please contact us.