

re: Geotechnical Design Summary Details
Proposed Residential Development – Copperwood Estates – Block 73
11 Spoor Street – Ottawa, Ontario

to: Claridge Homes – **Victoria St. Pierre** – victoria.stpierre@claridgehomes.com

date: July 24, 2026

file: PG4258-MEMO.33

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to provide a grading plan review for the proposed residential development. The following memorandum should be read in conjunction with Paterson Report PG4258-3 Revision 1 dated July 24, 2026.

1.0 Grading Review

Paterson reviewed the following drawing prepared by Novatech for the subject development:

- ☐ Grading Plan – Project No. 125113 - Drawing No. 125113-GR - Revision 2 dated July 23, 2026.

1.1 Residential Grading

Based on review of the above-noted grading plan, the proposed residential and right-of-way grading for the subject site are considered acceptable from a geotechnical perspective and in conformance with our recommendations. Due to the lack of silty clay within the subject site, a permissible grade raise restriction is not applicable. As such, lighttight fill is not required and standard construction practices are acceptable.

1.2 Frost Protection

Furthermore, adequate soil cover (1.5 m or greater) for frost protection is provided for all buildings within the proposed development. Therefore, additional measures for frost protection (such as rigid insulation) are not required.

2.0 Servicing Review

Paterson reviewed the following drawing prepared by Novatech for the subject development:

- ☐ General Plan of Services – Project No. 125113 - Drawing No. 125113-GP – Revision 2 dated July 23, 2026.



2.1 Lateral Support

Service Pipes and Manholes/Catch Basins

Based on the above-noted site servicing plan, the site servicing layout does not impede the lateral support zones of any adjacent buildings/structures and is acceptable from a geotechnical perspective.

Building Service Connections

The service connections to the proposed buildings are lower than the underside of footing (USF) elevation.

If the service connections will be installed prior to building construction, reinstatement of the bearing medium below the footings and within the lateral support zones will be required. To achieve this, it is recommended that the excavations are backfilled within either 15 MPa 28-day strength concrete, or OPSS Granular B Type II placed in maximum 300 mm thick loose lifts and compacted to a minimum of 98% of the material's standard Proctor maximum dry density (SPMDD).

If the footings will be placed prior to service connection installation, it is recommended that the USF is lowered to an elevation below the service connection elevation via concrete trench using 15 MPa 28-day strength concrete and the service connections should be sleeved through the footings/foundation walls. The lowered USFs should extend a minimum of 2.4 m laterally from the exterior edge of all service pipe connections.

2.2 Frost Protection

Based on the above-noted site servicing plan, adequate soil cover for frost protection is provided to all services.



We trust that the current submission meets your immediate requirements.

Best Regards,

Paterson Group Inc.

Owen R. Canton, B.Eng.



David J. Gilbert, P.Eng.

