



re: **Geotechnical Review of Grading Plans**
 Proposed Residential Development – Trails Edge – Stage 3
 298 Axis way – Ottawa, Ontario

to: Minto Communities Inc. – Kiara Gonzales – kiara.gonzales@minto.com

date: November 10, 2025

file: PG2392-MEMO.02

Further to your request and authorization, Paterson Group (Paterson) has prepared the current memorandum to document our review of the available grading plans, and to provide associated recommendations from a geotechnical perspective for the aforementioned project. The present memorandum should be read in conjunction with Paterson Group Report PG2392-3 Revision 2 dated November 10, 2025. Relevant design information is presented in Table 1 – Summary of Design Details for the subject blocks.

The relevant design and inspection information presented in Table 1 – Summary of Design Details includes the following:

- ☐ Block number
- ☐ Unit number
- ☐ Original ground surface elevation based on available ground surface elevations
- ☐ Proposed finished grade elevations
- ☐ Proposed underside of footing (USF) elevation
- ☐ Proposed finished floor elevation (FFE)
- ☐ Bearing resistance values at SLS
- ☐ Seismic Site Designation
- ☐ Maximum allowable grade raise
- ☐ Estimated engineered fill thickness required below footings
- ☐ Lightweight Fill (LWF) recommendations
- ☐ Frost protection recommendations

Grading Plan Review

Paterson reviewed the following grading plan prepared by ATREL Engineering Ltd for the aforementioned residential development:

- ☐ Grading Plan - Project No. 240801 - Drawing No. 240801-GR1 - Received November 5, 2025



Based on our review of the above-noted drawing, a number of blocks/units of the subject site exceeded our permissible grade raise recommendations provided in the above-noted geotechnical report. Where significant grade raise exceedences have occurred, lightweight fill (LWF), such as expanded polystyrene (EPS) geofoam blocks are recommended for specific areas adjacent to the subject buildings. It should be noted that the proposed roadway grades throughout the subject site were found to be within the recommended permissible grade raise restrictions for roadways provided in the aforementioned geotechnical investigation report. Further, sufficient soil cover has been provided to perimeter and exterior pad footings to mitigate the migration of frost within the founding subsoils.

Bearing Resistance Values for Foundation Design

Footings placed on an undisturbed, soil bearing surface can be designed using the following bearing resistance values provided in Table 2 below.

Table 2 - Bearing Resistance Values		
Bearing Surface	Bearing Resistance Value at SLS (kPa)	Factored Bearing Resistance Value at ULS (kPa)
Stiff Brown Silty Clay	150	225
Firm Grey Silty Clay	75	110
Note: - Strip and pad footings, up to 3 and 6 m wide, respectively, can be designed using the bearing resistance values provided for an undisturbed, silty clay bearing surface. - Bearing resistance values for footing design should be confirmed on a per lot basis by the Paterson personnel at the time of construction.		

An undisturbed soil bearing surface consists of a surface from which all topsoil and deleterious materials, such as loose, frozen or disturbed soil, whether in situ or not, have been removed, in the dry, prior to the placement of concrete footings. A geotechnical resistance factor of 0.5 was applied to the above noted bearing resistance values at ULS. The bearing resistance value at SLS, provided above, will be subjected to potential post-construction total and differential settlements of 25 and 20 mm, respectively.

Minor Adjustments to Lot Grading and Design Details During Construction Phase

It is anticipated that there may be minor discrepancies between the latest reviewed grading plan and the permit plot plans that will be prepared for some of the proposed blocks during the final permitting and construction phase of the proposed structures.



The discrepancies are anticipated to arise due to minor changes required by the building designer to accommodate finishes such as risers and entrances to the design grading. In our experience, minor adjustments are required to the design USF elevations and occasionally finished grades surrounding the structure.

Based on Paterson's review of site-specific conditions, provided all of the following criteria are met if further adjustments to the grading plan details are made on lot/block permit plot plans (i.e., changes made to plot plans, not to the current grading plans), additional review by Paterson to ensure the permit plot plans are satisfactory from a geotechnical perspective is not considered required during the construction phase:

- ☐ Plot plan USF is not more or less than 10 cm from the design USF elevation and Paterson field personnel prepared memorandums documenting their field review of the bearing medium and bearing surfaces for the structure.
- ☐ Plot plan finished grade does not fluctuate more than 10 cm from the design finished grade.
- ☐ Plot plan finished grade remains more than 30 cm below the recommended permissible grade raise elevation.
- ☐ There is not an existing recommendation to consider lightweight fill around the perimeter and/or in the garage/front porches of the building (i.e., if Table 1 provides a recommendation for LWF, any adjustment to grading and/or founding elevations must be reviewed by Paterson if they do not conform to those noted in Table 1).
- ☐ Sufficient soil cover remains to provide protection against the migration of frost to the soil subgrade (i.e., 1.5 m below finished grade for heated structures).
- ☐ If one of these conditions is not met, it is recommended that Paterson be contacted to review the permit plot plan during the construction phase for conformance to our grading requirements from a geotechnical perspective at that time.

Should the revised founding depth be located within 1.5 m from finished grade around the building perimeter, it is recommended that Paterson review and advise on frost protection measures, such as foundation insulation, on a lot-by-lot basis when this condition exists.

Any updates to the current grading plans should be reviewed and advised upon by Paterson. However, once approved and adjustments are made on plot plans, the adjusted plot plans may not require additional review to verify adequacy to the proposed grading matrix from a geotechnical perspective provided adjustments are within the ranges noted herein. Alternatively, permit plot plans may be circulated to Paterson prior to submission to approvals to ensure the grading and design values are consistent with our recommendations for the proposed residential development. It should be noted that this portion of the memorandum is only considered applicable to the subject site.



We trust that this information is satisfactory for your immediate requirements.

Best Regards,

Paterson Group Inc.

Nicholas F. R. Versolato, CPI, B.Eng

Drew Petahtegoose P.Eng.



Attachments:

- ☐ Table 1 – Summary of Design Details
- ☐ Figure 1 – EPS Block Installation Around Residential Buildings



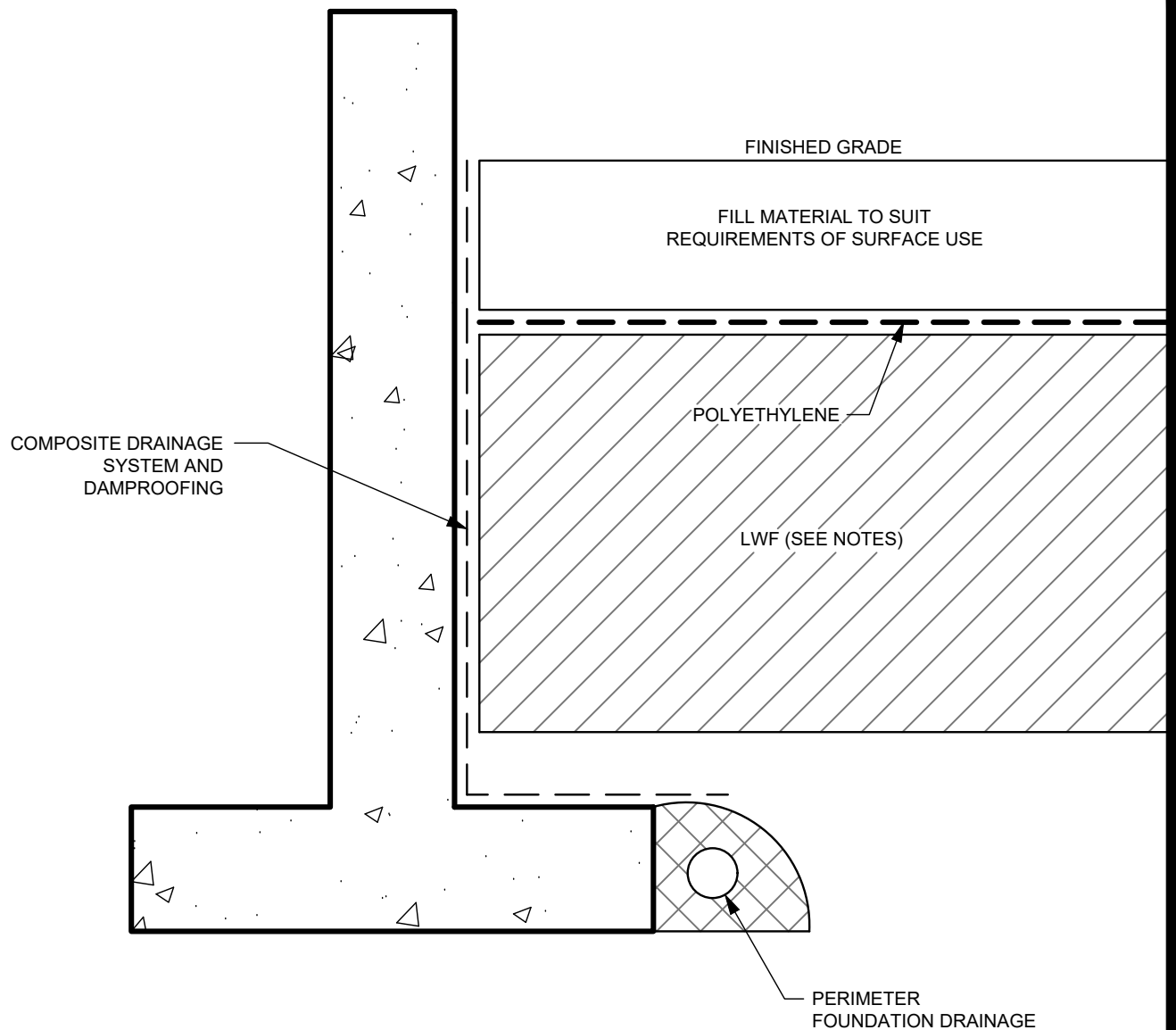
Table 1 - Summary of Design Details																			
PG2392 - Minto Communities - Trails Edge - Renaud Road																			
Block Number	Unit Number	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Finished Floor Elevation	Bearing Resistance Value at SLS	Seismic Site Designation	Permissible Grade Raise	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Required Below USF - Front	Engineered Fill Required Below USF - Rear	Frost Check - Front	Frost Check - Rear	Minimum Thickness LWF in Front Porch & Garage	Frost Protection Notes	General Notes
		(m)	(m)	(m)	(m)	(m)	(m)	(kPa)		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)		
BLOCK 1	MT-101 to MT-102	86.96	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-103 to MT-104	86.96	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-105 to MT-106	86.96	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-107 to MT-108	86.96	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-109 to MT-110	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-111 to MT-112	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-113 to MT-114	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-115 to MT-116	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-117 to MT-118	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
	MT-119 to MT-120	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.90	n/a	n/a	n/a	
BLOCK 2	MT-201 to MT-202	87.00	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.15	n/a	0.06	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch.
	MT-203 to MT-204	87.00	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.15	n/a	0.06	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-205 to MT-206	87.00	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.15	n/a	0.06	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-207 to MT-208	87.00	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.15	n/a	0.06	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-209 to MT-210	87.00	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.15	n/a	0.06	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-211 to MT-212	87.00	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.15	n/a	0.06	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch.
	MT-213 to MT-214	87.25	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-215 to MT-216	87.25	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-217 to MT-218	87.25	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-219 to MT-220	87.25	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-221 to MT-222	87.25	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-223 to MT-224	87.25	88.65	n/a	n/a	86.76	90.09	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
BLOCK 3	MT-301 to MT-302	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-303 to MT-304	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-305 to MT-306	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-307 to MT-308	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-309 to MT-310	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-311 to MT-312	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-313 to MT-314	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-315 to MT-316	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-317 to MT-318	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-319 to MT-320	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
BLOCK 4	MT-401 to MT-402	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-403 to MT-404	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-405 to MT-406	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-407 to MT-408	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-409 to MT-410	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-411 to MT-412	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-413 to MT-414	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
BLOCK 5	MT-415 to MT-416	87.00	88.30	n/a	n/a	86.41	89.74	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-501 to MT-502	87.00	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.10	n/a	0.01	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-503 to MT-504	87.00	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.10	n/a	0.01	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-505 to MT-506	87.25	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-507 to MT-508	87.25	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-509 to MT-510	87.01	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.09	n/a	0.00	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch.
	MT-511 to MT-512	87.01	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.09	n/a	0.00	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face. A minimum of 0.5 m thick LWF below front porch.
	MT-513 to MT-514	87.09	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.01	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-515 to MT-516	87.09	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.01	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-517 to MT-518	87.00	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.10	n/a	0.01	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch.
	MT-519 to MT-520	87.00	88.60	n/a	n/a	86.71	90.04	150	XE	1.50	0.10	n/a	0.01	n/a	1.89	n/a	0.5	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch.

Table 1 - Summary of Design Details

PG2392 - Minto Communities - Trails Edge - Renaud Road

Block Number	Unit Number	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Finished Floor Elevation	Bearing Resistance Value at SLS	Seismic Site Designation	Permissible Grade Raise	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Required Below USF - Front	Engineered Fill Required Below USF - Rear	Frost Check - Front	Frost Check - Rear	Minimum Thickness LWF in Front Porch & Garage	Frost Protection Notes	General Notes
		(m)	(m)	(m)	(m)	(m)	(m)	(kPa)		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)		
BLOCK 6	MT-601 to MT-602	87.50	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-603 to MT-604	87.50	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-605 to MT-606	87.50	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-607 to MT-608	87.50	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-609 to MT-610	87.25	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-611 to MT-612	87.25	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-613 to MT-614	87.25	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-615 to MT-616	87.25	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-617 to MT-618	87.50	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
BLOCK 7	MT-619 to MT-620	87.50	88.23	n/a	n/a	86.34	89.67	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-701 to MT-702	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-703 to MT-704	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-705 to MT-706	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-707 to MT-708	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-709 to MT-710	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-711 to MT-712	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-713 to MT-714	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
	MT-715 to MT-716	87.25	88.13	n/a	n/a	86.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	1.89	n/a	n/a	n/a	
BLOCK 8	MT-801 to MT-802	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-803 to MT-804	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-805 to MT-806	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-807 to MT-808	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-809 to MT-810	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-811 to MT-812	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-813 to MT-814	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-815 to MT-816	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-817 to MT-818	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
BLOCK 9	MT-819 to MT-820	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-821 to MT-822	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	MT-823 to MT-824	87.25	88.13	n/a	n/a	85.24	89.57	150	XE	1.50	0.00	n/a	0.00	n/a	2.89	n/a	n/a	n/a	
	Unit A	87.18	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit B	87.18	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit C	87.10	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit D	87.10	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit E	87.10	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit F	87.10	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
BLOCK 10	Unit G	87.18	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit H	87.18	88.14	n/a	n/a	86.32	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit A	87.10	88.09	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit B	87.05	88.09	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit C	87.00	88.09	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit D	87.00	88.09	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit E	86.97	88.09	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit F	86.90	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit G	86.90	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
BLOCK 11	Unit H	86.97	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit I	87.00	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit J	87.00	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit K	87.00	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit L	87.00	88.27	n/a	n/a	86.27	88.63	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit A	87.15	88.14	n/a	n/a	86.14	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit B	87.15	88.14	n/a	n/a	86.14	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit C	87.15	87.96	n/a	n/a	86.14	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit D	87.15	87.96	n/a	n/a	86.14	88.50	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	

Table 1 - Summary of Design Details																			
PG2392 - Minto Communities - Trails Edge - Renaud Road																			
Block Number	Unit Number	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Finished Floor Elevation	Bearing Resistance Value at SLS	Seismic Site Designation	Permissible Grade Raise	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Required Below USF - Front	Engineered Fill Required Below USF - Rear	Frost Check - Front	Frost Check - Rear	Minimum Thickness LWF in Front Porch & Garage	Frost Protection Notes	General Notes
		(m)	(m)	(m)	(m)	(m)	(m)	(kPa)		(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)		
BLOCK 12	Unit A	87.00	87.92	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit B	87.00	87.92	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit C	87.00	87.92	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit D	87.00	87.92	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	1.82	n/a	n/a	n/a	
	Unit E	87.00	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit F	86.44	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.16	n/a	0.00	n/a	2.00	n/a	n/a	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch and garage.
	Unit G	86.44	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.16	n/a	0.00	n/a	2.00	n/a	n/a	n/a	A minimum of 0.3 m thick LWF along front extending 2.4 m beyond building face, and a minimum of 0.3 m thick LWF along building side extending 1.2 m. A minimum of 0.5 m thick LWF below front porch and garage.
	Unit H	86.99	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit I	87.00	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit J	87.00	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit K	87.00	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
	Unit L	87.00	88.10	n/a	n/a	86.10	88.46	150	XE	1.50	0.00	n/a	0.00	n/a	2.00	n/a	n/a	n/a	
Notes: Grading information was based on the following grading plan prepared by ATREL Engineering Ltd: - Grading Plan - Project No. 240801 - Drawing No. 240801-GR1 - Received November 5, 2025 Current Block and Lot numbers assigned based on the following site plan prepared by SRN Architects below: - Site Plan - Project No. S24027 - Drawing No. A100 - dated November 6, 2025 All engineered fill thickness recommendations consider a minimum 300 mm thick layer of topsoil requiring to be removed from the ground surface prior to placing fill, and is considered in the thickness provided herein.																			



NOTES:

1. USE EPS12 BELOW FRONT PORCH AND LANDSCAPED AREAS
2. USE EPS15 BELOW GARAGE AND DRIVEWAY
3. MINIMUM GRANULAR THICKNESS OVER LWF SHOULD BE AS FOLLOWS:

FRONT PORCH	150mm OF OPSS GRANULAR A
GARAGE	300mm OF OPSS GRANULAR A
DRIVEWAY	450mm OF OPSS GRANULAR A
LANDSCAPED	500mm OF APPROVED BACKFILL SOIL
4. PLACEMENT OF LWF SHOULD BE ON A LEVELED SURFACE (SAND CAN BE USED TO PROVIDE AN ADEQUATE LEVELLING SURFACE).



Title:

**EPS BLOCK INSTALLATION
AROUND RESIDENTIAL BUILDINGS**

Scale:

N.T.S.

Date:

11/2025

Drawn by:

NFRV

Checked by:

DP

Drawing No.:

FIGURE 1