



re: Geotechnical Design Summary Details
Proposed Residential Development
Arcadia – Stage 5 – Campeau Drive – Ottawa

to: Minto Communities – **Mr. Jean-Michel Le Blanc** – jleblanc@minto.com

to: Minto Communities – **Ms. Kiara Gonzales** – Kiara.Gonzales@minto.com

date: November 8, 2023

file: PG4933-MEMO.06

Further to your request and authorization, Paterson Group (Paterson) prepared the current memorandum to provide the geotechnical design summary details for the proposed residential development at the aforementioned site. Reference should be made to Paterson Group report PG4933-1 Revision 2 dated November 8, 2023.

Relevant design information is presented in Table 1 – Summary Design Details for the subject blocks and lots. The relevant design and inspection information includes the following:

- Legal lot/block number and Civic Address
- Original ground surface elevation
- Proposed finished grade elevations
- Maximum permissible grade raise
- Proposed USF elevation
- Bearing resistance values at SLS
- Seismic Site Class
- Estimated engineered fill thickness beneath footings.
- Frost protection recommendations
- Lightweight Fill (LWF) recommendations

Grading Plan Review

Paterson reviewed the following grading plan prepared by J.L. Richards for the aforementioned development:

- Conceptual Grading – Arcadia Stage 5 - JLR No. 26299-005 – Drawing No. CG1 – Revision 1 – dated November 17, 2023.

Based on the grading plans provided, all blocks/lots of the subject site exceeded our permissible grade raise elevation recommendations provided in the geotechnical report. Where significant grade raises exceedances have occurred, lightweight fill, such as expanded polystyrene (EPS) geofoam blocks, is recommended for specific areas adjacent to the subject buildings.





Table 1 provides a grading summary and lightweight fill (LWF) requirements for the subject buildings based on our grading plan review. LWF material specifications and cover recommendations are provided in Table 1 and Figure 1 attached.

Settlement Surcharge Program and Subgrade Improvement

A settlement surcharge program is currently being carried out at the subject site. The settlement surcharge program is designed to eliminate excessive settlement associated with permissible grade raise exceedances that have occurred based on the proposed grading. It should be noted the above-noted lots located within the limits of the surcharge program and as identified in the attached Table 1 will not require lightweight fill provided the settlement surcharge programs are completed and as approved by Paterson.

Where footings will be founded within the previously placed surcharge fill material, it is recommended to sub-excavate a minimum of 500 mm below the design USF elevation and to proof-roll the existing fill using a suitably sized vibratory sheepsfoot roller, under dry conditions and above freezing temperatures. Paterson should review and approve the proof-rolling work. If the proof-rolled surface is considered acceptable at the time of construction, the sub-excavation should be in-filled with OPSS Granular A or Granular B Type II crushed stone placed in maximum 500 mm thick loose lifts and compacted to a minimum of 98% of the materials SPMDD.

Where more than 1.0 m of fill will be in place below the above-noted sub-excavation, Paterson will provide additional recommendations and advise on appropriate subgrade preparation measures at the time of detailed design. This may consist of re-working existing fill to be in a more compact and appropriate state for the support of building foundations, thickening engineered fill pads and/or the use reinforcement such as bi-axial geogrid layers. This will be determined at a later stage of design.

It should be noted that the currently provided engineered fill thicknesses on Table 1 do not currently consider these recommendations and will be revised further at a later stage of design. The current engineered fill thickness value may be considered as the difference between underside of footing and approximately 300 mm below the interpreted original ground surface. The original ground surface was interpreted using available historical topographic plans and may not be considered reflective of the actual previous original ground surface. As such, site-specific previous/historical topographic surveys may be used to better estimate this value as part of future revisions to this review.

Bearing Resistance Values for Foundation Design

Based on our review of the above-noted grading plans, it is expected that the buildings will be founded over an undisturbed bearing surface consisting of one of the following:



Table 1 - Bearing Resistance Values		
Bearing Surface	Bearing Resistance Values at SLS (kPa)	Factored Bearing Resistance Value at ULS (kPa)
Very Stiff to Stiff Silty Clay	150	225
Firm Grey Silty Clay	75	110
Engineered Silty Clay Fill	100	150
Engineered Fill over Silty Clay Crust	150	225

Note: Strip footings, up to 2 m wide, and pad footings, up to 4 m wide, placed over a silty clay bearing surface can be designed using the above noted bearing resistance values.

The bearing resistance values are provided on the assumption that the footings will be placed on undisturbed soil bearing surfaces. An undisturbed soil bearing surface consists of one 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 for footings.

Protection of Footings Against Frost Action

Based on our review, some units were noted to be provided with insufficient soil cover to protect footings against frost action. It should be noted that to accommodate the absence of sufficient soil frost cover (minimum 1.5 m for heated footings) for the proposed footings, alternative forms of frost protection may be considered to provide sufficient protection against frost.

Based on our review, the following frost protection using rigid insulation is recommended to be placed at the specified townhouse lots as specified below to provide sufficient protection to footings against frost action:

- ❑ **Lots 1 to 5 and Lots 58 to 62:** Based on our review, the front portions of these lots are currently provided insufficient soil cover for frost protection to the soil bearing medium. However, since a layer of engineered fill will be placed below USF as part of the bearing medium preparation for these lots, the depth to the frost-susceptible bearing surface below the engineered fill will be provided with over 1.5 m of cover. Therefore, these lots will not require additional frost protection in the form of rigid insulation despite the currently reduced soil cover based on grading.



- ❑ **Lots 21 to 32 and Blocks 69 to 73:** Based on our review, the rear half of the footings for these structures will be founded within the depth of frost migration and have insufficient soil cover for adequate frost protection. Similar to the above-noted lots, a future revision to the grading plan review will result in additional engineered fill to be placed below USF which will reduce increase the depth of soil cover present to frost susceptible bearing mediums. Since that value is not currently known, a preliminary recommendation of a minimum 100 mm thick layer of extruded polystyrene boards such as Dow Chemical High-Load 40 (HI-40), or equivalent other approved by Paterson, will be required below the rear half of the building's perimeter strip footings. Further, a minimum 100 mm thick layer of SM rigid insulation or equivalent should extend a minimum of 2,100 mm horizontally beyond the exterior face of strip footings along the rear half of the insulated strip footings. It would also be advised that a minimum 500 mm thick layer of engineered fill be placed between USF and the rigid insulation layer.

Rigid insulation boards should be placed upon a level and flat surface and with negligible gaps between abutting boards. Consideration can be given to placing a thin levelling mat consisting of a layer of compacted OPSS Granular A crushed stone, stone dust or sand below the insulation layer, as required. The placement of the insulation layers should be reviewed and approved by Paterson personnel at the time of construction.

Tree Planting Setbacks

In accordance with the City of Ottawa Tree Planting in Sensitive Marine Clay Soils (2017 Guidelines), Paterson completed a soils review of the site to determine applicable tree planting setbacks. Atterberg limits testing was completed for recovered silty clay samples at selected locations throughout the subject site. Grain size distribution and Sieve analysis testing was also completed on selected soil samples. The above noted test results were completed between design underside of footing elevation and a 3.5 m depth below finished grade. The results of our testing are presented in Tables 1 and 2 in Subsection 4.1 and in Appendix 1 of the current Geotechnical Report.

Based on the results of the representative soil samples, the subject site will be located upon a deposit of low to medium plasticity clay with a low to medium potential for soil volume change for tree planting according to the City of Ottawa Tree Planting in Sensitive Marine Clay Soils (2017 Guidelines).

Since the modified plasticity limit (PI) does not exceed 40%, large trees (mature height over 14 m) can be planted at the subject site provided a tree to foundation setback equal to the full mature height of the tree can be provided (e.g. in a park or other green space).



According to the City of Ottawa Tree Planting Guidelines, tree planting setback limits may be reduced to 4.5 m for small (mature tree height up to 7.5m) and medium size trees (mature tree height 7.5 m to 14 m) provided that the following conditions are met:

- ❑ The underside of footing (USF) extends to 2.1 m or greater below the lowest finished grade within 10 m from the tree, as measured from the centre of the tree trunk and verified by means of the Grading Plan as indicated procedural changes below. However, due to the thickness of the fill material within the subject site, this condition is not required as the native silty clay material is well below the proposed underside of footing elevations (at least 3 m below proposed USF levels).
- ❑ A small tree must be provided with a minimum of 25 m³ of available soil volume while a medium tree must be provided with a minimum of 30 m³ of available soil volume, or a volume that is appropriate to the species selected, as determined by the Landscape Architect. The developer is to ensure that the soil is generally un-compacted when backfilling in street tree planting locations.
- ❑ The tree species must be small (mature tree height up to 7.5 m) to medium size (mature tree height 7.5 m to 14 m) as confirmed by the Landscape Architect.
- ❑ The foundation walls are to be reinforced at least nominally (minimum of two upper and two lower 15M bars in the foundation wall). This condition is only required where the footings are placed directly on top of native silty clay material. Any footings placed over engineered fill will not require the additional reinforcement.
- ❑ Grading surrounding the tree must promote drainage to the tree root zone (in such a manner as not to be detrimental to the tree).

In-Ground Swimming Pools

The in-situ soils are considered to be acceptable for the installation of in-ground swimming pools. The soil removed to accommodate an in-ground swimming pool weighs more than the water filled in-ground pool. Therefore, no additional load is being applied to the underlying sensitive clays.

Aboveground Swimming Pools, Hot Tubs and Exterior Decks

If consideration is given to construction of an above ground swimming pool, a hot tub or an exterior deck, a geotechnical consultant should be retained by the homeowner to review the site conditions. No additional grading should be placed around the exterior structure. The swimming pool should be located at least 3 m away from the existing foundation to avoid adding localized loading to the foundation and the hot tub should be located at least 2 m away from the existing foundation. Otherwise, construction is considered routine, and can be constructed in accordance with the manufacturer's specifications.



We trust that the current submission meets your immediate requirements.

Best Regards,

Paterson Group Inc.

Drew Petahtegoose, P.Eng.

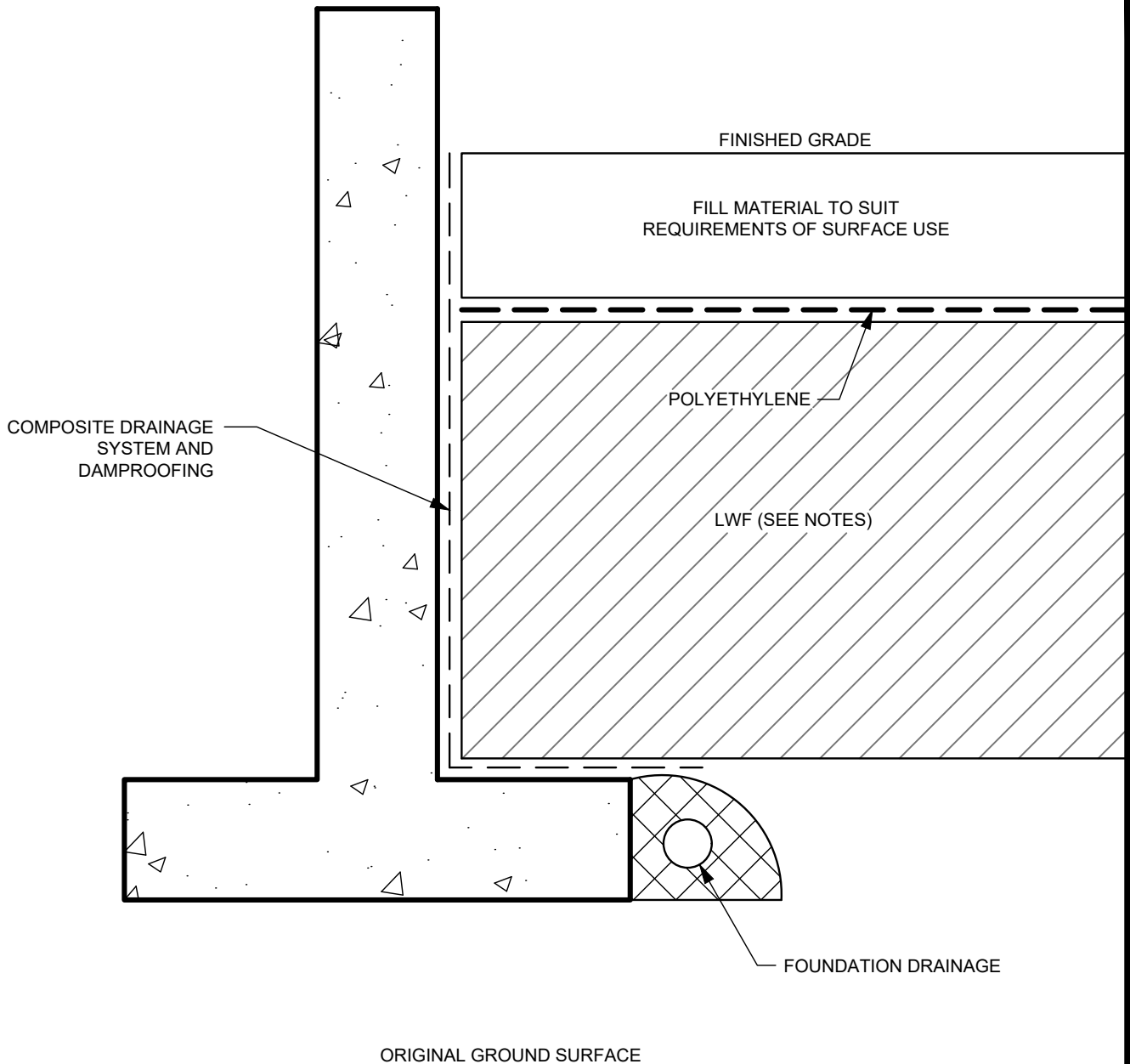


Faisal I. Abou-Seido, P.Eng.

Attachments

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





NOTES:

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

FRONT PORCH	150mm OF OPSS GRANULAR A
GARAGE	300mm OF OPSS GRANULAR A
DRIVEWAY	300mm 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).



**EPS BLOCK INSTALLATION AROUND
RESIDENTIAL BUILDINGS**

Drawing No.:	Scale:
FIGURE 1	N.T.S.
Drawn:	Approved:
MPG	DJG

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
n/a	Lot 16	Street No.1	Single	93.40	96.25	93.60	96.25	94.35	150	n/a	n/a	94.50	1.75	1.75	1.25	1.05	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.8 m thick LWF along rear extending 2.4 m beyond building face and 1.8 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 17	Street No.1	Single	93.35	96.25	93.45	96.25	94.35	150	n/a	n/a	94.50	1.75	1.75	1.30	1.20	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.8 m thick LWF along rear extending 2.4 m beyond building face and 1.8 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 18	Street No.1	Single	93.30	96.25	93.37	96.25	94.35	150	n/a	n/a	94.50	1.75	1.75	1.35	1.28	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.8 m thick LWF along rear extending 2.4 m beyond building face and 1.8 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 19	Street No.1	Single	93.27	96.25	93.37	96.25	94.35	150	n/a	n/a	94.50	1.75	1.75	1.38	1.28	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.8 m thick LWF along rear extending 2.4 m beyond building face and 1.8 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 20	Street No.1	Single	93.20	96.25	93.30	96.25	94.35	150	n/a	n/a	94.50	1.75	1.75	1.45	1.35	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.8 m thick LWF along rear extending 2.4 m beyond building face and 1.8 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 21	Street No.1	Single	93.09	96.40	93.15	94.50	94.50	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.90	0.00	1.71	1.65	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 22	Street No.1	Single	93.09	96.40	93.15	94.50	94.50	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.90	0.00	1.71	1.65	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 23	Street No.1	Single	93.03	96.40	93.05	94.50	94.50	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.90	0.00	1.77	1.75	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 24	Street No.1	Single	93.00	96.40	93.03	94.50	94.50	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.90	0.00	1.80	1.77	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 25	Street No.1	Single	92.95	96.40	92.98	94.50	94.50	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.90	0.00	1.85	1.82	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 26	Street No.1	Single	95.92	96.40	92.95	94.50	94.50	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.90	0.00	0.00	1.85	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 27	Street No.1	Single	95.90	96.30	92.93	94.40	94.40	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.80	0.00	0.00	1.77	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 28	Street No.1	Single	92.87	96.30	92.90	94.40	94.40	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.80	0.00	1.83	1.80	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933

Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
n/a	Lot 29	Street No.1	Single	92.85	96.30	92.88	94.40	94.40	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.80	0.00	1.85	1.82	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 30	Street No.1	Single	92.82	96.30	92.70	94.40	94.40	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.80	0.00	1.88	2.00	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 31	Street No.1	Single	92.80	96.30	92.50	94.40	94.40	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.80	0.00	1.90	2.20	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 32	Street No.1	Single	92.77	96.30	92.40	94.40	94.40	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.50	1.80	0.00	1.93	2.30	Ongoing	1.50	1.8 m thick LWF along front extending 2.4 m beyond building face and 1.8 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 33	Street No.1	Single	92.73	96.40	92.60	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	2.07	2.20	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 34	Street No.1	Single	92.71	96.40	92.71	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	2.09	2.09	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 35	Street No.1	Single	92.71	96.40	92.71	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	2.09	2.09	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 36	Street No.1	Single	92.84	96.40	92.73	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.96	2.07	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 37	Street No.1	Single	92.91	96.40	92.76	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.89	2.04	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 38	Street No.1	Single	92.98	96.40	92.79	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.82	2.01	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 39	Street No.1	Single	93.05	96.40	92.82	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.75	1.98	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 40	Street No.1	Single	93.12	96.40	92.85	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.68	1.95	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 41	Street No.1	Single	93.19	96.40	92.88	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.61	1.92	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 42	Street No.1	Single	93.27	96.40	92.88	96.40	94.50	150	n/a	n/a	94.50	1.90	1.90	1.53	1.92	Ongoing	1.50	1.9 m thick LWF along front extending 2.4 m beyond building face and 1.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.9 m thick LWF along rear extending 2.4 m beyond building face and 1.9 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

**Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5**

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
n/a	Lot 57	Street No.1	Single	93.08	96.20	92.97	96.20	94.30	150	n/a	n/a	94.50	1.70	1.70	1.52	1.63	Ongoing	1.50	1.7 m thick LWF along front extending 2.4 m beyond building face and 1.7 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.7 m thick LWF along rear extending 2.4 m beyond building face and 1.7 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 58	Street No.1	Single	93.40	95.80	93.40	96.00	94.40	150	n/a due to placement of engineered fill required below USF	n/a	94.90	0.90	1.10	1.30	1.30	Ongoing	1.50	0.9 m thick LWF along front extending 2.4 m beyond building face and 0.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 59	Street No.1	Single	93.44	95.80	93.44	96.00	94.40	150	n/a due to placement of engineered fill required below USF	n/a	94.90	0.90	1.10	1.26	1.26	Ongoing	1.50	0.9 m thick LWF along front extending 2.4 m beyond building face and 0.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 60	Street No.1	Single	93.48	95.80	93.48	96.00	94.40	150	n/a due to placement of engineered fill required below USF	n/a	94.90	0.90	1.10	1.22	1.22	Ongoing	1.50	0.9 m thick LWF along front extending 2.4 m beyond building face and 0.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 61	Street No.1	Single	93.51	95.80	93.51	96.00	94.40	150	n/a due to placement of engineered fill required below USF	n/a	94.90	0.90	1.10	1.19	1.19	Ongoing	1.50	0.9 m thick LWF along front extending 2.4 m beyond building face and 0.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
n/a	Lot 62	Street No.1	Single	93.53	95.80	93.53	96.00	94.40	150	n/a due to placement of engineered fill required below USF	n/a	94.90	0.90	1.10	1.17	1.17	Ongoing	1.50	0.9 m thick LWF along front extending 2.4 m beyond building face and 0.9 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 63	Unit A	Street No.2	End	93.50	96.00	93.50	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.90	0.90	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.2	Interior	93.50	96.00	93.50	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.90	0.90	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.2	Interior	93.50	96.00	93.50	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.90	0.90	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.2	Interior	93.50	96.00	93.50	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.90	0.90	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.2	Interior	93.50	96.00	93.50	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.90	0.90	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.2	End	93.50	96.00	93.50	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.90	0.90	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
Block 64	Unit A	Street No.2	End	93.75	96.00	93.75	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.65	0.65	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.2	Interior	93.75	96.00	93.75	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.65	0.65	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.2	Interior	93.75	96.00	93.75	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.65	0.65	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.2	Interior	93.75	96.00	93.75	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.65	0.65	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.2	Interior	93.75	96.00	93.75	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.65	0.65	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.2	End	93.75	96.00	93.75	96.00	94.10	150	n/a	n/a	94.50	1.50	1.50	0.65	0.65	Ongoing	1.50	1.5 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 65	Unit A	Street No.3	End	93.27	95.90	93.27	96.40	94.40	150	n/a	n/a	94.90	1.00	1.50	1.43	1.43	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	93.32	95.90	93.32	96.40	94.40	150	n/a	n/a	94.90	1.00	1.50	1.38	1.38	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Interior	93.37	95.90	93.37	96.40	94.40	150	n/a	n/a	94.90	1.00	1.50	1.33	1.33	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Interior	93.40	95.90	93.40	96.40	94.40	150	n/a	n/a	94.90	1.00	1.50	1.30	1.30	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.3	Interior	93.47	95.90	93.47	96.40	94.40	150	n/a	n/a	94.90	1.00	1.50	1.23	1.23	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.3	End	92.53	95.90	92.53	96.40	94.40	150	n/a	n/a	94.90	1.00	1.50	2.17	2.17	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)	(m)	(m)	(m)	(m)	(m)	(m)	(m)					
Block 66	Unit A	Street No.3	End	92.54	96.30	92.88	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.16	1.82	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.4 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	92.54	96.30	92.88	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.16	1.82	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Interior	92.55	96.30	92.85	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.15	1.85	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Interior	92.56	96.30	92.85	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.14	1.85	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.3	End	92.57	96.30	92.82	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.13	1.88	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.4 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 67	Unit A	Street No.3	End	92.58	96.30	92.79	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.12	1.91	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.4 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	92.58	96.30	92.76	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.12	1.94	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Interior	92.59	96.30	92.73	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.11	1.97	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Interior	92.59	96.30	92.70	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.11	2.00	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.3	Interior	92.60	96.30	92.70	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.10	2.00	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.3	End	92.60	96.30	92.71	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.10	1.99	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.4 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

**Table 1 - Summary of Design Details - PG4933
 Minto Communities - Arcadia - Stage 5**

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
Block 68	Unit A	Street No.3	End	92.55	96.30	92.70	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.15	2.00	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.4 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	92.50	96.30	92.60	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.20	2.10	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Interior	92.43	96.30	92.55	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.27	2.15	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Interior	92.38	96.30	92.50	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.32	2.20	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.5 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.3	End	92.33	96.30	92.50	96.40	94.40	150	n/a	n/a	94.90	1.40	1.50	2.37	2.20	Ongoing	1.50	1.4 m thick LWF along front extending 2.4 m beyond building face and 1.4 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.5 m thick LWF along rear extending 2.4 m beyond building face and 1.5 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 69	Unit A	Street No.3	End	92.33	96.15	92.40	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.42	2.35	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face and 1.3 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	92.33	96.15	92.40	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.42	2.35	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	End	92.33	96.15	92.40	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.42	2.35	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face and 1.3 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 70	Unit A	Street No.3	End	92.31	96.15	92.05	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.44	2.70	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face and 1.3 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	92.29	96.15	92.05	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.46	2.70	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Interior	92.27	96.15	92.05	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.48	2.70	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	End	92.26	96.15	92.05	94.45	94.45	150	n/a	Minimum 100 mm rigid insulation below rear half of footings extending 2.1 m horizontally beyond exterior side of rear half of footings. Engineered fill to be placed between USF and insulation layers. Reference should be made to associated memo for additional details.	94.90	1.25	0.00	2.49	2.70	Ongoing	1.50	1.3 m thick LWF along front extending 2.4 m beyond building face and 1.3 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

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Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
Block 75	Unit A	Street No.3	End	93.40	96.00	93.43	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	1.00	0.97	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Interior	93.40	96.00	93.43	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	1.00	0.97	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Interior	93.40	96.00	93.43	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	1.00	0.97	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Interior	93.40	96.00	93.43	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	1.00	0.97	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.3	End	93.40	96.00	93.43	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	1.00	0.97	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 76	Unit A	Winterset Road	End	93.45	96.00	93.43	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	0.95	0.97	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Winterset Road	Interior	93.47	96.00	93.44	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	0.93	0.96	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Winterset Road	Interior	93.49	96.00	93.45	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	0.91	0.95	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Winterset Road	Interior	93.51	96.00	93.46	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	0.89	0.94	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Winterset Road	Interior	93.53	96.00	93.47	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	0.87	0.93	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Winterset Road	End	93.53	96.00	93.48	96.00	94.10	150	n/a	n/a	94.90	1.10	1.10	0.87	0.92	Ongoing	1.50	1.1 m thick LWF along front extending 2.4 m beyond building face and 1.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 1.1 m thick LWF along rear extending 2.4 m beyond building face and 1.1 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)	(m)	(m)	(m)	(m)	(m)	(m)	(m)					
Block 77	Unit A	Street No.2	End	92.55	96.00	93.85	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	1.85	0.55	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.2	Interior	92.57	96.00	93.80	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	1.83	0.60	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.2	Interior	92.59	96.00	93.70	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	1.81	0.70	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.2	Interior	92.61	96.00	93.70	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	1.79	0.70	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.2	Interior	92.63	96.00	93.72	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	1.77	0.68	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.2	End	92.65	96.00	93.77	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	1.75	0.63	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 78	Unit A	Winterset Road	End	93.85	96.00	93.77	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	0.55	0.63	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Winterset Road	Interior	93.81	96.00	93.72	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	0.59	0.68	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Winterset Road	Interior	93.78	96.00	93.70	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	0.62	0.70	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Winterset Road	Interior	93.74	96.00	93.78	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	0.66	0.62	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Winterset Road	End	93.71	96.00	93.85	96.00	94.10	150	n/a	n/a	94.00	2.00	2.00	0.69	0.55	Ongoing	1.50	2 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 79	Unit A	Street No.2	End	93.72	96.10	93.65	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.78	0.85	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.2	Interior	93.76	96.10	93.69	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.74	0.81	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.2	Interior	93.80	96.10	93.73	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.70	0.77	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.2	End	93.84	96.10	93.77	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.66	0.73	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

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Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)	(m)	(m)	(m)	(m)	(m)	(m)	(m)					
Block 80	Unit A	Street No.2	End	93.84	96.10	93.77	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.66	0.73	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.2	Interior	93.88	96.10	93.81	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.62	0.69	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2 m thick LWF along rear extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.2	End	93.92	96.10	93.85	96.00	94.20	150	n/a	n/a	94.00	2.10	2.00	0.58	0.65	Ongoing	1.50	2.1 m thick LWF along front extending 2.4 m beyond building face and 2.1 m thick LWF along front half of the sides extending 1.2 m beyond building sides and 2 m thick LWF along rear extending 2.4 m beyond building face and 2 m thick LWF along rear half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 81	Unit A	Street No.3	Back to Back	93.00	95.90	93.20	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.80	0.60	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Back to Back	92.95	95.90	93.14	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.85	0.66	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Back to Back	92.90	95.90	93.08	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.90	0.72	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Back to Back	92.85	95.90	93.02	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.95	0.78	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.4	Back to Back	93.20	95.90	93.02	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.60	0.78	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.4	Back to Back	93.27	95.90	93.08	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.53	0.72	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.4	Back to Back	93.34	95.90	93.14	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.46	0.66	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.4	Back to Back	93.40	95.90	93.20	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.40	0.60	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class	
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)				
Block 82	Unit A	Street No.3	Back to Back	92.85	95.90	93.02	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.95	0.78	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit B	Street No.3	Back to Back	92.81	95.90	92.95	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.99	0.85	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit C	Street No.3	Back to Back	92.77	95.90	92.90	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.03	0.90	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit D	Street No.3	Back to Back	92.72	95.90	92.86	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.08	0.94	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit E	Street No.4	Back to Back	93.00	95.90	92.86	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.80	0.94	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit F	Street No.4	Back to Back	93.07	95.90	92.90	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.73	0.90	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.4	Back to Back	93.14	95.90	92.95	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.66	0.85	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.4	Back to Back	93.20	95.90	93.02	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.60	0.78	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933

Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class	
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)				
Block 83	Unit A	Street No.3	Back to Back	92.71	95.90	92.83	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.09	0.97	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit B	Street No.3	Back to Back	92.68	95.90	92.75	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.12	1.05	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit C	Street No.3	Back to Back	92.65	95.90	92.68	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.15	1.12	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit D	Street No.3	Back to Back	92.62	95.90	92.62	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.18	1.18	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit E	Street No.3	Back to Back	92.59	95.90	92.56	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.21	1.24	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit F	Street No.3	Back to Back	92.55	95.90	92.50	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	1.25	1.30	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.4	Back to Back	92.45	95.90	92.50	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	1.35	1.30	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.4	Back to Back	92.55	95.90	92.56	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	1.25	1.24	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit I	Street No.4	Back to Back	92.65	95.90	92.62	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	1.15	1.18	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit J	Street No.4	Back to Back	92.75	95.90	92.68	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	1.05	1.12	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit K	Street No.4	Back to Back	92.85	95.90	92.75	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.95	1.05	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit L	Street No.4	Back to Back	92.95	95.90	92.83	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.85	0.97	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

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Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
Block 84	Unit A	Street No.3	Back to Back	92.55	95.90	92.50	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.25	1.30	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.3	Back to Back	92.49	95.90	92.43	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.31	1.37	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.3	Back to Back	92.43	95.90	92.37	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.37	1.43	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.3	Back to Back	92.37	95.90	92.31	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.43	1.49	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.4	Back to Back	92.25	95.90	92.31	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.55	1.49	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.4	Back to Back	92.32	95.90	92.37	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.48	1.43	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.4	Back to Back	92.39	95.90	92.43	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.41	1.37	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.4	Back to Back	92.45	95.90	92.50	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.35	1.30	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 85	Unit A	Street No.4	Back to Back	93.40	95.90	93.40	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.40	0.40	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit B	Street No.4	Back to Back	93.33	95.90	93.33	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.47	0.47	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit C	Street No.4	Back to Back	93.26	95.90	93.26	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.54	0.54	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit D	Street No.4	Back to Back	93.20	95.90	93.20	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.60	0.60	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit E	Street No.3	Back to Back	93.20	95.90	93.20	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.60	0.60	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.3	Back to Back	93.26	95.90	93.26	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.54	0.54	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.3	Back to Back	93.33	95.90	93.33	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.47	0.47	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.3	Back to Back	93.40	95.90	93.40	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.40	0.40	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class	
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)				
Block 86	Unit A	Street No.4	Back to Back	93.20	95.90	93.20	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.60	0.60	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit B	Street No.4	Back to Back	93.15	95.90	93.15	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.65	0.65	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit C	Street No.4	Back to Back	93.10	95.90	93.10	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.70	0.70	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit D	Street No.4	Back to Back	93.05	95.90	93.05	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.75	0.75	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit E	Street No.4	Back to Back	93.00	95.90	93.00	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.80	0.80	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit F	Street No.3	Back to Back	93.00	95.90	93.00	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.80	0.80	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.3	Back to Back	93.05	95.90	93.05	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.75	0.75	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.3	Back to Back	93.10	95.90	93.10	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.70	0.70	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit I	Street No.3	Back to Back	93.15	95.90	93.15	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.65	0.65	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit J	Street No.3	Back to Back	93.20	95.90	93.20	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.60	0.60	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class	
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)				
Block 87	Unit A	Street No.4	Back to Back	92.95	95.90	92.97	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.85	0.83	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit B	Street No.4	Back to Back	92.85	95.90	92.96	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.95	0.84	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit C	Street No.4	Back to Back	92.75	95.90	92.94	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.05	0.86	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit D	Street No.4	Back to Back	92.65	95.90	92.92	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.15	0.88	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit E	Street No.4	Back to Back	92.55	95.90	92.90	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.25	0.90	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit F	Street No.3	Back to Back	93.25	95.90	92.90	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.55	0.90	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.3	Back to Back	93.19	95.90	92.92	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.61	0.88	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.3	Back to Back	93.12	95.90	92.94	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.68	0.86	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit I	Street No.3	Back to Back	93.06	95.90	92.96	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.74	0.84	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit J	Street No.3	Back to Back	93.00	95.90	92.97	n/a	93.50	150	n/a	n/a	n/a	94.90	1.00	n/a	0.80	0.83	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
Block 88	Unit A	Street No.4	Back to Back	92.55	95.90	92.90	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.25	0.90	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit B	Street No.4	Back to Back	92.46	95.90	92.75	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.34	1.05	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit C	Street No.4	Back to Back	92.39	95.90	92.60	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.41	1.20	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	
	Unit D	Street No.4	Back to Back	92.32	95.90	92.45	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.48	1.35	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D	

Table 1 - Summary of Design Details - PG4933
Minto Communities - Arcadia - Stage 5

Block Number	Lot Number	Street No.	Dwelling Type	Original GS Front	Proposed GS Front	Original GS Rear	Proposed GS Rear	Underside of Footing Elevation	Bearing Resistance Value at SLS	Frost Protection Required Front	Frost Protection Required Rear	Permissible Grade Raise Elevation	Above Permissible Grade Raise Front	Above Permissible Grade Raise Rear	Engineered Fill Thickness (Front)	Engineered Fill Thickness (Rear)	Surcharge Program	Minimum Thickness LWF in Garage and Front Porch	Minimum Thickness LWF and Extents	Additional Notes	Seismic Site Class
				(m)	(m)	(m)	(m)	(m)	(kPa)			(m)	(m)	(m)	(m)	(m)		(m)			
Block 88	Unit E	Street No.4	Back to Back	92.25	95.90	92.27	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.55	1.53	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit F	Street No.3	Back to Back	92.29	95.90	92.27	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	1.51	1.53	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit G	Street No.3	Back to Back	93.50	95.90	92.45	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.30	1.35	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit H	Street No.3	Back to Back	93.75	95.90	92.60	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.05	1.20	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit I	Street No.3	Back to Back	93.00	95.90	92.75	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.80	1.05	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D
	Unit J	Street No.3	Back to Back	93.25	95.90	92.90	n/a	93.50	150	n/a	n/a	94.90	1.00	n/a	0.55	0.90	Ongoing	1.50	1 m thick LWF along front extending 2.4 m beyond building face and 1 m thick LWF along front half of the sides extending 1.2 m beyond building sides	LWF volume is subject to change or removal based on successful completion of current surcharge program and as advised by Paterson. Current LWF recommendation does not consider current surcharge program.	D

Notes:
 - Proposed grade raise information was based on the following grading plans prepared by J. L. Richards.:
 - Conceptual Grading – Arcadia Stage 5 - JLR No. 26299-005 – Drawing No. CG1 – Revision 1 – dated November 17, 2023.
 - Rigid insulation thicknesses are expected to be modified as part of future revisions of the grading plan review once the proposed thickness of engineered fill will be known at a later time of review.