

This Guide is being provided to offer assistance when applying for a permit to construct a retaining wall. A retaining wall is defined as any soil retaining structure over 0.6m in exposed height, at any point along its length.

The following items are to be considered prior to applying for permits or constructing retaining walls on a property in Maple Ridge.

- 1) Height and siting of the proposed retaining wall must comply with the [Maple Ridge Zoning Bylaw](#) as amended. Additional information may be obtained from the Planning Department at 604-467-7341 or Planning@MapleRidge.ca.
- 2) If your property is located within a designated floodplain, additional engineering will be required to resist the impacts of flooding and surface water flows on adjacent properties.
- 3) If a property is located within the Fraser River Escarpment area, additional construction, engineering and covenants^(*) may apply depending on the property's location. The Fraser River Escarpment area is located between the Fraser River and as far north as 124 Avenue and between 207 Street and 224 Street. The following link will provide you with more specific information: [Fraser River Escarpment](#).
- 4) For lots that have a geotechnical covenant registered on title, any proposed retaining wall must first be reviewed against those covenants to ensure that the proposed locations and methods of construction comply with any specified requirements.
- 5) For lots located adjacent to slopes a geotechnical engineer is to be consulted to ensure that the retaining wall's location will not affect or be affected by slopes. See [Sloping Sites - Geotechnical Requirements Bulletin](#).
- 6) For lots with streams, ponds, trees, etc. located on or adjacent to a retaining wall, contact the Environmental section of the City's Planning and Building department for required setbacks, habitat protection, repair, or other requirements.
- 7) A compliance letter must be submitted prior to permit issuance for any lots that have a septic system, to ensure that the location of any retaining walls will not impact its function. This compliance must be obtained and verified in writing by an authorized person acceptable to the City. For information on Registered Onsite Wastewater Practitioners, please contact the Applied Science Technologists & Technicians of BC at 604-585-2788 or visit their website at <https://asttbc.org/>. The Association of Professional Engineers and Geoscientists currently have a searchable directory of their members on their web site at <https://www.egbc.ca/>.

(*) The Restrictive Covenant(s) must be registered with the Land Title Office. Contact a Development Services Technician in the Planning and Building department at 604-467-7311 or BuildingInquiries@MapleRidge.ca to obtain a sample covenant that may be taken to a lawyer or notary for execution.

Once the above-mentioned items have been considered, the following information is required in order to apply for a retaining wall permit:

- 2 site plans (in metric) showing wall location(s), which include:
 - length of wall, top of wall and bottom of wall elevations at various points along its length (this must include the highest point along the wall to ensure compliance with the requirements set out in the City's Zoning Bylaw);
 - distance between consecutive tiers of walls (if applicable);
 - distance from all property lines;
 - section through wall showing construction and drainage details including tieback systems; and
 - the location of any stormwater/rainwater infiltration systems.
- Walls over 1.0m in height or tiered walls with less than 3.0m of separation between walls, and walls supporting the house foundation will require 2 copies of a sealed wall design supplied by structural and geotechnical engineers plus copies of liability insurance and Schedule Bs.
- For walls under 1.0m in height that are located on properties where a geotechnical covenant is registered on title, or on properties that may have identified geotechnical concerns, a geotechnical engineer is required to provide comment on the impact of any proposed retaining walls on the site.
- For new subdivisions, a revision to the comprehensive lot grading plan may be required if the retaining wall is to be constructed between lots or impacts the drainage or stability of the lot.
- A separate retaining wall permit is not required for walls that have been identified on the site plan of a building permit application provided that the wall design information is incorporated into the permit submission package.
- Revisions to the building permit are permitted for minor relocations or deletions only. Retaining walls not originally identified on the site plan of the building permit application will require a separate retaining wall permit.

DESIGN INFORMATION

- Retaining walls are only permitted to be a maximum of 1.2 m in height and must be under the retaining wall grade line as defined by subsection 403.9 of the Zoning Bylaw.
- Proper drainage must be provided through drain tiles behind all retaining walls, which must be connected or directed to the on-lot drainage system.
- The use of cast in place concrete or concrete block type construction is preferred and, in certain cases (i.e., accessibility issues and foundation support), the only type of retaining wall construction that will be permitted. Please see specific design criteria for wood retaining walls.

- Unless previously approved on the lot grading plan or with written approval from the City's Engineering Department, retaining walls shall not be permitted to be installed on, over, under, adjacent to or within any easements or rights-of-way in favour of the City or that the City is a party to.
- Under no circumstance will the tie back structures for a retaining wall be permitted to encroach into easements, rights-of-way, or cross over property lines. Retaining wall locations are to be checked under a grading inspection to ensure the correct placement on a lot as dictated by the Zoning Bylaw and Building Bylaw, the lot grading plan, or a Building Inspector.
- Boulder walls will not be permitted to be constructed between lots unless it can be demonstrated that the construction and/or location will not negatively impact the adjoining lot(s) and the boulders are installed on the low side of a lot.
- Guard rails will be required adjacent to walking surfaces and may be required elsewhere on the property. If unsure this may be determined by a site inspection with a Building Inspector.
- A survey will be required when walls are located adjacent to property lines or covenant boundaries.
- Use the attached sample plans and site plan as a guide.

For Wood Walls

- Wood retaining walls are only permitted up to 0.6m high and for landscape purposes.
- Wood retaining walls are not permitted any closer to any property line than their height plus 600mm.
- Wood walls must be treated in accordance with the CSA Standard CAN/CSA-O80.1 (UC4.1, "Specification of Treated Wood", as referenced in the current edition of the *BC Building Code*.
- Wood walls are not permitted to be installed as developer walls.
- Wood walls are not permitted to support driveways, walkways, sidewalks or any other method used to provide or gain access to or from a dwelling unit, suite or accessory structure.
- The minimum permitted size for wood used in retaining walls must be 150mm x 150mm (6" x 6") actual dimension.
- Wood used for window wells may be reduced in size to 100mm x 150mm (4" x 6") minimum actual dimension but must meet the above pressure treatment standard.
- A certificate of treatment will be required on site prior to sign off on retaining wall permits. Should the retaining walls be included as part of the main dwelling permit then this certification must be provided prior to the issuance of a provisional occupancy and/or final occupancy.

The following documents will provide the necessary information to apply for a building permit. These documents are available online at www.mapleridge.ca/184/Building or at the Building department front counter:

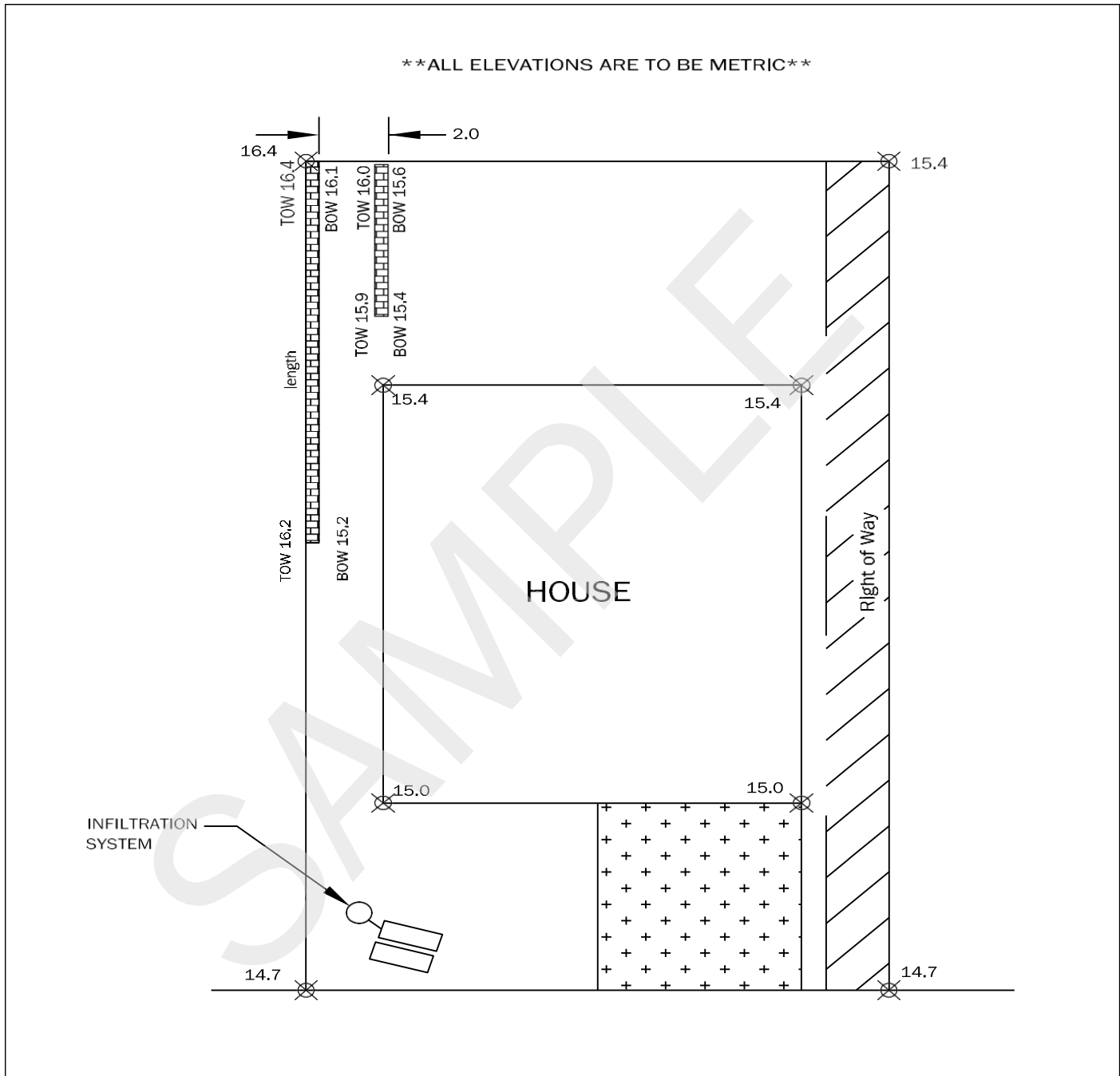
- [Accessory Building Permit Application](#)
- [Letter of Authorization and Owner Acknowledgement of Responsibility Letter.](#)
- [Permit Application Checklist - Residential](#)

NOTE: You will be required to have a legal survey certificate on site when calling for inspections on retaining walls being located adjacent to property lines or where covenants restrict the location of construction on a property. The survey must be obtained from a BC Land Surveyor. If the property is 0.4 ha (1 ac) or larger in size, the survey may not be required. Please confirm with the Building department.

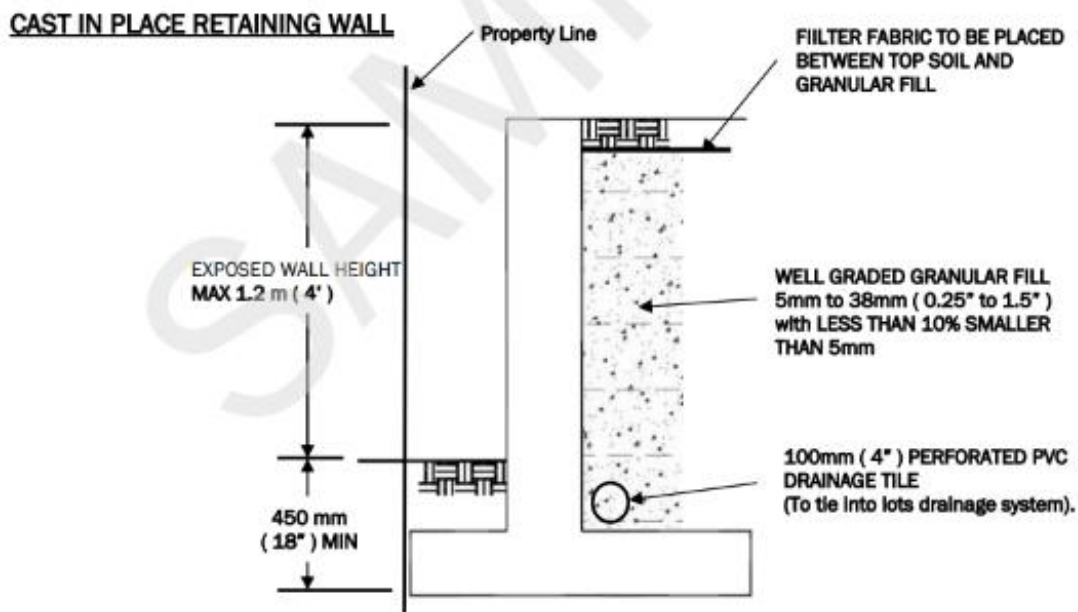
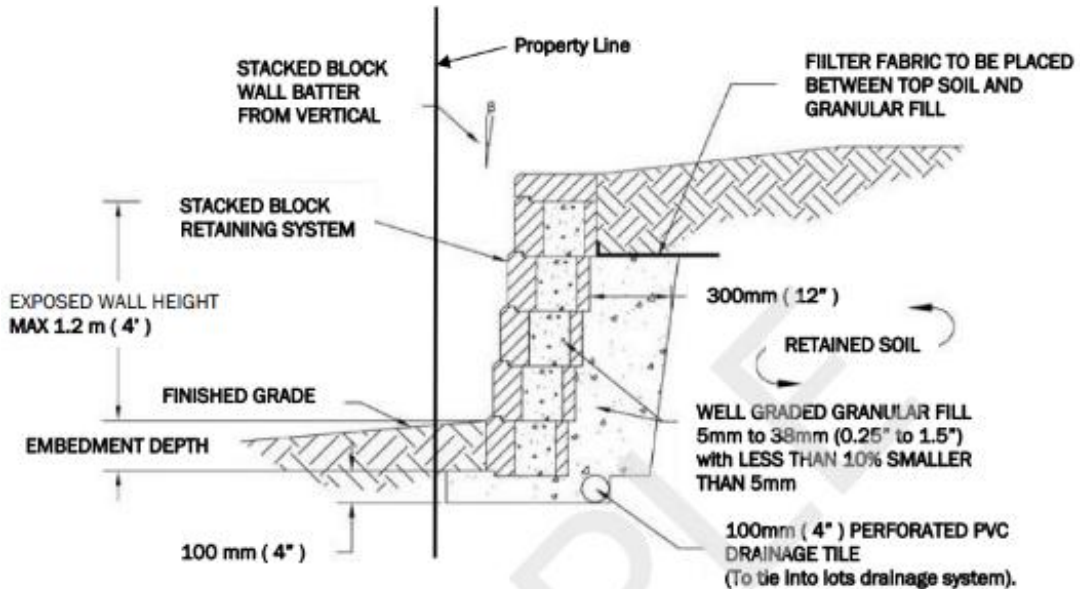
NOTE: Retaining walls are to be constructed entirely within the property they support. Ownership and maintenance are the sole responsibility of the property owner on which lot the walls are constructed.

NOTE: Restrictive Covenant(s) is registered on the Title of the property and remains registered with the property.

Sample Retaining Wall - Site Plan

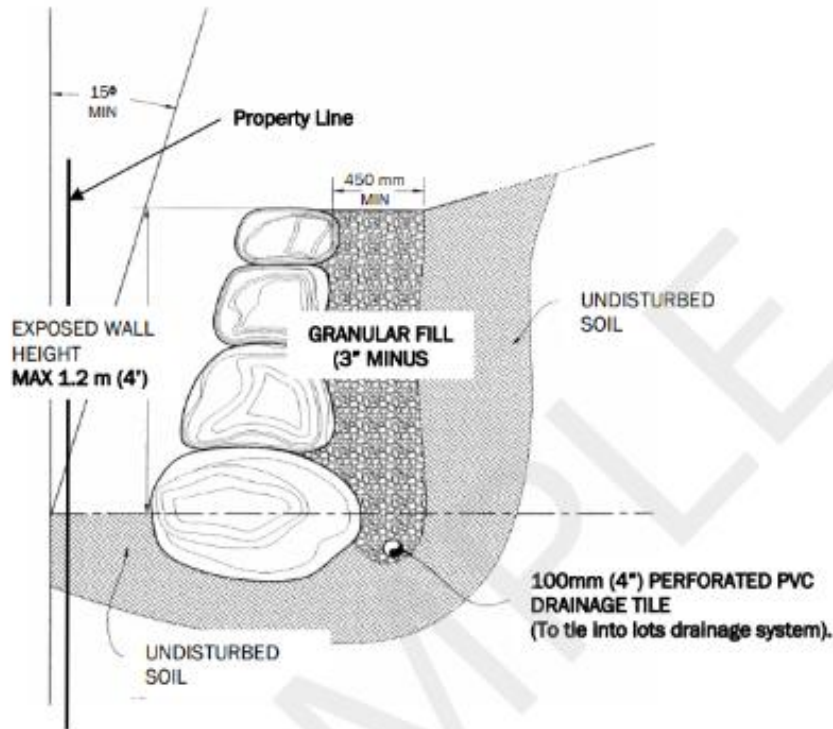


Stacked Concrete Block Retaining Systems: ESC Plan & Schedules



11995 Haney Place, Maple Ridge, BC V2X 6A9
Phone: 604-467-7311 Email: BuildingInquiries@MapleRidge.ca

Boulder Stack Retaining System



WOOD RETAINING SYSTEM

