

Purpose

The following information is provided to outline regulations for permits and engineering for lot grading and retaining wall structures. This guide will also outline the Zoning Bylaw regulations pertaining to retaining wall heights, location and fencing when part of a retaining wall.

Note that we are here to help you, if you are planning a landscaping or building project requiring lot grading changes, the please contact our office to arrange a consultation meeting to discuss compliance with grading, drainage and retaining regulations. Failure to obtain the necessary permits or follow good building practices could result in stop work delays and costly repairs to neighboring properties.

Reference

BC Building code – Sections 9.3 and 9.4

Zoning Bylaw 2000-450 – Section 5.0

Definitions

Building Grade: means the lowest of the elevation of the land measured from the lower of natural grade or finished.

Retaining Wall: means any structure other than a building that holds or retains soil or other earth material behind it.

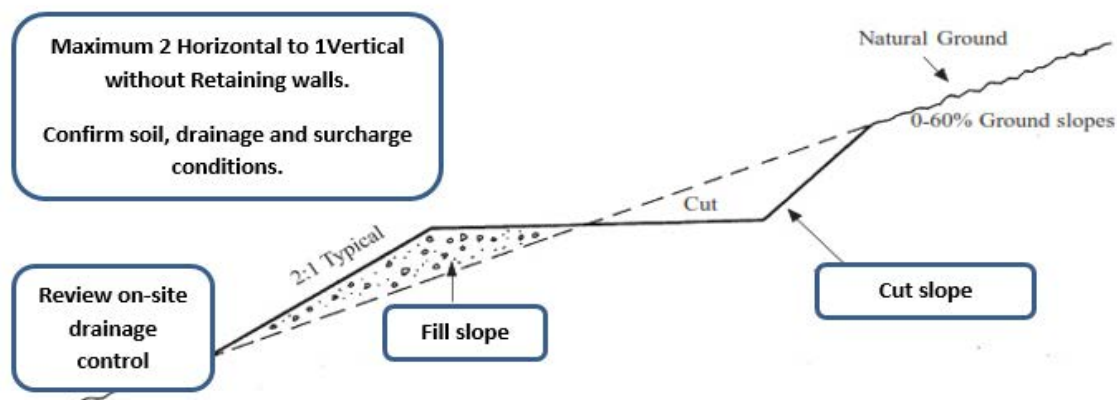
Implementation

Prior to the repair, replacement or construction of a new retaining wall or major landscaping works, owner/contractors should contact the building department to confirm whether a retaining wall building permit is required.

Landscaping and Retaining Requirements

Finished Grades and Slope Retention

Except as certified by a professional engineer with expertise in geotechnical engineering registered in the Province of British Columbia, fill material placed or excavation into natural grade on a marcel must not have a surface slope exceeding a ratio of one linear unit vertically to two linear units horizontally, unless restrained by a permitted retaining wall.



No person may occupy a building unless the finished grade complies with all applicable enactments. Information on Geotechnical requirements when working in potentials sensitive areas like steep banks, infill development or watercourses.

Retaining Wall Permits

A person must not construct, or structurally repair, a retaining wall without a valid building permit.

Application Requirements

An application for a building permit with respect to a retaining building permit must

1. be made in the prescribed form and signed by the owner, or a signing officer if the owner is a corporation;
2. pay applicable application fee as prescribed in the District of Summerland Fees and Charges Bylaw;
3. provide a site plan showing all building and structures and servicing locations.

Professional Design

A registered professional shall undertake the design and conduct field reviews of the construction and drainage of a retaining structure greater than 1.2m in height or where a sequence of walls are located closer than 2 horizontal to 1 vertical.

Site Safety Conditions

If a building official determines that an unsafe condition exists as the result of the construction of a retaining wall requiring a building permit, a guard or fence may be required.

2018 BC Building Code – Section 9.4

9.4.4.5. Retaining Walls

- 1) Walls shall be designed to resist the lateral pressure of the retained material.

9.4.4.6. Walls Supporting Drained Earth (See A-9.4.4.6. and 9.15.1.1. in Appendix A.)

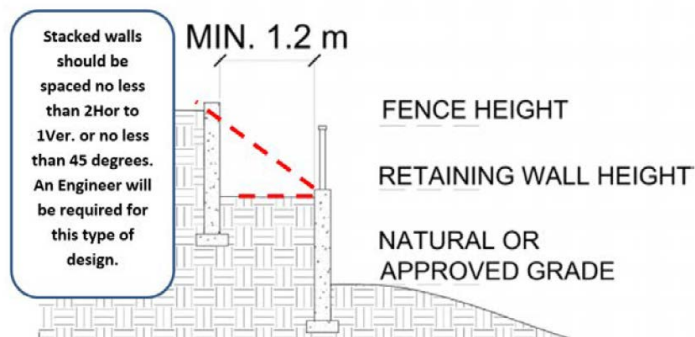
- 1) Except where constructed in accordance with Section 9.15., walls supporting drained earth shall be designed
 - a) for a pressure equivalent to that exerted by a fluid that has a density of not less than 480 kg/m³ and a depth equal to that of the retained earth, or
 - b) in accordance with section 4.2. so as to be able to resist the loads and effects described in Article 4.1.2.1.
- 2) Walls supporting other than drained earth shall be designed
 - a) for the pressure described in Clause (1)(a) plus the fluid pressure of the surcharge, or
 - b) in accordance with Section 4.2. so as to be able to resist the loads and effects described in Article 4.1.2.1.

Zoning Regulations – Zoning Bylaw No.2000-450

5.5 Retaining walls

- Retaining walls that are located within any required yards, must not exceed a height of 1.2m above building grade.
- Multiple parallel retaining walls must be spaced to provide at least a 1.2m horizontal separation between them.

Fences on retaining walls



- In the case where a fence is built on top of a retaining wall, the height of the fence and the height of the retaining wall shall be measured separately according to their respective regulations.

Please note that stacked retaining walls can create unique structural challenges and it is best to contact the building department if you are proposing stacked walls that are individually less than 1.2m (48') in retained height.

Other Conditions that May Trigger a Permit

Please note that Building Permits and Engineering may be required for walls under 1.2m in height where:

- Located within a geotechnical or environmentally sensitive area (Development Permit area – high hazard or works along steep banks or watercourses).
- The Building Official determines that the existing site conditions, such as overburden (a driveway or steep slope) or poor drainage conditions which may create a hazardous condition.

Works Near an Existing Structures and Walls

It is important to also verify that landscaping projects will not compromise an existing structure or dwelling. Proposed excavations should not be below a depth of a structure/footing projecting from a line at 45 degrees from the base of the footing/structure.

Existing Subdivision Walls

Where working near existing subdivision retaining walls, it is important to ascertain if there are restrictions noted on the property title as a covenant or Statutory Rights of Way. Adding additional surcharge with fill, structures such as a pool or drainage may compromise the existing structure.

Drainage

Consideration should be given to surface and retaining wall drainage. All surface water is to be controlled on-site and drainage should not negatively affect other structures or dwellings.

Site Safety

Under part 8 of the BC Building Code precautions are to be taken to ensure the protection of adjacent properties and the general public. It is highly recommended that you contact adjacent property owners prior to the start of your project.

Protection of Adjoining Property

If the stability of adjoining buildings may be endangered by the work of excavating, adequate underpinning, shoring and bracing shall be provided to prevent

- a) Damage to, or movement of, any part of the adjoining building, and
- b) The creation of a hazard to the public.

**Before any excavation you should contact
BC One Call – Call Before You Dig at 1-800-474-6886**

Protection of Municipal Property

Every owner to whom a permit is issued is responsible for the cost to repair any damage to municipal works or land that occurs during and arises directly or indirectly from the work authorized by the permit.

**Development Services
250-494-1373 or devserv@summerland.ca**