

BLDGREG-002 - RETAINING WALLS

- Authority: Building By-law No. 7258
- Covers: All persons required to obtain a Building Permit in accordance with the Building By-law for the construction, design and installation of a retaining wall.
- Effective: January 1, 2020
- Purpose: To establish provisions with respect to the construction, design and installation of retaining walls for which a Building Permit is required.
- Author: Murray Fischer, Manager of Building Safety and designated Authority Having Jurisdiction with respect to the Building By-law

1. **Definitions**

- (a) Unless otherwise expressly provided or unless the context otherwise requires, words and expressions in this Regulation have the same meaning as the same words and expressions in the Building By-law.
- (b) In this Regulation:
- (1) “PROFESSIONAL ENGINEER” means an engineer or firm licensed by Engineers Geoscientists Manitoba to practice in the province of Manitoba and skilled in the appropriate section of work concerned.
- (2) “EXPOSED FACE” of a retaining wall means the visible height of the wall above ground level.

2. **Permit Requirements**

- (a) Any retaining wall with an *exposed face* of 1.0 m and greater in height or two or more walls with total *exposed face* of 1.0 m and greater requires a building permit.
- (b) All retaining walls that form part of a development permit, regardless of height, are subject to approval by the authority having jurisdiction.
- (c) A building permit is required for retaining walls that support ground that is critical to the stability of building foundations.
- (1) Retaining walls supporting soil are considered to be critical to the stability of the building if a line drawn from the outer edge of the footing to the bottom of the *exposed face* of the retaining wall is greater than 45° to the horizontal.

3. **Construction and Design**

- (a) All retaining walls shall be designed and constructed as herein provided and in accordance with Part 4 of the Code.
- (b) All retaining walls shall be designed to resist the lateral pressure of the retained material.
- (c) All bracing systems shall be designed and constructed to resist the lateral forces applied to them.
- (d) All retaining walls and any of their supporting structures must be fastened with non-corrosive fasteners or otherwise have the fastening devices protected from corrosion.
- (e) Where the *exposed face* exceeds 1.0 m, the design of the retaining wall shall be carried out by a *professional engineer*.
- (f) Retaining walls with an *exposed face* of less than 1.0 m may be constructed in conformance with **Figure 1** for block walls, **Figure 2** for concrete walls or **Figure 3** for wood retaining walls.

4. **Required Guards**

- (a) Guards conforming to Article 3.3.1.18. or Section 9.8. of the Code are required at the top of any retaining wall, where the upper surface supported by the retaining wall is used to provide support for pedestrian traffic, and there is a difference in elevation of more than 600 mm between the walking surface and the adjacent surface, or where the slope adjacent to the wall is greater than 1 in 1.

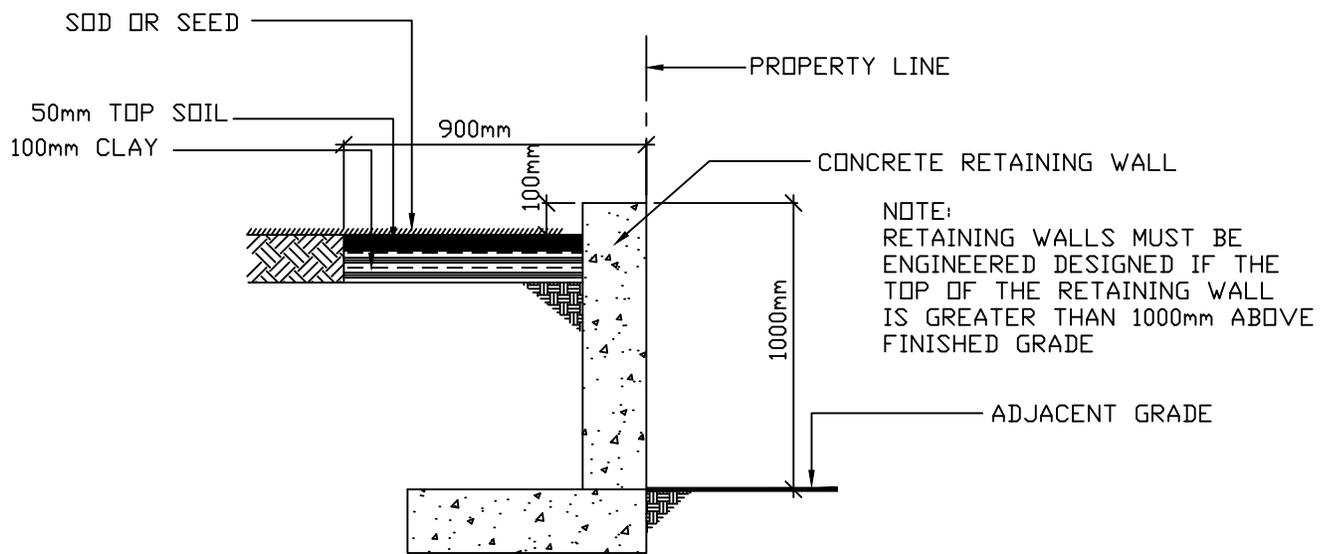
5. **Enforcement**

In accordance with the authorities established by the Building By-law, any person who contravenes, or does not comply, or improperly complies, or only partly complies, with any provision of this Regulation commits an offence and is subject to penalty.

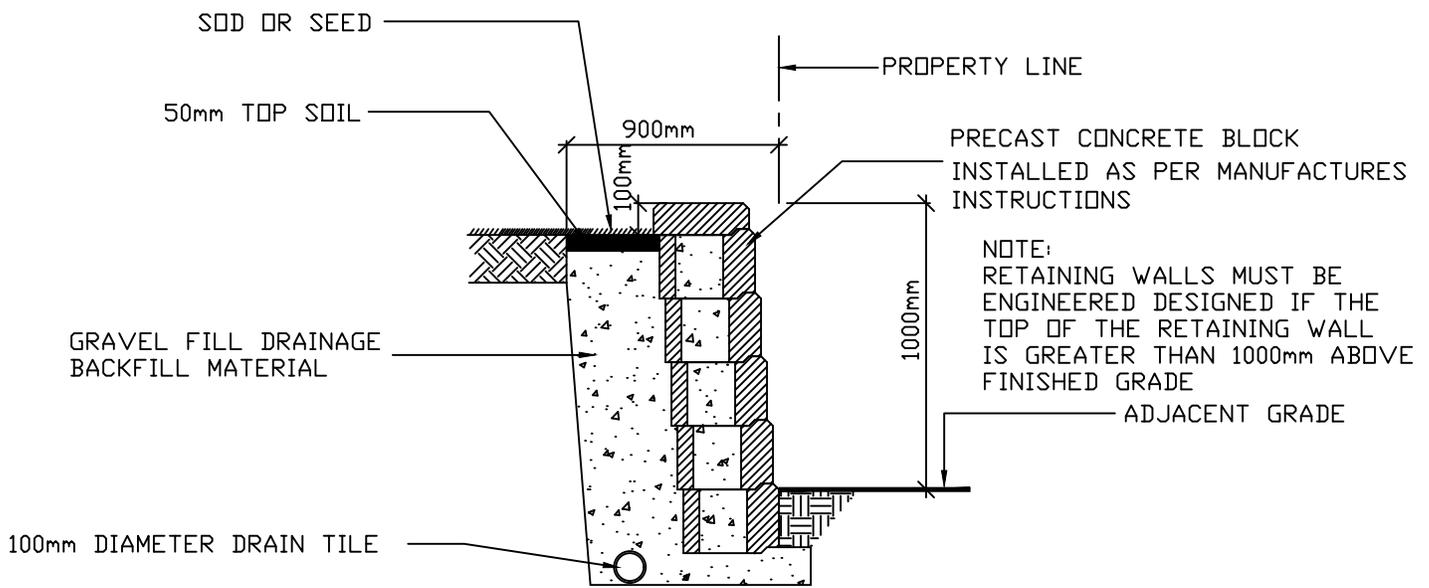
Related Information:

Building By-law No. 7258
The Building and Mobile Homes Act, C.C.S.M. 1987, c.B93
The Manitoba Building Code
Compliance By-law No. 7198

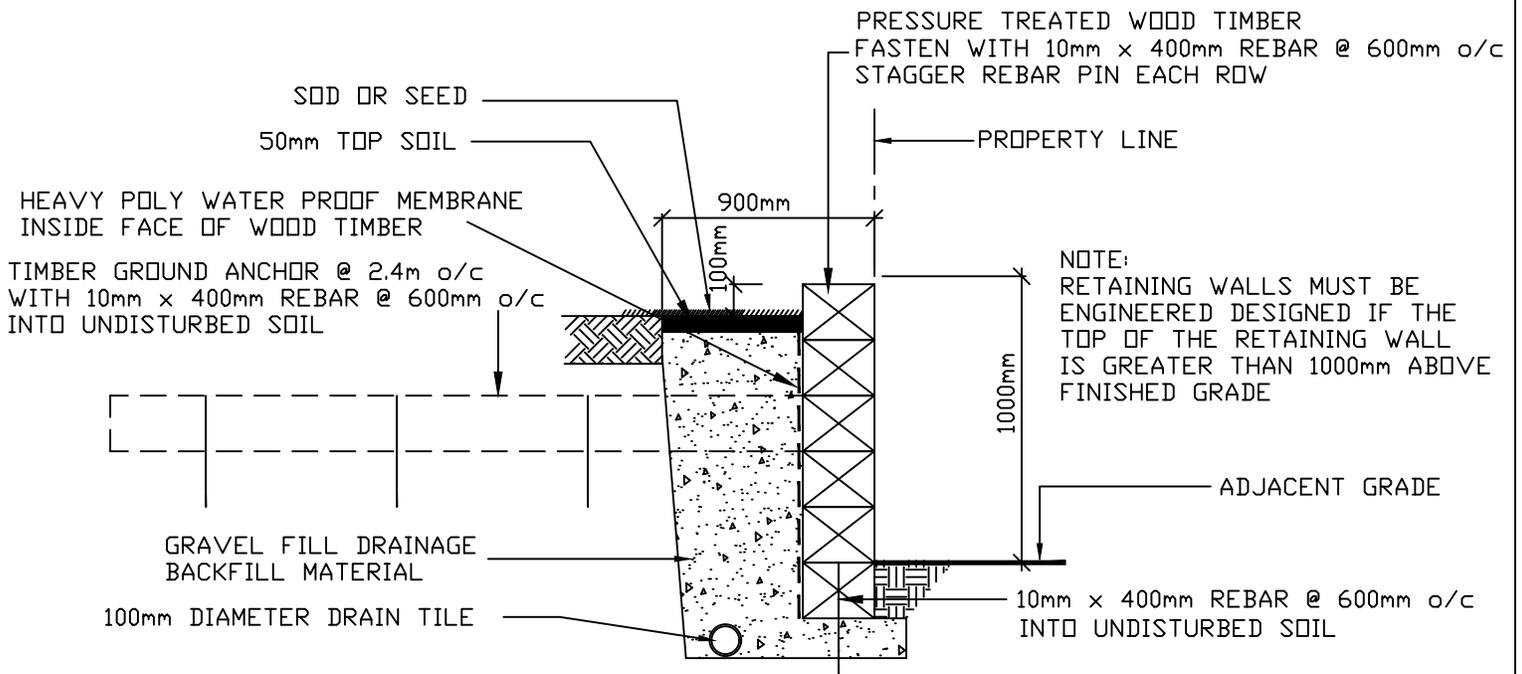
Conflict: Where there is a conflict or inconsistency between this Regulation and provisions contained within a statute or regulation of the Government of Canada or the Province of Manitoba, the Federal or Provincial statute or regulation shall supercede those impacted provisions of this Regulation.



CONCRETE RETAINING WALL DETAIL
 FIGURE 2



PRECAST CONCRETE BLOCK RETAINING WALL
 FIGURE 1



WOOD TIMBER RETAINING WALL
 FIGURE 3