

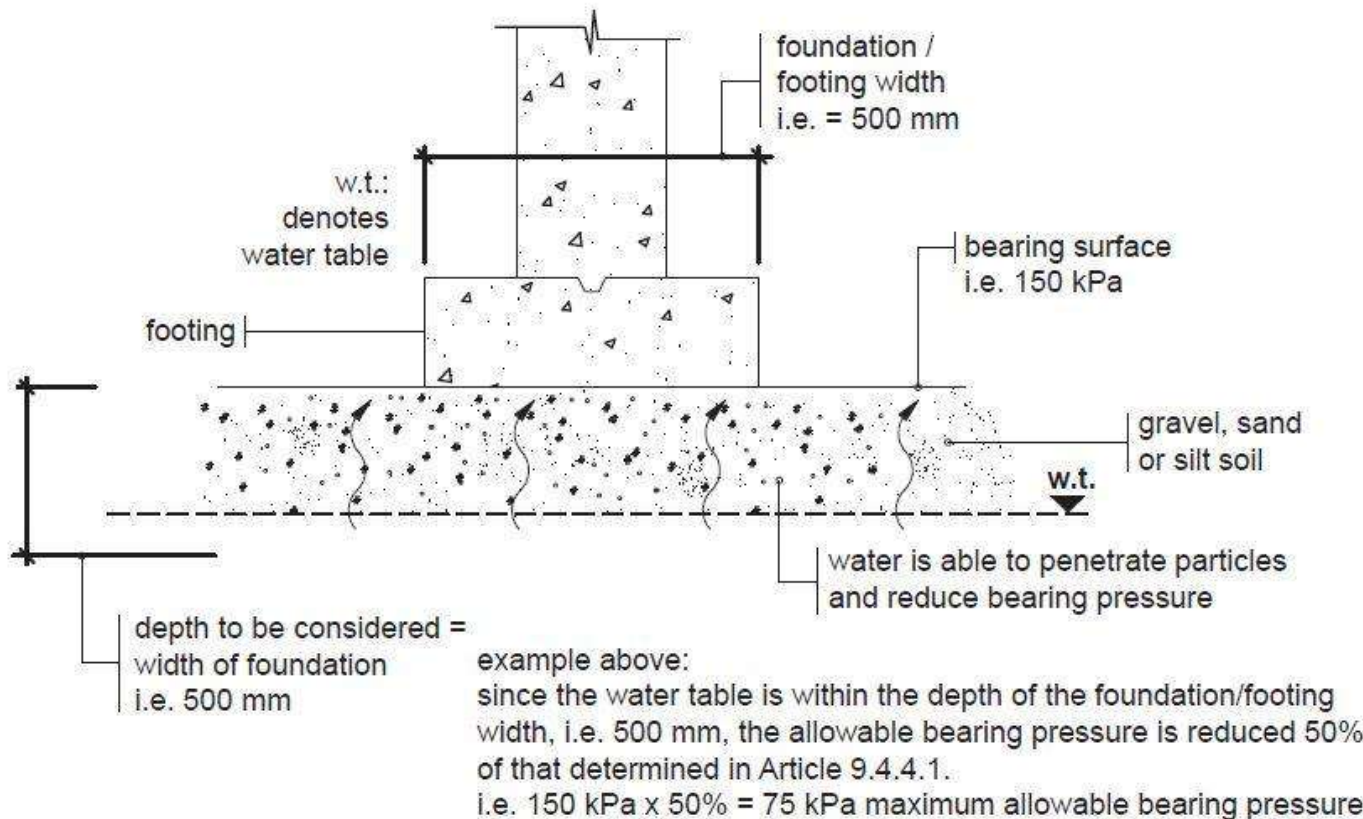
*4.3.1.1(2)(a) states how deep the footings are,
9.4.4.3 states how far below that, the water table needs to be. While minor variations on the code may be found, it has remained essentially same since our homes were built.*

The specific section of the Ontario Building Code (OBC) that addresses the 1.2-meter (3.9 ft) footing depth requirement is **Section 4.3.1.1(2)(a)**. This section, found in Part 4 of the OBC, dictates that foundation piers must have a minimum depth of 1.2 meters below the finished grade level to prevent frost damage.

9.4.4.3. HIGH WATER TABLE - Ontario Building Code

Water table is the height of the natural ground water in a soil. The water table is at its highest in the spring. When the water table is encountered within the width of the footings the allowable bearing pressure is to be reduced by 50% from that in **Table 9.4.4.1**. For example if the maximum allowable bearing pressure of a soil is 150 kPa and the designed footing width is 350 mm and the height of the water table is less than 350 mm to the underside of the footings then the allowable bearing pressure of the soil must be reduced to 75 kPa.

This is why it is important for the builder/contractor to determine where the high water table is on a property before constructing the footings. If during the excavation for house ground water is encountered at the footing level the builder/contractor should consult with the designer and building inspector prior to proceeding.



9.4.4.3. High Water Table

The Ontario Building Code (OBC) Section 9.4 provides allowable bearing pressures for different soil types. For example, dense or compact sand or gravel can have an allowable bearing pressure of 150 kPa, while loose sand or gravel is 50 kPa. Other soil types like silt, clay, and till also have specific allowable bearing pressures outlined in the code.

Allowable Bearing Pressures (kPa) according to OBC 9.4:

- **Dense or compact sand or gravel:** 150
- **Loose sand or gravel:** 50
- **Dense or compact silt:** 100
- **Stiff clay:** 150
- **Firm clay:** 75
- **Soft clay:** 40
- **Till:** 200
- **Clay shale:** 300
- **Sound rock:** 500

The OBC mandates a minimum footing width of 12 inches (300 mm).

