Tool: Soil Types – Canada and United States Soil Types

The type of soil determines the strength and stability of trench walls. In most Canadian Provinces, soil types fall into four categories.

Canadian Soil Classifications	
Type	**Description**
Type 1	This type of soil is so hard that it is close to rock.
Type 2	Easily excavated with a backhoe, remains intact for short time only – i.e. silty clay
Type 3	Previously excavated, flows through fingers – i.e. sand
Type 4	High moisture content, sensitive to vibration – i.e. quicksand, clay

In the U.S. there are also four types of soil, but the naming convention is different.

U.S. Soil Classifications	
Type	**Description**
Stable Rock	The natural solid mineral matter can be excavated with vertical sides and remain intact while exposed.
Type A	Cohesive soils. i.e. clay, silty clay, sandy clay, clay loam
Type B	Cohesive soils but less than Type A – i.e. angular gravel; silt/silt loam; previously excavated
Type C	Cohesive soils but less than Type A/B – i.e. gravel, sand and loamy sand, submerged soil, soil w/ freely seeping water, unstable submerged rock