

4.6 SURFACE COURSE

The surface selected for a cycling facility can substantially impact the comfort of a rider. The following factors are considered important in the surface of pedestrian and cycling facilities:

- **Smooth, even surface** – The surface should provide a comfortable facility for walking and cycling, as appropriate
- **Maintainability** – Surfaces should be conducive to year-round maintenance wherever the facility is intended to support commuting activity
- **Aesthetic/Context Sensitivity** – Surface materials should not unduly impact the surrounding landscapes or disturb the natural environment
- **Meet or exceed AODA standards** – Depending on the type of facility (exterior path of travel or recreational trail), AODA requires different levels of accommodation. However, the basic principle of providing a facility that is firm, stable and slip-resistant helps users of all abilities.
- **Sustainability & LID** - Consideration should also be given to the opportunity to provide permeable pavement types that meet the factors identified above, recognizing the desire of York Region to design facilities that are sustainable and sensitive to the surrounding environment.

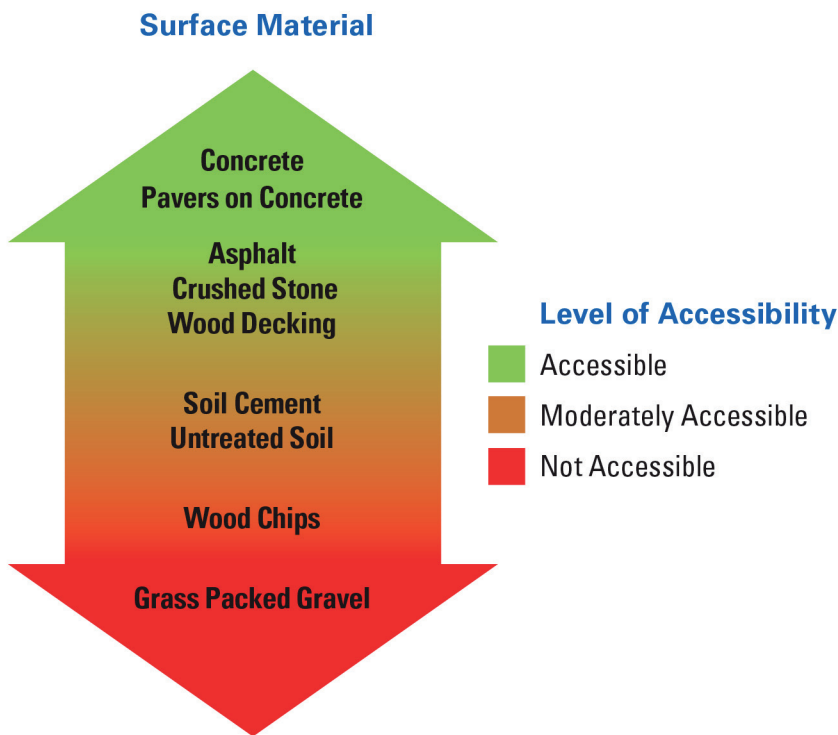
The following surface types may be considered for cycling or pedestrian facilities within York Region:

- Limestone screenings/crushed stone may be appropriate on trails or footpaths through sensitive/natural areas. They may be preferred where a path is primarily intended for walking or running as they can be softer for shock absorption. The use of screenings may also be appropriate for interim facilities due to a lower capital cost. However, gravel requires more on-going maintenance and can erode in areas with slopes or near water sources. These facilities can be difficult to maintain during winter months and it can be challenging to ensure that they meet AODA regulations.
- Asphalt (with a granular or concrete base) is the most common type of material used for multi-use facilities due to its relatively inexpensive cost and smooth surface. Asphalt paths can have a higher impact on the surrounding environment due to the need for increased depth of excavation for base materials (compared to concrete and stonedust).

- Concrete facilities also have potential to provide a high quality surface course for pedestrian and cycling facilities. Although concrete facilities represent a higher upfront capital investment, they can provide a highly durable smooth surface. Where concrete facilities will be used by cyclists and other users on wheels such as roller bladers or skateboarders, joints should be saw-cut. One potential challenge with concrete facilities is a more limited selection of durable pavement markings that maintain durability on concrete (refer to Section 10 of this guide).

Where a facility will be designated for multi-use, asphalt or concrete are the preferred materials. Various other types of traditional surface materials should generally be avoided due to their reduced accessibility (refer to Exhibit 4-10).

Exhibit 4-10. Accessibility of Various Materials



Adapted from GAATES Illustrated Technical Guide to the Accessibility Standard for the Design of Public Spaces

In addition to surface course, careful consideration should be given to base materials, as structural soils or soil cells may be required under active transportation facilities to support tree root growth.