## 3.1.5.4 CROWNED TRAIL WITH FILL SURFACE



### TREES TO BE PRUNED TO BARK BRANCH RIDGE, WITH OPTION OF PRUNING ON BOTH SIDES OF TRUNK. REFER TO PRUNING DETAIL 3.1.2.1 CLEARING HEIGHT AS SPECIFIED CLEARING WIDTH AS SPECIFIED NOTE :SURFACE MAY BE CLAY/GRAVEL, GRAVEL, WOOD OR BARK CHIPS. OR OTHER MATERIAL AS SPECIFIED OPTION A: USE EXCAVATED SOIL AND DUFF FOR TRAIL EDGE REPAIR OPTION B: SURFACING MATERIAL MEETS GRADE AS SHOWN TREAD WIDTH AS SPECIFIED NOTE: TREAD SURFACE COMPACTED

TO 100mm DEPTH OR AS SPECIFIED

## 3.1.5.4 CROWNED TRAIL WITH FILL SURFACE

When constructing a crowned trail with a fill surface, a narrow work path should be cleared and excavated from the outside stake to the centreline prior to full excavation. This working path will establish the desired grade and provides an excavation line for the rest of the trailbed. If the trailway is to be adjusted, less environmental damage occurs and less time is spent regrading and re-vegetating than if the entire width of trailway had been excavated and graded.

Excavated soil and duff can be used to stabilize the trail edge and tie into existing grades.

Crown fill surface at a 2% slope to meet existing grade.

#### CASCADE RIVER BRIDGE REFERENCE DOCUMENTS: DRAWING 2



## 3.1.6.2 TRAIL WITH FILL / CROSS-SLOPE

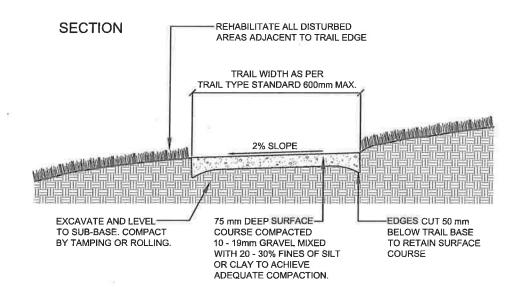




## 3.1.6.2 TRAIL WITH FILL / CROSS-SLOPE

Trails crossing moderate to steep side slopes will require a graded tread. The angle of cut/fill slopes should not be extreme. The maximum angle at which the constructed trail will be resistant to sloughing will depend on the typical amount of rainfall for the area, soil composition, plant cover, and root structure.

As a rule of thumb 1:1 slopes are the maximum for a stable slope but in many circumstances a more gentle slope will be desired.



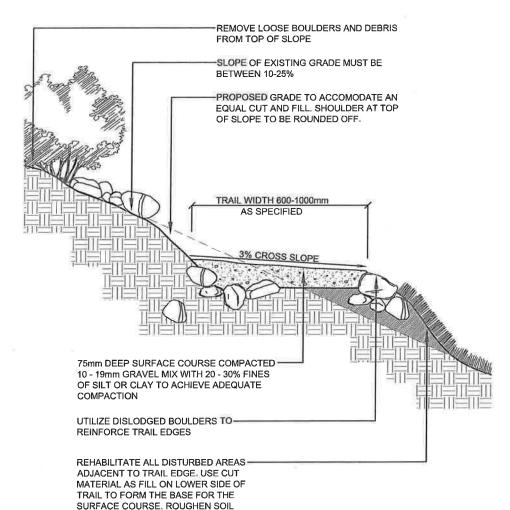
## 3.1.6.5 TRAILS ON MODERATE SLOPE







#### **SECTION**



BASE UNDER FILL TO AVOID SLOUGHING

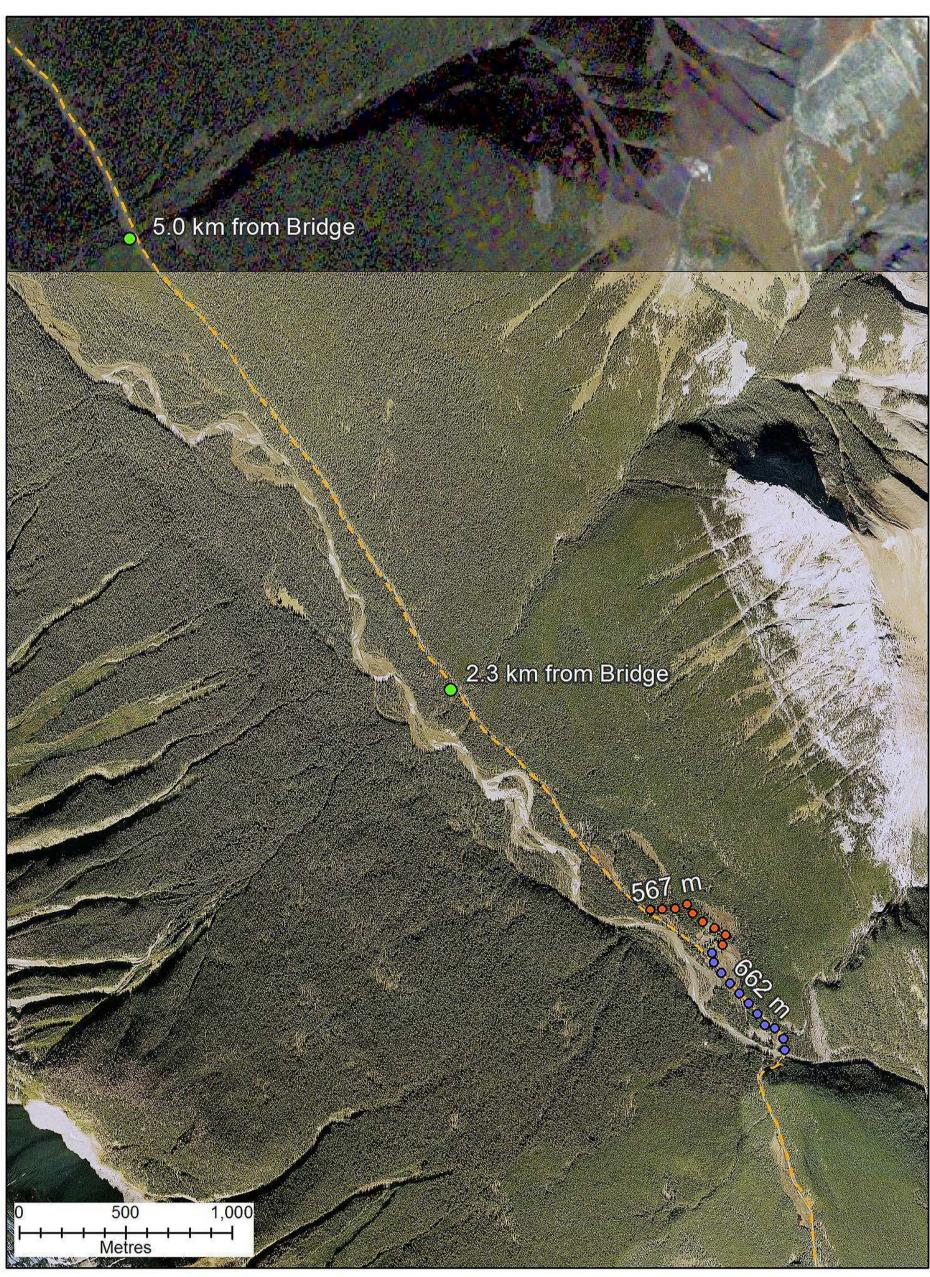
### 3.1.6.5 TRAIL ON MODERATE SLOPE

The cross-slope must be constructed at an appropriate angle. The best way to check this is to walk the tread. If you can feel your ankles rolling downhill, the cross-slope is too steep. Ideally the cross-slope should be barely detectable to the eye. One way to check the angle of cross-slope on the trail tread is to place a partially filled bottle of water on the tread. This will give you a good idea as to where a perfectly level tread would be.

Once the trail is constructed on a moderate slope, pull the reserved duff onto the fill slope to stabilize the fill and make the trail fit in with the aesthetics of the surrounding environment.

Be sure to remove all large rocks and logs from the top of the slope which could potentially roll onto the tread surface and create safety hazards. CASCADE RIVER BRIDGE REFERENCE DOCUMENTS IMAGE 1 - BORROW PIT LOCATIONS 1.3 km Secondary) **Borrow Pit Locations** Kilometres

# CASCADE RIVER BRIDGE REFERENCE DOCUMENTS IMAGE 2 - UPSTREAM WASHOUT LOCATIONS



Cascade Trail upstream washouts May 29, 2014

#### CASCADE RIVER BRIDGE REFERENCE DOCUMENTS: IMAGE 3 - TRAIL DIVERSION

