

## 14: Trail Specs

With the completion of the Trails Master plan, the trail committee along with the Conservation comm have been reviewing and establishing goals and construction standards for the various trails currently being worked on and completed on the various open space lands.

Sometimes this can be confusing, especially for a new person learning about our trail system so I thought for this month, lets discuss trail sustainable specifications.

When one decides there is a need for a trail, several questions should be answered right from the start: What is the purpose of this trail, (multiple or single purpose?) where does it go? Who is the trail user, and how many will be using the trail? Once these basic questions are answered, a review of the 5 trail design standards, as set out in the Trails Master plan, and a determination of what standard to use can be made. Then a site walk is held to determine, on the ground, can that trail standard be built in the area identified for this new trail.

So what are the 5 trail standards in our Master Plan? They are: Rail trail, Trek Trail, and Single track 1, 2 & 3.

### **1: Trail Type Name: Rail Trail: GT**

**Difficulty Rating** is gentle, easy to use by many types of trail user groups

**Typical Tread Width:** 10 to 12 feet (ASHTO Standards, Sufficient clearance for mobility devices of a maximum of 36" wide to travel in both directions)

**Typical Corridor Width:** 16-20'

**Tread Rugosity:** (trail surface) extremely smooth Average Gradient: <5%

**Maximum Sustained Grade:** 7%, Maximum Grade: 8%

**Turn Radius:** Very open radius    **Trail/Structure Formality:** Formal

**Wet Area Crossing Formality:** Formal bridges for minor/major crossings

**Duty of Care:** High

### **2: Trail Type Name: Trek Trail: TT**

**Difficulty Rating:** Gentle, easy to use by many types of trail user groups

**Typical Tread Width:** 36"-72" (Sufficient clearance for mobility devices of a maximum of 36" wide)

**Typical Corridor Width:** 60"-96"

**Tread Rugosity:** Smooth and even **Average Gradient:** <5% **Maximum**

**Sustained Grade:** 7% **Maximum Grade:** 8%

**Typical Tread Materials:** Cut and fill at grade compacted crushed stone (DGA 3/8"-) with sub base, as needed.

**Turn Radius:** Wide and open

**Trail/Structure Formality:** Formal

**Wet Area Crossing Formality:** Formal bridges for minor/major crossings

**Duty of Care:** High

**3: Trail Type Name:** ST-1. All-Weather Single Track- Easy

**Difficulty Rating:** Gentle

**Typical Tread Width:** 30"-48"

**Typical Corridor Width:** Mostly open with some trees, vertical choke points (trees) never closer than 50", rock anchor choke points never closer than 30"

**Tread Rugosity:** Mostly smooth

**Average Gradient:** 6%

**Maximum Sustained Grade:** 11%

**Maximum Grade:** 15%

**Typical Tread Materials:** Surface hardened with compacted crushed stone (DGA-3/8"-)

**Turn Radius:** Wide turns allowing for open and flowing rhythm travel speeds

**Trail/Structures Formality:** Formal

**Wet Area Crossing Formality:** Bridges (railing needed if over 36" above adjacent grade) and tread covered open culverts for seasonal wet areas

**Duty of Care:** Moderate-High

**4: Trail Type Name:** ST-2- Natural Surface Single Track - Moderate

**Difficulty Rating:** Moderate

**Typical Tread Width:** 24"-36"

**Typical Corridor Width:** 36"-48"

**Tread Rugosity:** Uneven, with regular rock and root protrusions above trail tread

**Average Gradient:** 10% or less

**Maximum Sustained Grade:** 15%

**Maximum Grade:** 20% for short distances

**Typical Tread Materials:** Mostly natural surface (native soils) with some rock armoring

**Turn Radius:** Tight turns with possible switchbacks

**Trail/Structure Formality:** Low formality

**Wet Area Crossing Formality:** Armored crossings at grade where possible, bridges would be less formal with low level engineering

**Duty of Care:** Low

**5: Trail Type Name:** ST-3, Natural Surface Single Track-MxDifficult

**Difficulty Rating:** Severe **Typical Tread Width:** 18"-24"

**Typical Corridor Width:** 30"

**Tread Rugosity:** Very rough and uneven, sometimes loose

**Average Gradient:** <12% **Maximum Sustained Grade:** 20%

**Maximum Grade:** 30%, potentially greater on rock faces

**Typical Tread Materials:** Natural surface, native soils sometimes loose

**Turn Radius:** Tight

**Trail/Structure Formality:** Very low

**Wet Area Crossing Formality:** Very low, single log bridge or 12" hardened, at-grade crossing when muddy

**Duty of Care:** Very low