Gravel Trail Surfacing Specifications for use with RFP

Performance Standard

- The finished trail surface shall be compact, stable, smooth, and tightly bound.
- The completed trail shall be free of standing water, rutting and loose gravel.
- The finished trail shall be crowned or sloped appropriately to ensure sufficient drainage.
- Blend finished work smoothly into adjacent trail surfaces and grades
- Uniform minimum width as specified

Public Safety and Site Management

- Maintain public safety through appropriate signage, barricades, and work-zone controls.
- Keep work areas clean, orderly, and free of hazards.
- Minimize disruption to park users and adjacent properties.
- Window for work shall be specified in RFP

Site Preparation

- Review site conditions, access routes, and staging areas prior to construction.
- Remove vegetation, organic material, soft spots, and unsuitable subgrade material from the trail surface.
- Removed material to be:
    - Disposed of off site or
    - Dispersed on site in a fashion manner that is not readily visible
- Protect adjacent vegetation, trees and root zones, drainage features, and existing park infrastructure from damage.

Geotextile Fabric – either remove of include depending on trail location

- Non-woven geotextile fabric (minimum 4 oz) shall be installed where existing subgrade conditions are likely to result in mixing of gravel and native soils, including:
    - Soft, wet, saturated, or unstable soils.
    - Fine-grained soils such as clay, silt, or organic material.
    - Areas exhibiting rutting, settlement, or gravel loss into the subgrade.
    - Low-lying or poorly drained areas subject to seasonal saturation or high groundwater.
- Geotextile fabric shall not be used in stable, well-draining granular soils unless directed by the RDN.
- Install geotextile fabric on a smooth, prepared subgrade with a minimum 300 mm overlap at all joints.
- Secure fabric to prevent movement during construction.
- Place gravel over geotextile fabric in a manner that prevents tearing, displacement, or exposure of the fabric.

Trail Grading and Drainage

- Drainage shall be the primary consideration in trail resurfacing and construction.
- Re-establish trail grades to eliminate standing water and promote positive drainage.
- Construct a uniform crown (preferred) or cross slope (outslope) of 2% to 4%,
- If drainage is negative 3 inches of 6 inch fractured rock is to be placed under the gravel cap for a sufficient length of trail to enable drainage
- Correct low areas, ruts, depressions, and localized settlement prior to placing gravel.

Gravel Material Requirements

The supplied gravel shall:

- Crushed gravel from Copcan or Bluestone quarries. Contract to specify size for project, to be
  - ¼ minus **(default / cart path**) or
  - ½ inch for pedestrian / biking only or
  - ¾ for vehicle traffic
- Contain sufficient fines to bind under compaction while maintaining drainage characteristics.
- Be free of organic material, topsoil, and other materials.

Gravel Surfacing Installation

- Spread gravel uniformly across the full trail width.
- Feather trail edges into adjacent grades to reduce edge failure and erosion.
- Finished gravel to a minimum compacted depth of 100 mm (4 inches) or 75 mm (3 inch) as specified
- Shape, grade and rake gravel smooth and compact.
- Install additional material to low spots or ruts, rake again and compact again.
- Surface will need multiple rounds of raking and compaction until it meets RDN Performance Standards listed in the first section.

- Trail width to be:
  - Type 1 trail 2-4 meters
  - Type 2 trail 1.5 -2.5 meters
  - Type 3 trail 0.5-1 meters

Compaction Requirements

- Compact gravel using a minimum
  - 5000 lbs smooth drum roller
  - 1000 lbs roller is acceptable is site restriction prohibit use of larger roller
  - If less than 1000 lbs roller is used gravel must be installed in 2 lifts of 2 inches each with the first lift being raked and compacted fully before installing second lift

Moisture Content

- Place and compact gravel only when moisture conditions are suitable for proper binding and compaction.
- The Contractor shall adjust moisture content by adding water prior to installing as needed.

Quality Control and Acceptance

- All work shall conform to RDN trail standards, drawings, and applicable project details.
- The Contractor shall correct any deficiencies identified during inspection at no additional cost to the RDN.
- Acceptance will be based on surface stability, drainage performance, smoothness, compaction, and conformity with the specified grades, dimensions, and materials.
- Upon completion, the trail shall be fully functional, safe for public use, and satisfactory to the RDN.