PART 1 - GENERAL

1. RELATED REQUIREMENTS
   1. Section 32 11 23 - Aggregate Base Courses

2. REFERENCES
   1. ASTM International
      a. ASTM D 698-07e1, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³) (600kN-m/m³).
   2. Ontario Provincial Standard Specifications (OPSS)
      a. OPSS 1004-[05], Material Specification for Aggregates-Miscellaneous.
      b. OPSS SP 110F13-03, Material Specification for Aggregates - Base, Subbase, Select Subgrade, and Backfill Material.

3. ACTION AND INFORMATIONAL SUBMITTALS
   1. Submit in accordance with Section 01 33 00 - Submittal Procedures.

PART 2 - PRODUCTS

1. MATERIALS
   1. Select Subgrade to OPSS SP 1010F13. Sand to OPSS 1004.

PART 3 - EXECUTION

1. EXAMINATION
   1. Verification of Conditions:
      a. Before commencing work verify locations of buried services on and adjacent to site.
   2. Evaluation and Assessment:
      a. Arrange with appropriate authority for relocation of buried services that interfere with execution of work. Pay costs of relocating services.
      b. Testing of materials and compaction of backfill and fill will be carried out by testing laboratory approved by PCA Representative.
      c. Not later than 48 hours before backfilling or filling with approved material, notify PCA Representative so that compaction tests can be carried out by designated testing agency.
      d. Before commencing work, conduct, with PCA

Representative, condition survey of existing structures, trees and plants, lawns, fencing, service poles, wires, and paving, survey bench marks and monuments which may be affected by work.

2. PREPARATION

1. Temporary Erosion and Sedimentation Control:

    a. Use temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, in accordance with sediment and erosion control plan.
    b. Inspect, repair, and maintain erosion and sedimentation control measures during construction until permanent vegetation has been established.
    c. Remove erosion and sedimentation controls other than Filtrexx Siltsoxx and restore and stabilize areas disturbed during removal.

2. Protection of in-place conditions:
    a. Protect excavations from freezing.
    b. Keep excavations clean, free of standing water, and loose soil.
    c. Where soil is subject to significant volume change due to change in moisture content, cover and protect to PCA Representative's approval.
    d. Protect natural and man-made features required to remain undisturbed. Unless otherwise indicated or located in an area to be occupied by new construction, protect existing trees from damage.
    e. Protect buried services that are to remain undisturbed.

3. Removal:
    a. Remove obstructions, ice and snow, from surfaces to be excavated within limits indicated.
    b. Remove trees, stumps, logs, brush, shrubs, bushes, vines, undergrowth, rotten wood, dead plant material, exposed boulders and debris within areas designated on drawings and within 3.60 Wide Clearing Width indicated on Drawings.
    c. Carefully remove soil around roots of trees to remain.

3. EXCAVATION

1. Shore and brace excavations, protect slopes and banks and perform work in accordance with Provincial and Municipal regulations.

2. Topsoil stripping:

    a. Do not handle topsoil while in wet or frozen condition or in any manner in which soil structure is adversely affected.
    b. Strip topsoil to depths as indicated. Avoid mixing topsoil with subsoil.
    c. Strip topsoil over areas where grade changes are required, and so that excavated material may be stockpiled without

covering topsoil.

3. Excavate as required to carry out work

4. BACKFILLING

1. Start backfilling only after inspection and receipt of written approval of fill material and spaces to be filled from PCA Representative.

2. Remove snow, ice, construction debris, organic soil and standing water from spaces to be filled.

3. Lateral support: maintain even levels of backfill around structures as work progresses, to equalize earth pressures.

4. Compaction of subgrade: compact existing subgrade under trails to same compaction as specified for fill. Fill excavated areas with selected subgrade material compacted as specified for fill.

5. Placing:
    a. Place backfill, fill and basecourse material in 150 mm lifts. Add water as required to achieve specified density.

6. Under seeded areas: use site excavated material.

5. GRADING

1. Grade to ensure that water will drain away from buildings, walls and paved areas, to catch basins and other disposal areas approved by PCA Representative. Grade to be gradual between finished spot elevations as indicated.

6. CLEANING

1. Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
    a. Dispose of cleared and grubbed material daily.

2. Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

3. Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

---------- END OF SECTION ----------