

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 31 05 16 – Aggregate Materials.

1.2 REFERENCES

- .1 *Cahier des charges et devis généraux*, Infrastructures routières – construction et réparation, Édition 2008, Québec, MTQ.
- .2 *Ontario Provincial Standard Specifications*, Ontario Ministry of Transportation.
- .3 ASTM D698-07e1 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft³ (600 kN-m/m³)).
- .4 ASTM D1557-07 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).

1.3 INCLUSIONS

- .1 Costs associated with the work described in this section must be included in the general lump sum portion of the contract under the fixed price item “Approach Road Works”. It shall not be measured.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .2 Divert unused granular material from landfill to local facility as approved by the Departmental Representative.

Part 2 Products

2.1 MATERIALS

- .1 Granular sub-base material: in accordance with Section 31 05 16 - Aggregate Materials and following the requirements of references in Paragraph 1.3.

Part 3 Execution

3.1 PLACING

- .1 Place granular sub-base after subgrade is inspected and approved by Departmental Representative.
- .2 Construct granular sub-base to depth and grade in areas indicated.
- .3 Ensure no frozen material is placed.
- .4 Place material only on clean unfrozen surface, free from snow or ice.
- .5 Shape each layer to smooth contour and compact to specified density before succeeding layer is placed.

- .6 Remove and replace portion of layer in which material has become segregated during spreading.

3.2 COMPACTION

- .1 Compaction equipment to be capable of obtaining required material densities.
- .2 Compact to density of not less than 98% maximum dry density in accordance with references of Paragraph 1.3 as well of ASTM D 698 and ASTM D 1557.
- .3 Shape and roll alternately to obtain smooth, even and uniformly compacted sub-base.
- .4 Apply water as necessary during compaction to obtain specified density.
- .5 In areas not accessible to rolling equipment, compact to specified density with mechanical tampers approved by the Departmental Representative.
- .6 Correct surface irregularities by loosening and adding or removing material until surface is within specified tolerance.

3.3 SITE TOLERANCES

- .1 Finished sub-base surface to be within 10 mm of elevation as indicated but not uniformly high or low.

3.4 PROTECTION

- .1 Maintain finished sub-base in condition conforming to this section until succeeding base is constructed, or until granular sub-base is accepted by the Departmental Representative.

END OF SECTION