

**Part 1 General**

**1.1 RELATED REQUIREMENTS**

- .1 Section 31 23 33.01 – Excavation and Backfilling.

**1.2 REFERENCES**

- .1 American Society for Testing and Materials International (ASTM)
- .1 ASTM C127-04, Standard Test Method for Density, Relative Density and Absorption of Coarse Aggregate.
- .2 ASTM D698-00ae1, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort 600 kN-m/m<sup>3</sup>.
- .3 ASTM D1557-02e1, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort 2,700 kN-m/m<sup>3</sup>.
- .4 ASTM D4253-00, Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.

**1.3 DEFINITIONS**

- .1 Corrected maximum dry density is defined as:
- .1  $D = (D1 \times D2) / ((F1 \times D2) + (F2 \times D1))$ .
- .2 Where: D = corrected maximum dry density kg/m<sup>3</sup>.
- .1 F1 = fraction (decimal) of total field sample passing 4.75 mm sieve.
- .2 F2 = fraction (decimal) of total field sample retained on 4.75 mm sieve (equal to 1.00 - F1).
- .3 D1 = maximum dry density, kg/m<sup>3</sup> of material passing 4.75 mm sieve determined in accordance with Method AC of ASTM D698.
- .4 D2 = bulk density, kg/m<sup>3</sup>, of material retained on mm sieve, equal to 1000G where G is bulk specific gravity (dry basis) of material when tested to ASTM C127.
- .3 For free draining aggregates, determine D1 (maximum dry density) to ASTM D4253 dry method when approved by Departmental Representative.

**Part 2 Products**

**2.1 NOT USED**

- .1 Not Used.

**Part 3 Execution**

**3.1 NOT USED**

- .1 Not Used.

**END OF SECTION**