

PART 1 - GENERAL

1.1 SUMMARY

- .1 This section defines correction to maximum dry density to take into account aggregate particles larger than 19 mm.

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
- .1 ASTM C127-12, Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate.
  - .2 ASTM D698-1221, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
  - .3 ASTM D1557-12, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - .4 ASTM D4253-00 (2006), 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  $D = (F1 \times D1) + (0.9 \times D2 \times F2)$
  - .3 Where: D = corrected maximum dry density kg/m<sup>3</sup>.
    - .1 F1 = fraction (decimal) of total field sample passing 19 mm sieve
    - .2 F2 = fraction (decimal) of total field sample retained on 19 mm sieve (equal to 1.00 - F1)
    - .3 D1 = maximum dry density, kg/m<sup>3</sup> of material passing 19 mm sieve determined in accordance with Method A of ASTM D698.
    - .4 D2 = bulk density, kg/m<sup>3</sup>, of material retained on 19 mm sieve, equal to 1000G where G is bulk specific gravity (dry basis) of material when tested to ASTM C127.
  - .4 For free draining aggregates, determine D1 (maximum dry density) to ASTM D4253 dry method when directed by Departmental Representative.

1.4 MEASUREMENT FOR .1 All work covered under this specification is  
PAYMENT considered to be incidental to the project and  
will not be measured for payment.

PART 2 - PRODUCTS

2.1 NOT USED .1 Not Used.

PART 3 - EXECUTION

3.1 NOT USED .1 Not Used.