PART 1   GENERAL

1.1   Summary

.1   This Section defines correction to maximum dry density to take into account aggregate particles larger than 4.75 mm.

1.2   References

.1   American Society for Testing and Materials (ASTM)

   .1   ASTM C127-88, Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate.

   .2   ASTM D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3) (600kN-m/m^3).

   .3   ASTM D1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3).

   .4   ASTM D4253, 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 $D = (D1 x D2)(F1 \times D2) + (F2 \times D1)$

   .2   Where: D = corrected maximum dry density kg/m^3.

      .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/m3of material passing 4.75 mm sieve determined in accordance with Method A C of ASTM D698.

      .4   D2 = bulk density, kg/m3, of material retained on 4.75 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 directed by Departmental Representative.

PART 2   PRODUCTS (NOT APPLICABLE)

PART 3   EXECUTION (NOT APPLICABLE)

END OF SECTION