

**EM TECH LABORATORY TESTING CAPABILITIES**

<b>SOIL</b>	
D-421	Dry Preparation of Samples for Particle Size Analysis
D-422	Particle Size Analysis of Soils
D-558	Moisture-Density Relations of Soil-Cement Mixtures
D-698/VTM-1	Standard Proctor
T-100	Specific Gravity of Soils (fines)
D-1140	Amount of Material in Soils finer than No. 200 sieve
D-1556	In-Place Density of Soils using Sand Cone
D-1557	Modified Proctor
D-1883/VTM-8	CBR of Laboratory Compacted Soils
D-2216	Lab Determination of Moisture Content of Soils
D-2434	Permeability of Granular Soils (Constant Head)
D-2419	Sand Equivalent Value of Soils & Fine Aggregate
D-2487	Classification of Soils (USCS)
D-3080	Direct Shear Test of Soils Under Consolidated Drained Conditions
D-3282	Classification of Soils & Soil-Aggregate Mixtures for Highway Construction
D-4318	Liquid-Plastic Limit and Plasticity Index
D-4829	Expansion Index of Soils
D-4972	Standard Test Method for pH of Soils
D-6276	Using pH to Esti. Soil Lime Prop. Requirement for Soil Stabilization
D-6938	In-Place Density and Water Content of Soil by Nuclear Method
<b>CONCRETE/AGGREGATE</b>	
C-29	Test Method for Bulk Density and Voids in Aggregate
C-31	Standard Practice for Making & Curing Conc. Cylinders
C-39	Testing of Concrete Cylinders in Lab
C-40	Test method for Organic Impurities in Fine Aggregates for Concrete
C-42	Test method for Obtaining & Testing Drilled Cores of Concrete
C-78	Test method for Flexure Strength of Concrete (Simple beam 3 <sup>rd</sup> point loading)
C-88	Test method for Soundness of Agg. by Use of Sodium/Magnesium Sulfate
C-109	Test method for Compressive Strength of Hydraulic Cement Mortars
C-117	Test method for Materials Finer than #200 Sieve in mineral agg. by washing
C-127	Test method for the Density, Sp.Gravity & Absorption of Coarse Aggreg.
C-123	Test method for Lightweight Particles in Aggregate
C-128	Test method for the Density, Sp.Gravity & Absorption of Fine Aggregates
C-131/C-535	Test method for Resistance to Degradation using Los Angeles Machine
C-136	Test method for Sieve Analysis of Fine and Coarse Aggregates
C-138	Test method for Unit Weight of Concrete
C-142	Test method for Clay Lumps and Friable Particles in Aggregates
C-143	Test method for Slump of Concrete
C-172	Sampling method for Freshly Mixed Concrete
C-173	Test method for Air Content of Freshly Mixed Concrete ( <b>Volumetric</b> )
C-192	Standard Practice Making and Curing Concrete Test Specimens in the Laboratory
C-231	Test method for Air Content of Freshly Mixed Concrete ( <b>Pressure</b> )
C-511	Specifications for Water Storage Tank for Curing of Concrete Specimens
C-617	Capping of Concrete Cylinders
C-1019	Test method for Sampling and Testing Grout
C-1064	Test Method for Temperature of Freshly Mixed Concrete
C-1202	Test Method for Electr. Indication of Concr. Ability to Resist Chloride Ion Penetration
C-1231	Std. Practice for Using Un-bonded Caps in Compressive Strength Testing
C-1583	Test Method for Bond Strength or Tensile Strength of Concrete Overlay (Pull-off Method)
D-4791/VTM-4	Flat & Elongated Particles in Coarse aggregates
ACI 211	Concrete Mix Design
<b>ASPHALT</b>	
R-47	Reducing Sample of Hot Mix Asphalt
D-2041/T-209	Theoretical Maximum Specific Gravity & Density of Bituminous Mixtures
D-2726/T-166	Bulk Specific Gravity & Density of Compacted Bituminous Mixtures
D-2950	Density of Bituminous Concrete in Place by Nuclear Method
D-3203/T-269	Percent Air Voids in Bituminous Paving Mixtures
D-6925/T-312	Relative Density of Asphalt Mix Specimens by Means of the Superpave Gyrotory Compactor
D-6937	Determining Density of Emulsified Asphalt