Division of Materials and Tests

TDOT Certification:
Soils and Aggregate Technician Certification Program

Course Title: **Soils and Aggregate Certified Testing Technician Course**

Certification Level: **Grade I**

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Course Description

The TDOT Soils and Aggregate Certified Testing Technician is an individual who has demonstrated the knowledge of and ability to interpret the results of basic field and laboratory tests on soils and aggregates as well as perform calculations necessary to report the data from each test.

Scope of Course

The program requires a working knowledge of the following AASHTO/ASTM Standards:

- AASHTO T 2/ASTM D 75 - Sampling of Aggregates
- AASHTO T 248/ASTM C 702 - Reducing Samples of Aggregate to Testing Size
- AASHTO T 27/ASTM C 136 - Sieve Analysis of Fine and Coarse Aggregates
- AASHTO T 255/ASTM C 566 - Total Evaporable Moisture Content of Aggregate by Drying
- AASHTO T 11/ASTM C 117 - Materials Finer Than 75-mm (No. 200) Sieve in Mineral Aggregates by Washing
- AASHTO T 19/ASTM C 29 - Bulk Density ("Unit Weight") and Voids in Aggregate
- AASHTO T 84/ASTM C 128 - Specific Gravity and Absorption of Fine Aggregate
- AASHTO T 85/ASTM C 127 - Specific Gravity and Absorption of Coarse Aggregate
- AASHTO T 88 - Particle Size Analysis of Soils
- AASHTO T 89 - Determining the Liquid Limit of Soils

- AASHTO T 99 - Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) drop.
- AASHTO T 180 - Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) drop.
- AASHTO T 100/ASTM D 854 - Specific Gravity of Soils
- AASHTO T 224 - Correction for Coarse Particles in the Soil Compaction Test
- AASHTO T 265 - Laboratory Determination of Moisture Content of Soils

Prerequisites

- Supervisor's approval and written recommendation
- A basic understanding of embankment construction and inspection; aggregate testing
- Familiarity with applicable TDOT Standard Specifications, Supplemental Specifications, and Special Provisions
- Mathematical skills through TDOT Basic Math 2

Certification Requirements

1) TDOT will grant certification to those applicants who meet both of the

   following requirements: A passing grade on the written examination:

2) The one-hour written examination is "open book" and consists of 55 multiple choice questions.

3) There are five (5) to ten (10) questions on each of the AASHTO/ASTM Standards. To pass the written examination, both of the following conditions must be met:

   (a) at least 60% correct for each of the required standards; and

   (b) a minimum score of 70% overall.

4) Recertification is necessary every five (5) years and requires that the technician attend the classes and successfully complete the written and performance examinations.

On-Line Study Guide

- Soils and Aggregate Course Technician Manual V 3.2

How to Register

- A Valid PHOTO ID IS REQUIRED upon check-in
- Cheating on any level WILL NOT BE TOLERATED and will result in immediate expulsion from the course and a notification of supervisors and directors.
- The use of cell phone calculators WILL NOT be permitted during exam.