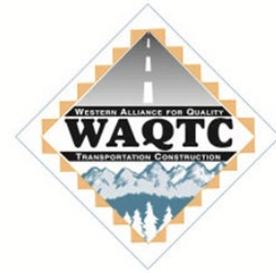

Western Alliance for Quality Transportation Construction

2021 Completed Items



- **Thorough review of written examination methodology**
Revised options on exam scoring in the *TTQP Administration Manual*.
- **Developed written examination to comply with ASTM D3740.**
Developed written exam questions for applicable test methods to meet the requirements of *ASTM D3740, Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction*.

AASHTO revisions:

- **R 25, Technician Training and Qualification Programs** – Added references to the Appendixes and corresponding references in the reference section and removed ‘flexible’ from Section 3.1
 - **R 100, Making and Curing Concrete Test Specimens in the Field** - Revised to correct the tamping rod length in Table 1 and revised the Test Method (T) to a Practice (R).
 - **T 30, Mechanical Analysis of Extracted Aggregate** – Revised to Table A1.
 - **T 85, Specific Gravity of Coarse Aggregate** – Added ‘according to T 255’ in Sections 8.1 and 8.5 and 122°F after 50°C in Sections 8.1 and 8.5.
 - **T 88, Particle Size Analysis of Soils** – Moved Note 7 into 12.2, added dispelling foam with 3 drops of isopropyl alcohol, and deleted Figure 5.
 - **T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop** – Replaced the variables for density, W and D , with ρ , in calculations.
 - **T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete** – Changed ‘tap the sides’ to ‘tap around the perimeter’ in Section 7.4 Vibration and revised ‘sides’ to ‘side’ in Section 7.5.
 - **T 152, Air Content of Freshly Mixed Concrete by the Pressure Method** – Changed ‘tap the sides’ to ‘tap around the perimeter’ in Section 9.1.3 and revise ‘sides’ to ‘side’ in Sections 9.1.4, 9.3.1, 9.3.3, 9.4.2, A1.7.2, and A1.7.3.
 - **T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens** – Changed the term ‘samples’ to ‘specimens’ where appropriate and changed the temperature in the water bath from $25 \pm 1^\circ\text{C}$ ($77 \pm 1.8^\circ\text{F}$) to $25 \pm 1^\circ\text{C}$ ($77 \pm 2^\circ\text{F}$) in Sections 6.2, 9.2, 9.3, and 10.1.
 - **T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture** – Removed ‘or’ in 6.1.1, both statements are mandatory.
 - **T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop** – Replaced the variables for density, W and D , with ρ , in calculations.
-

-
- **T 283, Resistance of Compacted Asphalt Mixtures to Moisture** – Extensive revisions for clarity, active voice, and reduce redundancy.
 - **T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)** – Replaced the variables for density, W and D , with ρ , in calculations.
 - **T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method** – Added a new Section 7.8, 'Reset the internal balance to zero,' revising 'flat pan' to 'container' in Section 9.1. Revised Sections 7.2 and 8.2 to say, 'Use T 329 to oven dry the asphalt mixture specimen to a constant mass or determine the moisture content of a companion specimen.'
 - **T 312, Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor** – Revised T 168 references to R 97 and 'binder' and 'HMA' to 'asphalt binder' and 'asphalt mixtures.'
 - **T 329, Moisture Content of Asphalt Mixtures by Oven Method** – Replaced T 168 with R 97 in 2.1 and 5.1.
 - **T 331, Bulk Specific Gravity (Gmb) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method** – Removed redundant information and revised Formula 1.
-