WAQTC EXECUTIVE BOARD
2024 SPRING MEETING MINUTES

MEETING CALLED BY: MIKE SAN ANGELO, CHAIR
RECORDER: DESNA BERGOLD, COORDINATOR

DATE: AUG. 2, 2024
TIME: 11:00 AM TO 2:00 PM MST
LOCATION: GOOGLE.MEET

ATTENDEES:
MIKE SAN ANGELO, AKDOT & PF, CHAIR
CRAIG WIEDEN, CDOT, VICE CHAIR
L. SCOTT NUSSBAUM, TREASURER, UDOT
BRENT CONNER, ADOT
MICHAEL VOTH, CFLHD
CHAD CLAWSON, ITD
OAK METCALFE, MDT
AMY BEISE , NDDOT
LARRY ILG, ODOT
GARRET WEBSTER, WSDOT
MISTY MINER, MDT, QAC CHAIR
GILBERT ARREDONDO, UDOT, QAC VICE CHAIR
LORI COPELAND, ITD
SEAN PARKER, ODT

Agenda Items / Objectives:

1. **2024 Proposed AASHTO revisions from the QAC**
    a. *R 39, Making and Curing Concrete Test Specimens in the Laboratory,* TS 3b, 8/5 at 10:30 am – **not on agenda**
    b. *R 60, Sampling Freshly Mixed Concrete* (withdrawn)
    c. *T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop,* TS 1b, Scott Nussbaum, 8/7 at 10: 30 am – **not on agenda**
    d. *T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop,* TS 1b, Scott Nussbaum, 8/7 at 10: 30 am – **not on agenda**
    e. *T 255, Total Evaporable Moisture Content for Aggregates,* TS 1c, Larry Ilg, 8/7 at 3:30 pm – on agenda
    f. *T 331, G_{mb} Using Automatic Vacuum Sealing Method,* TS 3c, Oak Metcalfe, 8/7 at 1:00 pm – on agenda
2. Revisions to the 2024 Training Materials – QAC
3. Administration Manual and RPIH – QAC
4. Website update – QAC Summer Meeting
5. Third-Party Written Exam Delivery progress
6. Google drive / shared folder – Scott Nussbaum
7. Funding and Budget – Scott Nussbaum
8. Task Force 16-01 T 310 procedure for Calibration Blocks – Craig
9. Board Chair and Vice Chair
10. 2025 QAC meeting locations
11. Other items

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY
WELCOME	Larry Ilg, ODOT and WAQTC Former Executive Board Chair, welcomed everyone to this 2024 Executive Board Summer Meeting. Larry turned the meeting over to Craig Wieden, Executive Board Vice Chair until Mike San Angelo, Executive Board Chair arrives. The Board discussed the WAQTC proposed revisions to the AASHTO Standards in preparation for the upcoming 2024 AASHTO Committee on Materials and Pavement (COMP) Annual Meeting.	

2024 PROPOSED AASHTO REVISIONS FROM THE QAC

R 39	*R 39, Making and Curing Concrete Test Specimens in the Laboratory (TS 3b)* – Larry Ilg, Champion. <u>WAQTC proposed revisions:</u> • Remove 'cardboard molds' from Section 7.5.3.1.1 Larry submitted the proposal to Wally Heyen, Technical Section (TS 3b) Vice Chair, but it isn't on the agenda for the upcoming meeting. Larry will follow up during the TS 3b Meeting. *Champion will submit the proposed revisions to TS 3b Chair, Brandon Varilek, and Vice Chair, Wally Heyen.*	LARRY ILG
R 60	*R 60, Sampling Freshly Mixed Concrete (TS 3b)* This proposal was withdrawn by Misty Miner, Qualification Advisory Committee (QAC) Chair. The National Ready Mix Concrete Association (NRMCA) provided comments that the QAC would like to review. <u>QAC proposed revisions:</u> • Add 'mobile' in Section 1.1 • Add 'Mobile Mixers' to the title of Section 5.2.3 and 'conveyor or' to the final sentence. *Proposal withdrawn. The QAC will revisit during the 2025 QAC Winter Meeting.*	QAC

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY
T 99 AND T 180	*T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop (TS 1b)* – Champion Scott Nussbaum *T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop (TS 1b)* – Champion Scott Nussbaum <u>WAQTC proposed revisions to both test methods:</u> • Section 3.5 remove first and third sentences. • Create a new Section 3.6 for the thermometer, remove 'of materials' after temperature and add 'oven' after 'for measuring the.' These proposals are not on the agenda for the upcoming TS 1b Meeting. Scott Nussbaum, UDOT and WAQTC Treasurer, said that he thought he had submitted them but realized he hadn't. He said that he will submit them before the TS 1b meeting and ask that they be included at the end of 'New Business.' *Champion Scott Nussbaum will submit the proposed revisions to the TS 1b Chair, Nicholas Van Den Berg, and Vice Chair, Joseph Blair.*	SCOTT NUSSBAUM
T 255	*T 255, Total Evaporable Moisture Content for Aggregates (TS 1c)* – Champion Larry Ilg <u>WAQTC proposed revisions:</u> • Section 5.2 remove first and third sentences. • Create a new Section 5.2.1 for 'Other suitable sources of heat.' • Create a new Section 5.3 for the thermometer add 'oven' after 'for measuring the.' Controlled temperature oven • Create Section 7.2.1 starting with 'Rapid heating may cause some particles to explode. . . ' • Add the temperature range in 7.2.1 • Create Section 7.2.2 starting with 'If a source of heat other than controlled temperature oven. . .' • Move the 'Caution' statement between Section 7.2.1 and 7.2.2 as 7.2.1.1	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY
	• Add constant mass formula to Section 8 Calculation Larry submitted the proposed revisions to Matt Beeson, TS 3b Chair. Matt asked Larry if he would like to present the proposal during the meeting. Larry provided a brief PowerPoint presentation on the prosed revisions and asked Misty to assist. *Champion Larry Ilg and Misty Miner will present the proposed revisions during the upcoming TS 1c Meeting.*	LARRY ILG MISTY MINER
T 331	*T 331, G_{mb} Using Automatic Vacuum Sealing Method (TS 2c)* – Champion Oak Metcalfe <u>WAQTC revisions proposal</u> • Section 5.7 change accuracy of ±0.5°C (±0.9°F) to accuracy of ±0.5°C (±1°F) • Section 5.10 change 25 ± 1°C (77 ± 1.8°F) to 25 ± 1°C (77 ± 2°F) • Section 6.3 change 25 ± 1°C (77 ± 1.8°F) to 25 ± 1°C (77 ± 2°F) Champion Oak Metcalfe, MDT, submitted the proposed revision to TS 2c, Chair, Allen Myers although it is not listed on the agenda. Oak will follow up with Allen and present the proposed revision during the upcoming TS 3c meeting. *Champion Oak Metcalfe will present the proposed revisions during the TS 2c Meeting.*	OAK METCALFE

REVISIONS TO THE 2024 TRAINING MATERIALS AND WAQTC ADMINISTRATION MANUAL AND RPIH

2024 QAC PROPOSED REVISIONS	*Revisions to the Training Materials, Administration Manual, and RPIH* Misty and Desna presented the list of revisions to the training materials that the QAC is proposing. Full list attached. *Proposed revisions to the training materials will be incorporated into the 2024 Training Materials and Organization Documents.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY

OTHER ITEMS

WEBSITE UPDATE	The migration of the WAQTC.org website to WordPress is approved. Desna contacted Ryan Cubillas of Applied Microsystems who indicated a delivery date in September. Misty told the Board that the QAC held a meeting to brainstorm ideas for the look of the website. She provided this information to Ryan. Craig asked how it would work, will Applied Microsystems present a website for approval before it is posted? Desna and Misty said they would work with Ryan to provide answers. *Applied Microsystems will begin the website migration.*	DESNA BERGOLD MISTY MINER
THIRD-PARTY EXAM DELIVERY	*Third-Party Exam Delivery Update* Mayra Garcia, Kryterion, proposed a monthly 'check-in' meeting and representatives of the agencies that use Webassessor are planning to attend. Mayra scheduled a meeting for Aug. 1st but had to cancel. Desna explained that one of the topics will be the e-commerce and delivery fees which have not been paid. Desna has been sorting the monthly reconciliation reports by test center location to identify which member agency to forward which part of the payment requests. Desna noticed some fluctuation in the fees and charges in the last couple of months. These fluctuations do not meet the contract. The contract states that account transactions are charged a four percent credit-card processing fee and $0.58 per transaction fee. All Webassessor exams are $85, which is $3.98 total per exam. There have been some charges that are over $6. She is trying to follow up with Kryterion. *QAC Members and Desna will hold monthly meetings with Kryterion to address outstanding issues.*	QAC MEMBERS DESNA BERGOLD
GOOGLE DRIVE / SHARED FOLDER	Scott arranged for the WAQTC members to use a Google Shared drive housed by UDOT. This will allow those with access to download WAQTC files. Larry said that he has tried to work it out, but ODOT's Information Technology (IT) division will not	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY
	allow it. Other member agencies will be able to access the shared drive. Scott also shared the proposed permission levels of the shared drive and folders. Scott will add Board members that are allowed to the Shared Google Drive. Desna will work with the QAC members to use the shared drive for the upcoming 2024 Training Materials update and continue to provide jump drives and files to ODOT's representatives. *WAQTC members will begin using the shared drive as allowed.*	EXECUTIVE BOARD AND QAC MEMBERS.
FUNDING AND BUDGET	*Turned over to Scott Nussbaum, Treasurer.* Scott presented a WAQTC Funding Summary current as of July 17, 2024 (attached). ADOT has contributed funds but still needs to commit them on the Transportation Pooled Fund (TPF) website. Scott also shared that WAQTC is not expecting future contributions from HDOT. Larry said that the Washington State Asphalt Producers Association (APA) is encouraging Hawaii to rejoin the WAQTC. Scott indicated that there is a healthy balance in the account. Some extra funds will be useful as the current TPF runs through 2025, WAQTC will need to initiate a new pooled fund towards the end of this year. Funds need to be obligated to both funds for a short period of time. The amount of funds currently being carried is more than enough for this effort. Scott suggests that when the new pooled fund is initiated that the commitments and contributions could be dropped from $12,000 to $10,000 per member agency. The Board will consider this suggestion. *ADOT will commit on the TPF website.*	ADOT
TASK FORCE 16-01 T 310 PROCEDURE	<u>Discussion item</u> Craig oversees this Task Force. They had their Kick-off meeting in January to refine the Task Force's Scope. Originally the scope was to address calibrating the nuclear gauge calibration blocks used in-house. Now many agencies use a 'Master Gauge' provided by the manufacturer to calibrate the gauges. Craig said that the new Task Force Scope will address both.	

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	Craig said that the Task Force is comprised of Scott, Oak, and Larry, Board Members; Kelly Syslova, FDOT; Paul Smith, CDT; and Ali Regimand, Instrotek Craig said he will schedule a follow-up meeting. *Discussion item.*	
BOARD CHAIR AND VICE CHAIR	As of July 1, 2024, Mike San Angelo, AKDOT, assumed the Board Chair and Craig Wieden, CDOT, is the Vice Chair. Mike said that he is happy to serve but wanted everyone to know that he is soon eligible to retire and is unsure how long he will continue to work and may not be able to serve the full two years. The by-laws have provisions for this possibility. *As of July 1, 2024, Mike San Angelo is new Executive Board Chair, and Craig Wieden is the new Executive Vice Chair.*	MIKE SAN ANGELO CRAIG WIEDEN
2025 QAC MEETING LOCATIONS	*2025 QAC Winter and Summer Meeting Locations* The QAC proposed locations for the upcoming 2025 QAC Meetings. Misty explained that the Winter Meeting has not been held in Reno since 2022 and Reno is usually a cost-effective location. She also said that now that Arizona is an official WAQTC member agency the QAC would like to hold the meeting in the Phoenix area. The QAC is proposing either location for Board approval. The Board supports Arizona for the 2025 QAC Winter Meeting. Misty said that the QAC hasn't held a meeting in Idaho and the QAC's primary choice is Coeur d'Alene for the 2025 QAC Summer Meeting. Other options are Seattle, WA, or Helena, MT. The Board supports Coeur d'Alene, ID, for the 2025 QAC Summer Meeting. Misty said that the QAC is considering rotating among the member states for the Summer Meetings and locations that are reliable to travel to for the Winter Meetings. Madeline Enright, CDOT's representative to the QAC, created a spreadsheet with the locations of the meetings since 2012, with a suggested alphabetical rotation starting 2026. The Board approved the following locations for each meeting.	MISTY MINER GILBERT ARREDONDO DESNA BERGOLD

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	2025 Winter Meeting to be held January 27th through the 31st. • Phoenix AZ 2025 Summer Meeting to be held July 14th through the 18th. • Coeur d'Alene, ID *Misty Miner and Gilbert Arredondo will work with Desna Bergold to arrange 2025 QAC Meeting accommodations.*	

QAC 2024 Proposed Revisions to the WAQTC Training Materials

General files

Random PowerPoint

- Slide 13 the example says material was ‘placed 0.50 ft. thick and 13 in. wide.’ This should be ‘13 ft. wide.’

Terminology

Add the following:

- Bleed – Occurs in concrete when coarse aggregate tends to settle down and free water rises to the surface.
- Halo – A concentration of mortar that can form at the perimeter of the slump flow patty.
- High-range water-reducer (HRWR) – A concrete admixture that can reduce the quantity of mixing water required to produce concrete by more than 12 percent, while maintaining a certain level of consistency in slump.
- Sectoring – An alternate method for further reducing quarters of a sample of material.

Aggregate (AgTT)

FOP for AASHTO R 76, Reducing Samples of Aggregate to Testing Size

FOP:

- New revision date
- Add ‘or tarp’ to Step 1
- Rephrase Step 2 and create sub steps for mixing the sample on a hard, clean, level surface and tarp.
- Add ‘or scoop; to Step 3

Performance Exam Checklist:

- Remove pass/fail lines from the optional sub steps

PowerPoint:

- Revisions to match the FOP revisions

FOP for AASHTO T 255, Total Evaporable Moisture Content of Aggregate by Drying

FOP:

- New revision date
- Add ‘and container’ to Step 15

- Revise Steps 11 and 16 to 'Subtract the container mass determined in Step 1 from the mass of the container and sample determined in Step xx and record.'

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP revisions

FOP for AASHTO T 27 /T 11, Sieve Analysis of Fine and Coarse Aggregates and Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing

FOP:

- New revision date
- New AASHTO date
- Apparatus
  - Remove 'accurate to 0.1 percent of the sample mass' from balance
  - Add Note 1 on large sieves
  - Add 'utensil' and 'wetting agent' under Optional.
- Remove the temperature requirements in Steps 1 in all methods
- Remove '0.1 percent' from Steps 2 in all methods
- Add 'To aid in the agitation process, a utensil may be used. To avoid degradation of the sample when using a mechanical washing device do not exceed 10 minutes,' in Steps 5 in Methods A and B and Step 13 in Method C.
- Add 'Rinse utensil, if used, into the washed sample' in Steps 7 of Methods A and B, and Step 15 in Method C.
- Annex B
  - Remove redundant statement under bulleted statements
  - Remove fineness modulus statement
  - Move paragraphs that define overloading under Tabel B1.

Performance Exam Checklists, all methods:

- Remove temperature requirements for drying
- Remove 0.1 percent from determining masses
- Add 'utensil rinsed'

PowerPoint:

– Revisions to match the FOP revisions

FOP for AASHTO T 335, Determining the Percentage of Fracture in Coarse Aggregate

FOP (editorial):

- Close bracket in Table 1

Performance Exam Checklist:

- None

PowerPoint:

– Revisions to match the FOP revisions

FOP for AASHTO T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test

FOP:

– None

Performance Exam Checklist (editorial):

– Removed pass/fail line for optional steps

PowerPoint:

– Rearranged Slides

Written exams

- Reformatting the answer and distractors vertically instead of a grid.
- Switching the formulas and tables for the FOP for AASHTO T 27/T 11 questions
- Removing the formulas and tables for the individual method from Methods B and C.

Asphalt (AsTT I and II)

FOP for AASHTO R 97, Sampling Asphalt Mixtures

FOP (editorial):

– Change 'haul unit' to 'transport unit'

Review Questions (editorial):

– Change 'haul unit' to 'transport unit'

Performance Exam Checklist (editorial):

– Change 'haul unit' to 'transport unit'

PowerPoint:

– Change 'haul unit' to 'transport unit'

FOP for AASHTO R 47, Reducing Samples of Asphalt Mixtures to Testing Size

No revisions

FOP for AASHTO T 329, Moisture Content of Asphalt Mixtures by Oven Method

FOP:

- Remove 'to the nearest 2°C (4°F)' from Step 4

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP revisions

FOP for AASHTO T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method

FOP:

- New revision date
- New AASHTO date
- Change 'Sampling' to 'Sample Preparation'

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP revisions
- Slide 58 change .01 to 0.1

FOP for AASHTO T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures

FOP (editorial):

- Add, 'Record the standardized container mass for use in subsequent calculations,' in Standardization

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens

FOP:

- New revision date
- New AASHTO date
- Apparatus Methods A and B
    - Add, 'Potable water: Water that is suitable for drinking.'
    - Add under water bath, 'Use potable water to fill the water bath. The water in the bath does not need to maintain a potable condition but must remain clear at all times.'
- Apparatus Method B
    - Add, 'Distilled water: Clear, distilled water for filling the volumeter.'
- Change 'Sample' to 'specimen' where appropriate.

Performance Exam Checklist (editorial):

- Add 'and apparatus completely submerged' to Step 2.

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO R 66, Sampling Asphalt Materials

None

FOP for AASHTO T 30, Mechanical Analysis of Extracted Aggregate

- New revision date
- New AASHTO date
- Apparatus
    - Remove 'accurate to 0.1 percent of the sample mass' from balance
    - Add, 'Utensil: device for agitating the sample during the washing procedure'
    - Add 'Use a utensil to aid in the agitation process. To avoid degradation of the sample when using a mechanical washing device do not exceed 10 minutes,' in Step 5
    - Add 'Rinse utensil, if used, into the washed sample' in Step 7

Performance Exam Checklist:

- Add ‘with a utensil’ to Step 5
- Add Step 8a, ‘Utensil rinsed?’

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor

FOP (editorial):

- Remove from Step 7
    - Check the pressure (600 ±18 kPa).
    - Check the angle (1.16 ±0.02°).

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP

WAQTC TM 13, Volumetric Properties of Asphalt Mixtures

None

Written Exams

- New year
- New questions.
- Reformatting the answer and distractors vertically instead of a grid.

Concrete (CTT)

WAQTC TM 2, Sampling of Freshly Mixed Concrete

FOP:

- Add ‘combine sample or increments’ to Step 5

Performance Exam Checklist:

- Rearrange to match order of FOP
- Add steps for stationary mixer to Oral
- Add steps for revolving drum truck mixer

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO T 119, Slump of Hydraulic Concrete

FOP (editorial):

- Add 'remove the aggregate by sieving the concrete sample over a 37.5 mm (1½ in.) sieve' to Step 1.

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete

- New revision date
    - New AASHTO date
    - Apparatus 0.5 ft^3 to ½ ft^3

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO T 152, Air Content of Freshly Mixed Concrete by the Pressure Method

FOP:

- New revision date
- New AASHTO date
- Add, 'remove the aggregate by sieving the concrete sample over a 37.5 mm (1½ in.) sieve' to Sampling Step 1
- New Step 7 is 'Jar the meter gently until all air is expelled from this same petcock.' This was in Step 6.

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP particularly step numbering.

FOP for AASHTO R 100, Making and Curing Concrete Test Specimens in the Field

FOP:

- New revision date
- Separate procedure for casting 4 in. and 6 in. specimens, include all steps

Performance Exam Checklists:

- None

PowerPoint:

- Revisions to match the FOP

Written Exams

- Reformatting the answer and distractors vertically instead of a grid.

Embankment/ Base and In-place Density (E&B/IPD)

FOP for AASHTO T 255/T 265, Moisture Content of Aggregate and Soil

FOP:

- New revision date
- Add 'and lid, when used' in Steps 3, 10, and 15
- Calculating the mass of the sample reworded in Steps 4, 11, and 16.

Performance Exam Checklist:

- New revision date
- Additional Step 2, 'Sample protected from moisture change?'
- Remove Step 6, 'Loss of moisture avoided prior to mass determination?'
- Address use of lid in Steps 3, 4, 12, and 13

PowerPoint:

- Move Slide 17 to 19, and 21 to 24
- Revisions to match the FOP

FOP for AASHTO T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop and

T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

FOP:

- None

Performance Exam Checklist:

- Add imperial equivalent to determining mass
- T 99: Make Step 28 sub steps full steps

FOP for AASHTO R 75, Developing ~~a Family of Curves~~ Soil-Moisture Density Relations

FOP:

- New revision date
- New AASHTO date
- New title, 'Developing Soil-Moisture Density Relations'
- Solid line for 80 percent optimum moisture curve

Practical exam:

- New revision date
- New title, 'Developing Soil-Moisture Density Relations'
- Solid line for 80 percent optimum moisture curve

Performance Exam Checklist:

- New title, 'Developing Soil-Moisture Density Relations'
- Solid line for 80 percent optimum moisture curve

PowerPoint:

- Revisions to match FOP

FOP for AASHTO T 272, One-point Method for Determining Maximum Dry Density and Optimum Moisture

FOP (editorial):

- Reformat the calculations
- Solid line for 80 percent optimum moisture curve

Performance Exam Checklist:

- None

PowerPoint:

- Revisions to match the FOP

FOP for AASHTO T 85, Specific Gravity and Absorption of Coarse Aggregate

None

FOP for AASHTO T 310, In-place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods

PowerPoint:

- Slide 19: correct step numbering starting on slide 19

- Instructor's note Slide 19: add 'The drive pin can be used to mark the perimeter of the guide plate.'

FOP for AASHTO T 355, In-place Density of Asphalt Mixtures by Nuclear Methods

None

Written Exams

- Reformatting the answer and distractors vertically instead of a grid.

Self-Consolidating Concrete Testing Technician (SCCTT) Module

All PowerPoint presentations

- Add slide, 'Warning Fresh Hydraulic cementitious mixtures are caustic and may cause chemical burns to skin and tissue upon prolonged exposure'

FOP for AASHTO T 347, Slump Flow of Self-Consolidating Concrete (SCC) and AASHTO T 351, Visual Stability Index (VSI) of Self-Consolidating Concrete (SCC)

FOP (editorial):

- Revise slide numbers

Performance Exam Checklist:

- None

PowerPoint:

- Add 'Warning' slide

FOP for AASHTO T 345, Passing Ability of Self-Consolidating Concrete by J-Ring

FOP (editorial):

- Revise slide numbers
- Add formula for h_c
- Split J-ring Flow example into Imperial and SI units.

Performance Exam Checklist:

- None

PowerPoint:

- Add 'Warning' slide
- Revisions to match the FOP

WAQTC TM 18, Penetration Test for Static Segregation Resistance of Self-Consolidating Concrete (SCC)

FOP (editorial):

- Revise slide numbers

Performance Exam Checklist:

- None

PowerPoint:

- Add ‘Warning’ slide

WAQTC TM 19, Static Segregation of Self-Consolidating Concrete (SCC) Using the Column Method

FOP:

- New revision date
- Add ‘large absorbent cloth’ to apparatus
- Revise slide numbers

Performance Exam Checklist:

- None

PowerPoint:

- Add ‘Warning’ slide
- Revision to match the FOP

Exams

- Reformatting the answer and distractors vertically instead of a grid.

FOP Library

FOP for AASHTO R 60, Sampling Freshly Mixed Concrete, Misty Miner

FOP

- New revision date
- New AASHTO date (2023)
- Addition of ‘Sampling from Continuous mixers’
- Other minor revisions

New – Performance Exam Checklist

FOP for AASHTO R 79, Vacuum Drying Compacted Asphalt Specimens, Champion Misty Miner

New – Performance Exam Checklist

FOP for AASHTO T 89 Liquid Limit, Champion Dan Gettman

New – Performance Exam Checklist

FOP for AASHTO T 90, Plastic Limit and Plasticity Index, Champion Dan Gettman

New – Performance Exam Checklist

FOP for AASHTO T 217, Speedy Moisture in Soils, Champion Sean Parker

New – Performance Exam Checklist

FOP for AASHTO T 304, Uncompacted Void Content of Fine Aggregate, Champion Mark Willoughby

New – Performance Exam Checklist

FOP for AASHTO T 331, G_{mb} Using Automatic Vacuum Sealing Method, Champion Mark Willoughby

FOP

- New revision date
- New AASHTO date (2023)
- Revisions to plastic bag dimensions

New – Performance Exam Checklist

WAQTC TM 16, Flat and Elongated Particles in Coarse Aggregate, Champion Sean Parker

New – Performance Exam Checklist

WAQTC Administration Manual and Registration, Policies, and Information Handbook (RPIH)

Annex A

- The Organizational Documents will be revised with the new name of AASHTO R 75