2024 WAQTC QAC
SUMMER MEETING MINUTES

CHAIR: MISTY MINER, MDT **COORDINATOR:** DESNA BERGOLD, D B CONSULTING	**DATE:** JULY 14TH THROUGH 18TH **TIME:** 8:00 TO 5:00 PM MON THRU WED. 8:00 AM TO 1:00 PM THUR. **LOCATION:** RADISSON, BISMARCK, ND
ATTENDEES: MISTY MINER, MDOT, CHAIR GILBERT ARREDONDO, UDOT, VICE CHAIR DAN GETTMAN, AKDOT & PF MADELINE ENRIGHT, CDOT LORI COPELAND, ITD SHARON TAYLOR, NDDOT SEAN PARKER, ODOT MARK WILLOUGHBY, WSDOT	**ABSENT:** BRENT CONNER, ADOT

MEETING ITEMS:

REVIEWS OF AASHTO REVISIONS AND QAC PROPOSED REVISIONS FOR EACH PROCEDURE

1. Welcome
2. Revisions to Embankment & Base and In-Place Density Training Materials
    a. T 255/T 265, Moisture Content of Soil
        i. AASHTO revision – none
        ii. Repeat direction after Step 1 throughout – Lori
        iii. PowerPoint – Lori
    b. T 99/T 180, Moisture-Density Relations
        i. AASHTO revisions none
    c. R 75, Developing a ~~Family of Curves~~ Soil-Moisture Density Relations
        i. AASHTO revisions
            1. New title, "Developing Soil-Moisture Density Relations'
            2. 'Family' is 'group'
        ii. 'Smooth best fit curve' – some are shown dashed – Lori
    d. T 272, One-Point Method
        i. AASHTO revisions – none
    e. T 85, G_{sb}
        i. AASHTO revisions – none
    f. T 310, In-place Density and Moisture Content of Soil-Aggregate
        i. AASHTO revisions – none
    g. T 355 In-place Density of Asphalt
        i. AASHTO revisions – none
    h. Exams
        i. Darken lines on graphs in Webassessor – Lori
3. Revisions to Concrete Training Materials
    a. TM 2 Sampling
        i. AASHTO revisions – none

ii. add mobile mixers – Winter Meeting
iii. Performance Exam – Lori

b. T 309, Temperature
i. AASHTO revisions – none

c. T 119, Slump
i. AASHTO revisions – none

d. T 121, Density
i. AASHTO revisions
1. New year
2. WAQTC revisions

e. T 152, Air Content
i. AASHTO revisions
1. New year
2. Apparatus - mallet

f. R 100, Test Specimens
i. AASHTO revisions – none

g. Exams

4. Revisions to Aggregate Training Materials
a. R 90, Sampling Aggregate Products
i. AASHTO revisions – none
ii. Haul unit or transport unit

b. R 76, Reduction
i. AASHTO revisions – none
ii. PR Step 6c Using the template required? – Lori
iii. Quartering combining – Lori withdrawn
iv. Sectoring on a tarp – Lori

c. T 255, Moisture Content of Aggregate
i. AASHTO revisions – none

d. T 27/T 11, Sieve Analysis
i. AASHTO revisions to both
1. New year on both
2. Balance requirements
3. Oven requirements T 11 only
4. Wetting agent T 11 only
5. Determine masses to 0.1 g. (no more 1.0 percent)
6. Additional language for washing
7. Dry according to T 255
ii. 'Limit agitation to 10 min.' doesn't read well – Lori
iii. Change 9.50 mm to 9.5 in the tables – Desna
iv. Spaces in Note 3 – Misty
v. Use of large shakers – Board 2023 Spring Meeting
vi. Annex B – one statement – Lori

e. T 335, Fractured Particles
i. AASHTO revisions – none
ii. Table 1 – close brackets – Misty

f. T 176, Sand Equivalent
i. AASHTO revisions – none

g. Exams
i. Dry fines only, say preferred method – Misty

5. Revisions to Asphalt I and II Training Materials
a. R 97, Sampling Asphalt Mixtures

i. AASHTO revisions – none
ii. Haul unit or transport unit (R 90) – Winter Meeting
iii. General – can be used – Desna

b. R 47, Reducing Asphalt Mixtures
i. AASHTO revisions – none

c. T 329, Moisture Content
i. AASHTO revisions – none
ii. Remove 'to the nearest 2°C (4°F)' from Step 4

d. T 308, Asphalt Content
i. AASHTO revisions
1. New year
2. NCHRP reference
3. Precision statement
ii. 'Sampling' heading should be 'Sample Preparation' – Desna

e. T 209, G_{mm}
i. AASHTO revisions – none

f. T 166, G_{mb}
i. AASHTO revisions – some of the revisions may affect proposal
1. New year
2. Potable water
3. Removed formula from Terminology
4. Added Selection of Method
5. Apparatus
a. Water bath
b. Thermometer
c. Oven
ii. Change 'samples' to 'specimens' where applicable – Lori
iii. Add 'completely submerged' to PR checklist – Gilbert

g. R 66, Sampling Asphalt Material
i. AASHTO revisions – none

h. T 30, Sieve Analysis
i. AASHTO revisions
1. New year
2. Added Summary
3. Apparatus
4. Procedure
5. Annex A

i. T 312, Gyratory
i. AASHTO revisions – none

j. TM 13, Volumetrics
i. R 35 AASHTO revisions – none

k. Exams
i. Q20 – 'where' instead of 'given' for variables – Desna
ii. T 30 questions-no 'key' for the variable in the table – Lori

6. Revision to Self-Consolidating Concrete Module Training Materials
a. Warning on PowerPoints – Misty
b. T 347/T 351, Slump Flow and VSI
i. AASHTO revisions – none
c. T 345, J-Ring
i. AASHTO revisions – none
d. TM 18 Penetration

i. ASTM revision – none
e. TM 19, Column
i. ASTM revision – none
f. Exams

7. Revisions to General Training Materials
    a. Random PowerPoint Slide 13 – 13 ~~in.~~ ft. wide
    b. Add 'sectoring' to Terms
8. Training materials accessibility – Madeline
9. FOP Library
    a. Performance Exam Checklists – Winter Meeting
        i. R 60 – Misty
        ii. T 84 – Lori
        iii. T 89 – Dan
        iv. T 90 – Dan
        v. T 217 – Sean
        vi. T 304 – Mark
        vii. T 331 – Mark
        viii. TM 14 – Sean
        ix. TM 15 – Mark
        x. TM 16 – Sean
        xi. TM 17 – Mark
10. Third-Party Exam Delivery update

WAQTC ITEMS

a. Schedule for videos – Board
b. Shared folder
c. Website update – migration approved

ORGANIZATION DOCUMENTS

11. Administration Manual and RPIH – new name for R 75.
12. Style Guide – look at the AASHTO Style Guide
13. Strategic Plan

OPERATIONS MANUAL

ADDITIONAL ITEMS

14. *AASHTO Time Evaluation for Mechanical Shakers* for ballot
15. PAPA and Asphalt request – Misty Miner
16. YouTube Channel
17. Report from Executive Board meetings
18. 2025 Winter and Summer Meeting locations
19. Other items

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
WELCOME	Misty Miner, MDT, and Qualification Advisory Committee (QAC) Chair welcomed the committee members to Bismarck. Misty asked the attendees how their training efforts were going. She said that MDT is doing well, and she and her team have been continuing her training statewide Dan Gettman, AKDOT, said that Alaska has started using Webassessor to deliver their exams and is implementing AASHTOWare. These have both required significant adjustments. Lori Copeland, ITD, said that Idaho has been using Webassessor to deliver their exams, it has been a similarly significant transition. She also said that their training and certification program has moved to a statewide human resource division and has begun using a new learning management system (LMS). Sharon Taylor, NDDOT, says that she does all the technical training and the classes have been extremely full. North Dakota has worked with the Asphalt Paving Association (APA) for training and certification. Recently the person they have been working with the most is retiring and there are a lot of changes. Gilbert Arredondo, UDOT, has had similar struggles. The certification program has quit presenting reviews, and they are holding technicians accountable for preparation. UDOT now has a lab with equipment and props for each station. The department has been considering how to support training outside the certification program. Sean Parker, ODOT, runs the training and certification for the sampling and testing technicians, someone else runs the Inspector Certification program. ODOT also works with their local APA. Madeline Enright, CDOT, says that Colorado only used the WAQTC soils module and adds a CDOT specific exam. CDOT does not provide training other than the YouTube videos. About 90 percent of the technicians are private companies who are responsible for their own training. Mark Willoughby, WSDOT, says that they are implementing a new E1 program, a certification program for Engineers who are new to WSDOT. This adds significantly to the training and certification program. WSDOT also uses Webassessor to deliver their written exams. Currently, all technicians from private companies and 30 to 40 percent of WSDOT technicians from their two biggest regions take their exams through Webassessor. *Discussion, no further action required.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:

REVIEW OF AASHTO REVISIONS AND QAC PROPOSED REVISIONS FOR EACH PROCEDURE

EMBANKMENT & BASE AND IN-PLACE DENSITY (EBTT/DTT)

T 255/T 265	*Field Operating Procedure (FOP) for AASHTO T 255, Total Evaporable Moisture Content of Aggregate by Drying and T 265 Laboratory Determination of Moisture Content of Soils* <u>Revisions proposed before the meeting:</u> In the 2024 Training Materials, additional guidance was added to Procedure Step 1 to address the use of a lid and determining the container mass with the lid. Lori suggested that the lid should be addressed each time the mass of the container and sample is determined. Lori also recommended that PowerPoint Slides 19 to 23 be rearranged for better flow. She also pointed out that 'Aggregate' in Table 3 of the Student FOP was incomplete. These revisions were approved. <u>There are no revisions to the AASHTO methods in 2024</u>. <u>Other revisions</u> During review of the FOP for the proposed revisions, the committee decided that Steps 1.a. and 1.b. be reversed to match the order of aggregate and soils under Procedure. Calculating the mass of the sample by subtracting the mass of the container was reworded in Steps 4, 11, and 16. The Performance Exam Checklist was revised to match the revisions in the FOP. The committee decided that the sub-steps that are 'pick-one' or optional would not have pass/fail lines. If the full step is performed correctly the line for the full step will receive a 'P.' The committee also decided to include 'Sample protected from moisture?' as Step 2 and remove Step 6, 'Loss of moisture avoided prior to mass determination.' <u>Proposed revisions to the training materials:</u> **FOP:** - New revision date - Add 'and lid, when used' in Steps 3, 10 and 15	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	- Calculating the mass of the sample reworded in Steps 4, 11, and 16. **Performance Exam Checklist:** - New revision date - Additional Step 2 - Remove Step 6 - 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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 99/ T 180	*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* <u>There were no revisions proposed before the meeting.</u> <u>There are no revisions to the AASHTO methods in 2024</u>. <u>Other revisions</u> Lori pointed out that the Performance Exam Checklist for T 99 indicates in Step 7 to determine mass to 1 g (0.005 lb.), but Step 21 says 1 g only. Step 27 in the Performance Exam Checklist for T 180 also needs to be revised. The committee then noticed that sub-Steps 28a, b, and c, should not be sub steps but full steps. These steps are not sub-steps in the T 180 Performance Exam Checklist. These revisions were approved. <u>Proposed revisions to the training materials:</u> **FOP:** - None **Performance Exam Checklist (editorial):** - Add imperial equivalent to determining mass	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 99/ T 180	- T 99: Make Step 28 sub-steps full steps **'PowerPoint:** - None *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
R 75	*FOP for AASHTO R 75, Developing ~~a Family of Curves~~ Soil-Moisture Density Relations* <u>Revisions proposed before the meeting:</u> Lori would like the FOP for AASHTO R 75 graphs to have a solid curve for the 80 percent optimum moisture curve. The instructions say to 'Draw a smooth, "best fit," curved line connecting the 80 percent of optimum moisture points plotted.' The graph in the FOP has a dashed line. She pointed out that the AASHTO practice has a solid line. This revision was approved. <u>2024 revisions to the AASHTO practice:</u> - New revision date - New title - Verbiage changes throughout "family" to "group" <u>Proposed revisions to the training materials:</u> **FOP:** - New revision date - New AASHTO date - New title, 'Developing Soil-Moisture Density Relations' - Solid line for 80 percent optimum moisture curve **Practice:** - 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	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
R 75	**PowerPoint:** - Revisions to match FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 272	*FOP for AASHTO T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture* <u>There were no revisions proposed before the meeting.</u> <u>There are no revisions to the AASHTO method in 2024</u>. <u>Other revisions:</u> Lori asked why the calculations are formatted differently in this FOP. The calculations in the FOP for AASHTO T 99/T 180 are cleaner and easier to follow, the committee agreed. There are many references to 'Family of Curves, in this FOP, these should be changed to match the name change of the FOP for AASHTO R 75. Desna was asked to put revisions to AASHTO T 272 on the 2025 Winter Meeting Agenda. The references need to reflect the revisions to AASHTO R 75. <u>Proposed revisions to the training materials:</u> **FOP (editorial):** - Reformat the calculations - Solid line for 80 percent optimum moisture curve **Performance Exam Checklist:** - None **PowerPoint:** - Revisions to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.* *Revisions to AASHTO T 272 will be an agenda item for the 2025 QAC Winter Meeting.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 85	*FOP for AASHTO T 85, Specific Gravity of Coarse Aggregate* There were no revisions proposed before the meeting. There are no revisions to the AASHTO method in 2024. *There are no revisions to the 2024 Training Materials.*	
T 310	*FOP for AASHTO T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)* Revision discussion: There are no revisions to the AASHTO method in 2024. *There are no revisions to the 2024 Training Materials.*	
T 355	*FOP for T 355, In-place Density of Asphalt Mixtures by Nuclear Methods* There were no revisions proposed before the meeting. There are no revisions to the AASHTO method in 2024. *There are no revisions to the 2024 Training Materials.*	
EXAMS	Lori said that she had some feedback from the candidates that took the exams on Webassessor. Some of the graphs for the FOP for AASHTO T 99/T 180, R 75, and T 272 should be darker. This will be done. Lori mentioned that one of the R 75 Performance Exams could be graphed slightly differently by a technician that uses a point that is shown to be thrown out. The resulting graph appears legitimate. She would like the confusing point moved. The committee agreed. Revisions to the written exams include: - Darkening graphs - Reformatting the answer and distractors vertically instead of a grid. *Committee members: refer to the exam errata for specific revisions.* *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
CONCRETE (CTT)		
TM 2	*WAQTC TM 2, Sampling of Freshly Mixed Concrete* Revisions proposed before the meeting: Lori compared the Oral Performance Exam Checklist to the physical Performance Exam Checklist and proposed revisions to harmonize them. She suggests moving steps to the order of the FOP and adding stationary mixer in the Oral Performance Exam Checklist, and steps for the revolving drum truck mixer in the Performance Exam Checklist. Lori pointed out that the FOP does not state that increments should be combined and remixed, but the Performance Exam Checklists do. The committee decided to add this to the FOP as a sample may be taken in increments. There are no revisions to the AASHTO R 60 in 2024. **FOP**: - Add 'combine sample or increments' to Step 5 **Performance Exam Checklist:** - Rearrange steps 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 *This revision will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 309	*FOP for AASHTO T 309, Temperature of Freshly Mixed Hydraulic Cement Concrete* There were no revisions proposed before the meeting. There are no revisions to the AASHTO methods in 2024. *There are no revisions to the 2024 Training Materials.*	
	FOP for AASHTO T 119, Slump of Hydraulic Cement Concrete There were no revisions proposed before the meeting. There are no revisions to the AASHTO method in 2024.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 119	Other revisions The committee noticed that in TM 2 Wet Sieving, it states, 'Pass the concrete over the designated sieve.' The various FOPs indicate the max size of aggregate but do not state the size of sieve to use for wet sieving. They decided to add 'remove the aggregate by sieving the concrete sample over a 37.5 mm (1½ in.) sieve' to Step 1. Proposed revisions to the training materials: **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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 121	*FOP for AASHTO T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete* There were no revisions proposed before the meeting. 2024 AASHTO revisions: • New revision date • ρ_T • Determine mass of empty measure • Concrete mass instructions These revisions were proposed by WAQTC and do not affect the training materials. Other revisions In the Mallet section of Apparatus, 0.5 ft^3 is used but elsewhere ½ ft^3 is used. The committee decided to make them match.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Proposed revisions to the training materials: **FOP:** - 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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 152	*FOP for AASHTO T 152, Air Content of Freshly Mixed Concrete by the Pressure Method* There were no revisions proposed before the meeting. 2024 AASHTO revisions: • New revision date • Mallet in apparatus was revised to match T 121 AASHTO T 121 states to hit the outside of the measure 10 to 15 times after vibrating, AASHTO T 152 does not. This will be an agenda item for the 2025 QAC Winter Meeting. Other revisions Lori pointed out that the steps in the PowerPoint do not match the steps in the procedure. While correcting this, the committee decided that Step 6 of 'Strike-Off and Air Content' was bit long, upon review of the FOP they decided to split Step 6 into two steps. 'Jar the meter gently until all air is expelled from this same petcock,' is the new Step 7. As discussed in the FOP for AASHTO T 119, this FOP does not state the size of sieve to use for wet sieving. 'Remove the aggregate by sieving the concrete sample over a 37.5 mm (1½ in.) sieve,' was added in Sampling Step 1.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Proposed revisions to the training materials: **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. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.* *Revisions to AASHTO T 152 will be an agenda item for the 2025 QAC Winter Meeting.*	DESNA BERGOLD
R 100	*FOP for AASHTO R 100, Making and Curing Concrete Test Specimens in the Field* There were no revisions proposed before the meeting. There are no revisions to the AASHTO method in 2024. Other revisions The committee reviewed the flow of the PowerPoint and decided that it would be cleaner to separate casting a 4 in. cylinder and a 6 in. cylinder in the FOP and the PowerPoint. The committee drafted revisions to address all the steps for both cylinder sizes in rodding and internal vibration. Lori volunteered to help Desna revise the PowerPoint to match the FOP. Sean shared that the AASHTO method has tables listing the specimen size, number of roddings or insertions, and approximate depth of the layers for both rodding and internal vibration. The committee decided that similar tables would be good to have in the FOP. Desna said that she would work on this, but not necessarily for this year.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Proposed revisions to the training materials: **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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.* *Lori Copeland will assist in revising the PowerPoint to match the FOP.*	DESNA BERGOLD LORI COPELAND
EXAMS	Revisions to the written exams include: - Reformatting the answer and distractors vertically instead of a grid. *Committee members: refer to the exam errata for specific revisions.*	DESNA BERGOLD

AGGREGATE (AGTT)

R 90	*FOP for AASHTO R 90, Sampling Aggregate Products* There were no revisions proposed before the meeting. There are no revisions to the AASHTO method in 2024. *There are no revisions to the 2024 Training Materials.*	
R 76	*FOP for AASHTO R 76, Reducing Samples of Aggregate to Testing Size* Revisions proposed before the meeting. Lori said that some of the performance exam proctors have interpreted the Performance Exam Checklist as requiring use of the quartering template for quartering. The committee decided to remove the pass/fail lines for the optional steps as was done on the Performance Exam Checklist for the FOP for AASHTO T 255/T 265. Lori asked why the FOP does not address sectoring on a tarp as the AASHTO practice does. The committee decided that the FOP should be	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	revised to include this. Steps 1, 2, and 3 of Method B Sectoring were revised. There are no revisions to the AASHTO method in 2024. **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 Checklists:** - Remove pass/fail lines from the optional sub-steps **PowerPoint:** - Revisions to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 255	*FOP for AASHTO T 255, Total Evaporable Moisture Content for Aggregates* Revisions proposed before the meeting: Lori pointed out that the procedure doesn't address cooling the container, just the sample, which is still in the container. Step 15 was revised to state, 'sample and container' Revisions to match those made to the FOP for AASHTO T 255/ T 265 revisions for determining masses will be carried through this FOP. Revisions to the PowerPoint for the FOP for AASHTO T 255/ T 265 will also be made. There are no revisions to the AASHTO method in 2024. **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 (different step in Method C) and record.'	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Performance Exam Checklists: - None **PowerPoint:** - Revisions to match the FOP *<u>These revisions will be included in the 2024 Training Materials pending Executive Board approval.</u>*	DESNA BERGOLD
T 27/T 11	*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* <u>Revisions proposed before the meeting:</u> Lori said that 'Limit agitation to 10 min.' in Step 5 doesn't read well. The committee agreed and changed it to 'do not exceed 10 minutes.' Desna noticed that in the example tables for Methods B and C, the 9.5 mm sieve is listed as 9.50 mm. Every other use is 9.5 mm. This will be changed for consistency. During the 2023 Executive Board Spring Meeting, the QAC was asked to address appropriate use of large shakers and sieves. The AASHTO test method states in Note 1, 'The same mechanical sieve shaker may not be practical for all sizes of samples because the large sieving area needed for practical sieving of a large nominal size coarse aggregate very likely could result in loss of a portion of the sample if used for a smaller sample of coarse aggregate or fine aggregate.' The committee decided that this should be addressed in Apparatus under the Mechanical Shaker. A new Note 1 was added, 'Sieves with a large sieving area, greater than 304.8 mm (12 in.) diameter may not be practical for all sizes of samples. The large sieving area needed for practical sieving of a large nominal size coarse aggregate could result in loss of a portion of the sample if used for a smaller sample of coarse aggregate or fine aggregate affecting final test results.' Lori pointed out that Annex B is redundant. The redundant statements were removed and the paragraphs that define overloading were moved under Table B1. Annex B also included a statement that additional sieves may be needed to determine fineness modulus. This was removed. <u>2024 AASHTO revisions:</u> • New revision date (both)	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	• Balance requirements • Oven requirements T 11 only • Wetting agent T 11 only • Determine masses to 0.1 g. (1.0 percent removed) • Additional language for washing • Dry according to T 255 Many of the revisions to the AASHTO test methods were proposed by WAQTC and do not affect the FOP. Determining masses to 0.1 g and removing 0.1 percent and the additional language for rinsing the utensil during washing will be incorporated. <u>Proposed revisions to the training materials:</u> **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 Step 5 in Methods A and B and Step 13 in Method C. - Add 'Rinse utensil, if used, into the washed sample' in Step 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 Table B1. ▪ Change 'testing' to 'sieving'	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Performance Exam Checklist, all methods: - Remove temperature requirements for drying - Remove 0.1 percent from determining masses - Add 'utensil rinsed' **PowerPoint:** - Revisions to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 335	*FOP for AASHTO T 335, Determining the Percentage of Fracture in Coarse Aggregate* Revisions proposed before the meeting: Misty pointed out that there is a missing bracket in Table 1. This will be revised editorially. There are no revisions to the AASHTO method in 2024. Proposed revisions to the training materials: **FOP (editorial):** - Close bracket in Table 1 **Performance Exam Checklist:** - None *These revisions will be included in the 2023 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 176	*FOP for AASHTO T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test* No revisions were proposed before the meeting. There are no revisions to the AASHTO method in 2024. Revision discussion Lori proposed rearranging the slides and videos to better follow the steps. Move Slide 15 to 12. Proposed revisions to the training materials: **FOP:**	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	- None **Performance Exam Checklist (editorial):** - Removed pass/fail line for optional steps **PowerPoint:** - Rearranged Slides *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
EXAMS	Lori said that she has received feedback on the format of the T 27T 11 calculations. Many people are getting confused by the formulas listed before the tables and think they do not have enough information for the calculations. The committee decided that the formulas and the tables should be reversed. Lori said that as ITD uses Method B and only uses the cumulative method of calculating the gradation, the information for individual method can be removed. Misty and Dan said that the individual method can be removed for Method C also. Revisions to the written exams include: - New year - 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. *Committee members: refer to the exam errata for specific revisions.* *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

ASPHALT TEST METHODS (ASTT I AND II)

R 97	*FOP for AASHTO R 97, Sampling Asphalt Mixtures* <u>Revisions proposed before the meeting.</u> During the 2024 Winter Meeting, Misty pointed out that in the FOP for AASHTO R 47, the truck is mostly referred to as a 'haul unit' but the FOP for AASHTO R 90 refers to it as a 'transport unit.' The committee decided to change 'haul unit' to 'transport unit.'	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	There are no revisions to the AASHTO method in 2024. Proposed revisions to the training materials: **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’ *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
R 47	*FOP for AASHTO R 47, Reducing Samples of Asphalt Mixtures to Testing Size* No revisions proposed before the meeting: There are no revisions to the AASHTO method in 2024. *There are no revisions to the 2024 Training Materials.*	
T 329	*FOP for AASHTO T 329, Moisture Content of Asphalt Mixtures by Oven Method* Revisions proposed before the meeting: Step 4 says, ‘Determine and record the temperature of the sample to the nearest 2°C (4°F).’ The temperature requirement is not in the AASHTO standard. Remove ‘to the nearest’ from Step 4. There are no revisions to the AASHTO method in 2024. Proposed revisions to the training materials: **FOP:** - Remove ‘to the nearest 2°C (4°F)’ from Step 4	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Performance Exam Checklist (editorial): - None **PowerPoint:** - Revisions to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 308	*FOP for AASHTO T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method* <u>Revisions proposed before the meeting:</u> Desna suggested that the 'Sampling' heading should be changed to 'Sample Preparation' which is what it discusses. <u>Additional revisions</u> <u>Revisions to the AASHTO method in 2024:</u> - New revision date - NCHRP reference - Precision statement <u>Proposed revisions to the training materials:</u> **FOP:** - New revision date - New AASHTO date - Change 'Sampling' to 'Sample Preparation' **Performance Exam Checklist:** - None **PowerPoint:** - Revisions to match the FOP - Slide 58 change .01 to 0.1 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 209	*FOP for AASHTO T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures* No revisions were proposed before the meeting. There are no revisions to the AASHTO method in 2024. Although standardization of the container is discussed at the beginning of the FOP, technicians are getting confused when they try to calculate the specific gravity. They are unsure where to find the standardized value of the container. The committee decided to add to the Standardization section, 'Record the standardized container mass for use in subsequent calculations.' 'Record the standardized container mass,' will also be included on Slide 8 in the PowerPoint. Proposed revisions to the training materials: **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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 166	*FOP for AASHTO T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens* Revisions proposed before the meeting: Lori pointed out that terms 'specimen' and 'sample' are used interchangeably. The term 'sample' should be changed to 'specimen' when referring to a core or laboratory compacted specimen. Gilbert proposed adding, 'completely submerged' to the Performance Exam Checklist. The committee reviewed the checklist and added 'and apparatus completely submerged' to Step 2. Revisions to the AASHTO method in 2024: • New year • Potable water	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 166	• Removed formula from Terminology • Added Selection of Method • Apparatus • Water bath • Thermometer • Oven In response to the AASHTO method revisions, the committee decided to add 'potable water' to the apparatus of Methods A and B and the instruction under the 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.' 'Distilled water' will also be added to the apparatus section of Method B. <u>Proposed revisions to the training materials:</u> **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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
R 66	*FOP for AASHTO R 66, Sampling Asphalt Materials*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	No revisions proposed were before the meeting. There are no revisions to the AASHTO practice in 2024. *There are no revisions to the 2024 Training Materials.*	
T 30	*FOP for AASHTO T 30, Mechanical Analysis of Extracted Aggregate* No revisions were proposed before the meeting. Revisions to the AASHTO method in 2024: - New revision year - Added Summary - Apparatus - Procedure - Annex A Determining masses to 0.1 g and removing 0.1 percent and the additional language for rinsing the utensil during washing as with the FOP for AASHTO T 27/T 11 will be incorporated. Proposed revisions to the training materials: **FOP:** - New 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?'	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	PowerPoint: - Revisions to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 312	*FOP for AASHTO T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor* <u>No revisions were proposed before the meeting.</u> <u>There are no revisions to the AASHTO method in 2024</u>. <u>Other revisions</u> Remove sub-Steps 7 a and b, this is a repeat of direction under Equipment Preparation.' <u>Proposed revisions to the training materials:</u> **FOP (editorial):** - Remove from Step 7 ▪ Check the pressure (600 ±18 kPa). ▪ Check the angle (1.16 ±0.02°). **Performance Exam Checklist:** - New Revision date - Rearranged steps - Added 600 ±18 kPa - Added 'Mix leveled' **PowerPoint:** - Revision to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
TM 13	*WAQTC TM 13, Volumetric Properties of Asphalt Mixtures* <u>No revisions proposed before the meeting:</u> <u>There are no revisions to AASHTO R 35 in 2024</u>. *There are no revisions to the 2024 Training Materials.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
EXAMS	During the 2023 Summer Meeting the committee determined to write new questions for the Asphalt II module. This effort continued through the 2024 Winter Meeting and two subsequent virtual meetings. The committee approved many of the new questions during the meeting. Desna was asked to add the remaining questions to the exams and distribute them for approval and incorporation in the 2024 Training materials. Revisions to the written exams include: - New year - Reformatting the answer and distractors vertically instead of a grid. - New questions *Desna will distribute revised written exams for final approval.* *Committee members: refer to the exam errata for specific revisions.* *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

SELF-CONSOLIDATING CONCRETE TESTING TECHNICIAN (SCCTT) MODULE

POWER-POINTS	Misty proposed adding the warning addressing the caustic nature of cementitious mixtures that is included in the FOP to the PowerPoint presentations. The committee agreed. **PowerPoint:** - Add slide to the presentation for all FOPs, 'Warning Fresh Hydraulic cementitious mixtures are caustic and may cause chemical burns to skin and tissue upon prolonged exposure' *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 347 / T 351	*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)* <u>Revisions to the Training Materials proposed before the meeting:</u> Updating slide numbers to address 'Warning' slide addition. <u>There are no revisions to the AASHTO method in 2024</u>. <u>Proposed revisions to the training materials:</u>	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	FOP (editorial): - Revise slide numbers **Performance Exam Checklist:** - None **PowerPoint:** - Add 'Warning' slide *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 345	*FOP for AASHTO T 345, Passing Ability of Self-Consolidating Concrete by J-Ring* <u>Revisions to the Training Materials proposed before the meeting:</u> Updating slide numbers to address 'Warning' slide addition. <u>There are no revisions to the AASHTO method in 2024</u>. <u>Other revisions:</u> Lori pointed out that the formula for the height of the SCC at the center of the J-ring, h_c, is not included in the Calculations section. This will be added. She also wonders why the example for J-ring Flow calculations mixed units and the other examples are not. This calculation will be split into Imperial and SI units. <u>Proposed revisions to the training materials:</u> **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 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
TM 18	*WAQTC TM 18, Penetration Test for Static Segregation Resistance of Self-Consolidating Concrete (SCC)* Revisions to the Training Materials proposed before the meeting: Updating slide numbers to address 'Warning' slide addition. There are no revisions to the ASTM C1720 in 2024. Revision discussion Lori pointed out that the instructor notes on Slide 15, now Slide 16, incorrectly list p_i and p_f when it should be d_i and d_f. Proposed revisions to the training materials: **FOP (editorial):** - Revise slide numbers **Performance Exam Checklist:** - None **PowerPoint:** - Add 'Warning' slide - Correct instructor's not on Slide 16 *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
TM 19	*WAQTC TM 19, Static Segregation of Self-Consolidating Concrete (SCC) Using the Column Method* Revisions to the Training Materials proposed before the meeting: Updating slide numbers to address 'Warning' slide addition. There are no revisions to the ASTM C1610 in 2024. Other revisions Lori pointed out that the apparatus section should include a large absorbent cloth. This was approved. Proposed revisions to the training materials: **FOP:** - New revision date - Add 'large absorbent cloth' to apparatus	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	- Revise slide numbers **Performance Exam Checklist:** - None **PowerPoint:** - Add 'Warning' slide - Revision to match the FOP *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
EXAMS	*Committee members: refer to the exam errata for specific revisions.* *Revisions to the written exams include:* - *Reformatting the answer and distractors vertically instead of a grid.* *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
ALL WRITTEN EXAMS	During the 2024 Winter meeting, the committee decided that the written exams should be reformatted so that the options are vertical instead of in a grid. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
NEXT EXAMS	The committee decided to continue to create new questions one module at a time. In the coming year, the committee will write new questions to replace the true/false questions for the Concrete module. They are to send the new questions to Desna by Dec. 31, 2024, for review during the 2025 QAC Winter meeting. *The QAC members will send new multiple-choice questions for Concrete to Desna by Dec. 31, 2024.*	QAC MEMBERS

GENERAL FILES

RANDOM POWERPOINT	On Slide 13 of the 'Random' PowerPoint presentation, the example says material was 'Placed 0.50 ft. thick and 13 in. wide.' This should be '13 ft. wide.' *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
TERMINOLOGY	Reducing a sample by 'sectoring' is in both the FOPs for AASHTO R 76 and R 97. The committee decided to include the term and its definition in the Terminology chapter of the training materials. Lori suggested that the terms 'bleed, 'halo,' and 'HRWA' and their definitions should be added as they are used in the SCC training materials. The committee agreed. <u>Proposed revisions to the training materials:</u> Add the following to Terminology - Bleed – Occurs in concrete when coarse aggregate tends to settle down and free water rises to the surface. Segregation is the cause of bleeding in the mix. - 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. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TRAINING MATERIALS

ACCESSIBILITY	*ADA Accessibility of Training Materials* Madeline has been working with the Embankment & Base module to make it ADA accessible. She said that the format of the Student FOPs cannot be made accessible. She has had to reformat them completely to meet Colorado requirements. Desna explained that the student FOPs are in three column tables, the first column is used for pictures and charts, the second narrow column lists the PowerPoint presentation slide numbers, with the content in the remaining column. Madeline asked how committed the committee is to this format. The committee said they were open to developing a different format that would be more accessible and would like to review what Madeline has done.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Madeline shared the draft 2024 CDOT Soils Inspection Manual and the formatting she is using for accessibility. She explained that the serif fonts, like the current Times New Roman, are not considered good fonts for onscreen content. Sans serif fonts are more common, she chose to use Trebuchet MS. The committee asked Madeline to keep them informed of her progress. Eventually the Student FOPs could be revised to be more accessible. *Madeline will share her progress and experience revising the training materials with the QAC Members.*	MADELINE ENRIGHT

REVIEW ASSIGNMENTS

2024 REVISION REVIEWS	*2024 Revision Reviews* The 2024 revision review assignments are: General: Gilbert Arredondo and Sharon Taylor Embankment & Base and In-place Density: Madeline Enright and Dan Gettman Concrete: Mark Willoughby and Misty Miner Aggregate: Lori Copeland and Sharon Taylor Asphalt: Dan Gettman, Gilbert Arredondo, and Mark Willoughby SCC: Lori Copeland and Sean Parker Administration Manual and RPIH: Misty Miner and Gilbert Arredondo The committee members will review all the training materials: Student and Short FOPs, Review Questions, Performance Exams, Written Exams, and PowerPoint presentations for the module they are assigned. Corrections will be sent to Desna. *Desna will send the draft revisions out by Sept. 6th. Review deadline is Sept. 20th.* *Committee members will review the draft revisions of the modules assigned. Corrections will be sent to Desna.*	DESNA BERGOLD QAC MEMBERS

FOP LIBRARY

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
PERFORMANCE EXAM CHECKLISTS	*Performance Exam Checklists* The committee discussed Performance Exam Checklists that were approved during the 2024 QAC Winter Meeting for the FOPs in the Library. Desna asked if the Performance Exam Checklists were to be posted on the website. The committee decided that for now they will just be included in the training materials for internal use. *The QAC approved Performance Exam Checklists will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
R 60	*AASHTO R 60, Sampling of Fresh Concrete, Champion Misty Miner* Revisions to the FOP and a new FOP Performance Exam Checklist were approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
R 79	*FOP for AASHTO R 79, Vacuum Drying Compacted Asphalt Specimens, Champion Misty Miner* A new Performance Exam Checklist was approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 84	*FOP for AASHTO T 84, Specific Gravity and Absorption of Fine Aggregate, Champion Lori Copeland* A new Performance Exam Checklist was approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 89	*FOP for AASHTO T 89 Liquid Limit, Champion Dan Gettman* A new Performance Exam Checklist was approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 90	*FOP for AASHTO T 90, Plastic Limit and Plasticity Index, Champion Dan Gettman* A new Performance Exam Checklist was approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 217	*FOP for AASHTO T 217, Speedy Moisture in Soils, Champion Sean Parker* A new Performance Exam Checklist was approved during the 2024 Winter Meeting.	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	These revisions will be included in the 2024 Training Materials pending Executive Board approval.	
T 304	*FOP for AASHTO T 304, Uncompacted Void Content of Fine Aggregate, Champion Mark Willoughby* A new Performance Exam Checklist was approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
T 331	*FOP for AASHTO T 331, G_{mb} Using Automatic Vacuum Sealing Method, Champion Mark Willoughby* Revisions to the FOP and a new Performance Exam Checklist were approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD
TM 14	*WAQTC TM 14, Asphalt Mixture Laboratory Prepared Test Specimen, Champion Sean Parker* The committee decided that this test method did not need a Performance Exam Checklist. *No action required.*	
TM 15	*WAQTC TM 15, Laboratory Maximum Dry Density of Granular Soil and Soil/Aggregate, Champion Mark Willoughby* Mark and his team are still revising the TM 15 Performance Exam Checklist and will submit it to the QAC when it is finalized. *Mark Willoughby will submit the Performance Exam Checklist for TM 15.*	MARK WILLOUGHBY
TM 16	*WAQTC TM 16, Flat and Elongated Particles in Coarse Aggregate, Champion Sean Parker* A new Performance Exam Checklist was approved during the 2024 Winter Meeting. *These revisions will be included in the 2024 Training Materials pending Executive Board approval.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
TM 17	*WAQTC TM 17, Determination of Theoretical Maximum Dry Density, Champion Mark Willoughby* The committee decided that this test method did not need a Performance Exam Checklist. *No action required.*	

WAQTC ITEMS

THIRD-PARTY EXAM DELIVERY	*Third-Party Exam Delivery Update* Desna explained that the e-commerce and delivery fees have not been paid. The Board had agreed that the agencies who are using Webassessor will be assessed these fees. Mark said that he thought the fees had been paid as he had forwarded the bills to the finance office. Desna said that she has been sorting the monthly reconciliation reports by test center location. Lori said that some of ITDs technicians use a testing center in Washington and she and Mark will need to sort them out. Desna said that she noticed some fluctuation in the fees and charges in the last couple of months. These fluctuations do not meet the contract. She said that she will follow up with those who use Webassessor once Kryterion responds. Desna also said that the Kryterion representative that WAQTC works with has suggested holding monthly meetings. Dan, Lori, and Mark agreed that this would be helpful. Desna will work with Mayra Garcia with Kryterion to schedule monthly meetings. Mark said that a topic for the first meeting is that the testing centers are not consistent in what the candidate is allowed to use. WAQTC had stipulated that a candidate could bring a non-programmable calculator and be given scratch paper. Some centers are telling the candidates that they can only use the calculator on the screen and refusing to provide scratch paper. This will be discussed with Mayra. *Desna will begin scheduling monthly meetings with Mayra Garcia, Kryterion, and Lori, Dan, and Mark*	DESNA BERGOLD
SHARED FOLDER	Scott Nussbaum, UDOT and Executive Board Treasurer, has created a shared folder on UDOT's Google Drive. All the QAC members believe that they can access the drive except Sean, ODOT's Information Technology (IT) division will not allow it.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Desna said that she can continue to email documents and mail jump drives to Sean. She will also verify everyone has access and can retrieve this year's revisions. *The QAC members will confirm access to the Google Drive before the draft revisions go out, Sean will still receive a jump drive.*	QAC MEMBERS DESNA BERGOLD
WEBSITE UPDATE	*Migrating the WAQTC website to WordPress* Desna announced that the website migration has been approved. Desna will contact Ryan Cubillas, Applied Microsystems, and get the migration started. *Applied Microsystems will begin the website migration.*	DESNA BERGOLD

ORGANIZATION DOCUMENTS

WAQTC ADMINISTRATION MANUAL AND REGISTRATION, POLICIES, AND INFORMATION HANDBOOK (RPIH)		
ANNEX A	*Annex A* Annex A of both the *Administration Manual and Registration, Policies, and Information Handbook (RPIH)* will need to be revised to the new title for the FOP for AASHTO R 75, Developing ~~a Family of Curves~~ Soil-Moisture Density Relations. *The Organizational Documents will be revised with the new name of AASHTO R 75*	DESNA BERGOLD

OPERATIONS MANUAL

	There were no proposed revisions to the Operations Manual.	

ADDITIONAL ITEMS

AASHTO TIME EVALUATION FOR MECHANICAL SHAKERS	AASHTO recently balloted a new Standard Practice, Time Evaluation for Mechanical Shakers. It was suggested the committee review the practice and recommend comments to their voting members. Desna was asked how to become a 'friend' of a Committee on Materials and Pavement (COMP) Technical Subcommittee (TS) so to receive notices of ballots. She said to email the TS Chair or Vice Chair. *Committee members should review the proposed new practice.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
PAPA AND ASPHALT REQUEST	Misty received a request from Pennsylvania Asphalt Pavement Association (PAPA) for information on sampling locations and temperature of asphalt mixtures. They provided a list of questions that Misty forwarded to the committee members, but she didn't get any response. The committee reviewed the questions and provided brief responses. *PAPA question: What do you think is the best sampling location for the most representative produced asphalt mixture sample?* The committee agreed that sampling from the grade either before or after the paver is the most representative for Hot Mix Asphalt (HMA) and is frequently used for quality assurance. Many suggested sampling at the plant is necessary for quality control. Not all agencies sample asphalt mixtures at the most representative location due to safety and other considerations. *PAPA question: Do you check the temperature at the plant? If so, how? Or do you rely on the temp the plant is recording? Is there a process you use to check the temperature of the material at placement?* One member agency determines the temperature in the truck while sampling, others check it on the grade for compaction temperature. Some track the temperature loss from the plant in the truck and on the grade and check the mat with an infrared thermometer. The temperature is usually monitored more closely when there are long distances between the plant and the grade. *PAPA question: Do you get the temperature of the asphalt mixture sample? If so when?* During sampling. *PAPA question: Does your temperature specification change based on additives or Warm Mix?* Temperature specs are based on the job mix formula. *PAPA question: Does your state reject loads or trucks outside of Mixing or Placement temperature spec?* Some agencies do. Many agencies' specifications identify 'paving windows' based on the calendar and expected ambient temperatures. Misty thanked everyone for their input. *Misty will reply to Pennsylvania Asphalt Pavement Association request for information.*	MISTY MINER

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
YOUTUBE CHANNEL	YouTube Channel Aggregate Videos playlist Asphalt Videos playlist Concrete Videos playlist Embankment & Base and In-Place Density Videos playlist CDOT's videos: https://www.codot.gov/programs/waqtc. MDT full training videos at WAQTC Qualified Technician's Registry (mt.gov). *No action discussed.*	

REPORT FROM EXECUTIVE BOARD MEETING

2024 PLANNED WORK	During the 2024 Spring Executive Board Meeting, the Board revised the Strategic Plan to include the work recently proposed by the QAC and Board members. **2024 PLANNED WORK** Priorities of the Executive Board: • Continue work on 'on-going' activities. • Evaluate existing training materials for needed improvements / updates. • Member teleconferences to share developments in training and certification platforms. • Develop online training and videos. • Website updating • Secure electronic file sharing • Evaluate membership funding needs *Discussion item.*	
BOARD SUMMER MEETING	*Executive Board Summer Meeting* The Executive Board Summer Meeting will be held virtually Aug. 2, at 11:00 am MDT.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
QAC MEETINGS	*2025 QAC Winter and Summer Meeting Locations* The committee discussed locations for the upcoming 2025 QAC Meetings. The Winter Meeting has not been held in Reno since 2022 and Reno is usually a cost-effective location. They also discussed going back to Arizona now that ADOT is a member agency. For the 2025 Summer Meeting, Lori suggested going to Idaho, and recommended Coeur d'Alene. Meetings haven't been held in Washington for a while and Mark suggested the Seattle area. Sean recommended Helena, MT. Madeline proposed a member state rotation for the Summer Meeting to make advance planning easier. She created a spreadsheet with the locations of the meetings since 20212, with a suggested alphabetical rotation starting 2026. The committee decided this is a good idea and will give it further consideration. The committee discussed the options and decided to request approval from the Board for the following locations for each meeting. 2025 Winter Meeting to be held January 27th through the 31st. Proposed locations: • Reno NV • Phoenix AZ 2025 Summer Meeting to be held July 14th through the 18th. Proposed locations: • Coeur d'Alene, ID • Seattle, WA • Helena, MT *Misty Miner and Gilbert Arredondo will discuss the meetings' locations with the Executive Board.*	MISTY MINER GILBERT ARREDONDO

ACTION ITEMS

QAC Member Follow-up

All QAC Members

Write new multiple-choice questions for Concrete and send to Desna by Dec. 31, 2024.

Revision review deadline is Sept. 20th.

Verify access to Google Drive shared folder (except Sean)

Review AASHTO balloted 'Standard Practice, Time Evaluation for Mechanical Shakers'

Misty Miner

- Revision review assignment – Training materials for Concrete and Administration Manual and RPIH
- Present revisions to training materials to the Executive Board during the 2024 Summer Board Meeting
- Respond to Pennsylvania Asphalt Pavement Association's request for information.
- Present 2025 Meeting location proposals to the Executive Board

Gilbert Arredondo

- Revision review assignment – Training materials for Asphalt and General files, and Administration Manual and RPIH
- Present 2025 Meeting location proposals to the Executive Board

Lori Copeland

- Revision review assignment - Training materials for Aggregate and SCC
- Assist in revising the PowerPoint for the FOP for AASHTO R 100 to match the FOP.
- Assist with revisions to AASHTO R 75 Performance Exam

Madeline Enright

- Revision review assignment - Training materials for Embankment & Base and In-place Density
- Share materials revised for ADA accessibility with the QAC members

Dan Gettman

- Revision review assignment - Training materials for Embankment & Base and In-place Density and Asphalt

Sean Parker

- Revision review assignment - Training materials for SCC

Sharon Taylor

- Revision review assignment - Training materials for Aggregate and General files

Mark Willoughby

- Revision review assignment - Training materials for Concrete and Asphalt
- TM 15: Send Desna revised TM 15 and Performance Exam Checklist

Desna Bergold

- Revise training materials and organizational documents. Distribute by Sept. 6
- Contact Applied Microsystems to begin website migration
- Draft Tables for the FOP for AASHTO R 100