# WAQTC QAC 2025 SUMMER MEETING **MINUTES**

**DATE:** JULY 14<sup>TH</sup> THROUGH 18<sup>TH</sup>

**TIME:** MON 1:00 PM TO 5:00 PM, TUES THRU **CHAIR:** MISTY MINER, MDT **RECORDER:** DESNA BERGOLD, D B CONSULTING

Thurs 8:00 am to 5:00 pm, Fri 8:00

AM TO NOON

**LOCATION: SPRINGHILL SUITES, BOISE ID** 

**ATTENDEES:** 

MISTY MINER, MDOT, CHAIR

GILBERT ARREDONDO, UDOT, VICE CHAIR

DAN GETTMAN, AKDOT & PF MADELINE ENRIGHT, CDOT

ISABELLE PANOS, ITD

SHARON TAYLOR, NDDOT

ADAM ROSE, ODOT

MARK WILLOUGHBY, WSDOT

DESNA BERGOLD, D B CONSULTING

LORI COPELAND, D B CONSULTING

CHAD CLAWSON, ITD

**ABSENT:** 

BRENT CONNER, ADOT ERIC WILSON, WFL-FHWA

### **MEETING ITEMS:**

REVIEWS OF AASHTO REVISIONS AND QAC PROPOSED REVISIONS FOR EACH PROCEDURE

- 1. Welcome
- 2. Revisions to Aggregate Training Materials
  - a. R 90, Sampling Aggregate Products
    - i. AASHTO revisions none
    - ii. PowerPoint Slide #14 fix numbering Misty
  - b. R 76, Reduction
    - i. AASHTO revisions none
    - ii. Reformat quartering to same as sectoring Lori
    - iii. PowerPoint Slide 35 add relevant directions to diagram slides Lori
  - c. T 255, Moisture Content of Aggregate
    - i. AASHTO revisions
      - 1. New AASHTO date
    - ii. Move Table 2 to Step 5 Lori
  - d. T 27/T 11, Sieve Analysis
    - i. AASHTO revisions (T 11 only)
      - 1. New date
      - 2. New title
      - 3. New Note 3 on Mechanical washers
      - 4. New Annex A
  - e. T 335. Fractured Particles
    - i. AASHTO revisions none
  - T 176, Sand Equivalent
    - i. AASHTO revisions
  - g. Exams
    - i. Exam 2 Method B check sum

- ii. New T 11 title
- 3. Revisions to Asphalt I and II Training Materials
  - a. R 97, Sampling Asphalt Mixtures
    - i. AASHTO none
  - b. R 47, Reducing Asphalt Mixtures
    - i. AASHTO revisions none
    - ii. Add back Quartermaster Sean (4/2 and 6/26)
    - iii. Rework some steps Dan
    - iv. Note 1: Several small increments Eric
  - c. T 329. Moisture Content
    - i. AASHTO revisions none
  - d. T 308, Asphalt Content
    - i. AASHTO revisions
      - 1. New date
      - 2. Revised Step 9 in Annex
      - 3. Revised Determining Specimen batch weights
  - e. T 209, G<sub>mm</sub>
    - i. AASHTO revisions
      - 1. New date
      - 2. New thermometer requirements
      - 3. New note on water bath circulators
    - ii. Move last sentence in Step 11 down Dan
  - f. T 166, G<sub>mb</sub>
    - i. AASHTO revisions
      - 1. New date
      - 2. New note about water bath circulators
  - g. R 66, Sampling Asphalt Material
    - i. AASHTO revisions none
  - h. T 30, Sieve Analysis
    - i. AASHTO revisions
      - 1. New date
      - 2. Added automated extractor
    - ii. Appendix B should match T 27/T 11 Appendix B
    - iii. Add statement for mass verification example Desna
    - iv. Performance Exam Checklist Step 1 should be 'basket is cleaned . . . ' Misty
    - v. T 308 says to test a blank according to T 30 T 30 doesn't address it Chad
  - i. T 312, Gyratory
    - i. AASHTO revisions none
  - j. TM 13, Volumetrics
    - i. R 35 AASHTO revisions none
  - k. Exams
    - i. Exam 3 Q 6 Remove AASHTO 74/ put all options- if possible Misty
    - ii. Exam 2 Q 32 B & D correct take not off of B Misty
    - iii. Exam 1 Q 33 have 1/2, 1, 1 1/2, 2 Misty
    - iv. Exam 1 Q 5 replace with formerly approved question
    - v. Exam 2 Q 11 T 329, 'drives away', 'dries away' or 'removes' Sharon
- 4. Revisions to Concrete Training Materials
  - a. TM 2 Sampling
    - i. AASHTO revisions none to R 60
    - ii. Performance Exam Checklist Step 10b does not match the step in the FOP Dan
    - iii. Add continuous batching mixer 2025 Winter Meeting

- b. T 309, Temperature
  - i. AASHTO revisions none
- c. T 119, Slump
  - i. AASHTO revisions
  - ii. Performance Exam Checklist Step 2 Misty
- d. T 121, Density
  - i. AASHTO revisions
    - 1. New date
    - 2. Added references
  - ii. Table 2 revisions Dan
- e. T 152. Air Content
  - i. AASHTO revisions none
  - ii. Action taken when air meter leaks 2025 Winter Meeting
- f. R 100, Test Specimens
  - i. AASHTO revisions
    - 1. New date
    - 2. New title
    - 3. Max/min thermometer
    - 4. Wet sieving equipment
    - 5. Remove fresh concrete tests section
    - 6. Messed up SCC
    - 7. Additional cleanup
  - ii. Add tables 2025 Winter Meeting
  - iii. Slump table to match ASTM C31 Spring Executive Board Meeting
  - iv. PowerPoint corrections Misty
  - v. Clarify wet sieving and sieve to use Lori
- g. Exams
  - i. New exam questions
    - 1. Exam 2 Q 16 two correct answers?
- 5. Revisions to Embankment/Base and In-Place Density Training Materials
  - a. T 255/T 265, Moisture Content of Soil
    - i. AASHTO revisions (T 255 only)
      - 1. New AASHTO date
    - ii. Move Table 2 to Step 5 Lori
  - b. T 99/T 180, Moisture-Density Relations
    - i. AASHTO revisions
      - 1. New date
      - 2. Revisions proposed by WAQTC
      - 3. New Method titles
    - ii. Annex PowerPoint is slide 3 necessary? Dan
    - iii. Step 2b add 'stand for at least 12 hrs.' Dan
    - iv. Example does not carry the lb. to 0.005 Garth
  - c. R 75, Developing a Family of Curves
    - i. AASHTO revisions none
    - ii. PowerPoint Slide 10 Remove extra points Misty
  - d. T 272, One-Point Method
    - i. AASHTO revisions none
    - ii. Method selection table Lori
    - iii. Shaded area Madeline
  - e. T 85, G<sub>sb</sub>
    - i. AASHTO revisions

- 1. New date
- 2. Definitions
- 3. Significance and use
- 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
- h. Exams
  - i. Correct 'Developing Soil Moisture-Density Relations
- 6. Revision to Self-Consolidating Concrete Module Training Materials
  - a. T 347/T 351, Slump Flow and VSI
    - i. AASHTO revisions none
    - ii. PowerPoint Need picture with a plate that shows the central location of the mold Sean
  - b. T 345, J-Ring
    - i. AASHTO revisions
      - 1. New date
      - 2. Changed apparatus dimensions
      - 3. Brackets to parentheses
  - c. TM 18, Penetration
    - i. 2024 ASTM revisions
  - d. TM 19. Column
    - i. 2024 ASTM revisions
    - ii. Add strike-off of middle and bottom sections
  - e. Exams
- 7. Revisions to General Training Materials
  - a. 01\_Gen\_preface Revisions to match Admin Manual revisions
  - b. Terminology smartly tap Gilbert
- 8. Revision Review Assignments
- 9. FOP Library
  - a. TM 15 revisions Mark
  - b. T 84, T 217, TM 14, and TM 16 Champion
  - c. T 331 revisions
  - d. Performance Exam Checklists 2025 Winter Meeting
    - i. R 66 Mark
  - e. Gravimetric air content calculation Dan
  - f. Spreadsheet for SCC testing
  - g. Add FOP for R 64 Dan

#### **WAQTC ITEMS**

- 10. Third-Party Exam Delivery update
- 11. Sampling module
- 12. ADA compliance work plan
  - a. Preserve slide Nos?

#### ORGANIZATION DOCUMENTS/OPERATIONS MANUAL

- 13. Administration Manual and RPIH.
  - a. Reciprocity language
- 14. Style Guide
- 15. Strategic Plan

#### 2025 QAC WINTER MEETING ACTION ITEM FOLLOW UP

Logo

## 17. Website

- a. Related links selection
- b. 'Private' page Unlist Posts & Pages Plugin

### ADDITIONAL ITEMS

- 18. Report from Executive Board meetings19. 2026 Winter and Summer Meeting locations
- 20. Other items

Page 6		
Topic	Discussion / Decision	Action Required By:
	Misty Miner, MDT and Qualification Advisory Committee (QAC) Chair, welcomed the committee members to Boise.  Misty asked everyone to introduce themselves, starting around the table and then those joining virtually.  Lori Copeland, D B Consulting, said it was great to see everyone.	
	Lori was formerly a QAC member and recently retired from ITD. She now works as a WAQTC consultant.  Desna Bergold, D B Consulting and WAQTC Coordinator, expressed how happy she is to welcome Lori on board. Desna has been WAQTC's consultant for 15 years and, before this, worked for UDOT and was a QAC member.	
	Madeline Enright, CDOT, explained that she has been a QAC member for three years.  Isabelle Panos, ITD, is new to the QAC, replacing Lori who she worked with at ITD.  Mark Willoughby, WSDOT, said he has been with the QAC for over three years but with WSDOT for many more.	
WELCOME	Gilbert Arredondo, UDOT, said he joined the QAC in 2013.  Dan Gettmna, AKDOT, joined the QAC in 2015.  Misty has worked with MDT for nearly 30 years and joined the	
	QAC in 2009.  Sharon Taylor, NDDOT, who joined the meeting virtually, said that she has been on the QAC for three plus years and with the NDDOT Materials Division since 2020.	
	Adam Rose, ODOT, is new to the QAC, replacing Sean Parker, former QAC Chair. Adam has worked in the construction materials field for 25 years, working for an asphalt mixture supplier, private testing firm, and a general contractor.	
	As the committee has two new members, Misty began by explaining how the two QAC meetings, Summer and Winter, work. The primary purpose of the Summer Meeting is to discuss and agree on revisions to the WAQTC training materials as well as review and incorporate the soon to be published revisions to the related AASHTO Standards. Other agenda items are discussed as time allows.	

Page 7		
Торіс	Discussion / Decision	Action Required By:
	The Winter Meeting's focus is on member agencies' proposals to the AASHTO Standards. Secondly, the revisions to FOP Library documents and incorporation of the revisions made to the related AASHTO Standards in the previous year. More agenda items are discussed as time allows.  Desna displayed the WAQTC Events Calendar section of the Operations Manual for reference.  Isabelle asked how the agencies manage reciprocity. Desna explained that the reciprocity audit was currently being conducted and once all the questionnaires are received, she will create a report on the findings. There was further discussion on this topic, which is covered under other agenda items.	
	Discussion item.	

## REVIEW OF AASHTO REVISIONS AND QAC PROPOSED REVISIONS FOR EACH PROCEDURE

AGGREGATE (AGTT)

	FOP for AASHTO R 90, Sampling Aggregate Products	
	Revisions proposed before the meeting.	
	Misty submitted a correction to the PowerPoint presentation; on Slide 14 the numbering needs to be corrected.	
	There are no revisions to the AASHTO practice in 2025.	
	Revision discussion	
R 90	Dan submitted revisions for consideration shortly before the meeting. In the Field Operating Procedure (FOP), Procedure – General section, Dan recommended revising the second sentence to active voice.	
	Dan also suggested rewriting the steps to Method B (From the Belt Discharge).	
	The committee agreed with the proposed revisions and approved the draft.	
	The committee also reviewed and revised the Performance Exam Checklists to match the FOP revisions.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	

Page 8		
Topic	Discussion / Decision	Action Required By:
	A .:	T
	- Active voice revisions in Procedure – General	
	- Reformatting in Method B (From the Belt Discharge)	
	Performance Exam Checklists (editorial):	
	- Remove 'at least twice' in Step 6 and Step 2b (oral).	
	PowerPoint:	
	- Renumber Slide 14	
	- Revisions to match the FOP	D.D.
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO R 76, Reducing Samples of Aggregate to Testing Size	
	Revisions proposed before the meeting.	
	During the 2025 Winter Meeting, Lori suggested reformatting the quartering section and combining quartering on a hard surface with the tarp the same as the formatting of the sectoring section. She also recommended adding the steps to Slides 34, 36, and 37.	
	Revision discussion	
R 76	Dan's late suggestions were to rewrite the splitter information at the bottom of the Apparatus Mechanical Splitter section; this sentence was rewritten and moved to the top of the section.	
	Dan also questioned underlining 'two diagonal sections' in Quartering Step 7. The underline will be removed in the reformatting.	
	During discussion of the proposed revisions, the committee decided to add 'place the splitter on a level surface' to Method A, Mechanical Splitter.	
	There are no revisions to the AASHTO practice in 2025.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- Active voice revisions in Apparatus	
	r r	

Page 9		
Topic	Discussion / Decision	Action Required By:
	- Add Step 1, in Method A – Mechanical Splitter, 'Place the splitter on a level surface.'	
	- Reformat Method B Quartering to match Method B Sectoring, combining tarp and surface instructions.	
	- Removed underline from 'two diagonally opposite'  Performance Exam Checklist:	
	- New revision date	
	- Update title for Method A and Method B to match title in FOP	
	- Add Step 1 'Place the splitter on a level surface,' in Method A - Mechanical Splitter	
	PowerPoint:	
	- Revise slides 34, 36, and 37 to include the Steps.	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 255, Total Evaporable Moisture Content for Aggregates	
	Revisions proposed before the meeting:	
	During the 2025 Winter Meeting, Lori had recommended that Table 2, Instructions on Drying, be moved to Step 5 in the procedure. The committee reviewed the proposal and decided the table would fit better under Step 9.	
Т 255	2025 AASHTO revisions:	
T 255	New revision date	
	<ul> <li>Revisions proposed by WAQTC</li> </ul>	
	Revision discussion	
	Dan proposed revising the Apparatus balance section to match AASHTO. The balance should be 'readable' to 0.1 percent or 0.1 g. Desna pointed out that 0.1 g is not in the AASHTO Standard, although 'or better' is. The committee decided that 0.1 g should remain.	

Page 10		
Topic	Discussion / Decision	Action Required By:
	Dan had some editorial recommendations for the description of the heat source, uncontrolled, and the container, which were approved.  The committee also approved the AASHTO date and Table revisions.  Proposed revisions to the training materials:  FOP:  New revision date  New AASHTO date  Balance description changed to 'readable'  Heat source description revised.  Table 2 moved to Step 9  Performance Exam Checklist:  New revision date  Break Step 10 to two steps and include mass loss.  PowerPoint:	Required By:
	- Revisions to match the FOP  These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
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  There were no revisions proposed before the meeting.  2025 AASHTO revisions (T 11 only):  New revision date  New title (removed 'mineral' from T 11 title)  Note 3 on mechanical washers  Annex A on mechanical washers  Revision discussion  Dan suggested editorial and active voice revisions which were approved. He also pointed out that in the Example for Method C,	

Page 11		
Topic	Discussion / Decision	Action Required By:

	the Cumulative Mass retained does not match the value used in the check sum calculation.	
	The committee approved Dan's revisions and added Note 3 on mechanical washers from the AASHTO Standard to the FOP.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- New title (remove the word mineral)	
	- Revise Note 1 to active voice	
	- Revise Sample Sieving bullet 4 to active voice	
	- Add note 'See AASHTO T 11 Annex A for Mechanical Washer Comparison if there is potential aggregate degradation.'	
	- Renumber notes	
	- Correct Method C Example	
	- Add to PP.	
	Performance Exam Checklist:	
	- New revision date	
	- Title change	
	PowerPoint:	
	- Title change	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 335, Determining the Percentage of Fracture in Coarse Aggregate	
Т 335	There were no revisions proposed before the meeting.	
	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
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Page 12		
Topic	Discussion / Decision	Action Required By:

	FOP for AASHTO T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test	
T 176	No revisions were proposed before the meeting.	
	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
	Aggregate Written Examinations	
	Revisions proposed before the meeting	
	FOP for AASHTO T 11 title change carried throughout the exams.	
	Exam 2 Method B, check sum, does not follow the data given. A correction was drafted.	
	Revision discussion	
Exams	Misty asked if it is necessary to maintain the nine exams which were created when the calculations questions for each FOP for AASHTO T 27/T 11 Method were incorporated. She suggested one calculation exam question that would be the same for each method. New questions could be drafted based on how the test method is performed.	
	Adam agreed, he would like new questions to focus on sieves loss and sieve overloading. Adam volunteered to write three new questions for review and incorporation by Thursday.	
	New exam questions were incorporated, and redundant method exams are no longer to be used. All exams will have a new revision date.	
	Committee members: refer to the exam errata for specific revisions.	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting

Page 13		
Topic	Discussion / Decision	Action Required By:

#### ASPHALT TEST METHODS (ASTT I AND II)

	FOP for AASHTO R 97, Sampling Asphalt Mixtures	
R 97	There were no revisions proposed before the meeting.	
K 91	There are no revisions to the AASHTO practice in 2025.	
	There are no revisions to the 2025 Training Materials.	
	FOP for AASHTO R 47, Reduction of Asphalt Materials	
	Revisions proposed before the meeting:	
	During the 2025 Winter Meeting, Sean Parker proposed reincorporating the quartermaster splitter in the FOP. This was drafted and distributed before the meeting.	
	Eric Wilson, WFL-FHWA, suggested that Note 1 applies to all methods listed, not just the final incremental section. He is concerned that technicians 'fine tune' the sample mass by adding or removing non representative material.	
	There are no revisions to the AASHTO practice in 2025.	
	Revision discussion	
	The committee agreed with the proposed revisions and added the following statement at the beginning of the procedure:	
R 47	'If the reduced sample mass does not fall within the test sample size limits, continue reducing to achieve the correct sample mass. Do not adjust sample mass by adding or removing material after reduction.'	
	Dan recommended slight revisions to the language of the draft revisions. Reworked former Steps 3 and 6 (new Steps 4 and 7) in Quartermaster and Step 4 in incremental. These were approved.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- Add Mechanical Splitter Type A (Quartermaster) in Apparatus and Selection of Method sections	
	- Procedure:	
	<ul> <li>Active voice revisions</li> </ul>	

Page 14		
Topic	Discussion / Decision	Action Required By:
	<ul> <li>Add reduction statement</li> </ul>	
	<ul> <li>Remove redundant sample size statement</li> </ul>	
	<ul> <li>Add procedure to reduce using the Mechanical Splitter Type A (Quartermaster)</li> </ul>	
	<ul> <li>New Step 1 in Mechanical Splitter Type B: Place the splitter on a level surface.</li> </ul>	
	<ul> <li>Add 'of the sheeting' in Step 4 of the Incremental Method</li> </ul>	
	Performance Exam Checklist:	
	- New revision date	
	- Add steps for Mechanical Splitter Type A (Quartermaster)	
	- Add new Step 1 in Mechanical Splitter Type B	
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 329, Moisture Content of Asphalt Mixtures by Oven Method	
T 329	No revisions proposed before the meeting:	
	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
	FOP for AASHTO T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method	
	No revisions proposed before the meeting.	
т 200	2025 AASHTO revisions:	
T 308	- New date	
	- Annex	
	<ul> <li>Reworked calculating the asphalt binder content correction factor</li> </ul>	

Page 15		
Topic Di	iscussion / Decision	Action Required By:

Торіс	Diseasion / Decision	Required By:
	<ul> <li>Reworked Determining Correction Specimen batch weights</li> </ul>	
	Revision discussion	
	Step 9 in the Annex will be revised to match the AASHTO method. The committee decided that a formula and example of the calculation for the asphalt binder correction factor would be a good addition. This was drafted.	
	Misty had recommended that the Performance Exam Checklist in the FOP for AASHTO T 30 include a step to verify that the burn-off basket is clean. The committee decided it should be the last step for this test method's Performance Exam Checklist.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- Annex	
	<ul><li>Revise Step 9</li></ul>	
	<ul> <li>Add formula and example for calculating the asphalt binder correction factor</li> </ul>	
	Performance Exam Checklist:	
	- New revision date	
	- Add Step 14 'All residual fines are cleaned from the basket(s)'	
	PowerPoint:	
	- Revisions to match the FOP	DB
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	CONSULTING
	FOP for AASHTO T 209, Theoretical Maximum Specific Gravity $(G_{mm})$ and Density of Asphalt Mixtures	
T 209	Revisions proposed before the meeting:	
1 207	Dan proposed moving the last sentence in Procedure Step 11 down to the beginning of Procedure – Pycnometer or Volumetric Flask.	

Page 16		
Topic	Discussion / Decision	Action Required By:

#### 2025 AASHTO revisions:

- New date
- New thermometer requirements
- New note about water bath circulator

#### Revision discussion

The committee agreed with Dan's recommendation for Procedure Step 11.

The committee also agreed to incorporate the AASHTO revisions into the FOP. Desna asked if the oven requirements, although not new, should be included in the Apparatus. The committee decided not to include it just for warming the material until it is pliable but decided to add 'do not exceed Job Mix Formula (JMF) compaction temperature' in parentheses in Procedure – General Step 1.

#### Proposed revisions to the training materials:

#### FOP:

- New revision date
- New AASHTO date
- Apparatus
  - Add new note 1 on water bath circulator
  - Revise thermometer to match AASHTO
- Renumber notes
- Add JMF language to Procedure General Step 1.
- Move 'Complete steps 12B through 16B within 10 ±1 minute' to Procedure Pycnometer or Volumetric Flask

#### **Performance Exam Checklist:**

- None

#### **PowerPoint:**

- Revisions to match the FOP

These revisions will be included in the 2025 Training Materials pending Executive Board approval.

D B Consulting

Page 17		
Торіс	Discussion / Decision	Action Required By:

		1 3
	FOP for AASHTO T 209, Theoretical Maximum Specific Gravity (Gmm) and Density of Asphalt Mixtures	
	No revisions were proposed before the meeting.	
	2025 AASHTO revisions:	
	- New date	
	- New note about water bath circulator	
	- New Methods titles	
	Revision discussion	
	The committee agreed to incorporate most of the AASHTO revisions into the FOP. They decided not to add the lengthier titles to Methods A and B but did remove 'for Method A or B' in Method C's title.	
	Proposed revisions to the training materials:	
T 166	FOP:	
	- New revision date	
	- New AASHTO date	
	- Add new Note 1 on water bath circulator in apparatus	
	- Renumber notes	
	- Change title of Method C (Rapid <del>Test for Method A and B)</del>	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO R 66, Sampling Asphalt Materials	
D	No revisions were proposed before the meeting.	
R 66	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
	1	1

Page 18		
Topic	Discussion / Decision	Action Required By:

FOP for AASHTO T 30, Mechanical Analysis of Extracted Aggregate

#### Revisions proposed before the meeting:

During the 2025 Winter Meeting, it was mentioned that Appendix B for this method should match Appendix B for the FOP for AASHTO T 27/T 11 as both addresses overloading the sieves.

Desna recommended adding a statement after the mass verification example like the one after the check sum examples. 'This is not more than 0.1 percent therefore the results can be used for acceptance purposes.'

Misty suggested that Step 1 on the Performance Exam Checklist should be 'basket is cleaned.' (The committee decided that this step should be the last on the FOP for AASHTO T 308 Performance Exam Checklist.)

Chad Clawson, ITD and Executive Board Member, said that the FOP for AASHTO T 308 states to test the 'blank' aggregate specimen according to this FOP. This FOP only covers material taken from the burn-off basket and does not address the possibility of absorbed moisture in a prebatched specimen.

#### 2025 AASHTO revisions:

- New date
- Added automated extraction device

#### Revisions discussion

The committee approved the revisions to Appendix B and mass verification example. They did not approve adding a new Step 1 to dry the sample if necessary. They decided to include 'If necessary, dry the sample to constant mass according to the FOP for AASHTO T 255' under Procedure; and add a new Note 1 to explain when it is necessary. 'Note 1: If more than 24 hr. has passed after completion of the FOP for AASHTO T 308, the sample may have absorbed moisture.'

The committee also decided to table the inclusion of the automated extractor until the 2026 Summer Meeting. This equipment is not currently being used for project testing.

T 30

Page 19		
Topic	Discussion / Decision	Action Required By:

	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- Add instructions to dry the sample if necessary	
	- Add a new Note 1 to describe when drying is necessary	
	- Renumber notes	
	- Add statement under mass verification example	
	- Revise Annex B Overload Determination to match the FOP for AASHTO T 27/T 11	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP	DB
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	Consulting
	FOP for AASHTO T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor	
T 312	No revisions were proposed before the meeting.	
	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
	WAQTC TM 13, Volumetric Properties of Asphalt Mixtures	
TM 12	No revisions proposed before the meeting.	
TM 13	There are no revisions to the related AASHTO R 35 in 2025.	
	There are no revisions to the 2025 Training Materials.	
	Asphalt Written Examinations	
EXAMS	Revisions proposed before the meeting:	
LAAMS	Misty asked that distractors in Exam 3 Question 6 be revised. She also pointed out that Exam 2 Question 32 could have two	

Page 20		
Topic	Discussion / Decision	Action Required By:
	answers, and Exam 1 Question 3 should have the answer and distractors rearranged.	
	Sharon proposed an editorial revision to Exam 2	
	Exam 1 Q 5, True/False will be replaced with formerly approved question.	
	Committee members: refer to the exam errata for specific revisions.	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting

CONCRETE (CTT)	
	WAQTC TM 2, Sampling of Freshly Mixed Concrete
	Revisions proposed before the meeting:
	During the 2025 Winter Meeting the committee decided to add sampling from continuous mixers to the Test Method (TM), Review, and Performance Exam Checklists. This revision was drafted and distributed before the meeting.
	Dan submitted a revision to the Performance Exam Checklists, Steps 8 and 8b do not match the relevant step in the FOP. Revisions to the Performance Exam Checklists were drafted to match the FOP
TM 2	Dan also proposed an active voice revision to the language in 'Sampling from stationary mixers' third sentence.
TIVI Z	There are no revisions to the related AASHTO R 60 in 2025.
	Revision discussion
	The committee decided that the units of measure for the continuous mixers be changed from L and ft <sup>3</sup> to m <sup>3</sup> and yd <sup>3</sup> for consistency.
	Misty proposed removing the statement cautioning obtaining the increments from very first or last as the statement is already included in general procedure.
	Revised drafts were approved.

Page 21		
Topic	Discussion / Decision	Action Required By:

	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- Scope:	
	<ul> <li>Add 'and continuous mixing equipment as described in AASHTO M 241, Concrete Made by Volumetric Batching and Continuous Mixing.'</li> </ul>	
	- Procedure:	
	<ul> <li>Active voice revision to 'Sampling from stationary mixers' third sentence.</li> </ul>	
	<ul> <li>Add procedure to 'Sampling from continuous mixers (volumetric batching or mobile mixers)</li> </ul>	
	• Convert units from 140 L (5 ft <sup>3</sup> ) to ½ m <sup>3</sup> (1/4 yd <sup>3</sup> )	
	- Renumber notes	
	Performance Exam Checklists:	
	- New revision date	
	- Add 'continuous mixer (volumetric batching or mobile mixers)' to Procedure Step 6 and Step 7 (oral) of the checklists	
	- Add 'Which portions of the batch are avoided when obtaining sample? From first or last portions of the batch."	
	- Revise new Steps 10 and Step 11b (oral)	
	- Reformat remaining steps	
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.  Consulting	
	FOP for AASHTO T 309, Temperature of Freshly Mixed Hydraulic Cement Concrete	
T 309	Revisions proposed before the meeting:	
	Misty proposed switching Step 5 and 6. New Step 5 'Record temperature to nearest 0.5°C (1°F)?' New Step 6 'Complete	

Page 22		
Topic	Discussion / Decision	Action Required By:
	temperature measurement within 5 minutes of obtaining sample?'	
	There are no revisions to the AASHTO methods in 2025.	
	Revision discussion	
	The committee reviewed the proposed revision to the Performance Exam Checklist and agreed to reverse Steps 5 and 6. They also decided that the new Step 6 should be rewritten to 'Temperature measurement completed within 5 minutes of obtaining sample?'	
	The committee then discussed the placement of the time parameter in the steps of the FOP and decided to move it to the beginning of Procedure.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- Remove 'or smaller' from Thermometer in Apparatus	
	- Move 'Complete the temperature measurement of the freshly mixed concrete within 5 minutes of obtaining the sample,' from Step 5 to the beginning of Procedure	
	Performance Exam Checklist:	
	- New revision date	
	- Revise the new Step 6 'Temperature measurement completed within 5 minutes of obtaining sample?'	
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 119, Slump of Hydraulic Cement Concrete	
	Revisions proposed before the meeting:	
T 119	Misty proposed revisions to the Performance Exam Checklist to include not allowing the slump mold to shift in any way while filling.	

There are no revisions to the AASHTO method in 2025.

Page 23		
Topic	Discussion / Decision	Action Required By:

#### Revision discussion

The committee discussed Misty's proposal and agreed to add 'without allowing it to shift' to Step 14 of the Performance Exam Checklist.

The committee reviewed the AASHTO Standard and found that it doesn't really address not allowing the mold to shift during filling, strike-off, and cleaning around the mold. Desna was asked to include this as an item on the 2026 Winter Meeting Agenda. She will ask a committee member if anyone would draft the revision to the AASHTO before the meeting.

Gilbert said that he would like to address Step 3 in the FOP. He is concerned with the statement, 'Stand on both foot pieces' as many technicians use a clamping base plate and do not need to stand on the foot pieces. The committee revised Step 3 and Step 11 of the procedure to 'secure' and 'clean' without allowing the mold to shift as Misty proposed.

Proposed revisions to the training materials:

#### FOP:

- New revision date
- Procedure
  - Revise Step 3 'Stand on both foot pieces to hold the mold firmly in place' to 'Secure both foot pieces, holding the mold firmly in place until removal of the mold.'
  - Revise Step 11 'Clean overflow concrete away from the base of the mold' to 'Clean excess concrete away from the base of the mold without allowing the mold to shift.'

#### **Performance Exam Checklist:**

- New revision date
- Add 'without allowing it to shift' to Step 14 of Procedure.

#### **PowerPoint:**

- Revisions to match the FOP

Not allowing the mold to shift during the procedure will be on the 2026 Winter Meeting Agenda.

Page 24		
Торіс	Discussion / Decision	Action Required By:

	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	
	Revisions proposed before the meeting:	
	Dan recommended revisions to Table 2, Liquid Conversion Factors, to identify US fluid and avoirdupois ounces.	
	2025 AASHTO revisions:	
	- New revision date	
	- Added references	
	Revision discussion	
	The committee discussed revision to Liquid Conversion Factors in Table 2 proposed by Dan. The committee decided not to add the US fluid and avoirdupois identifiers but found that the fluid ounces to milliliters was incorrect.	
T 121	Lori suggested adding a statement that directs the technician to standardize the measure according to the Annex in the FOP. The committee agreed that would be good to include in the Apparatus for the measure.	
	Desna explained the 'FOP for' should be removed from the WAQTC TM 2 reference, TM 2 is the test method not an FOP, this is not in the FOPs for AASHTO T 309 and T 119.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- Remove 'FOP for' from WAQTC TM 2 references.	
	- Add reference for Measure in Apparatus 'Standardized according to FOP for AASHTO T 121 Annex Standardization of Measure.'	
	- Correct the ounce to milliliters conversion in Table 2	
	Performance Exam Checklist"	
	- None	
		1

Page 25		
Topic	Discussion / Decision	Action Required By:
	PowerPoint:	
	- Add 'For thorough consolidation of a concrete layer, increase or decrease the amount of force from the mallet for each tap around the perimeter to close the voids and release trapped air,' to Slide 14	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 152, Air Content of Freshly Mixed Concrete by the Pressure Method	
	No revisions proposed before the meeting.	
	There are no revisions to the AASHTO method in 2025.	
	<u>Discussion item</u>	
	During the 2025 Winter Meeting, the committee discussed what each agency recommends when an air meter leaks air during the performance of the test. The responses were essentially to try again and then take the air meter out of service until it is repaired.	
	Revision discussion	
T 152	Dan proposed adding a spreadsheet to calculate the gravimetric air content to the FOP Library.	
1 132	Misty suggested adding 'when the needle stabilizes' to Step 15 of Strike off and Air Content to help identify a leak at that stage.	
	Dan will draft a proposal to protect the air chamber from getting fines in it when conducting an aggregate correction for the 2026 Winter Meeting.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- Add 'When the needle stabilizes' and removed 'and then' in Step 15 of Strike off and Air Content.	
	Performance Exam Checklist:	
	- New revision date	
	1.010101010	

Page 26		
Topic	Discussion / Decision	Action Required By:
	- Added 'When the needle stabilizes' to Step 25 in Using a Type B Meter.	
	PowerPoint:	
	- Add 'For thorough consolidation of a concrete layer, increase or decrease the amount of force from the mallet for each tap around the perimeter to close the voids and release trapped air,' to Slide 18	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO R 100, Making Casting and Curing Concrete Strength Test Specimens in the Field	
	Revisions proposed before the meeting:	
R 100	During the 2025 Winter Meeting, Desna was asked to draft tables similar to the those in the AASHTO Standard to incorporate into the FOP.	
	During the Executive Board Spring Meeting, the board found that the method for consolidation for concrete with a 1 in. slump is either rodding or consolidation in ASTM C31, the AASHTO Standard is unclear. The FOP has stated that the method of consolidation for a 1 in. slump is only vibration. This revision was drafted.	
	Misty proposed some edits to the PowerPoint presentation, Slide 34 steps were not numbered correctly and some slides list 6 x 12 cylinders inconsistently.	
	2025 AASHTO revisions:	
	- New revision date	
	- New title	
	- Max/min thermometer	
	- Wet sieving equipment	
	- Remove fresh concrete tests section	
	- Messed up SCC	
	- Additional cleanup	

Page 27		
Topic	Discussion / Decision	Action Required By:

#### Revision discussion

The committee approved revisions to match the AASHTO Standard's requirements for the maximum/minimum thermometer. They decided not to add the wet sieving equipment because it is addressed in WAQTC TM 2, which is referenced.

The committee agreed with the board's recommendation to follow ASTM C31 in Table 1, Method of Consolidation.

The committee reviewed the drafted tables. Madeline recommended separating the rodding and vibration sections of Table 2, the committee agreed.

Proposed revisions to the training materials:

#### FOP:

- New revision date
- New AASHTO date
- New title, FOP for AASHTO R 100, Making Casting and Curing Concrete Strength Test Specimens in the Field.
- Revise max/min thermometer from 'registering' to 'recording'.
- Remove 'FOP for' in front of WAQTC TM 2.
- Change 'making' to 'casting' throughout
- Revise Consolidation Selection to a slump of 1 in. can either be rodded or vibrated and Table 1 to match
- Add Table 2 for diameter of cylinder, number of layers and number of strokes or insertions per layer.

#### **Performance Exam Checklist:**

- New revision date
- New title
- Change 'Making' to 'Casting' in Procedure Step 3

#### **PowerPoint:**

- Add 'For thorough consolidation of a concrete layer, increase or decrease the amount of force from the mallet for each tap around the perimeter to close the voids and release trapped air.' to Slide 18.

Page 28		
Topic	Discussion / Decision	Action Required By:

	- Corrected 4 x 8 and 6 x 12 and standardized unit designation	
	- Renumber Slide 34	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
_	Revisions proposed before the meeting	
FRONT AND APPENDIX	Revise references to the FOP for AASHTO R 100 to reflect the name change.	D B Consulting
	Concrete Written Exams	
	Revisions proposed before the meeting	
	The committee revised multiple exam questions which Desna drafted and sent to the committee for review.	
	Revise references to the FOP for AASHTO R 100 to reflect the name change.	
	Revision discussion	
	Gilbert suggested adding a question on the continuous mixer, one was added.	
EXAMS	During the review, a new question had two correct answers, this question was rewritten.	
	Desna explained that the exams will be revised in Webassessor to be 'live' Jan. 1 <sup>st</sup> . She asked Mark to help her review them at that time to ensure that they are correct. Mark agreed.	Mark
	Mark will work with Desna on the exam revisions in Webassessor.	WILLOUGHBY
	Committee members: refer to the exam errata for specific revisions.	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting

Page 29		
Topic	Discussion / Decision	Action Required By:

## E

EMBANKMENT & BASE AND IN-PLACE DENSITY (EBTT/DTT)	
	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
	No revisions proposed before the meeting.
	2025 AASHTO revisions (T 265 only):
	- New revision date
	- Revisions proposed by WAQTC
	Revision discussion
	Revisions will be made to match those made in the FOP for AASHTO T 255.
	While reviewing the move of Table 3 from the end of the Procedure to after Step 9, the committee agreed that the table should be split into two tables, Methods of Drying Aggregate and Methods of Drying Soil.
T 255/T 265	The committee decided to revise the Performance Exam Checklist and have Step 12 broken into two steps, one for determining the mass of the sample and one for calculating constant mass. This revision was also drafted in the FOP for AASHTO T 255 Performance Exam Checklist.
	Proposed revisions to the training materials:
	FOP:
	- New revision date
	- New AASHTO date
	- Balance description changed to 'readable'
	- Heat source description revised.
	- Table 3 moved to Step 9
	- Separate Table 3 into two tables, one for aggregate and one for soils
	Performance Exam Checklist:
	- New revision date
	- Break Step 12 to two steps and include mass loss.

Page 30		
Topic	Discussion / Decision	Action Required By:

		•
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	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	
	Revisions proposed before the meeting:	
	Dan suggested adding 'stand for at least 12 hrs.' to Procedure Step 2b.	
	Garth Newman, WSDOT, submitted a revision to the calculation example. The example does not carry the pounds to the accuracy required in the Procedure Step 1.	
	2025 AASHTO revisions:	
	- New revision date	
	- Revisions proposed by WAQTC	
	- New method title (T 180 only)	
T 99/T 180	Revision discussion	
	AASHTO T 180 included title for each 'Method' that lists the size of the mold and the passing sieve size. The committee decided not to adopt the revision at this time.	
	They also decided not to adopt the temperature range of the oven; the FOP's is more restrictive.	
	The committee agreed to the proposed revisions.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- In Procedure Step 2b, add 'stand for at least 12 hrs.'	
	- Calculation example, to the nearest 0.005 lb.	
	- Balance description changed to 'readable'	

Page 31		
Topic	Discussion / Decision	Action Required By:
	- Heat source description revised.	
	- Table 3 moved to Step 9	
	- Separate Table 3 into two tables, one for aggregate and one for soils	
	Performance Exam Checklists:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B CONSULTING
	FOP for AASHTO R 75, Developing a Family of Curves Soil- Moisture Density Relations	
	Revisions proposed before the meeting:	
	Misty proposed removing the extra points from the PowerPoint presentation on Slide 10.	
	There are no revisions to the AASHTO practice in 2025.  Revision discussion	
R 75	The extra points are labeled for removal on Slide 12. They should be removed before the curve is drawn on the graph. The committee decided that Slide 9 should include the step to remove the extra points. Slide 10 will include the label to remove them and Slide 12 will have them removed.	
	The committee also decided to include 'Family of Curves' in parentheses after the title and on all the curve titles in the FOP and PowerPoint presentation.	
	Proposed revisions to the training materials:	
	FOP (editorial):	
	- Add (Family of Curves) after the title	
	- Add (Family of Curves) on graph	
	Performance Exam Checklist:	
	- Add (Family of Curves) after the title	

Page 32		
Topic	Discussion / Decision	Action Required By:

	PowerPoint:	
	- Add (Family of Curves) after the title	
	- Add (Family of Curves) on all graphs	
	- Revise Slide 9 to include the step to remove curves	
	- Slide 10 will include label to remove extra points	
	- Slide 12 will have them removed	
	- Revisions to match the FOP	DB
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	Consulting
	FOP for AASHTO T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture	
	Revisions proposed before the meeting:	
	During the 2025 Winter Meeting, Lori suggested adding a table to help identify the method to be used when pounding the one-point proctor.	
	Madeline submitted the 'individual' and 'family' graphs with the area that the one-point must fall within to be usable shaded for easier identification.	
	There are no revisions to the AASHTO method in 2025.	
	Revision discussion	
T 272	The committee members reviewed the drafted table and decided that the common cells should be merged. They also agreed with adding 'for full apparatus requirements' to the FOP for AASHTO T 99/T 180 reference in Apparatus.	
	The committee decided that when using an individual moisture – density curve, Step 1 should be reformatted to Steps 1, 1a, and 1b, and revised.	
	The committee likes Madeline's proposed shaded area on the 'individual' and 'family' graphs and felt it would be a good training aid. Madeline agreed to provide graphs in Excel to Desna for incorporation into the training materials. They also instructed Desna to change the title of the 'Reference Curve' to 'Individual Reference Curve' for consistency.	

Page 33		
Topic	Discussion / Decision	Action Required By:
	Discussion item	
	There was a lengthy discussion on how to determine if the appropriate 'individual curve' is used with a one point determination. Adam provided ODOT's 'Appendix A Guidelines for selecting a single curve.' This will be added to the reference folder in the FOP Library.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- Add Table 1, Field Selection of Apparatus – English	
	<ul> <li>Add shaded areas on the graph showing the area that the one-point determination must fall within</li> </ul>	
	<ul> <li>Revise Step 1 in the Maximum Dry Density and Optimum Moisture Content Determination Using an Individual Moisture – Density Curve section</li> </ul>	
	- Change title of the 'Reference Curve' to 'Individual Reference Curve'	
	Performance Exam Checklist:	
	- None.	
	PowerPoint:	
	- Add shaded area to graphs	
	- Revisions to match the FOP	DB
	These revisions will be included in the 2025 Training Materials pending Executive Board approval. D B Consulting	Consulting
	FOP for AASHTO T 85, Specific Gravity of Coarse Aggregate	
	No revisions proposed before the meeting.	
	2025 AASHTO revisions:	
T 85	- New date	
1 05	- Definitions	
	- Significance	

Page 34		
Topic	Discussion / Decision	Action Required By:

	Revision discussion	
	The committee decided to remove the second sentence in the absorption definition, which matches the revision in the AASHTO Standard.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- Remove 'The aggregate is considered "dry" when it has been maintained at a temperature of $110 \pm 5^{\circ}\text{C}$ (230 $\pm 9^{\circ}\text{F}$ ) for sufficient time to remove all uncombined water,' from the absorption definition.	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	D.D.
	- Revisions to match the FOP	D B Consulting
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	
	FOP for AASHTO T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)	
T 310	No revisions proposed before the meeting.	
	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
	FOP for AASHTO T 355, In-place Density of Asphalt Mixtures by Nuclear Methods	
T 355	There were no revisions proposed before the meeting.	
	There are no revisions to the AASHTO method in 2025.	
	There are no revisions to the 2025 Training Materials.	
	Embankment & Base and In-Place Density Written Examinations	
EXAMS	Correct 'Developing Soil Moisture-Density Relations,' some references do not have the hyphen.	

Page 35		
Topic	Discussion / Decision	Action Required By:
	Misty reminded the committee to write questions to replace the True/False questions. She asked Desna to schedule a meeting to discuss the new questions. Desna sent a meeting invitation for Aug. 25 <sup>th</sup> and requested that the new questions be submitted to her by Aug. 20 <sup>th</sup> .	
	The committee also decided to replace some of the calculation questions for the FOP for AASHTO T 85. Each exam currently has three calculation questions. Near the end of the meeting, Isabelle submitted new questions for the committee to review. These questions were incorporated into the exams.	
	Madeline had some formatting revisions which were fixed. Madeline also asked that 'Family of Curves' be incorporated where appropriate and requested Exam 3, Question 14 be modified for clarity.	
	These were approved.	
	The committee members will draft new exam questions and send them to Desna by August 20 <sup>th</sup> , and review during the meeting on August 25 <sup>th</sup> .	
	Committee members: refer to the exam errata for specific revisions.	QAC MEMBERS DB
	These revisions will be included in the 2025 Training Materials	Consulting

## SELF-CONSOLIDATING CONCRETE TESTING TECHNICIAN (SCCTT) MODULE

pending Executive Board approval.

	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) Revisions proposed before the meeting:	
T 347 / T 351	During the 2025 Winter Meeting, Sean said that the PowerPoint presentation needs a picture with a plate that shows the central location of the mold.	
	There are no revisions to the AASHTO methods in 2025.	
	Discussion	
	Adam, Isabelle, and Dan agreed to get pictures of the bullseye plate for the training materials. Desna said that if they are	ADAM ROSE

Page 36		
Торіс	Discussion / Decision	Action Required By:

		T = -
	provided soon, they will be included in the 2025 Training Materials.	Dan Gettman
	Adam, Isabelle, and Dan will provide pictures on the bullseye	ISABELLE PANOS
	board.	DB
	There are no revisions to the 2025 Training Materials.	Consulting
	FOP for AASHTO T 345, Passing Ability of Self-Consolidating Concrete by J-Ring	
	There were no revisions proposed before the meeting.	
	2025 AASHTO revisions	
	- New date	
	- Changed apparatus dimensions	
	- Brackets to parentheses	
	- Figure 1 revisions	
	Revision discussion	
	The committee approved the revisions to the FOP to match the AASHTO Standard's revisions.	
T 345	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- Revise apparatus dimensions	
	- Crop Figure 1 to match AASHTO revision	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting

Page 37		
Topic	Discussion / Decision	Action Required By:

	WAQTC TM 18, Penetration Test for Static Segregation Resistance of Self-Consolidating Concrete (SCC)	
	There were no revisions proposed before the meeting.	
	2024 ASTM C1712 revisions	
	These revisions did not affect the training materials.	
	FOP:	
	- New revision date	
TM 18	- New ASTM date	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- None	DB
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	CONSULTING
	<u> </u>	
	WAQTC TM 19, Static Segregation of Self-Consolidating Concrete (SCC) Using the Column Method	
	There were no revisions proposed before the meeting.	
	2024 ASTM C1610 revisions	
	- Added strike-off of middle and bottom sections.	
	Revision discussion	
	The committee approved the revisions to the FOP to match the ASTM Standard's revisions.	
	Proposed revisions to the training materials:	
TM 19	FOP:	
	- New revision date	
	- New ASTM date	
	- Add steps to strike off the middle and bottom sections	
	Performance Exam Checklist:	
	- New revision date	
	- Add steps to strike off the middle and bottom sections	
	PowerPoint:	
	- Revisions to match the FOP	

Page 38		
Topic	Discussion / Decision	Action Required By:
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
EXAMS	There are no revisions to the 2025 Training Materials.	
GENERAL FILES		•
	Preface	
	Revisions proposed before the meeting:	
	Desna drafted revisions to the preface to match revisions the Board approved in the Mission Statement section the <i>Administration Manual</i> .	
01 CEN PRESACE	The committee reviewed the revisions and approved.	
01_GEN_PREFACE	Proposed revisions to the training materials:	
	- Revise Mission Statement to match Mission Statement in the Administration manual.	
	- Editorial edits in the Background and Objectives sections	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	Terminology	
	Revisions proposed before the meeting:	
TERMINOLOGY	Gilbert suggested that the term 'smartly' be defined in Terminology. Based on the usage, the part of the definition that is appropriate is 'quickly and usually done with force.'	
	The committee also wanted to further address how concrete should be consolidated in the tapping step after rodding in the FOP's for AASHTO T 121, T 152, and R 100.	
	It was decided to add the following statement to the appropriate PowerPoint slides in the notes.	
	'For thorough consolidation of a concrete layer, increase or decrease the amount of force from the mallet for each tap around the perimeter to close the voids and release trapped air.'	
	Proposed revisions to the training materials:	
	- Add definition of 'smartly' in Terminology.	

Page 39		
Topic	Discussion / Decision	Action Required By:

	These revisions will be included in the 2025 Training Materials	D B
	pending Executive Board approval.	Consulting
	Background	
	During discussions, it was mentioned that the Background section that is in all the training modules has not been reviewed for a long time. There are concepts that are discussed that may or may not be relevant.	
BACKGROUND	Misty asked committee members to volunteer to review the section, decide what is relevant, and suggest revisions.	SHARON TAYLOR
	Sharon and Adam volunteered to review it, and Misty	ADAM ROSE
	volunteered for herself and Gilbert. She also recommended that the rest of the committee keep it in mind while training and keep a list of suggestions.	GILBERT ARREDONDO
	Sharon, Adam, Gilbert, and Misty will review the Background	MISTY MINER
	section of the General files for possible revision in 2026.	QAC MEMBERS
	The 2026 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	
REVISION REVIEW	Aggregate: Isabelle Panos, Adam Rose, and Sharon Taylor	
	Asphalt: Dan Gettman, Gilbert Arredondo, and Mark Willoughby	
ASSIGNMENTS	SCC: Isabelle Panos and Adam Rose	
	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(s) they are assigned.	
	Corrections will be sent to Desna and Lori.	
	Desna was asked to include links to the shared folder in the Google Drive when draft revisions are sent. She agreed.	QAC MEMBERS

Page 40		
Topic	Discussion / Decision	Action Required By:
	Desna will send the draft revisions with links out by Sept. 6 <sup>th</sup> . Review deadline is Sept. 20 <sup>th</sup> .	D B Consulting
OP LIBRARY		
	WAQTC TM 15, Laboratory Maximum Dry Density of Granular Soil and Soil/Aggregate, Champion Mark Willoughby	
	Revisions proposed before the meeting:	
	Mark indicated during the 2025 Winter Meeting that WSDOT may have additional revisions to propose and, if they are approved, would like to have them incorporated during the Summer Meeting.	
	Revision discussion	
TM 15 REVISIONS	The committee approved the proposed revisions to the apparatus. Additional revisions to the FOP were approved during the 2025 Winter Meeting.	
	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New dimensions and criteria for the small and large mold assemblies in Apparatus	
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	D B Consulting
	FOP for AASHTO T 84, Specific Gravity and Absorption of Fine Aggregate	
	FOP for AASHTO T 217, Speedy Moisture in Soils	
CHAMPION(S)	WAQTC TM 14, Asphalt Mixture Laboratory Prepared Test Specimen	
	WAQTC TM 16, Flat and Elongated Particles in Coarse Aggregate	
	Due to Sean Parker and Lori Copeland's departure from their respective DOT's, there are multiple FOPs in the FOP Library that need champions.	
	According to the FOP Library Work Plan:	
	1. When an FOP champion departs from the QAC	

Page 41		
Topic	Discussion / Decision	Action Required By:
	a. The champion's replacement decides whether to assume these duties.  b. If this individual will not assume the duties for the FOP  i. Open the position to volunteers  1. Co-champions 2. Other stakeholders  c. If no champion is assigned, the FOP is 'discontinued'  i. Date of last revision appended to link title d. Removed from library after three years  Isabelle agreed to champion future revisions to the FOP for AASHTO T 84.  Sharon agreed to Champion the FOP for AASHTO T 217; and Adam agreed to champion WAQTC TMs 14 and 16.  These QAC members will be listed as the champions of their respective FOPs	SHARON TAYLOR ISABELLE PANOS ADAM ROSE
T 331	FOP for AASHTO T 331, Gmb Using Automatic Vacuum Sealing Method, Champion Mark Willoughby  Desna was asked to confirm expected revisions to AASHTO T 331.  2025 AASHTO revisions:  - New date  - Oven in Apparatus  - Thermometer in Apparatus  - Bag dimensions in Procedure  Revision discussion  The committee decided to add the same note on the water bath circulator that will be added in the FOPs for AASHTO T 209 and T 166. The committee also decided to approve the revisions for 2025 training materials instead of waiting for 2026 Winter Meeting.	

Page 42		
Topic	Discussion / Decision	Action Required By:

	Proposed revisions to the training materials:	
	FOP:	
	- New revision date	
	- New AASHTO date	
	- New Note 1 about water bath circulators	
	- Revise requirement for the thermometer	DB
	- Revise plastic bag dimensions	CONSULTING
	These revisions will be included in the 2025 Training Materials pending Executive Board approval.	
	Performance Exam Checklists	
R 66 PERFORMANCE EXAM CHECKLIST	Mark proposed a Performance Exam Checklist for this FOP during the 2025 Winter Meeting. At that time the committee decided that the draft needed more work. Mark reproposed a revised checklist that was approved.	
	This Performance Exam Checklist will be included in the 2025 Training Materials FOP Library subfolder pending Executive Board approval.	D B Consulting
REFERENCE FOLDER	During a discussion on what items are included in the library and on the website, the committee decided that there should be a subfolder for items that are for committee members to reference but not included on the website.	
	The FOP Library will include a 'Reference' folder holding items that are not universal training materials.	D B Consulting
	Gravimetric Concrete Air Content Calculation Spreadsheet	
GRAVIMETRIC AIR CONTENT CALCULATION	Dan told the committee that he was developing a gravimetric concrete air content spreadsheet during the 2025 Winter Meeting. He submitted the finished spreadsheet for inclusion in the FOP Library Reference folder.	
	The committee reviewed the spreadsheet and agreed that it would be nice to have it available if needed.	
	The Gravimetric Concrete Air Content Calculation Spreadsheet will be included in the Reference folder of the FOP Library.	D B Consulting

Page 43		
Topic	Discussion / Decision	Action Required By:

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	<u>Discussion item</u>	
SPREADSHEET FOR SCC TESTING	During the 2025 Winter Meeting, Lori indicated that she used a spreadsheet to record the measurements while testing SCC. She was unable to clen it up and provide it to the committee before she left ITD.	
	Misty asked Isabelle if she had access to it and if it was useful. Isabelle said she hadn't seen it. Misty said that since ITD is testing SCC, if someone develops a spreadsheet, it would be Isabelle's to share. Isabelle agreed. Lori emailed Isabelle the original draft version for reference.	
	SCC Spreadsheet is tabled.	
	FOP for AASHTO R 64, Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar	
	Dan suggested that WAQTC develop an FOP for AASHTO R 64 for the FOP Library.	
NEW FOP FOR AASHTO R 64	This AASHTO Standard was originally a WAQTC test method that was adopted by AASHTO.	
	Mark indicated that WSDOT has a practice they use instead of the AASHTO practice. He said he would be interested in helping Dan develop an FOP.	Dan Gettman
	Mark and Dan will develop an FOP for AASHTO R 64. They will have a draft ready for distribution by November 14 <sup>th</sup>	Mark Willoughby

# WAQTC ITEMS

	<u>Discussion item</u>	
THIRD-PARTY EXAM DELIVERY	Isabelle asked what the time frames are for retesting in Webassessor. Desna explained that the WAQTC Administration Manual allows the agency to decide their retesting rules. Webassessor rules were agreed upon by those agencies using it. Webassessor allows two registrations in a row and then 30 days before the technician can register again a third and fourth time, then another 30 days.	
	Desna also said that if there is a reason the agency wants to waive this there is a way she can arrange another registration in Webassessor.	

Page 44		
Topic	Discussion / Decision	Action Required By:
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	Action items	
	Mark said that the technicians are not contacting the agencies when there are questions. Desna reviewed the emails that Webassesor sends and found that the contact information is incomplete on some of the emails. She said that she would get it corrected.	
	Madeline asked if agency specific exams could be delivered through Webassessor. Desna said that it has been discussed. The board would need to decide how to address any added expense that would be incurred. She recommended that Craig Wieden, CDOT and Executive Board member, discuss it with the board.	
	Desna said that she will review the contract with Kryterion to see if there are limitations on the number of exams that can be offered through Webassessor.	
	Desna will get the emails from Webassessor to the candidates revised with better agency member contact information.	
	Desna will review the WAQTC contract with Kryterion for more information on additional exams.	DESNA BERGOLD
	During the 2025 Winter Meeting, Misty told those on the committee who want a WAQTC sponsored Sampling Module to decide which FOPs it would include and how long the certification would last.	
	Misty also said she had a discussion with the board during the Executive Board Spring Meeting, and they are in favor of offering a Sampling Module.	
SAMPLING MODULE	Desna showed the committee the list that Dan provided of the module AKDOT offers. The list included sampling aggregate, asphalt mixtures, and asphalt binder, and reduction of aggregates and asphalt mixtures.	
	Gilbert said that UDOT offers a similar sampling and reduction, they also have a module that includes sampling, reduction, and density.	
	Mark said that they only offer the sampling portion but not the reduction. Mark was asked if he could agree to sampling and reduction. He said he would work with WSDOT to approve it.	
	The proposed Sampling and Reduction module will include:	

Page 45		
Topic	Discussion / Decision	Action Required By:
	- FOP for AASHTO R 90, Sampling Aggregate Products	
	- FOP for AASHTO R 76, Reducing Samples of Aggregate to Testing Size	
	- FOP for AASHTO R 97, Sampling Asphalt Mixtures	
	- FOP for AASHTO R 47, Reduction of Asphalt Materials	
	- FOP for AASHTO R 66, Sampling Asphalt Materials	DB
	The new Sampling and Reduction Module will be included in the	Consulting
	2025 Training Materials pending Executive Board approval.	MISTY MINER
	Desna said that she started revising some of the concrete FOPs to comply with accessibility requirements. She used the Word Accessibility Assistant to investigate the documents. The Word files needed few revisions, mostly alternate text for pictures in the student files. She said that she needed to get a better grasp on the process in Adobe PDFs.	
ADA COMPLIANCE WORKPLAN	Madeline offered some advice and explained that the multiple text boxes for each picture cause a great deal of problems. The text boxes need to be unstacked in Word before converting to PDF.	
	Desna said she will continue to track the steps and time to make the concrete FOPs accessible. This information will be used to create a workplan.	
	DB Consulting will continue gathering information for the workplan.	D B Consulting
DUAL UNITS IN THE FOPS	Misty was asked to discuss removing the dual units from the training materials and using the most common single units. In some cases, this would be the Imperial units and in other cases metric units (such as grams).	

Misty will discuss dual units and single units with the Executive Board during the Executive Board Summer meeting.

MISTY MINER

Page 46		
Торіс	Discussion / Decision	Action Required By:

# ORGANIZATION DOCUMENTS/OPERATIONS MANUAL

ADMINISTRATION MANUAL & RPIH	WAQTC Administration Manual and Registration, Policies, and Information Handbook (RPIH)  The board revised the proposed reciprocity language during the Executive Board Spring Meeting. The committee reviewed the board revisions.  Discussion item.
STYLE GUIDE	WAQTC Style Guide  The board reviewed and approved the proposed revisions to the Style Guide.  Discussion item.
STRATEGIC PLAN	<ul> <li>2025 Planned Work</li> <li>Priorities of the Executive Board, from the 2025 Strategic Plan:</li> <li>Continue work on 'on-going' activities.</li> <li>Evaluate existing training materials for needed improvements / updates.</li> <li>Member teleconferences to share developments in training and certification platforms.</li> <li>Develop online training and videos.</li> <li>Develop a work plan to address training materials for Americans with Disabilities Act (ADA) compliance.</li> <li>Determine whether to develop a sampling module</li> <li>Evaluate membership funding needs</li> <li>Discussion item.</li> </ul>

# 2025 WINTER MEETING ACTION ITEM FOLLOW UP

Logo	The new WAQTC logo and banner are available for committee members' use. The logo on the WAQTC.org webpage has been changed.		
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Page 47		
Topic	Discussion / Decision	Action Required By:

	Desna said that D B Consulting will change the logo on the covers of the training manuals and the WAQTC letterhead.	DB
	DB Consulting will update the logo wherever used.	Consulting
	WAQTC.org	
Website	During review of the recent revisions to the WAQTC.org website, the subcommittee discussed the related links section and asked if they all should remain. The committee said that as long as the links are current, they should remain.	
	While reviewing the webpage, it was pointed out that the titles for the FOPs for AASHTO R 100 and T 11 need to be revised. Desna said that when the updates are uploaded to the website, she will make sure the titles are also updated.	
	Desna was asked to find out if the website can have a private page for WAQTC members. Desna found a plugin, 'Unlist Posts & Pages Plugin,' that could be used to create an unsearchable page that can be shared with a link. She believes that this would have limited use as each file would need to be uploaded and linked to the page.	
	Desna was also asked to have the links on the website open in a new tab instead of the same tab. She was able to change all the links except those in line with the text. She hasn't tried the links in the map, she said she would try.	
	She was then asked if she could make the registries list buttons instead of a bulleted list. She said she would.	
	It was recommended that the presentations used in training have website information. Desna asked which PowerPoint presentations should have the information. It was decided that each module's basics and the final slide of the module have a website slide.	
	DB Consulting will revise the website and PowerPoint presentation as directed.	
SHARED DRIVE	Adam asked about the Google shared drive that has been mentioned during the meeting. Desna explained that UDOT set up a Google shared drive that the board and committee members can use. Sean, Adam's predecessor, was unable to access it. Adam requested access and will see if he can work out a means	

Page 48		
Topic	Discussion / Decision	Action Required By:
	to use it. Adam's access to the shared drive was requested from UDOT.	
	Desna was requested to add the Google Drive links when sending both the draft and final training materials announcement. She agreed.	
	Desna will include the shared drive links when announcing the draft and final training materials are prepared.	

# ADDITIONAL ITEMS

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EXECUTIVE BOARD MEETINGS	Executive Board Meetings and their content were discussed under the relevant items.	
	No further action required.	
	2026 QAC Winter and Summer Meeting Locations	
	The committee discussed locations for the upcoming 2026 QAC Meetings.	
	The committee considered the options and decided to request approval from the board for the following locations for each meeting.	
	The 2026 QAC Winter Meeting will be held Jan. 26 <sup>th</sup> to the 30 <sup>th</sup> .	
	Proposed locations:	
2026 QAC	- Tempe, Arizona	
MEETING	- Reno, NV	
LOCATIONS	- Farmington, UT	
	The 2026 QAC Summer Meeting will be held July 13 <sup>th</sup> through the 17 <sup>th</sup> .	
	Proposed locations:	
	- Seattle, WA	
	- Denver, CO	
	- Bend, OR	MISTY MINER
	Misty Miner and Gilbert Arredondo will discuss the meetings' locations with the Executive Board.	GILBERT ARREDONDO
OTHER ITEMS	There were no other items to discuss.	

# 2025 QAC Summer Meeting Action Items

# QAC Member Follow Up

- Develop Embankment & Base/In-place Density new exam questions to replace some of the true/false exams.
- Submit the questions by August 20<sup>th</sup>
- Review *Background on Measurements and Calculations* in the General folder for updates. Identify information that may not be relevant to deliver.

# Desna Bergold/Lori Copeland

 Meeting to review Embankment & Base/In-place Density new exam questions scheduled Monday August 25th.

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

• Send Performance Exam Checklist to QAC for review, request guick response.

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

• Send Performance Exam Checklist to QAC for review, request quick response.

## FOP for AASHTO R 75, Developing Soil-Moisture Density Relations

• Modify slides with graphics. Add 'Family of Curves' after FOP for AASHTO R 75.

### Third-Party Exam Delivery

Exams will be updated and go 'live' January 1<sup>st</sup>

### Sampling and Reduction Module

 Draft Module: Short, Student, Review, Performance Exam, Written Exam, PowerPoint, Admin Manual.

### QC Spreadsheet Update

• Add page for list of documents that need updated when the title or number is changed

#### Website:

- Fix links behind Isabelle and Adam's contact
- Add reference to website in basics PowerPoint for each module and last slide of last method in each module.
- Related Links Tab: Remove redundancies.
- Update with new logos.

# **2025 QAC Summer Meeting Action Items**

## **Misty Miner**

### **Background**

- Review Background on Measurements and Calculations in the General folder for updates. Identify information that may not be relevant to deliver.
  - Mass vs. weight
  - Real world limitations (FOP for AASHTO T176)

## Revision review assignment

- Concrete
- Administration Manual and RPIH

#### Gilbert Arredondo

## **Background**

- Review *Background on Measurements and Calculations* in the General folder for updates. Identify information that may not be relevant to deliver.
  - Mass vs. weight
  - Real world limitations (FOP for AASHTO T176)

# Revision review assignment

- General
- Administration Manual and RPIH

#### Dan Gettman

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)

• Provide pictures of the bullseye board.

FOP for AASHTO R 64, Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar

Develop FOP for FOP Library. Submit draft by November 14<sup>th</sup>

# Revision review assignment

- Embankment & Base and In-place Density
- Asphalt

# Madeline Enright

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

Provide excel graph with shaded areas

# **2025 QAC Summer Meeting Action Items**

### Revision review assignment

Embankment & Base and In-place Density

#### Isabelle Panos

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)

- Provide pictures of the bullseye board. Revision review assignment
- Self-Consolidating Concrete
- Aggregate

# **Sharon Taylor**

# **Background**

- Review *Background on Measurements and Calculations* in the General folder for updates. Identify information that may not be relevant to deliver.
  - Mass vs. weight
  - Real world limitations (FOP for AASHTO T176)

### Revision review assignment

- General
- Aggregate

### Adam Rose

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)

Provide pictures of the bullseye board.

## Revision review assignment

- Aggregate
- Self-Consolidating Concrete

# Mark Willoughby

FOP for AASHTO R 64, Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar

• Develop FOP for Library. Submit Draft to Desna by November 14<sup>th</sup>

### Revision review assignment

- Concrete
- Asphalt