## 2021 WAQTC QAC SUMMER MEETING MINUTES

CHAIR: SEAN PARKER, ODOT Coordinator: Desna Bergold, D B Consulting	DATE: JULY 12 <sup>th</sup> through the 16 <sup>th</sup> , 2021 Time: 8:30 am to 3:00 pm PDT Location: Teams
ATTENDEES:	Absent:
SEAN PARKER, ODOT, CHAIR	BRIAN IKEHARA, HDOT
MISTY MINER, MDOT, VICE CHAIR	
DAN GETTMAN, AKDOT & PF	
CHRISTOPHER RUSSELL, CDOT	
LORI COPELAND, ITD	
SHARON TAYLOR, NDDOT	
GILBERT ARREDONDO, UDOT	
KEVIN BURNS, WSDOT	
RANDY MAWDSLEY, WSDOT	
NASSIM SABAHFAR, FHWA	
Invited Guest:	
SONYA PUTERBAUGH, AASHTO RE:SOURCE	

## MEETING ITEMS:

REVIEWS OF AASHTO REVISIONS AND QAC PROPOSED REVISIONS FOR EACH PROCEDURE

1. Revision to Embankment/Base and In-Place Density Field Operating Procedures

- a. Basics full revision
- b. T 255/T 265, Moisture Content of Aggregate and Soil
  - i. Improve discussion on the use of each oven Desna
- c. T 99/T 180, Moisture/Density Relations
  - i. Add 'sieve' after 3/4 in. in Scope Desna
  - ii. AASHTO says the moisture sample is obtained by 'removing the cut face' Desna
  - iii. PR-Q 6, add US Customary equivalent Lori
  - iv. Leftover 'D' in formulas Lori
  - v. AASHTO revision New Date
    - 1. Alternate types of molds
- d. R 75; Developing a Family of Curves
- e. T 272, One-Point Method
  - i. Does not address sieving the sample obtained by T 310 Desna
- f. T 85, G<sub>sb</sub>
  - i. PR Q 8, 'completely submerged' not in FOP Dan
  - ii. AASHTO revisions
    - 1. New date

- 2. Referenced T 255 add 'aggregates' after T 255/T 265 reference?
- 3. Cool until comfortable to handle
- g. T 310, In-place Density and Moisture Content of Soil-Aggregate
- h. T 355, In-place Density of Asphalt Mixtures
  - i. % Compaction in formulas Desna
- i. Exams
  - i. Replace D with  $\rho$  Sean
  - ii. Additional exam questions to meet D3740
  - iii. IPD exam 2 numbering problem Kevin
  - iv. EB/IPD exam 3 two 20s Lori
- j. PowerPoint
  - i. Basics full revision
- 2. Revision to Concrete Field Operating Procedures
  - a. Basics full revision
  - b. TM 2, Sampling Concrete
    - i. Should begin, 'This practice' Desna
    - ii. Revise Step 4 Desna
    - T 309, Temperature
      - i. Remove Q4 Lori
  - d. T 119, Slump

c.

- e. T 121, Density
  - i. Update density formula in example, FOP, Student, and PowerPoint Lori
- f. T 152, Air Content
- g. T-23R 100, Test Specimens
  - i. AASHTO revisions
    - 1. R 100
    - 2. New date
- h. Exams
  - i. Exam 1 and 3 formatting Lori
  - ii. Exam 1 add formulas for Q 20 Lori
  - iii. T 23 to R 100
- i. PowerPoint
  - i. Basics full revision
- 3. Revision to Aggregate Field Operating Procedures
  - a. Basics full revision
  - b. R 90, Sampling Aggregate Products
    - i. Additional review question
  - c. R 76, Reduction
    - i. Correct PP slide 23 Lori
  - d. T 255, Moisture Content of Aggregate
  - e. T 11/T 27, Sieve Analysis
    - i. Table 1 'Minimum Dry Mass' Short and FOP don't match Lori
    - ii. Method B cumulative gradation on fine sieves heading (exams too) Lori
    - iii. No need for AIMR, ACMR as an intermediate step Desna

- iv. Method B, Notes 5 and 6, same note different No.
- v. PowerPoint
  - 1. Table 1 'Minimum Dry Mass' Lori
- f. T 335, Fractured Particles
  - i. Step 5, 'To the nearest 1 percent' Kevin
  - ii. Calculation instructions revisions Kevin
  - iii. %Q example fix Kevin
  - iv. Principle v principal Desna
- g. T 176, Step Sand Equivalent
  - i. 6b should be 'Manual Method' Misty
  - ii. Note 7 is not a Note in AASHTO Kevin
  - iii. Add a balance to the apparatus Kevin
  - iv. Move 'givens' Desna
- h. Exams
  - i. Exam 1 correct 19 and 20 Sean
  - ii. Exam 3 fix pan mass Sean
  - iii. All exams fix minus pan mass labels Desna
  - iv. Exam 2B individual approximately halved
- i. PowerPoint
  - i. Basics full revision
- 4. Revision to Asphalt I & II Field Operating Procedures
  - a. Basics full revision
  - b. R 97, Sampling Asphalt Mixtures
  - c. R 47, Reducing
  - d. T 329, Moisture Content
  - e. T 308, Asphalt Content
  - f. T 209, G<sub>mm</sub>
  - g. T 166, G<sub>mb</sub>
    - i. Replace pictures of puck in water Sean
    - ii. AASHTO revisions
      - 1. New date
      - 2.  $77 \pm 2^{\circ}F$
  - h. R 66, Sampling Asphalt Material
  - i. T 30, Sieve Analysis
    - i. RPP example equation correction Dan
    - ii. AASHTO revision
      - 1. New date
      - 2. Table A.2.1
  - j. T 312, Gyratory
  - k. TM 13, Volumetric Properties
    - i. PR1 correction on answer sheet, mid-calculation Lori
    - ii. Formal dispute Lori
  - 1. Exams
  - m. PowerPoint

- i. Basics full revision
- 5. Revision to Self-Consolidating Concrete Module Field Operating Procedures
  - a. T 347/T 351, Slump Flow and VSI
    - b. T 345, J-Ring
    - c. TM 18 Penetration
    - d. TM 19, Column
- 6. Revision to General
  - a. Warm mix in terminology Desna
- 7. Revision review assignments
- 8. New exam questions for E&B Spring Meeting
  - a. Exam best practices
- 9. Other AASHTO revisions
- 10. FOP Library
  - a. R 79 Champion?
  - b. R 60 for next Board meeting, Champion?
- 11. Administration Manual and RPIH proposed revisions
  - a. SCC Prerequisite, should it read 'or ACI-CFT Reciprocity? Garth
  - b. Written re-examination full or partial
  - c. Expiry date, date of exam completion Randy
  - d. T 23 to R 100
- 12. Action Item Follow up
  - a. Revision to T 315 for 2022 Winter Meeting Nassim, Sonya, Kevin
- 13. Report from Executive Board Spring meeting
- 14. Other items
- 15. Location of upcoming meetings Winter Meeting January 31<sup>st</sup> through February 4<sup>th</sup>. Summer July 18<sup>th</sup> through the 22<sup>nd</sup>

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	Sean Parker, ODOT and Qualification Advisory Committee (QAC) Chair, welcomed the committee members to the virtual meeting. He hopes that we will be able to hold the Winter Meeting in person. Sean asked that everyone share update on their programs and the ongoing impact of COVID-19.
	He started by saying that Oregon still has some restrictions, such as masks and social distancing for travel. The DOT is still quarantining and will be until September although they are able to hold some limited qualification sessions.
	Randy Mawdsley and Kevin Burns, WSDOT, said they have had some success with training on YouTube using PowerPoint. Exams are in person. Eight to twelve people per session, significantly smaller than before. FHWA had approved two qualification expiration date extensions and WSDOT will possibly seek a third.
WELCOME	Gilbert Arredondo, UDOT, said that they are having similar issues. Utah no longer mandates wearing masks. They are still holding exam only sessions with 10 people each including instructors and will continue for the rest of the year. They are planning to electronically deliver class presentations soon. UDOT's FHWA extensions have expired which led to a surge in registrations which are now slowing. They expect registrations to surge again in the fall.
	Misty Miner, MDT, says that Montana is completely open. They have been having problems keeping personnel which has led to non-stop virtual classes and travel for Performance Exams. They anticipate maintaining the electronic training which they have made available to anyone.
	Dan Gettman, AKDOT, said that Alaska has opened up and the DOT requires technicians to travel to Anchorage for qualifications.
	Christopher Russell, CDOT, says Colorado is open. CDOT is now allowed to conduct training and qualification sessions with more participants but has opted for fewer. They have capped the sessions at 15 participants and conduct two sessions per month. CDOT has found that the on-line training has been successful.

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	Lori Copeland, ITD, says that Idaho is mostly back to normal. They are conducting exams with fewer participants than before. ITD is trying to encourage consultant labs to train their own personnel. Sharon Taylor, NDDOT, said their experiences are pretty much the same. North Dakota is open and trying to get people back to work. They used Teams for winter training and found that the frequent internet issues caused significant problems. They intend to continue to pursue on-line training because their technicians prefer not to travel for classes. Sonya Puterbaugh, AASHTO re:source, says that Maryland is getting back to normal. Masks are still required on mass transit. Returning to the office is optional until September but re:source is starting on-site assessments again. <i>Discussion only, no action required</i> .	
	`RAINING MATERIALS AND REVISIONS	
EMBANKMENT/ B	ASE AND IN-PLACE DENSITY (E&B/IPD)	
	Basics of Compaction and Density Control	
	During the 2021 QAC Winter Meeting, Desna Bergold, D B Consulting and WAQTC Coordinator, was assigned to review and revise the 'Basics' sections in all the modules except Self- Consolidating Concrete (SCC).	
BASICS	The committee reviewed the revised <i>Basics of Compaction and</i> <i>Density Control</i> Word file and PowerPoint. The committee determined that, because of the implementation of TMs 15 and 17, the list of agency methods for coarse-grained soil and soil/aggregate should be removed in 2022 but remain as is for now.	
	Desna will include removal of the list of agency specific test methods for coarse grained soil and soil-aggregate on the 2022 Summer Meeting agenda.	
	<i>Revisions to the</i> Basics of Compaction and Density Control <i>will be included in the 2021 training materials.</i>	Desna Bergold

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	<ul> <li>Revisions to match those in the FOP.</li> <li><i>These revisions will be included in the 2021 training materials.</i></li> </ul>
	PowerPoint:
	- None
	Performance Exam Checklist:
1 233, 1 203	Revisions to the training materials include:         FOP:         - New date         - Apparatus add:         - Forced draft oven (preferred)         - Other device/method allowed by the agency.         - Procedure add:         - Steps 5aii and 9aii: 'or other heat sources as allowed by the agency.'         - Table 3: 'or any other device/method allowed by the agency.'
T 255/T 265	Chris suggested adding 'allowed by the agency' in Apparatus where it discusses other devices/methods and include similar language in the Procedure. This was approved.
	Other revisions: Lori said that she was asked to include language that the forced draft oven is 'preferred' to match AASHTO T 265. Everyone agreed.
	sufficient. <u>There are no revisions to the AASHTO methods in 2021.</u>
	Desna asked if the committee would like to expand the discussion on the use of each oven. At one time there was more information on when close control of the temperature is necessary. The committee determined that the statement in Apparatus is
	Proposed revisions to the training materials:
	Field Operating Procedure (FOP) for AASHTO T 255/T 265, Moisture Content of Aggregate and Soils

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	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	
	Proposed revisions to the training materials:	
	Desna pointed out that AASHTO T 99 and T 180 says to remove 'one of the cut faces' to obtain a representative moisture sample. Although the figure in the FOP implies this, it isn't stated. The committee agreed that including the statement is appropriate. They then determined that 'ensuring that all layers are represented' should be moved to the next sentence of the step to address obtaining a sample when a cut face does not exist.	
	Lori pointed out that the variable $\rho$ has not been replaced in all the usages of $D$ in the formulas and examples. This will be fixed.	
	Lori also pointed out that the US Customary Unit equivalents should be added to the Performance Exam Checklist.	
T 99/T 180	The 2021 AASHTO methods revisions:	
	The 2021 AASHTO methods will be revised upon publication with new revision dates and will include the use of alternate types of molds. The committee decided that the FOP should not address alternate types of molds.	
	Revisions to the training materials include:	
	FOP:	
	<ul> <li>New AASHTO date</li> <li>New date</li> <li>Editorial revisions in Scope</li> <li>Procedure Step 10: add 'remove one of the cut faces' and move 'ensuring that all layers are represented.'</li> <li>Replace the variable 'D' with 'ρ' in the formulas and examples.</li> </ul>	
	Performance Exam Checklists:	
	- Include US Customary units	
	PowerPoint:	
	- Revisions to match the FOP revisions.	DESNA
	These revisions will be included in the 2021 training materials.	BERGOLD

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

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	FOP for AASHTO R 75, Developing a Family of Curves	
D 76	<u>There were no revisions to the training materials proposed</u> <u>before the meeting.</u>	
R 75	There are no revisions to the AASHTO method in 2021.	
	<i>There are no revisions for this method for the 2021 training materials.</i>	
	FOP for AASHTO T 272, One-point Method for Determining Maximum Dry Density and Optimum Moisture	
	Proposed revisions:	
	Desna pointed out that the FOP does not address sieving the sample obtained by the FOP for AASHTO T 310. The committee decided to include the language from the AASHTO method, 'Pass the material through the appropriate sieve.'	
	There are no revisions to the AASHTO method in 2021.	
	Other revisions:	
	The committee decided that instructions under Apparatus concerning which method to use should be in the Procedure. This statement will be moved.	
T 272	Revisions to match the above revisions to the FOP for AASHTO T 99/T 180.	
	Revisions to the training materials include:	
	FOP:	
	<ul> <li>New date</li> <li>Sample: new Step 3, 'Pass the material through the appropriate sieve.'</li> <li>Procedure Step 10: add 'remove one of the cut faces' and move 'ensuring that all layers are represented.'</li> </ul>	
	Performance Exam Checklists:	
	- Include US Customary units	
	PowerPoint:	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	Bergold

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	FOP for AASHTO T 85, Specific Gravity and Absorption of Coarse Aggregate	
	Proposed revisions to the training materials:	
	Dan pointed out that Step 8 of the Performance Exam Checklist states to 'completely submerge' the wire basket. This is not in the FOP. The committee decided to add 'and basket fully submerged' in Steps 2 and 5.	
	Desna said that the AASHTO method says to cool the sample 'until comfortable to handle' after drying. The FOP says to cool to room temperature. The committee decided the FOP still complies with AASHTO and should not be revised.	
	The 2021 AASHTO methods revisions:	
Т 85	The 2021 AASHTO method will be revised upon publication with a new revision date and will include references to T 255 for drying. The FOP already includes this reference.	
	Revisions to the training materials include:	
	FOP:	
	<ul> <li>New AASHTO date</li> <li>New date</li> <li>Add 'and basket fully submerged' in Steps 2 and 5</li> </ul>	
	Performance Exam Checklist:	
	- None	
	PowerPoint	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD
	FOP for AASHTO T 310, In-place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods	
Т 310	<u>There were no revisions to the training materials proposed</u> <u>before the meeting.</u>	
	There are no revisions to the AASHTO method in 2021.	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	Other revisions:	
	The committee decided to move language from the Significance section of the Student FOP to the Scope section because the Significance section is not in the Short FOP.	
	Revisions to the training materials include:	
	FOP (editorial):	
	- Move 'This procedure provides a rapid, nondestructive technique for determining the in-place wet density and moisture content of soil, aggregate, and soil-aggregate mixes,' from Significance into Scope.	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- None	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD
	FOP for AASHTO T 355, In-place Density of Asphalt Mixtures by Nuclear Methods	
	Proposed revisions to the training materials:	
	Desna suggested using '% Compaction' in formulas instead of spelling out 'percent compaction,' this matches the FOP for AASHTO T 310. The committee agreed.	
	There are no revisions to the AASHTO method in 2021.	
	Revisions to the training materials include:	
Т 355	FOP (editorial):	
	- Replace 'percent compaction' with '% Compaction' in formulas.	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

		1
Exams	Sean pointed out that replacing the variable $D$ with $\rho$ was not complete. Other editorial revisions include correcting question numbering. <i>Committee members: refer to the exam errata for specific</i> <i>revisions.</i>	Desna Bergold
CONCRETE (CTT	)	I
	Basics of Concrete	
Basics	The committee reviewed the proposed edits. Lori explained that many technicians don't understand that air-entraining agents do not generate bubbles, they stabilize the bubbles that are created during mixing. The committee decided that this information should be included in the notes in the PowerPoint for the instructor to cover and, also, included in the Significance of the FOP for AASHTO T 152. <i>These revisions will be included in the 2021 training materials.</i>	Desna Bergold
TM 2	<ul> <li>WAQTC TM 2, Sampling of Freshly Mixed Concrete</li> <li>Proposed revisions to the training materials:</li> <li>Desna proposed some editorial revisions. She indicated that TM 2 is a 'Practice' not a 'Method.' This will be revised in three locations. She also said that one sample is obtained from each sampling location and that 'samples' should be revised to 'sample' in multiple uses. Step 4 should be revised to say, 'Transport sample to the testing location,' and remixing should be Step 5.</li> </ul>	
	Other revisions	
	Misty pointed out that the only location that requires multiple increments is the paving mixer so the term 'material' should be revised to 'increments.' These revisions were approved.	
	Revisions to the training materials include:	
	FOP (editorial):	
	<ul> <li>Scope, change 'Method' to 'Practice'</li> <li>Step 3, Sampling from Paving Mixtures, change 'material' to 'increments'</li> </ul>	

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	<ul> <li>Step 4, change to 'Transport sample to the testing location.'</li> <li>Start Step 5 with 'Remix'</li> <li>Change 'samples' to 'sample' in multiple uses</li> <li>Performance Exam Checklist: <ul> <li>None</li> </ul> </li> <li>PowerPoint: <ul> <li>Revisions to match the FOP revisions.</li> </ul> </li> </ul>	Desna
	These revisions will be included in the 2021 training materials.	Bergold
	FOP for AASHTO T 309, Temperature of Freshly Mixed Portland Cement Concrete	
	Proposed revisions to the training materials:	
	Lori indicated that Question 4 on the Review Questions asked about large aggregate. Discussion of concrete with large aggregate was removed from the FOP. Desna drafted a replacement question. This was approved.	
	There are no revisions to the AASHTO method in 2021.	
	Revisions to the training materials include:	
Т 309	FOP:	
1 309	- None	
	Review Questions	
	<ul><li>New date</li><li>Replace Question 4.</li></ul>	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- None	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

<b>F</b>		· · · · · · · · · · · · · · · · · · ·
T 110	FOP for AASHTO T 119, Slump of Hydraulic Concrete	
	<u>There were no revisions to the training materials proposed</u> <u>before the meeting.</u>	
T 119	There are no revisions to the AASHTO method in 2021.	
	<i>There are no revisions for this method for the 2021 training materials.</i>	
	FOP for AASHTO T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	
	Proposed revisions to the training materials:	
	Lori pointed out that the FOP has a formula for concrete mass which subtracts the mass of the measure from the combined mass, but the example doesn't use the term. This will be corrected in the FOP and PowerPoint.	
	There are no revisions to the AASHTO method in 2021.	
T 121	Revisions to the training materials include:	
1 121	FOP (editorial):	
	- Revise example equations to use the term 'concrete mass.'	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD
	FOP for AASHTO T 152, Air Content of Freshly Mixed Concrete by the Pressure Method	
T 152	There were no revisions to the training materials proposed before the meeting.	
	There are no revisions to the AASHTO method in 2021.	
	Other revisions:	
	Add discussion on air-entraining agents to the Significance, PowerPoint, and Notes as discussed under <i>Basics of Concrete</i> .	

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	Revisions to the training materials include:	
	FOP (editorial):	
	- Student: Add discussion on air-entraining agents	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions	DESNA DED GOLD
	These revisions will be included in the 2021 training materials.	Bergold
	FOP for AASHTO R 100 T 23, Making and Curing Concrete Test Specimens in the Field	
	There were no revisions to the training materials proposed before the meeting.	
	The 2021 AASHTO methods revisions:	
	The 2021 AASHTO method will be revised upon publication to a Practice with a new number, R 100, and new revision date. Also, a revision to Table 1 which does not affect the FOP.	
	Revisions to the training materials include:	
	FOP:	
	- New AASHTO date	
<del>T 23</del> R 100	<ul><li>New date</li><li>Revise to 'FOP for AASHTO R 100'</li></ul>	
	- Revise 'Procedure' to 'Practice'	
	Review Questions	
	<ul><li>New date</li><li>Revise to 'FOP for AASHTO R 100'</li></ul>	
	Performance Exam Checklist:	
	<ul><li>New date</li><li>Revise to 'FOP for AASHTO R 100'</li></ul>	
	PowerPoint:	
	- Revisions to match the FOP revisions	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

EXAMSRevise the FOP for AASHTO T 23 to the FOP for AASHTO R 100. Other editorial revisions for formatting. Committee members: refer to the exam errata for specific revisions.DESNA BERGOLDAGGREGATE (AGTT)Basics of Aggregate The committee reviewed and approved the proposed edits. These revisions will be included in the 2021 training materials.DESNA BERGOLDFOP for AASHTO R 90, Sampling Aggregate ProductsDESNA DESNADESNA DESNA DESNA
Committee members: refer to the exam errata for specific revisions.DESNA BERGOLDAGGREGATE (AGTT)Basics of Aggregate The committee reviewed and approved the proposed edits. These revisions will be included in the 2021 training materials.DESNA BERGOLDFOP for AASHTO R 90, Sampling Aggregate ProductsFOP for AASHTO R 90, Sampling Aggregate ProductsDESNA DESNA DESNA DESNA DESNA
BASICSBasics of Aggregate The committee reviewed and approved the proposed edits. These revisions will be included in the 2021 training materials.DESNA BERGOLDFOP for AASHTO R 90, Sampling Aggregate ProductsDESNA DESNA DESNA
BASICS       The committee reviewed and approved the proposed edits.       DESNA <i>These revisions will be included in the 2021 training materials.</i> DESNA <i>FOP for AASHTO R 90, Sampling Aggregate Products</i> DESNA
Desired       If the included in the 2021 training materials.       Desired         Bergold       FOP for AASHTO R 90, Sampling Aggregate Products       Desired
FOP for AASHTO R 90, Sampling Aggregate Products
Proposed revisions to the training materials:
Misty proposed an additional question on sampling from stockpiles for the Review Questions. This was approved.
There are no revisions to the AASHTO method in 2021.
Revisions to the training materials include:
FOP
- None
R 90 Review Questions
<ul> <li>New date</li> <li>Add, 'What are the differences in Methods A, B, and C when sampling from a stockpile?'</li> </ul>
Performance Exam Checklist (both):
- None
PowerPoint:
- None DESNA
These revisions will be included in the 2021 training materials BERGOLD

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

		1
	FOP for AASHTO R 76, Reducing Samples of Aggregate to Testing Size	
	Proposed revisions to the training materials:	
	Lori said that on PowerPoint Slide 23, Splitter Check, the equation needs to be corrected.	
	There are no revisions to the AASHTO method in 2021.	
	Revisions to the training materials include:	
R 76	FOP:	
	- None	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Correct PowerPoint Slide 12	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD
	FOP for AASHTO T 255, Total Evaporable Moisture Content of Aggregate by Drying There were no revisions to the training materials proposed	
	before the meeting.	
	There are no revisions to the AASHTO method in 2021.	
	Other revisions:	
Т 255	Revisions to match those for the FOP for AASHTO T 255/T 265.	
1 233	Revisions to the training materials include:	
	FOP	
	- New date	
	- Apparatus, add: E Forced draft oven (preferred)	
	<ul> <li>other device/method allowed by the agency.</li> </ul>	
	- Procedure, add:	
	<ul> <li>Steps 5aii and 9aii: 'or other heat sources as allowed by the agency.'</li> </ul>	
T 255	Aggregate by Drying         There were no revisions to the training materials proposed before the meeting.         There are no revisions to the AASHTO method in 2021.         Other revisions:         Revisions to match those for the FOP for AASHTO T 255/T 265.         Revisions to the training materials include:         FOP         - New date         - Apparatus, add:         - Forced draft oven (preferred)         - other device/method allowed by the agency.         - Procedure, add:         - Steps 5aii and 9aii: 'or other heat sources as	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

		1
	<ul> <li>Table 3: or any other device/method allowed by the agency.</li> </ul>	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD
	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	
	Proposed revisions to the training materials:	
	Lori submitted editorial corrections. Table 1 headings in the short and student FOPs do not match. 'Minimum Dry Mass' is correct.	
	In the example calculations tables, the heading for the fine gradation in Method B Cumulative were incorrect. They referenced individual gradation. In reviewing the corrections, Desna noticed that the tables reference AIMR and ACMR, these are intermediate steps, the headings should be TIMR and TCMR.	
	Desna also pointed out that in Method B Procedure, Notes 5 and 6 are the same discussion on cleaning sieves. Note 6 was removed and 'see note 5' was added.	
T 27/T 11	There are no revisions to the AASHTO method in 2021.	
	Revisions to the training materials include:	
	FOP:	
	<ul> <li>New date</li> <li>Correct Table 1 heading, 'Minimum Dry Mass' in Student</li> <li>Correct headings in the example gradation tables.</li> <li>Method B: Replace 'Adjusted Individual Mass Retained (AIMR) with 'Total Individual Mass Retained (TIMR).'</li> <li>Method B: Replace 'Adjusted Cumulative Mass Retained (ACMR) with 'Total Cumulative Mass Retained (TCMR).'</li> </ul>	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	Bergold
	FOP for AASHTO T 335, Determining the Percentage of Fracture in Coarse Aggregate	
	Proposed revisions to the training materials:	
	Kevin proposed adding 'to the nearest 1 percent' in Step 5. It is common practice to include the accuracy for calculations in the Procedure. Other revisions he proposed:	
	• Replacing 'mass percentage of' with 'percent' in the instructions for calculations.	
	• Using the variables, defined in the formula, in the example 'given' section.	
	• Change the answer in the 'Percent Questionable' example to the correct accuracy.	
Т 335	Desna proposed correcting the term 'principle' with 'principal' in Apparatus. 'Capacity sufficient for the principal sample mass.' She also realized that this error is in many of the test methods. She will search for this incorrect usage and replace it.	
	There are no revisions to the AASHTO method in 2021.	
	Revisions to the training materials include:	
	FOP:	
	<ul> <li>New date</li> <li>Add 'to the nearest 1 percent' in Step 5.</li> <li>Correct instructions for calculations.</li> <li>Use variables in example calculations.</li> <li>Correct accuracy in example calculations.</li> <li>Replace 'principle' with 'principal'</li> </ul>	
	Performance Exam Checklist:	
	- None	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	PowerPoint:	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	Bergold
	FOP for AASHTO T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test	
	Proposed revisions to the training materials:	
	Misty asked that Step 6b be revised from 'Manually-Operated Shaker Method' to the 'Manual Method' to be consistent with the titles of the other methods, 'Mechanical Method' and 'Hand Method.'	
	Kevin pointed out that Note 7 is not a Note in AASHTO, it is a required process. This will be revised to Step 10b in the Procedure. He also suggested adding a balance to the Apparatus. All agreed.	
	Desna proposed reformatting the example equation to be consistent with other FOPs. She recommends removing 'full' in the last sentence, 'Strike off the can level <del>full</del> with the straightedge or spatula.'	
	There are no revisions to the AASHTO method in 2021.	
T 176	Discussion item:	
	Desna asked if Note 3 should be a note because it sounds like a directive. The committee reviewed the note and determined that the note is for information only to reference the AASHTO method.	
	Revisions to the training materials include:	
	FOP	
	<ul> <li>Add a 'balance or scale' to Apparatus.</li> <li>Remove 'full' from Step 6.</li> <li>Label Step 6b 'Manual Method.'</li> <li>Make Note 7 a part of Step 10 in the Procedure.</li> </ul>	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions.	DESNA
	These revisions will be included in the 2021 training materials.	BERGOLD

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	Editorial revisions include correcting gradation tables	
Exams	intermediate masses and labels.	
	<i>Committee members: refer to the exam errata for specific revisions.</i>	Desna Bergold
ASPHALT (ASTT ]	I AND II)	
Basics	Basics of Asphalt The committee reviewed and approved the proposed edits with some revisions. Sean wants updated pictures for the Drum and Batch Plants. Desna opened the PowerPoint and found that those pictures are better. She will incorporate them into the Basics file. The committee decided to remove the section on comparing the Drum plant quantities to field tests and delivered quantities.	Desna
	These revisions will be included in the 2021 training materials	Bergold
R 97	FOP for AASHTO R 97, Sampling Asphalt MixturesThere were no revisions to the training materials proposedbefore the meeting.There are no revisions to the AASHTO method in 2021.There are no revisions for this method for the 2021 trainingmaterials.	
R 47	FOP for AASHTO R 47, Reducing Samples of Asphalt Mixturesto Testing SizeThere were no revisions to the training materials proposedbefore the meeting.There are no revisions to the AASHTO method in 2021.There are no revisions for this method for the 2021 trainingmaterials.	
Т 329	FOP for AASHTO T 329, Moisture Content of Asphalt Mixtures by Oven MethodThere were no revisions to the training materials proposed before the meeting.There are no revisions to the AASHTO method in 2021.There are no revisions for this method for the 2021 training materials.	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	FOP for AASHTO T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method
Т 308	There were no revisions to the training materials proposed before the meeting.
	There are no revisions to the AASHTO method in 2021.
	There are no revisions for this method for the 2021 training materials.
	FOP for AASHTO T 209, Theoretical Maximum Specific Gravity $(G_{mm})$ and Density of Asphalt Mixtures
	There were no revisions to the training materials proposed before the meeting.
	There are no revisions to the AASHTO method in 2021.
	Discussion item:
T 209	Sharon mentioned that the AASHTO T 209 Precision section was revised at some point and wondered what the new 'Standard Deviations' and 'Acceptable Range of Two Results' was based on. Desna said she thought they were based on AASHTO re:source Proficiency Sample testing data. Sean remembered that John Malusky, AASHTO Manager Proficiency Sample Program, gave a presentation at the 2021 mid-year meeting.
	The committee reviewed the presentation located at the end of TS 2c 2021 Mid-year Meeting minutes titled 'Evaluation of Manual vs. Mechanical Agitation for T 209.' <u>https://materials.transportation.org/wp-</u> <u>content/uploads/sites/24/2021/06/TS-2c-Asphalt-Aggregate-</u> <u>Mixtures-21-Mid-Year.pdf</u> .
	Lori asked if anyone uses the auto-rice machine. Sean says that they have one but there are none in use in the field. No one else is using them.
	Discussion item, no further action necessary.
	There are no revisions for this method for the 2021 training materials.

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

T 166	FOP for AASHTO T 166, Bulk Specific Gravity ( $G_{mb}$ ) of Compacted Asphalt Mixtures Using Saturated Surface-Dry SpecimensProposed revisions to the training materials:Sean supplied better pictures for the specimen being weighed in water. The current pictures were replaced.The 2021 AASHTO methods revisions:The 2021 AASHTO method will be revised upon publication with a new revision date and will include the WAQTC proposed revision changing the temperature of water from 77 ±1.8°F to 77 ±2°F. The FOP will be revised to match.Revisions to the training materials include:FOP: 	
	- Revisions to match the FOP revisions.	Desna
	These revisions will be included in the 2021 training materials.	Bergold
R 66	<ul> <li>FOP for AASHTO R 66, Sampling Asphalt Materials</li> <li><u>There were no revisions to the training materials proposed</u> <u>before the meeting.</u></li> <li><u>There are no revisions to the AASHTO method in 2021.</u></li> <li><u>Other revisions:</u></li> <li>The Review Questions reference an HMA plant, this will be revised to an asphalt mixture plant.</li> <li><u>Revisions to the training materials include:</u></li> <li>FOP:</li> <li>None</li> </ul>	

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

	Review Questions	
	- Change 'HMA' to 'asphalt mixture'	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- None	Desna
	These revisions will be included in the 2021 training materials.	BERGOLD
	FOP for AASHTO T 30, Mechanical Analysis of Extracted Aggregate	
	Proposed revisions to the training materials:	
	Dan found an error in the reported percent passing example equation. This will be corrected.	
	The 2021 AASHTO methods revisions:	
	The 2021 AASHTO method will be revised upon publication with a new revision date and will include WAQTC proposed revisions to Table A.2.1. The table revision will be included in the FOP.	
	Other revisions:	
Т 30	Kevin recommended that the mass verification steps that are currently listed before the Procedure section be included in the Procedure section. The committee agreed. The Mass Verification section will be revised to discuss the requirement and the steps will be included in the Procedure. The Mass Verification formula and example calculation will be moved to the Calculations section.	
	Revisions to the training materials include:	
	FOP:	
	<ul> <li>New date</li> <li>New AASHTO date</li> <li>Revise Mass Verification Section</li> <li>Include mass verification steps in Procedure</li> <li>Move Mass Verification formula and example to Calculations</li> <li>Correct reported percent passing example calculation</li> </ul>	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

	- Revise Annex B1 Table to match A.2.1 in the AASHTO Method.	
	Performance Exam Checklist:	
	- None	
	PowerPoint:	
	- Revisions to match the FOP revisions	Desna
	These revisions will be included in the 2021 training materials	Bergold
	FOP for AASHTO T 312, Preparing and Determining the Density of Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor	
	<u>There were no revisions to the training materials proposed</u> <u>before the meeting.</u>	
	There are no revisions to the AASHTO method in 2021.	
	Discussion item:	
	Lori asked how other agencies manage Note 7, 'If the specimen is not $115 \pm 5$ mm, follow agency requirements.'	
	Everyone indicated that if a specimen is out of tolerance, they dispose of it and adjust the mass for subsequent specimens.	
T 312	She then asked if any other agency has a range for the specimen mass based on the mix design specimen mass. Most use the mix design specimen mass as an initial guideline but that conditions in the field and allowable variations in gradation and asphalt binder content can change the mass necessary to maintain a consistent volume.	
	Sharon asked if anyone has height tolerances that are tighter than $115 \pm 5$ mm. Lori says ITD does, $115 \pm 2$ mm, as well as the mass tolerance based on the mix design specimen mass. They are finding it difficult to consistently reach both requirements in the field.	
	There are no revisions for this method for the 2021 training materials.	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

WAQTC TM 13, Volumetric Properties of Asphalt Mixtures	
Proposed revisions to the training materials:	
Lori submitted a correction to Performance Exam 1. There was an error in the answer sheet mid calculation. This did not affect the final answer. This will be corrected.	
Discussion item:	
Lori received a 'Formal Dispute' from a technician who failed the Performance Exam. Although WAQTC does not have a process to address disputes, Lori agreed to discuss the issue with the QAC.	
The technician failed because they calculated and used in subsequent calculations four decimal places for the average G <sub>mb</sub> . They indicated that as TM 13 does not have a precision standard for specific gravities, they should not have failed. The Performance Exam instructions state, 'all initial formula input data shall use reported data.' As the initial inputs are all from other methods, this is referencing the reporting for these methods. The technician also stated that the scientific community reports an average one decimal place further than the raw data. This is a statistical convention for large data sets. The committee referenced <i>ASTM E29, Standard Practice for Using</i> <i>Significant Digits in Test Data to Determine Conformance with</i> <i>Specifications</i> . Section 7.6 states, 'round the average to the same last place of significant digits.'	
The committee found the arguments non-persuasive.	
Revisions to the training materials include:	
FOP:	
- None	
Performance Exam Checklist:	
- Correction in Performance Exam 1 answer sheet mid calculation.	
PowerPoint:	
- Revisions to match the FOP revisions.	Desna
These revisions will be included in the 2021 training materials.	BERGOLD
	<ul> <li>Proposed revisions to the training materials:</li> <li>Lori submitted a correction to Performance Exam 1. There was an error in the answer sheet mid calculation. This did not affect the final answer. This will be corrected.</li> <li>Discussion item:</li> <li>Lori received a 'Formal Dispute' from a technician who failed the Performance Exam. Although WAQTC does not have a process to address disputes, Lori agreed to discuss the issue with the QAC.</li> <li>The technician failed because they calculated and used in subsequent calculations four decimal places for the average G<sub>mb</sub>. They indicated that as TM 13 does not have a precision standard for specific gravities, they should not have failed. The Performance Exam instructions state, 'all initial formula input data shall use reported data.' As the initial inputs are all from other methods, this is referencing the reporting for these methods. The technician also stated that the scientific community reports an average one decimal place further than the raw data. This is a statistical convention for large data sets. The committee referenced ASTM E29, Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications. Section 7.6 states, 'round the average to the same last place of significant digits.'</li> <li>The committee found the arguments non-persuasive.</li> <li>Revisions to the training materials include:</li> <li>FOP:</li> <li>None</li> <li>Performance Exam Checklist:</li> <li>Correction in Performance Exam 1 answer sheet mid calculation.</li> <li>PowerPoint:</li> <li>Revisions to match the FOP revisions.</li> </ul>

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

Exams	There were no revisions to the written exams.	
Self-Consolii	DATING CONCRETE TESTING TECHNICIAN (SCCTT) MODULE	
	FOP for AASHTO T 347, Slump Flow of Self-Consolidating Concrete (SCC) and	
	FOP for AASHTO T 351, Visual Stability Index (VSI) of Self- Consolidating Concrete (SCC)	
T 347 / T 351	There were no revisions to the training materials proposed before the meeting.	
	There are no revisions to the AASHTO method in 2021.	
	There are no revisions for this method to the 2021 training materials.	
	FOP for AASHTO T 345, Passing Ability of Self-Consolidating Concrete by J-Ring	
T 345	There were no revisions to the training materials proposed before the meeting.	
	There are no revisions to the AASHTO method in 2021.	
	There are no revisions for this method to the 2021 training materials.	
	WAQTC TM 18, Penetration Test for Static Segregation Resistance of Self-Consolidating Concrete (SCC)	
TM 18	There were no revisions to the training materials proposed before the meeting.	
	There are no revisions for this method to the 2021 training materials.	
TM 19	WAQTC TM 19, Static Segregation of Self-Consolidating Concrete (SCC) Using the Column Method	
	There were no revisions to the training materials proposed before the meeting.	
	There are no revisions for this method to the 2021 training materials.	

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GENERAL F	ILES	
	Proposed revisions to the training materials.	
	Desna suggested including a definition for warm mix asphalt (WMA) in Terminology because it is used in the revised <i>Basics</i> of Asphalt.	
	Other revisions:	
	The committee decided that Terminology should also include a definition for stone matrix asphalt (SMA). Desna then suggested listing the definitions for hot mix asphalt (HMA), SMA, and WMA under asphalt mixtures, similar to the list of various specific gravities. The committee agreed. Kevin asked if there was a definition for recycled asphalt paving (RAP), recycled asphalt shingles (RAS), or recycled (reclaimed) asphalt materials. There is not and the committee determined to list the definitions for the terms.	
	Randy suggested that all the terms used in SCC testing be included. The committee therefore also added definitions for the J-Ring, passing ability, slump flow, static segregation, and visual stability index (VSI).	
	Revisions to the Terminology section include adding or editing definitions for:	
	Hot mix asphalt (HMA)	
	J-Ring	
	Passing ability	
	Recycled (reclaimed) asphalt materials	
	Recycled asphalt paving (RAP)	
	Recycled asphalt shingles (RAS)	
	Static segregation	
	Stone matrix asphalt (SMA)	
	Slump flow	
	Visual stability index (VSI)	
	Warm mix asphalt (WMA) DESNA	
	These revisions will be included in the 2021 training materials. BERGOLD	

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REVIEW ASSIGNM	IENTS	
	The 2021 revision review assignments are:	
	EB/DTT: Chris Russell and Dan Gettman	
	General: Randy Mawdsley and Lori Copeland	
	Concrete: Gilbert Arredondo and Sharon Taylor	
	Aggregate: Kevin Burns and Misty Miner	
	Asphalt: Lori Copeland and Randy Mawdsley	
	Administration Manual, RPIH, and AASHTO name change revisions: Sean Parker and Misty Miner	
Revision Review	These are mostly the same review assignments as last year. In 2022, there will be new assignments.	
Assignments	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. Desna was asked to send friendly reminders every few days.	
	Corrections will be sent to Desna.	
	Desna will send the draft revisions out by Sept. 6 <sup>th</sup> . Review deadline is Sept. 20 <sup>th</sup> .	Desna
	Committee members will review the draft revisions of the modules assigned. Corrections will be sent to Desna.	Bergold QAC Members
New Written Exam	During the 2021 Executive Board Spring Meeting, the Board assigned the QAC to develop written exam questions to meet the requirements of ASTM D3740, Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction for those methods that are applicable.	
QUESTIONS FOR EBTT/DTT	Desna drafted questions and met with Sonya to review if they are acceptable.	
	Desna shared the results of Sonya's review with the committee.	
	The questions Desna wrote for WAQTC's combined FOP for AASHTO T 255/T 265, were based on ASTM C566, the ASTM equivalent of AASHTO T 255. The questions should have been	

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	written on ASTM D2216, the ASTM equivalent of AASHTO T 265. The question on the Scope needs to be rewritten. Sonya indicated that this section would also need two more questions on sampling and one or two more on the procedure.	
	There also needs to be additional questions on WAQTC's combined FOP for AASHTO T 99/T 180.	
	AASHTO T 272 does not have an ASTM equivalent, but Sonya indicated that technicians can still be certified on it according to ASTM D3740. She said that the questions as written were sufficient. Chris did not like the proposed question on Reporting. The committee wrote another question to address it.	
	Sonya said the questions written for AASHTO T 310 were 'perfect.'	
	Desna was assigned to write the remaining questions. Desna asked Sonya if she would be the person from re:source to approve the exam or if it would need to be reviewed by a larger committee. Sonya said that she would be able to approve it when complete.	
	Desna will write additional questions to meet the requirements of ASTM D3740 and send to the QAC for review.	
	Upon approval, Desna Bergold will meet with Sonya Puterbaugh for approval.	Desna Bergold
	Sean Parker will report progress to the Executive Board.	SEAN PARKER
Exam best practices	Desna told the committee that she recently attended a webinar on developing multiple choice questions presented by Patti Shank, PHD, from the 'Training Network Magazine.' Desna said that it included information on best practices and flaws in writing multiple-choice questions. She asked if anyone would be interested in the presentation. The committee asked her to send it to all of them.	
	Desna said that there is more information on the website <u>https://www.trainingmagnetwork.com/</u> .	
	Desna Bergold will send the webinar information to the committee.	Desna Bergold

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FOP LIBRARY		
	AASHTO R 79, Vacuum Drying Compacted Asphalt Specimens	
	This FOP was included in the FOP Library last fall. Desna said that she could not find a record of who volunteered to be champion of this practice.	
	Misty said that as she and Kevin developed the FOP and that she volunteers to Champion the FOP.	
R 79	Desna was asked if there is a list of the FOPs and their Champions. She said that there is not, the champions are listed in the comments on the document. Desna said she would compile a complete list and include it in the FOP Library folder with the 2021 training materials and org. docs as well as distribute to the QAC members.	Misty Miner
	Misty Miner will be the FOP Champion for AASHTO R 79.	DESNA
	Desna will compile a list of FOP Champions and distribute.	BERGOLD
	FOP for AASHTO R 60, Sampling Fresh Concrete	
FOP FOR R 60	This FOP is ready to present to the Board for approval and incorporation into the FOP Library. Desna asked for a volunteer to champion it. Misty said that she would champion the FOP for AASHTO R 60.	
	Sean Parker will present the FOP for AASHTO R 60 to the Executive Board for approval.	Sean Parker
	Misty Miner will Champion the FOP.	MISTY MINER
WAQTC ADMINI Handbook (RPI)	STRATION MANUAL AND REGISTRATION, POLICIES, AND INFORMA H)	TION
SCC Prerequisite	The prerequisite for an SCCTT certification is a current qualification in CTT. Garth Newman, former QAC Chair, suggested, while working for D B Consulting, that it should also include, 'or ACI-CFT Reciprocity.' This reciprocity is allowed for a CTT Qualification. Garth said that the addition would align with what he remembers ITD requires. Lori agreed that the inclusion would work better for ITD. The committee determined the specific ACI certification that should be listed is 'ACI Concrete Field-Testing Technician-	

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	Grade 1.' This term will also be revised in the CTT	
	qualification process. These revisions will be presented to the Executive Board for approval.	Sean Parker
	Currently the <i>Administration Manual</i> says that a qualification expires on the last day of the month in which the initial exam portion is completed. Kevin said that this has caused WSDOT issues during state audits. If the date of the certification starts before all the elements are complete, then there is the appearance that a technician is certified when they are not. WSDOT is proposing revising the last sentence under the <u>Qualification/Certification Reciprocity</u> section to say, 'Any Certification obtained in this manner will expire a maximum of five (5) years from the date of successfully completing all requirements.' They are also proposing corresponding language in the <u>Certified Technician Registry</u> and <u>Certification Renewal</u> <u>Policy</u> sections.	
QUALIFICATION	It was pointed out that the <i>Administration Manual</i> discusses the expiration date not the start date although it may seem to imply a start date.	
EXPIRATION DATE	Misty and Sean said that they start their technicians through their systems with a pending start date upon completion date of the initial portion.	
	Some agencies use the date of the initial or complete examinations instead of the last day of the month.	
	AKDOT, CDOT, UDOT, and ITD use the last day of the month and would have to change their sytems if the expiration date is the date of exam completion. This may pose a problem with database issues. The respective committee members will each find out how a change may impact them.	
	Sean also mentioned that he allows an extension on certification expirations if a technician is unable to get into a class. He said that he will make a point of indicating that the extensions are only for ODOT work and not subject to reciprocity.	
	Sean then asked each agency to indicate the length of the certification. ODOT recognizes an initial certification for three	

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	<ul> <li>years and subsequent certifications for five years. Chris indicated that CDOT does the same.</li> <li>AKDOT says that their AsTT certification is for three years, all others are for five years. All other agencies have 5-year certifications.</li> <li>The committee approved forwarding WSDOT's proposed revisions to the Board for approval.</li> <li>Desna suggested that the second sentence in the <u>Certification Renewal Policy</u> section be struck; it is redundant. The</li> </ul>	
	committee agreed. <i>These revisions will be presented to the Executive Board for approval.</i>	Sean Parker
WRITTEN RE- EXAMINATIONS	<ul> <li>Written re-examination – full or partial</li> <li>The committee discussed the merits of revising the <i>Administration Manual</i> to require a full re-examination if any procedure is failed. This would match the practice of other certifying agencies such as ACI.</li> <li>WAQTC requires a score of 70 percent, with no procedure less than 60 percent (3 of 5 questions correct) to pass. If the overall score is 70 percent or higher, with one or more procedures scoring less than 60 percent (2 or fewer correct), the candidate is allowed to take a second exam on just the failed procedure(s). Re-examination of a single procedure requires a passing score of 70 percent which, in practice, means 80 percent (4 of 5 correct). Re-examination of two or more procedures require an overall 70 percent which allows at least 60 percent on one procedure and 80 percent or greater on another.</li> <li>Chris doesn't want to change from the current system. CDOT conducts full examinations in one day. He thinks that requiring a full retest for failing just one or two sections would inconveniently prolong the examination. Misty said that MDT also conducts full examination in one day and time is an issue with full retesting.</li> <li>Sean and Lori also expressed that full retesting could be a burden on the maintenance personnel that their agencies cross over during the construction season.</li> </ul>	

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Gilbert indicated that they would support an all or nothing retest if it would promote better preparation.	
Lori is concerned that the written exam process is too easy. She feels that making the process harder raises the bar.	
Sean likes the idea that a full retest may improve preparation. But he is concerned about weaker candidates failing and the cost of retraining after a failure.	
Advantages of the current system:	
<ul> <li>Allows the certification to be conducted in one day. Re- examination of one or more methods, when applicable, allows the candidate a brief period to study and retake the exam on just the failed methods.</li> <li>Allows flexibility in the administration of the certification program.</li> </ul>	
Advantages of full re-examination:	
<ul> <li>Candidates may be more likely to take the exams seriously and study appropriately.</li> <li>Exams are prepared in advance and ready for reexamination.</li> <li>Eliminates confusion on the scoring of the reexamination.</li> </ul>	
• Allows flexibility to deliver exams electronically.	
The committee members were polled; four members are in favor of full re-examinations and four are in favor of the current system.	
Randy wondered if each agency could decide whether to require a full retest. This would not be contrary to the <i>Administration</i> <i>Manual</i> because additional requirements have always been allowed.	
The historical interpretation of the highlighted section of the <i>Administration Manual</i> , below, has been, 'You can make it more difficult, but you can't make it easier.'	

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AGENCY PERSONALIZATION / ALTERATION OF MATERIALS	
Member Agencies are not authorized to make any changes to any materials, such as course materials or administrative procedures that fall under the jurisdiction of the TTQP with the following exceptions: Agencies may include in the RP&IH their own Agency specific information, fee structure, cancellation and refund policies, course allocations, individualized registration forms, or other such information as defined in this manual.	
The written examination questions may be organized or compiled according to Agency preference as long as the content and procedure adheres to the guidance provided in this manual and the exam reflects that it is a product of the WAQTC TTQP. Agencies may provide	
supplemental administrative guidance for Agency specific issues in the RP&IH as long as it is not in conflict with any guidance contained herein. The addition of Agency specific supplemental information, such as Agency specific test methods, contract administration guidance, specification information, or quality assurance program information to Qualification courses is not considered a change to the program."	
The committee concluded that if a member agency adopts a more stringent retesting criteria and continues to accept reciprocity from member agencies that use the current practice, there is no 'conflict with any guidance contained herein,' and there is no need to modify the <i>Administration Manual</i> .	
The committee will present their concerns and the options to the Executive Board.	Randy Mawdsley
Randy Mawdlsey will write an opinion representing both sides and send it to Desna Monday morning. She will review and distribute to the Executive Board for consideration.	Desna Bergold
<ul> <li>Proposed revisions to the <i>Administration Manual</i> and <i>RPIH</i>:</li> <li>Change reference to AASHTO T 23 to AASHTO R 100</li> <li>Qualification/Certification Reciprocity section – change</li> </ul>	
to, 'Any Certification obtained in this manner will	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

PROPOSED REVISIONS TO THE ADMIN MANUAL AND RPIH	<ul> <li>expire, a maximum of five (5) years from the date of successfully completing all requirements.'</li> <li>Certified Technician Registry section – change to, 'The day, month, and year of the Certification expiration. Depending on the qualifying agency, the expiration date shall be three (3) or five (5) years from the date of successfully completing all requirements.'</li> <li>Certification Renewal Policy section <ul> <li>Change the first sentence to, 'Certification renewal is required to be completed by the certification's expiration date.'</li> <li>Remove second sentence.</li> <li>Remove 'making arrangements for' from third sentence.</li> <li>Change first sentence in third paragraph to active voice.</li> </ul> </li> <li>CTT Qualification Process – change ACI-CFT to ACI Concrete Field-Testing Technician-Grade 1</li> <li>SCCTT Qualification Process – add 'or ACI Concrete Field-Testing Technician-Grade 1 Reciprocity.'</li> </ul>	Sean Parker		
ACTION ITEM FOLLOW UP				
Т 315	<ul> <li>AASHTO T 315, Determining the Rheological Properties of Asphalt Binder Using the Dynamic Shear Rheometer (DSR)</li> <li>During the Winter Meeting, Nassim Sabahfar, FHWA, Sonya, and Kevin agreed to draft revisions to AASHTO T 315 and present them at the 2022 Winter meeting.</li> <li>There hasn't been any progress on this. Nassim said that she will work on it.</li> <li>Nassim Sabahfar, Sonya Puterbaugh, and Kevin Burns will draft revisions and present them at the 2022 Winter meeting.</li> </ul>	NASSIM Sabahfar Sonya Puterbaugh Kevin Burns		

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Τορις	Discussion / Decision	ACTION REQUIRED BY:

REPORT FROM EXE	ECUTIVE BOARD SPRING MEETING	
	The committee reviewed the revisions to the planned work in the 2021 Strategic Plan.	
	• Investigate virtual written examinations.	
2021 STRATEGIC	Thoroughly review testing methodology	
Plan	• Develop written exam to comply with ASTM D3740.	
	The committee has worked on each of these items during this meeting.	
	No further action necessary.	
OTHER ITEMS		
	Discussion item:	
	Randy said that there is a real benefit to WAQTC to begin delivering the written exams through Prometric.	
Prometric	There may still be some issues to work through for remote testing. Some of the written exam questions require graphing. Prometric has indicated that they have a program that can assist with this. Gilbert suggested moving these types of questions to the Performance Exam and replacing the questions in the written exam.	
	Discussion item, no action necessary at this time.	
M XX	M XX, Thermometers Used in the Testing of Construction Materials	
	Sean made everyone aware that there is a new proposed standard on thermometers that has been balloted.	
	Upon adoption, this method will need to be referenced in many of the methods that WAQTC members use.	
	Discussion item, no further action required.	
	It is unknown if 'in person' meetings will be feasible in the coming year. The committee decided they would propose	

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Торіс	Discussion / Decision	ACTION REQUIRED BY:

LOCATION OF UPCOMING MEETINGS	continuing with the interrupted schedule when 'in person' meetings become an option.	
	The 2022 Winter Meeting will be held Jan. 31 <sup>st</sup> through Feb. 4 <sup>th</sup> . If this meeting can be held in person, Reno NV will be proposed.	
	The 2022 Summer Meeting will be held July 18 <sup>th</sup> through the 22 <sup>nd</sup> . If this meeting can be held in person, Farmington UT, the location originally planned for the 2020 Summer Meeting, will be proposed.	
	If these meetings are not to be held 'in person,' they will be scheduled as virtual meetings, and for the same hours as this meeting, 8:30 am to 3:00 pm PDT.	
	The locations for upcoming QAC Meetings will be presented to the Executive Board for approval.	Sean Parker