WAQTC QAC
2020 WINTER MEETING MINUTES

CHAIR: SEAN PARKER, ODOT
COORDINATOR: DESNA BERGOLD, D B CONSULTING

DATE: JAN. 27TH THROUGH 31ST
TIME: 1:00 TO 5:00 PM MON, 8:00 AM TO 5:00 PM TUES. THRU THUR., 8:00 AM TO 12:00 NOON FRI
LOCATION: PANORAMIC BOARDROOM, ELDORADO, RENO, NV

ATTENDEES:

SEAN PARKER, ODOT, CHAIR
MISTY MINER, MDOT, VICE CHAIR
DAN GETTMAN, AKDOT & PF
LORI COPELAND, ITD
STEVE TAYLOR, ITD
SHARON TAYLOR, NDDOT
GILBERT ARREDONDO, UDOT
KEVIN BURNS, WSDOT
DAVID MARIMAN, WFL-FHWA
SONYA PUTERBAUGH, AASHTO RE:SOURCE

ABSENT:

BRIAN IKEHARA, HDOT
CHRISTOPHER P. RUSSELL, CDOT

MEETING ITEMS:

REVIEWS OF AASHTO REVISIONS AND QAC PROPOSED REVISIONS FOR EACH PROCEDURE

1. Welcome
2. AASHTO Revision Process
3. Revisions to Embankment/Base and In-Place Density Test Methods
    a. T 265, Moisture Content of Soil
        i. Consistent use of constant mass direction among methods – Summer Meeting
    b. T 99, Moisture/Density Relations
    c. T 180, Moisture/Density Relations
    d. R 75, Developing a Family of Curves
    e. T 272, One-Point Method
        i. 6.1.1 add 'if necessary' and the 'or' should be 'and' – Desna
    f. T 85, G_{sb}
    g. T 310, In-place Density and Moisture Content of Soil-Aggregate
    h. T 355 In-place Density of Asphalt
4. Revisions to Concrete AASHTO Test Methods
    a. R 60, Sampling Concrete
        i. Standalone practice based on TM 2 – Misty and Oak
    b. T 309, Temperature
        i. Remove confusing large size aggregate statement from Significance
    c. T 119, Slump
    d. T 121, Density
    e. T 152, Air Content
        i. 9.4.2 take the 's' off of sides – Summer Meeting
        ii. 9.1.3 add 'around the perimeter' – Summer Meeting
    f. T 23, Test Specimens
        i. Re-propose revision from 2018

1. Tamping rod length in Table 1
2. Practice (R)

g. R 39, Making and Curing Concrete Test Specimens in the Lab

5. Revisions to Aggregate AASHTO Test Methods
   a. R 90, Sampling Aggregate Products
   b. R 76, Reduction
      i. Additional method to meet tight tolerance – Steve
   c. T 255, Moisture Content of Aggregate
      i. Consistent use of constant mass direction among methods – Summer Meeting
   d. T 11, Washing
   e. T 27, Sieve Analysis
   f. T 335, Fractured Particles
      i. ASTM D5831 harmonization
      ii. Notes 1 and 2 – Steve
   g. T 176, Sand Equivalent
   h. T 113, Lightweight Particles
      i. 6.3.4 and 6.4.4 clarification – Steve
6. Revisions to Asphalt AASHTO Test Methods
   a. R 97, Sampling Asphalt Mixtures
      i. 5.9.2 why grade or base only – Steve
   b. R 47, Reducing Asphalt Mixtures
      i. Note 2 tolerance for sample size – Steve
   c. T 329, Moisture Content
      i. Consistent use of constant mass direction among methods – Summer Meeting
   d. T 308, Asphalt Content
      i. Remove room temperature in 7.6 and 7.11 – Steve and Kevin
      ii. Add step for taring internal scale after 7.7 – Steve
      iii. 9.1 – Why a flat pan? – Steve
      iv. Remove last sentence of A1.1– Steve
   e. T 209, G_{mm}
      i. 30 second tolerance for pressure and agitation – Steve
      ii. Remove drying to constant mass – summer Meeting.
      iii. A1.2.1
   f. T 166, G_{mb}
      i. Consistent use of constant mass direction among methods – Summer Meeting
      ii. 77 ±2 instead of 1.8 – Summer Meeting
      iii. Task Force proposals
   g. R 66, Sampling Asphalt Material
   h. T 30, Sieve Analysis
      i. Consistent use of constant mass direction among methods
   i. T 312, Gyratory
   j. R 35, Superpave Volumetric Design
7. Other AASHTO:
   a. PP 97, Determination of Constant Mass
   b. T 283, Resistance of Compacted Asphalt Mixtures to Moisture-Induced Damage (10/21)
   c. T 315, Determining the Rheological Properties of Asphalt Binder Using a Dynamic Shear Rheometer (DSR) – Dave
   d. T 21, Organic Impurities in Fine Aggregates for Concrete
   e. R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)
   f. T 88, Particle Size Analysis of Coarse Aggregate

g. R 25, Technician Training and Qualification Programs

WAQTC ITEMS

8. Separating the Embankment & Base and In-place Density Manuals – Scott Nussbaum
9. FOP for AASHTO R 76 – Annex – Summer Meeting (12/9)
10. FOP Library
    a. TM 14 – Step 3 mixing temp. wrong – Steve
    b. TM 15
    c. TM 16 – Sean
    d. T 84 (11/20)
        i. Concerns with companion sample – Steve
    e. R 79
        i. Remove 'test temp' and 'total percent loss' from Report - Steve
    f. T 331
        i. Remove Sentences 4 and 5 from Step 1 – Steve
        ii. Cross referencing and other revisions
11. SCC module
    a. Basics (12/9)
    b. T 347_T 351 word files (1/10)
    c. T 345 word files (1/10)
    d. PowerPoint (1/11)
    e. Exam (1/13)
12. Materials Revision Request Form (1/15)
13. Administration Manual
14. Operations Manual
15. Review of AASHTO methods to present to the Board

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
WELCOME	Sean Parker, ODOT and WAQTC QAC Chair, welcomed everyone to the QAC Winter Meeting. He introduced the new member from North Dakota Department of Transportation (NDDOT) Sharon Taylor and the new representative from ITD, Lori Copeland. He then asked that everyone introduce themselves.	
AASHTO REVISION PROCESS	Desna Bergold, D B Consulting and WAQTC Coordinator, suggested that the meeting begin with an overview of the AASHTO revision process. She explained that there is a 'Process for Revision Proposals to AASHTO' included in the WAQTC Operations Manual. This describes the process for a member agency seeking WAQTC support for AASHTO Standards proposals. Sean helped explain that once the QAC agrees to propose a revision to an AASHTO Standard it is presented to the Executive Board at the Spring Meeting. The Board may approve the submitted proposal or revise it and then assigns a Champion. The Champion submits the proposal to the AASHTO Technical Subcommittee (TS) Chair. The Champion usually discusses the proposal at the AASHTO Committee on Materials and Pavement (COMP) Annual Meeting in August. At that time, it will be determined if the proposal will be balloted. The initial ballot is a TS member ballot, if it passes it is then balloted to the entire COMP membership. The Chair also has the option to perform the ballots concurrently. All negative votes must have a reason. If the negative vote is found persuasive, it must be addressed before subsequent ballots. If a proposal passes, it is included in the appropriate Standards Release. Release 1 is in April and includes Hydraulic Cement and Lime; Fresh Concrete; Hardened Concrete; Pavement Measurement; Bridge and Pavement Preservation; and Quality Assurance and Environmental. Release 2 is in June and includes General Manufactured Materials. Release 3 is in July and includes Geotechnical, and Bituminous Materials and Mixtures. The process can take a year or longer. *Discussion item, no action necessary.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
AASHTO EMBANKMENT/BASE AND IN-PLACE DENSITY TEST METHODS		
T 265	*T 265, Laboratory Determination of Moisture Content of Soils* <u>Discussion Item</u> There was a brief discussion during the 2019 Summer Meeting about the various procedures and how they specify the allowed loss upon reaching constant mass. R 79, T 255, T 265, T 329, and T 166 require the sample to be dried to constant mass, some state 'not more than' a given percent loss others state 'not less than' a given percent loss. The committee was asked to propose revisions to use consistent terminology. T 265 6.1 state, 'less than 0.1 percent . . .' The committee discussed the possibility of revising this method to state 'not more than 0.1 percent' and recognized that this is not the same requirement. As the value, 0.1 percent, is not absolute this could allow a percent loss up to 0.14 percent due to rounding and be acceptable. This is more than an editorial revision no matter which terminology is selected. The committee reviewed *ASTM E29, Using Significant Digits in Test Data to Determine Conformance with Specifications*, as it is referenced in some AASHTO Standards. ASTM E29 discusses the issue but indicates that the specification or test method should state what option to use. The committee decided that without a justification to propose the change other than the terminology should be consistent they would not pursue the revision in multiple test methods. The committee did determine that it is something to consider when proposing other revisions to a standard. **NOTE:** It was found after the meeting, that T 265 states 'an observed value or a calculated value shall be rounded off "to the nearest unit" in the last right-hand place of figures used in expressing the limiting value, in accordance with ASTM E29.' The other referenced standards do not include this language. *Discussion item, no action necessary.* *No proposed revisions to the AASHTO method.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 99 & T 180	*T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop and* *T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop* <u>Status of previous proposals</u> WAQTC proposed revisions to T 99 and T 180 in 2019. Replacing the variables *W* and *D* with ρ to represent density in calculations. This was approved as an editorial revision and should be included in 2020 Release 3. In 2018, WAQTC assisted AASHTO re:source with revision proposals addressing the use of the extruder. These revisions were included in 2019 Release 3. <u>Discussion item</u> During the TS 1b Mid-year Webinar another proposed revision by AASHTO re:source was discussed. The revision includes moving requirements for alternate types of mold assemblies from Note 2 to the body of the apparatus section and adding a new Note 2 indicating that an example of the alternate type of mold assemblies is a split-wall mold. These revisions will be TS balloted. *Discussion item, no action necessary.* *No proposed revisions to the AASHTO method.*	
R 75	*R 75, Developing a Family of Curves* *No proposed revisions to the AASHTO method.*	
T 272	*T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture* <u>Revision Discussion</u> Desna pointed out that in 6.1.1 is states: 6.1.1. Follow the initial drying step in Sample section of T 99 or T 180 or; 6.1.2. Sieve sample over the appropriate sieve. She thinks the ‘or’ should be an ‘and’ because 6.1.2 must be performed. She also indicated that 6.1.1 should state ‘if necessary.’ The committee agreed that the ‘or’ is wrong but that striking it would be sufficient and the ‘and’ did not need to be added. They	

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	also reviewed T 99 and T 180 and determined that it does not state 'if necessary' and the statement does not need to be included. Desna also asked if there should be direction on reducing the sieved sample to testing size. The committee determined that as the method is used on material in the field and would most likely not need reduction that this direction should not be included. <u>Revision proposal</u> • Remove 'or' in 6.1.1 *Revision to T 272 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 85	*T 85, Specific Gravity of Coarse Aggregate* <u>Revision Discussion</u> Kevin Burns, WSDOT, wondered why T 85 didn't reference T 255 for drying to constant mass. Instead it states the temperature at which the sample is dried but not the interval of additional drying time or acceptable percent loss. Desna pointed out that T 255 does not restrict the temperature unless excessive heat will alter the character of the aggregate. The committee determined that referencing T 255 and leaving the temperature requirement would resolve the issue of the missing pieces. <u>Revision proposal</u> • Add 'according to T 255' in 8.1 and 8.5 • Add 122°F after 50°C in 8.1 and 8.5 *Revisions to T 85 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 310	*T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)* <u>Status of previous proposals</u> WAQTC proposed revisions to T 99 and T 180 in 2019. Replacing the variables W and D with ρ to represent density in calculations. This was approved as an editorial revision and should be included in 2020 Release 3. *No proposed revisions to the AASHTO method.*	

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T 355	*T 355, In-place Density of Asphalt Mixtures by Nuclear Methods* *No proposed revisions to the AASHTO method.*	
AASHTO CONCRETE TEST METHODS		
R 60	*R 60, Sampling Freshly Mixed Concrete* During the August Executive Board Meeting, Misty Miner, MDT and QAC Vice Chair, explained some of the differences between *WAQTC TM 2, Sampling Freshly Mixed Concrete* and AASHTO R 60. Misty wanted to know if the Board would support development of a method to submit to AASHTO. Oak Metcalfe, MDT, offered to speak with Mick Syslo, TS 3b Chair, to get a sense of how such a practice would be received. Oak reported that Mick had a few concerns about creating a new standard, confusion between the two being his main concern, however, he also said he would be happy to add it to the agenda at the annual meeting to at least have a discussion with the rest of the members. Oak suggests that the QAC and Executive Board reach a consensus and then let Mick know at WASHTO if it should be on the agenda for the Annual COMP Meeting. Misty indicated that she spoke further with Oak about the issues with R 60 which requires obtaining multiple increments from the middle of the load. TM 2 allows a single increment after ½ cubic yd. has been discharged. This is similar to the method described in Note 3 of R 60 which allows for sampling for air content and slump testing after ¼ cubic yd. has been discharged. This note essentially alters the practice. Misty offered to draft revisions to R 60 to agree with TM 2. David Mariman, WFL, Lori Copeland, ITD, and Sean have volunteered to help. *Revisions to R 60 will be drafted and, if ready, discussed at the Executive Board Meeting.*	MISTY MINER DAVID MARIMAN LORI COPELAND SEAN PARKER

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T 309	*T 309, Temperature of Freshly Mixed Hydraulic Cement Concrete* Status of previous proposals WAQTC proposed revisions to T 309 in 2019 to remove 8.4.1. The revision was discussed in the Annual Meeting and it was approved to go to concurrent ballot. Unfortunately, the ballot was to move the section into Significance and Use. This was not the proposal. 2020 Release 1 in April will probably include this revision. The QAC would like the Executive Board to discuss proposing striking the confusing statement concerning large size aggregate at the 2020 COMP Annual Meeting. *Removing confusing statement concerning large size aggregate will be on the Executive Board Spring Meeting agenda.*	DESNA BERGOLD
T 119	*T 119, Slump of Hydraulic Cement Concrete* *No proposed revisions to the AASHTO method.*	
T 121	*T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete* Status of previous proposals In 2018, WAQTC proposed that the vibrator requirements be revised to match *T 23, Making and Curing Concrete Test Specimens in the Field.* This revision was included in 2019 Release 1. In 2019, WAQTC proposed revisions replacing the variables D with ρ to represent density in calculations. This was approved as an editorial revision and should be included in 2020 Release 1. *No proposed revisions to the AASHTO method.*	
T 152	*T 152, Air Content of Freshly Mixed Concrete by the Pressure Method* Status of previous proposals In 2018, WAQTC proposed that the vibrator requirements be revised to match *T 23, Making and Curing Concrete Test Specimens in the Field.* This revision was included in 2019 Release 1.	

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	Revision discussion Misty pointed out that 9.1.2 Rodding states to 'tap around the perimeter' after rodding each layer; 9.1.3 Vibration states 'tap the sides.' 9.1.3 should be revised to match. Other uses of the term 'sides' when it is the outside of the measure that is being referenced should be revised to 'side.' Revision proposal • Revise 9.1.3 to say 'tap around the perimeter' after consolidation • Revise 'sides' to 'side' in 9.1.4, 9.3.1, 9.3.3, 9.4.2, A1.7.2, and A1.7.3 *Revisions to T 152 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 23	*T 23, Making and Curing Concrete Test Specimens in the Field* Status of previous proposal In 2018, WAQTC proposed revisions to correct the tamping rod length in Table 1 and revise the Test Method (T) to a Practice (R). This method was moved from TS 3c to TS 3b in 2018. Proposed revisions appear to be lost. The QAC agreed that the revisions should be proposed again. Revision proposal • Revise from a Test Method (T) to a Practice (R) • Correct rod dimensions in Table 1 *Revisions to T 23 will be presented to the Executive Board for approval and submittal to AASHTO.*	
R 39	*R 39, Making and Curing Concrete Test Specimens in the Laboratory* Status of previous proposal In 2018, WAQTC proposed extensive revisions; adding steps for Self-consolidating Concrete (SCC), matching requirements in T 23, and further corrections to comply with AASHTO Style Manual. These revisions were included in 2019 Release 1. *Discussion item, no action necessary.*	

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AASHTO AGGREGATE TEST METHODS		
R 90	*R 90, Sampling Aggregate Products* *No proposed revisions to the AASHTO method.*	
R 76	*R 76, Reducing Samples of Aggregate to Testing Size* <u>Discussion item</u> Steve Taylor, ITD, pointed out that there are several aggregate test methods that have very tight tolerances for sample size, for example T 84 requires the sample to be 500 ± 10 g. Most of these test methods refer to initial reduction by R 76 and it is extremely difficult if not impossible to reduce aggregate to these tolerances while adhering to R 76. He would like to propose an alternate splitting method be added to R 76, possibly a variation on quartering from R 47, referred to in the FOP for AASHTO R 47 as the 'apex method,' to allow testers to achieve these tight sample size tolerances while still adhering to the test method. The committee reviewed T 84 and determined that it did not reference R 76 to reduce the sample to testing size (500 g ± 10 g) just to reduce the primary sample. The committee agreed that, although it is not an issue with T 84, a more precise reduction method may be useful. Steve volunteered to draft an alternative quartering method. Lori and Misty volunteered to help. *Steve Taylor, Lori Copeland, and Misty Miner will draft an alternate quartering method.*	STEVE TAYLOR LORI COPELAND MISTY MINER
T 255	*T 255, Total Evaporable Moisture Content for Aggregates* See 'Allowed loss upon reaching constant mass' discussion item in T 265. *No proposed revisions to the AASHTO method.*	
T 11	*T 11, Materials Finer Than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing* <u>Status of previous proposal</u> WAQTC proposed revisions to this method in 2015 to address the use of the automatic washer which is mentioned in a note. A task force was formed to consider the issue in depth. Garth Newman, formerly ITD and QAC Chair, was a member of the Task Force.	

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	This was balloted on Rolling Ballot 3 to the full COMP with no negatives. Approved during Mid-Year Webinar. This should be included in Release 3. *No proposed revisions to the AASHTO method.*	
T 27	*T 27, Sieve Analysis of Fine and Coarse Aggregates* <u>Status of previous proposal</u> In 2018, WAQTC proposed moving requirements for overloading sieves, shaker time, and sieving efficiency into Annexes. The proposal was revised at the 2019 Annual Meeting to align with changes to T 30. This was balloted on Rolling Ballot 3 to the full COMP with no negatives and approved during Mid-Year Webinar. It should be included in Release 3. <u>Discussion item</u> Sean explained that there is a Task Force being formed in TS 1c, *Aggregates*, to address sieving efficiency for large sieves. The current method does not address this. He also mentioned that there is a Task Force being formed in TS 2c, Asphalt-Aggregate Mixtures, to discuss cross-referencing or combining T 27 and T 30. The committee discussed some of the issues of combining the methods. Washing the sample is already included in T 30 but not T 27. which has to be combined with T 11; the 'sieve loss' requirement is 0.2 percent for T 30 and 0.3 percent for T 27; and sample size, in T 30 the sample size is often smaller and determined by the method used to obtain the extracted aggregate from asphalt mixtures. Sean is on these Task Forces as WAQTC's representative and agreed to express WAQTC's concern with attempts to combine the methods. *Discussion item, no action necessary.* *No proposed revisions to the AASHTO method.*	
T 335	*T 335, Determining the Percentage of Fracture in Coarse Aggregate* <u>Discussion item</u> During the TS 1c Midyear webinar, harmonizing T 335 and *ASTM D5821 Determining the Percentage of Fractured Particles in Coarse Aggregate* was discussed. The question was asked, 'Why are the two methods different?' The main difference is in	

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	the definition of a fractured face. ASTM requires one quarter of the face to be angular, rough, or broken to be considered fractured, T 335 requires one half. Sean offered to put together a history of T 335 and provide it to Matt Beeson, TS 1c Chair. T 335 was developed by WAQTC as TM 1. It was proposed to AASHTO and included in 2002 as TP 61. In 2009, the procedure was revised to a full standard, T 335. Sean will also note that T 335 is referenced in *M 323, Superpave Volumetric Mix Design*, as a consensus property. The committee found it interesting though that *M 325, Stone Matrix Asphalt (SMA)* references D5821. Finally, all but one, our newest member NDDOT, of the WAQTC member agencies specify T 335. *Sean Parker will draft an email about the history and value of T 335 to Matt Beeson, TS 1c Chair,* *No proposed revisions to the AASHTO method.*	SEAN PARKER
T 176	*T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test* <u>Status of previous proposal</u> WAQTC informed TS 1a that there were discrepancies in the description and figures for the apparatus. The 2019 Annual Meeting minutes indicate that this would be discussed during the Midyear webinar which was held Jan. 23. Andy Babish, TS 1a Chair, will schedule a meeting with Sean and the Standard's Steward. Sean will inform the committee of the outcome. <u>Discussion item</u> Sean pointed out that the FOP for AASHTO T 176 does not agree with T 176 6.2.3.4. This will be included on the Summer Meeting agenda. *T 176 6.2.3 discrepancies will be included on the Summer Meeting agenda.* *No proposed revisions to the AASHTO method.*	DESNA BERGOLD
T 113	*T 113, Lightweight Pieces in Aggregate* <u>Discussion item</u>	

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	Steve indicated that in 6.3.4, it doesn't specify which material is brought to an SSD condition, the material retained on the No. 50 sieve or the material passing the No. 50 sieve or both. Similar issue in 6.4.4, the material retained on the No. 4 sieve or the material passing the No. 4 sieve, or both, is brought to an SSD condition. Desna pointed out that 6.3 references fine aggregate, which in this method is the material passing the No. 4 sieve, and 6.4 references coarse aggregate, which is the material retained on the No. 4 sieve. She explained that the test method was developed to be used on fine and coarse aggregate used in concrete and that the expectation is that there would be minimal material retained on the No. 4 sieve for fine aggregate and passing the No. 4 sieve for coarse aggregate. David pointed out that in the Significance it states that the method is used to determine conformance with *M 6, Fine Aggregate for Hydraulic Cement Concrete,* and *M 80, Coarse Aggregate for Hydraulic Cement Concrete.* Sharon said the NDDOT uses T 113 for aggregate used in asphalt mixtures, she thought the NDDOT may want to draft revisions to T 113 for next year. *Sharon Taylor will draft revisions to T 113 for the 2021 Winter Meeting.* *No proposed revisions to the AASHTO method.*	SHARON TAYLOR
ASTM D4791 FLAT AND ELONGATED	*ASTM D4791, Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate* <u>Discussion item</u> ASTM allowed this standard to lapse. ASTM standards are not subject to automatic renewal. ASTM is planning to reinstate D4791. Maria Knake, AASHTO re:source, is working with ASTM and has asked WAQTC if they have any comments on the method. Sean asked the committee to review it and send any comments to him. *The QAC will review ASTM D4791 and provide Sean Parker with comments by the end of march.*	QAC MEMBERS

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AASHTO ASPHALT TEST METHODS		
R 97	*R 97, Sampling of Asphalt Mixtures* Status of previous proposal In 2017, WAQTC proposed a new 'A' practice, wholly owned by AASHTO, to replace the 'C' method owned by ASTM. At the same time another practice was proposed with significant differences. A Task Force was created to resolve the differences and merge the two proposals. The new practice was included in 2019 Release 3. Discussion item Steve asked if there is a reason that Method 1, plate method, is not allowed for second layers of asphalt paving? 5.9.2 states, '*Plate Method*—Obtaining samples of asphalt mixture being placed on grade or base material using a plate.' Grade can be a layer of asphalt paving. The FOP for AASHTO R 97 created this confusion by stating, 'Plate Method (Untreated Base Course).' Revisions to the FOP for AASHTO R 97 will be on the Summer Meeting agenda. *Revisions to the Plate Method in the FOP for AASHTO R 97 will be included on the Summer Meeting agenda.* *No proposed revisions to the AASHTO method.*	DESNA BERGOLD
R 47	*R 47, Reducing Samples of Asphalt Mixtures to Testing Size* Status of previous proposal In 2018, WAQTC proposed revisions that include changing the term HMA to asphalt mixtures, maximum temperature for heating equipment, and adding heating of equipment in 10.1 and 12.1. The revisions were included in 2019 Release 3. Discussion item Steve told the committee that ITD has a requirement to reduce samples to within 30 g of the sample size required by a test method. He asked if any other agencies had similar requirements. The committee members indicated that they did not have such a requirement *Discussion item, no action necessary.* *No proposed revisions to the AASHTO method.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 329	*T 329, Moisture Content of Asphalt Mixtures by Oven Method* See 'Allowed loss upon reaching constant mass' discussion item in T 265. <u>Revision discussion</u> 5.1 needs to be revised; it references T 168 for sampling. This will most likely be an editorial revision. <u>Revision proposal</u> • Replace T 168 with R 97 in 2.1 and 5.1 *Revisions to T 329 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 308	*T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method* <u>Revision discussion</u> Steve and Kevin propose removing the requirement to bring the specimen and basket assembly to room temperature before determining its mass in 7.6 and 7.11. Some members indicated that their agencies do cool the specimen before determining mass. Gilbert Arredondo, UDOT, said that it should be cooled to minimize variables. The specimens are most likely at room temperature when correction factors are established. He felt that putting a fan on the sample for 5 to 10 minutes was usually sufficient and did not add a significant amount of time in performing the test. *This revision request was withdrawn.* Steve suggested adding a step after 7.7 to reset the internal balance. 7.8 requires verifying that the scale is within ± 5 g of the total of the specimen and basket assembly mass. If the scale is not zero when the specimen and basket assembly are placed on it, this cannot be determined. The committee agreed. Steve also asked why the specimen baskets are to be emptied into a 'flat pan.' Other containers that have sides high enough to contain the sample should be allowed. The committee agreed. Steve requested that the option to use 'historical data' for correction factors be removed from A1.1. This does not seem a good practice. The committee wondered how this provision was included. The statement was first included in 2010. Sharon was able to find the TS 2c Annual Meeting minutes. Upon review, it	

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	appears that this was a very complicated issue from the beginning. The committee decided not to propose any revisions to the Annex at this time. Revision proposal • Add a new 7.8, 'Reset the internal balance to zero.' • Revise 'flat pan' to 'container' in 9.1 *Revisions to T 308 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 209	*T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures* Status of previous proposal WAQTC proposed extensive revisions to this method in 2014. The revisions were included in 2019 Release 3. On Rolling Ballot 3, there was a concurrent ballot to revise *T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures*, to include an equation and example for calculating the weighted average maximum specific gravity of large-size samples tested. Revision discussion During the 2019 Summer Meeting the committee discussed the requirement to dry a plant-produced sample to constant mass. The Executive Board decided to bring it up at the TS 3c Annual Meeting. During the meeting no one in attendance indicated that they were performing this step. The committee would like to propose removing the requirement. They also discussed that it is advisable to short-term age plant-produced samples to mimic material haul and placement. These proposals were approved. Kevin pointed out that in 5.4 the vacuum pump or aspirator should be 'capable of evacuating air from the vacuum container to a residual pressure of 4.0 kPa (30 mmHg). This is the top of the range the test is performed at. The requirement should be the bottom of the range, 3.3 kPa (25 mmHg). 5.5 has the same requirements for the vacuum measurement device. The committee agreed. Steve proposed that the time the residual pressure is maintained in 9.1 and 10.1 be changed from 15 ± 2 min. to 15 min. ± 30 sec. There seems to be no benefit to the greater allowable range. This was approved. Tightening this time allowance could be	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	incorporated into the FOP for AASHTO T 209 before the revision appears in T 209 because it is does not contradict AASHTO. Desna said that during the TS 3c Mid-Year Webinar someone mentioned that it appeared there should be a 'Check' section for A1.2 *Standardization and Check of Flask and Pycnometer for Mass Determination in Air.* She reviewed WAQTC's proposals and found that the original proposal in 2014 had this section and when the revisions were copied into a newer T 209 document the Check section was lost. Also, when the original A1.1 was removed the internal cross referencing was not updated. The committee discussed why the flask or pycnometer would need to be stabilized for 10 ± 1 min. for each of the three determinations in A1.2.1. They would like to propose that the subsequent two determinations not require stabilization if it is in the temperature range. Desna pointed out that the process is not repeated 'three times' as stated in the section but performed once and repeated two times. The committee discussed revisions to A1.1.2, *Standardization and Check of Bowl for Mass Determination in Water.* ITD is the only member agency that uses the bowl. They decided not to propose any revisions at this time. <u>Revision proposal</u> • Change 4.0 kPa (30 mmHg). to 3.3 kPa (25 mmHg) in 5.45 and 5.5 • Revise 7.2.1 to read, 'Plant-produced samples may be short-term conditioned according to R 30. See Note 5.' • Remove current 7.2.1 requirement to dry the samples to constant mass • Revise 9.1 and 10.1 to require residual pressure for 15 min. ± 30 sec instead of 15 ± 2 min. • Refer to Equation 1 instead of 2 in A1.1.1 • Refer to A1.1.1 in A1.1.2 instead of A1.2.1 • Replace repeat 'three times' with 'two times' and equation 3 with 2 in A1.2.1 • Add, 'Subsequent determinations do not need to stabilize the 10 ± 1 min. if the flask or pycnometer with water is within 25 ± 1ºC (77 ± 2ºF).'	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	• Include section on Checks for Flask and Pycnometer (A1.2.2) *Revisions to T 209 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 166	*T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens* See 'Allowed loss upon reaching constant mass' discussion item in T 265. <u>Revision discussion</u> At one time, WAQTC proposed revising the temperature in the water bath from 25 ± 1°C (77 ± 1.8°F) to 25 ± 1°C (77 ± 2°F) in 6.2, 9.2, 9.3, and 10.1. This would match the temperature references in T 209. There were other confusions about revisions to the method at that time and this was never incorporated. The committee approved re-proposing the revision. There is some confusion about the samples referenced in 6.1. The first sentence uses the term specimen, but the two subsequent sentences refer to drying the sample. It has been misconstrued that this is referencing samples of loose mix. As the specimens are not created in this method it should be assumed that 'samples' means 'specimens.' The committee proposes 'samples' to be revised to 'specimens' where appropriate. <u>Revision proposal</u> • Change 'samples' to 'specimens' where appropriate • Change the temperature in the water bath from 25 ±1°C (77 ± 1.8°F) to 25 ± 1°C (77 ± 2°F) in 6.2, 9.2, 9.3, and 10.1 *Revisions to T 166 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
R 66	*R 66, Sampling Asphalt Materials* *No proposed revisions to the AASHTO method.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
T 30	*T 30, Mechanical Analysis of Extracted Aggregate* Status of previous proposal In 2018, WAQTC proposed moving discussions of overloading sieves, shaker time, and sieving efficiency into Annexes. These revisions were included in 2019 Release 3. See related discussion in T 27. Revision discussion Misty proposed revising Table A1, *Maximum Allowable Mass of Material Retained on Sieve*, to reflect the actual sieves used in this method. The table is a copy of the one in T 27 but the sample sizes for T 30 are much smaller. The committee agreed. Revision proposal • Remove sieves with opening sizes larger than 2 in. from and the related rows in Table A1 • Remove 350 by 350 mm and 372 by 580 mm sieves and the related columns in Table A1 • Add US customary equivalences for remaining sieve sizes in Table A1 *Revisions to T 30 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
T 312	*T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor* Revision discussion In 2019, the title of this standard was revised to use the term asphalt mixtures instead of HMA. Further revisions were not incorporated. The committee decided to forward these revisions to the Board and see if it will require a full revision proposal or just alerting the TS 2d Chair, Oak Metcalfe, MDT, who is also an Executive Board member. Revision proposal • Changing the reference to T 168 to R 97 in Referenced Documents • Changing 'binder' and 'HMA' in 4.4 to 'asphalt binder' and 'asphalt mixtures' • Changing HMA to 'asphalt' in 8. title	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	• Referencing R 97 instead of T 168 in 8.2.2 • Changing HMA to 'asphalt mixtures' in 8.2.5 • Updating the revision date in the footer of the Word file *Revisions to T 312 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
R 35	*R 35, Superpave Volumetric Design for Asphalt Mixtures* <u>Revision discussion</u> Lori mentioned that the reference to *SP 2, Superpave Mix Design*, in 2.2 and Note 1 is outdated. *MS 2, Asphalt Mix Design Methods*, incorporates SP 2 in its 7th Edition. This will most likely be an editorial revision. <u>Revision proposal</u> • Revise *SP 2, Superpave Mix Design*, in 2.2 and Note 1 to *MS 2, Asphalt Mix Design Methods* *Revisions to R 35 will be presented to the Executive Board for approval and submittal to AASHTO.*	SEAN PARKER
OTHER AASHTO TEST METHODS		
T 283	*T 283, Resistance of Compacted Asphalt Mixtures to Moisture* <u>Revision discussion</u> This is an item from the 2019 Winter meeting. Desna drafted revisions for the AASHTO method. Sean and Steve made further revisions. The latest proposed revision was reviewed. Steve wondered why there was such a broad vacuum and time range. The committee reviewed the method and determined that the range was to allow bringing the specimens to 70 to 80 percent saturation. Sean said that ODOT may not use this method much longer and Steve said that ITD may also quit using it. David indicated Federal Lands uses it and would like to see the proposed revisions move forward. Since the revisions to be proposed to the Executive Board are extensive, Desna volunteered to draft an outline of the proposed revisions for the Board. Sean offered to review it.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Revisions to T 283 will be presented to the Executive Board for approval and submittal to AASHTO. *Desna Bergold will draft an explanation of the proposed revisions to present to the Executive Board with the revisions.*	SEAN PARKER DESNA BERGOLD
T 315	*T 315, Determining the Rheological Properties of Asphalt Binder Using the Dynamic Shear Rheometer (DSR)* <u>Revision discussion</u> David proposed revisions to the Verification and Calibration section in 9.1. It currently states that there are four items that require verification, lists them, and then states that the DSR temperature transducer must be verified first. The DSR temperature transducer is not included in the list but the portable thermometer is. He felt that the DSR temperature transducer should replace the portable thermometer since it is actually a part of the machine. Sonya Puterbaugh, AASHTO re:source, pointed out that the portable thermometer also needs to be verified and is outlined in 9.3. Upon further review of the method, it was determined that the equipment references are inconsistent and confusing. David, Sonya, and Kevin will try to work through the issues and present revisions next year. *David Mariman, Sonya Puterbaugh, and Kevin Burns will draft further revisions and present them at the 2021 Winter meeting.*	DAVID MARIMAN SONYA PUTERBAUGH KEVIN BURNS
PP 97	*PP 97, Determination of Constant Mass* <u>Status of previous proposal</u> In 2017, WAQTC proposed a new standard on determining constant mass. Many test methods and practices use the term without a definition or a discussion on how to achieve it. This new provisional practice was included in 2019 Release 3. *Discussion item, no action necessary.*	
T 21	*T 21, Organic Impurities in Fine Aggregates for Concrete* <u>Discussion item</u> On Rolling Ballot 3, there was a COMP ballot to revise T 21 to reflect recent ASTM C40 updates on Gardiner color scale. *Discussion item, no action necessary.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
R 67	*R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)* Discussion item From Rolling Ballot 3: Concurrent ballot item to revise *R 67, Sampling Asphalt Mixtures after Compaction (Obtaining Cores)*, to include an appendix with instructions for removing cut-aggregate particles from pavement cores in preparation for further testing. The proposed revisions to R 67 also include several other minor changes to improve the practice. *Discussion item, no action necessary.*	
T 88	*T 88, Particle Size Analysis of Soils* Discussion item WAQTC informed TS 1a that there were discrepancies in the description and figures for the apparatus. The 2019 Annual Meeting minutes indicate that this would be discussed during the Midyear webinar which was held Jan. 23. Sean will work with Matt Beeson, TS 1a Chair, to remove the discrepancies. Revision discussion David mentioned that WFL has an issue with certain soils foaming in the cylinder after agitation which make it impossible to take the readings. He said that they have had to suction out the foam but realize it is not allowed by the procedure. Sonya reviewed *ASTM D7928, Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis* and pointed out that it allows three drops of alcohol to dispel the foam. David liked this option solution. 12.2 was then reworked to incorporate Note 7, rinsing the walls of the cylinder if there is material clinging to it, and dispelling any foam with alcohol. Revision proposal • Move Note 7 into 12.2 • Add dispelling foam with 3 drops of alcohol • Begin 12.3 with ‘placing the graduate in the bath’	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Revisions to T 88 will be presented to the Executive Board for approval and submittal to AASHTO.	SEAN PARKER
R 25	*R 25, Technician Training and Qualification Programs* Status of previous proposal In 2015, WAQTC proposed revisions to R 25. The revisions included adding references to the Appendixes and corresponding references in the reference section, removing 'flexible' from Section 3.1, and adding 'subordinates' to the Section 7.2, *Examination Controls and Integrity*. The 2015 proposed revision were lost and were re-proposed in 2019. According to the COMP Annual Meeting minutes, the revisions will be made by the Chair and are considered editorial. *Discussion item, no action necessary.*	
T 331	*T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method* Revision discussion While reviewing the *FOP for AASHTO T 331*, the committee determined that AASHTO T 331 needs significant revisions. It appears that the method has had multiple changes that caused contradictions and extra steps. In 6.1, the last two sentences discuss issues with too much moisture in the specimen, yet the first sentence requires the sample to be dried. 6.2.2 requires the bag mass to be determined, in 6.3 the sealed specimen mass is determined by adding the bag mass to the specimen mass, and in 7.1 the specimen mass is subtracted from the bag mass and specimen mass to determine the bag mass. If the mass in 6.1 is used, 6.2.2 can be deleted and a portion of the formula can be simplified. 6.5 has two conditions for the check to ensure a tight seal. As one is tighter than the other, it is the only one of value. 6.6 and 6.7 discuss drying the specimen, which was done in 6.1. 6.6 and 6.7 should be deleted. The plastic bag verification is odd and confusing. To determine if the 'bag correction factor' of each size bag supplied by the manufacturer is correct, an asphalt mixture specimen is compacted, the specific gravity of the specimen is determined according to T 331 and then T 166 and the two values compared.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Sonya wondered why an alternate item of known specific gravity isn't used instead of a laboratory specimen. The committee felt that the whole exercise seems excessive when the only recourse of failing results is 'Contact the manufacturer.' The committee decided to address revising or removing the bag verification at another time. This will be added to the agenda for the 2021 Winter Meeting. Revision proposal • Remove the final two sentences of 6.1 • Add 'Designate this mass (bag) as *B*.' in 6.2.2 • Delete 6.3 • Remove secondary check condition from 6.5 • Delete 6.6 and 6.7 • Revise Formula 1 and definition of *B* *Revisions to T 331 will be presented to the Executive Board for approval and submittal to AASHTO.* *Plastic Bag Verification will be added to the 2021 Winter agenda.*	SEAN PARKER DESNA BERGOLD
WAQTC ITEMS		
E&B AND IPD SEPARATION	Scott Nussbaum, UDOT and WAQTC Treasurer, requested the QAC discuss publishing Embankment and Base Testing Technician (EBTT) and In-place Density Testing Technician (DTT) manuals separately as UDOT and other member agencies offer the qualifications separately. Desna informed the committee that there is a lot of inconsistency in these materials. The *Administration Manual* lists EBTT and DTT separately, the written exams for the two qualifications are separate, but the manuals have always been combined. The committee agreed that it would be nice to publish the manuals separately as well as together. Lori said that they often offer the qualifications together and would like to have the written exams combined. The committee agreed and noted that the *Administration Manual* should include this option.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	Desna was asked to draft the revision to the *Administration Manual* to present to the Board for approval and implementation with the 2020 Training Materials. <u>Proposal to the Executive Board</u> • Publishing EBTT and DTT as separate manuals • Including an EBTT/DTT combined written exam in the training materials • Including the combined qualification in the Administration Manual *Proposed revisions to the training materials and* Administration Manual *will be presented to the Executive Board.*	SEAN PARKER
FOP FOR AASHTO R 76 ANNEX	*FOP for AASHTO R 76, Reducing Samples of Aggregate to Testing Size* Desna was asked to draft an Annex for 'effective reduction' and Figure 1 and remove it from the body of the procedure. The committee was asked to review the Annex and have comments and recommendations to Desna by March 17. Steve recommended a slightly different method than that presented in Figure 1. He said the final step could be shortened by swapping the pans in the splitter. He offered to draft revisions to the Annex and Figure 1. This draft will be distributed before the 2020 Summer Meeting for review and comment and included on the Summer Meeting agenda. *The QAC will review the Annex and provide Desna comments and recommendations by March 15.* *Steve Taylor will draft revisions to the Annex which will be distributed and discussed at the 2020 Summer Meeting.*	QAC STEVE TAYLOR DESNA BERGOLD
FOP FOR AASHTO R 97	*FOP for AASHTO R 97, Sampling Asphalt Mixtures* Sean was asked why the plate method has specific safety instructions but that none of the other sampling methods were addressed. Sean feels that a safety disclaimer at the beginning of the practice would be helpful. Dan Gettman, AkDOT, was concerned that specific safety instructions opens up potential liability. Desna pointed out that the instructions in R 97 should be included in the FOP for	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	AASHTO R 97. Sean agreed but a statement at the beginning would cover the rest of the methods. *Sean Parker will draft a safety statement to be included in the FOP for AASHTO R 97 at the beginning.*	SEAN PARKER
FOP FOR T 329	*FOP for AASHTO T 329, Moisture Content of Asphalt Mixtures by Oven Method* Sean said that Note 1 needs to be deleted. *This will be on the Summer Meeting agenda.*	
FOP LIBRARY		
TM 14	*WAQTC TM 14, Laboratory Prepared Asphalt Mixture Specimens* This WAQTC TM is now included in the FOP library and has been available on the website since October. <u>Discussion item</u> Steve has some concerns about Mixing Preparation Step 3. He is concerned that the RAP, at 230 °F, is cooling the rest of the mixture too much. Kevin explained that the aggregate and asphalt binder are slightly over heated to compensate for the lower temperature of the RAP. This is discussed in Note 7. Steve withdrew his concerns. <u>Revision discussion</u> It was pointed out that in Material Sampling Step 5, it references AASHTO R 90. It should reference the FOP for AASHTO R 90. Desna will correct this editorially *Desna Bergold will correct Material Sampling Step 5 editorially.*	DESNA BERGOLD
TM 15	*WAQTC TM 15, Laboratory Maximum Density of Granular Soils and Soils Aggregates* <u>Action item follow up</u> During the 2019 Winter Meeting, a subcommittee, David, Kevin, Dan, and Randy Mawdsley, WSDOT, was assigned to continue work on this WAQTC test method. Randy joined via teleconference for this discussion. Randy described the method, based on WSDOT T 606, and its use for the new members.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	The apparatus and calculation sections are outstanding items from 2019. Desna drafted the calculations example sections to determine the inputs for the spreadsheet to develop the maximum density chart and curve. The subcommittee has not had time to review these sections. They were asked to have comments to Desna by Feb. 28th. Randy explained that the apparatus that WSDOT uses is made by 'Parrott' and is not exactly the same as the equipment described in HRB 159. Desna recommended that the test method reference the Parrott equipment and HRB 159 with 'or equivalent.' The committee agreed. Desna also pointed out that the spreadsheet to develop the maximum density chart and curve is locked and it has the WSDOT logo and information. She suggested that the WAQTC provide a generic spreadsheet with instructions to accompany the test method. Kevin said he would try to provide an editable version of the spreadsheet. Randy indicated that WSDOT uses a modified *AASHTO T 100, Specific Gravity of Soils* method to determine the specific gravity of the coarse aggregate portion and they would like to include it as an option. The committee agreed and decided that the modified T 100 should be included as an appendix to the test method. Desna will draft this from the WSDOT method. Desna asked about the applied loads throughout the test method. All are listed in lbs., she asked if it should be psi or lb/ft^2 and what the equivalency should be. She was told that it is lb_f but simply referenced as lb. in the old HRB 159 and on the equipment. It was decided to use the term lb_f in the method without and including an equivalency as there is not equivalent values on the equipment. Sean asked where the 'Pass #4' value comes from that is used in the Maximum Density Chart to determine the 'Maximum' density. Kevin explained that the passing No. 4 material percentage is determined in the field on material sampled under the nuclear density gauge using the WSDOT SOP 615, much like the method in the FOP for AASHTO T 272. The committee determine that this is a companion method to TM 15 and needs to be included in the FOP library. Desna will start developing WSDOT SOP 615 as a WAQTC TM.	KEVIN BURNS RANDY MAWDSLEY

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	The TM 15 subcommittee will review the draft calculation and example sections, and the standardization annex and provide comments to Desna by Feb. 28th. *Desna Bergold will draft / revise TM 15 as indicated and draft an appendix based on WSDOT Modified T 100. She will also draft a TM based on WSDOT SOP 615.*	DAN GETTMAN DAVID MARIMAN DESNA BERGOLD
TM 16	*WAQTC TM 16, FOP for Determining the Percentage of Flat and Elongated Particles in Coarse Aggregate* This test method is complete and posted. *No action necessary.*	
FOP FOR T 84	*FOP for AASHTO T 84, Specific Gravity and Absorption of Fine Aggregate* <u>Action item follow up</u> During the 2019 Summer meeting, Desna and Gilbert agreed to draft an FOP for AASHTO T 84 from the UDOT FOP. This was sent for review on November 20. Steve would like to remove the option to dry a companion sample to determine the oven dried mass as it is impossible to reduce two samples within 0.2 g by AASHTO R 76. The committee reviewed AASHTO T 84 and found that it does not reference R 76 for obtaining the samples used in this step of the procedure. This reference will be removed from the FOP. Sean pointed out that there are more methods in AASHTO T 84 than the cone method to determine the saturated surface dry (SSD) condition. The committee agreed that AASHTO T 84 should be referenced in the Scope for materials do not readily slump. The committee also noticed a typo in the examples that will be corrected. It appears this FOP does not have a Champion. Desna asked Steve if he would like to be the Champion and Steve agreed. *Desna Bergold will revise the FOP for AASHTO T 84 and distribute for QAC approval.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
FOP FOR R 79	*FOP for AASHTO R 79, Vacuum Drying Compacted Asphalt Specimens* <u>Action item follow up</u> During the 2019 Summer meeting, Kevin and Misty agreed to draft an FOP for AASHTO R 79. Steve thought that 'total percent loss' and 'test temperature' are not necessary in the Report section. The committee reviewed AASHTO R 79 and found that it does not include a Report section and decided to remove the section from the FOP. *The FOP for AASHTO R 79 will be submitted to the Executive Board for approval to include in the FOP library.*	
FOP FOR T 331	*T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method* Refer to the AASHTO revision discussion in T 331 above. <u>Action item follow up</u> During the 2019 Summer meeting, Kevin agreed to draft an FOP for AASHTO T 331. The FOP for AASHTO T 331 will be revised to reflect the proposed revisions to T 331. *Desna Bergold will revise the FOP for AASHTO T 331 and distribute to the QAC for review.*	DESNA BERGOLD
SCC MODULE		
QUALIFICATION	*Self-consolidating Concrete (SCC) Qualification* The QAC committee has been working on the components of the SCC Testing Technician (SCCTT) qualification module. Desna asked what the committee thought about an agency 'beta testing' the qualification before a formal roll out. Gilbert indicated that UDOT may be interested. The committee discussed how the initial qualifications should be handled. As it is a new qualification, there is no one holding the qualification to administer the exams. The committee decided to ask the Board to provide guidance. Desna and Sean indicated that they would present the SCCTT materials to the Board for preliminary approval for any interested agency to offer the first round of qualifications.	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
	The SCCTT qualification materials will be presented to the Executive Board. *The Executive Board will be asked how to handle initial SCCTT qualifications.* Gilbert provided video and pictures from testing performed at a precast plant. He has offered to get more pictures of the equipment and testing for the training materials. The committee reviewed the test methods that the ACI certification covers. As well as ASTM equivalents of AASHTO T 347, T 351, and T 345, ACI certification also includes *ASTM C1610, Static Segregation of Self-Consolidating Concrete Using Column Technique*, and *ASTM C1712, Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test*. UDOT specifies both of these methods. The committee would like the Board to determine if these methods should be addressed in the SCCTT qualification module and if so, now or later. The committee decided that even if these methods won't be included in the qualification, TMs should be drafted for them. Lori and Gilbert offered to help Desna draft them. *Sean Parker will ask the Executive Board how to address the two additional test methods.* *Gilbert Arredondo, Lori Copeland, and Desna Bergold will begin drafting TMs for ASTM C1610 and ASTM C 1712.*	SEAN PARKER DESNA BERGOLD SEAN PARKER DESNA BERGOLD
BASICS	*Basic of Self-consolidating Concrete* <u>Action item follow up</u> Desna received comments and corrections for the initial draft of the Basics section. She distributed the revised file Dec. 9. Steve and Dan pointed out some additional editorial corrections and these have been incorporated. Desna will add pictures and graphics to the Word file and PowerPoint when they become available. *Desna Bergold will add pictures to the Basics of SCC training materials.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
FOP FOR T 347/T 351	*FOP for AASHTO T 347 and T 351, Slump Flow of Self-consolidating Concrete (SCC) and Visual Stability (VSI) of Self-consolidating Concrete (SCC)* <u>Action item follow up</u> Desna combined the FOPs for AASHTO T 347/T 351 and drafted the combined review and performance exam. These documents were sent for review Jan. 10. Steve pointed out that there was a step included in the performance exam that wasn't in the book. This will be removed. Dan said that the statement about wet sieving the concrete mixture should be deleted as SCC does not contain large aggregate. The committee agreed and it will be removed. Dan also indicated that the FOP should require the same size board as AASHTO T 347 and T 351 so that existing equipment is not excluded. This will be revised. Desna asked what the expected range for the diameter measurements is and Dan said they specify 24 to 26 in. The examples in the FOP are high. Desna will fix this. *Desna Bergold will revise and add pictures to the FOP for AASHTO T 347/T 351 training materials.*	
FOP FOR T 345	*FOP for AASHTO T 345, Passing Ability of Self-consolidating Concrete (SCC) by J-Ring* <u>Action item follow up</u> Desna drafted the review and performance exam. These documents were sent for review Jan. 10. The revisions listed in the FOP for AASHTO T 347/T 351 will also be applied to this FOP. *Desna Bergold will revise and add pictures to the FOP for AASHTO T 347/T 351 training materials.*	
POWERPOINT	<u>Action item follow up</u> Desna drafted the PowerPoint presentations for the Basics and FOPs. She will need to add graphics and pictures. *Desna Bergold will add pictures PowerPoint presentations.*	

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
EXAMS	Action item follow up Desna drafted the written exams for the FOPs and distributed them Jan. 13. Steve had some corrections that have been fixed. *Written exams for the SCCTT qualifications are complete.*	
OTHER WAQTC		
MATERIALS REVISION REQUEST FORM	Desna explained that there is a *Materials Revision Request Form* on the WAQTC website that is significantly outdated. She presented an updated Adobe PDF Form to replace it. The new form has a submit button that sends the form to Sean and Desna. Lori asked about the process once a request has been submitted. Sean explained that he would direct the request to the QAC at the appropriate meeting if the request concerned WAQTC materials. If the request was agency specific, he would direct it to the agency's QAC or Board representative or both. The committee approved the new *Materials Revision Request Form* for presentation to the Board. *Sean Parker will submit the* Materials Revision Request Form *to the Executive Board for approval*.	SEAN PARKER
ADMIN MANUAL	*WAQTC Transportation Technician Qualification Program Administration Manual* Refer to E&B and IPD Separation topic. The committee discussed agency specific sampling and density qualifications. Some agencies offer qualifications for technicians that are on a project site that will be performing in-place density testing and perhaps sampling. Sean recommended that further discussion concerning additional limited qualifications be discussed at the Summer Meeting. Desna offered to poll the member agencies and compile a list of additional qualifications and which practices and methods they include. *Alternate limited qualifications will be on the Summer Meeting agenda.* *Desna will poll member agencies and compile a list of additional qualifications and which practices and methods they include.*	DESNA BERGOLD

TOPIC	Discussion / *Decision*	ACTION REQUIRED BY:
ORG DOCS	The Executive Board recently approved a *WAQTC Travel Policy* which has been implemented and posted on the website. The committee reviewed the new policy. *Discussion item, no action necessary.*	
REVIEW OF AASHTO METHODS TO BE SENT TO THE BOARD		
	Revisions to the following methods will be presented to the Executive Board during the 2020 Spring Meeting: • *R 35, Superpave Volumetric Design for Asphalt Mixtures* • *T 23, Making and Curing Concrete Test Specimens in the Field* • *T 30, Mechanical Analysis of Extracted Aggregate* • *T 85, Specific Gravity of Coarse Aggregate* • *T 88, Particle Size Analysis of Soils* • *T 152, Air Content of Freshly Mixed Concrete by the Pressure Method* • *T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens* • *T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures* • *T 272, One-Point Method for Determining Maximum Dry Density and Optimum Moisture* • *T 283, Resistance of Compacted Asphalt Mixtures to Moisture* • *T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method* • *T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor* • *T 329, Moisture Content of Asphalt Mixtures by Oven Method* • *T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method*	