

# WAQTC EXECUTIVE BOARD

## 2021 SPRING MEETING MINUTES

**MEETING CALLED BY:** JOHN BILDERBACK,  
CHAIR  
**COORDINATOR:** DESNA BERGOLD,  
COORDINATOR

**DATE:** APRIL 15, 2021  
**TIME:** 11:00 AM TO 3:00 PM MST  
**LOCATION:** GOOGLE.MEET

### ATTENDEES

#### **BOARD MEMBERS:**

JOHN BILDERBACK, CHAIR, ITD  
L. SCOTT NUSSBAUM, TREASURER, UDOT  
MIKE SAN ANGELO, AKDOT & PF  
CRAIG WIEDEN, CDOT  
BRIAN IKEHARA, HDOT  
OAK METCALFE, MDT  
MATT G. LINNEMAN, NDDOT  
GARRETT WEBSTER, WSDOT  
MICHAEL VOTH, FHWA  
SEAN PARKER, QAC CHAIR

#### **INVITED GUESTS:**

MISTY MINER, MDT, QAC VICE CHAIR  
DAN GETTMAN, AKDOT & PF  
CHRISTOPHER RUSSELL, CDOT  
LORI COPELAND, ITD  
KEVIN BURNS, WSDOT  
RANDY MAWDSLEY, WSDOT  
SONYA PUTERBAUGH, AASHTO RE:SOURCE

#### ABSENT

LARRY ILG, VICE CHAIR, ODOT

### **AGENDA ITEMS / OBJECTIVES:**

#### **1. Report on 2018 AASHTO proposals**

- a. *T 27; Sieve Analysis of Fine and Coarse Aggregate* – John Bilderback – complete

#### **2. Report on 2019 AASHTO proposals**

- a. *R 25, Technician Training and Qualification Programs (TS 5c)* – Scott Nussbaum and Sean Parker
- b. *T 88, Particle Size Analysis of Soils (TS 1a)*
- c. *T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop (TS 1b)*
- d. *T 176; Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a)* – Sean Parker
- e. *T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop (TS 1b)*
- f. *T 310; In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b)*

#### **3. Report on 2020 AASHTO proposals:**

- a. *R 35, Superpave Volumetric Design for Asphalt Mixtures (TS 2d)* – Oak Metcalfe
- b. *T 23, Making and Curing Concrete Test Specimens in the Field (TS 3b)* – Sean Parker
- c. *T 30; Mechanical Analysis of Extracted Aggregate (TS 2c)* – John Bilderback
- d. *T 85, Specific Gravity of Coarse Aggregate (TS 1c)* – John Bilderback
- e. *T 88, Particle Size Analysis of Soils (TS 1a)* – Sean Parker
- f. *T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric of Concrete) (TS 3b)* – Sean Parker

- g. *T 152, Air Content of Freshly Mixed Concrete by the Pressure Method (TS 3b)* – Sean Parker
- h. *T 166, Bulk Specific Gravity ( $G_{mb}$ ) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens (TS 2c)* – Larry Ilg
- i. *T 209, Theoretical Maximum Specific Gravity ( $G_{mm}$ ) and Density of Asphalt Mixtures (TS 2c)* – Larry Ilg
- j. *T 272; One-Point Method for Determining Maximum Dry Density and Optimum Moisture (TS 1b)* – Matt Linneman
- k. *T 283, Resistance of Compacted Asphalt Mixtures to Moisture (TS 2d)* – Oak Metcalfe
- l. *T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method (TS 2c)* – Oak Metcalfe
- m. *T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor*
- n. *T 329, Moisture Content of Asphalt Mixtures by Oven Method (TS 2c)* – John Bilderback
- o. *T 331, Bulk Specific Gravity ( $G_{mb}$ ) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method (TS 2c)* – Larry Ilg

**4. Proposed AASHTO revisions from QAC:**

- a. *R 47, Reducing Samples of Asphalt Mixtures to Testing Size (TS 2c) (3/8)*
  - i. ‘Should’ used 5 times – John
  - ii. New graphic for template
- b. *R 60, Sampling Freshly Mixed Concrete (TS 3b) (3/8)*
- c. *R 76, Reducing Samples of Aggregate to Testing Size (TS 1c) (3/30)*
  - i. ‘Should’ used 4 times – John
  - ii. Picture of mechanical splitter – Randy
- d. *T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a) (2/2)*
- e. *T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b) (3/8)*
- f. *T 355, In-place Density of Asphalt Mixtures by Nuclear Methods (TS 2c) (3/8)*

**5. From QAC Winter meeting**

- a. D3740, additional exam questions, and QAC concerns
- b. Computer based written exams (Prometric) – WSDOT
- c. Administration Manual
  - i. Retention of Written Examinations – Winter Meeting
- d. Summer meeting

**6. WAQTC 2021 Spring Business**

- a. WAQTC Exam administration and scoring
- b. 2021 Strategic Plan (4/6)
  - i. Mission statement fifth bullet ‘accredited members’ – John
- c. Pooled fund update – Scott Nussbaum
- d. Other items

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
WELCOME	<p>John Bilderback, ITD and WAQTC Executive Board Chair, welcomed the attendees to the meeting.</p> <p>The meeting began with a review of the outstanding proposals of revision to AASHTO Standards.</p>	
<b>REPORT ON 2018 AASHTO PROPOSALS</b>		
T 27	<p><i>T 27, Sieve Analysis of Fine and Coarse Aggregates</i></p> <p><u>Status of previous proposal</u></p> <p>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 Committee on Materials and Pavement (COMP) and published in 2020 Release 3.</p> <p><i>This will be included in 2020 completed items.</i></p>	DESNA BERGOLD
<b>REPORT ON 2019 AASHTO PROPOSALS</b>		
R 25	<p><i>R 25, Technician Training and Qualification Programs (TS 5c) – Scott Nussbaum and Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>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 Section 7.2, <i>Examination Controls and Integrity</i>. The 2015 proposed revisions were lost and were re-proposed in 2019. According to the 2020 COMP Annual Meeting minutes, the revisions were considered editorial but that they would be balloted.</p> <p>The proposed revisions have not been balloted, and they were not mentioned during the mid-year meeting.</p> <p>Scott Nussbaum, UDOT and WAQTC Treasurer, has contacted Curt Turgeon, Technical Subcommittee (TS) 5c Chair, who indicated that he will submit the revisions editorially.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
T 88	<p><i>T 88, Particle Size Analysis of Soils (TS 1a) – Sean Parker</i></p> <p><u>Discussion item</u></p> <p>In 2019, WAQTC informed TS 1a that there were discrepancies in the description and figures for the apparatus.</p> <p>Sean Parker, ODOT and Qualification Advisory Committee (QAC) Chair, has been working with Andy Babish, TS 1a Chair, and a TS Task Force to remove the discrepancies.</p> <p><i>See further T 88 discussion under 2020 Proposed Revisions and Proposed AASHTO revisions from QAC.</i></p>	
T 99 / T 180/ T 310	<p><i>T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop (TS 1b)</i></p> <p><i>T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop (TS 1b)</i></p> <p><i>T 310; In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b)</i></p> <p>In an email dated Jan. 14, 2021, Neoma Cole, TS 1b Chair, confirmed that the editorial revisions were sent to AASHTO Publications.</p> <p>Matt Linneman, NDDOT and TS 1b Vice Chair, verified that these revisions have been made and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 176	<p><i>T 176; Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a) – Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>In 2019, WAQTC informed TS 1a that there were discrepancies in the description and figures for the apparatus.</p> <p>Sean has worked with the TS Task Force to remove the apparatus discrepancies.</p> <p>Sean indicated that the recommendations of the Task Force will be balloted this Spring.</p> <p><i>See further T 176 discussion under Proposed AASHTO revisions from QAC.</i></p>	

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:

REPORT ON 2020 AASHTO PROPOSALS		
R 35	<p><i>R 35, Superpave Volumetric Design for Asphalt Mixtures (TS 2d) – Oak Metcalfe</i></p> <p><u>Status of previous proposals</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>Revise <i>SP 2, Superpave Mix Design</i>, in 2.2 and Note 1 to <i>MS 2, Asphalt Mix Design Methods</i></li> </ul> <p>Oak Metcalfe, MDT, and TS 2d Chair, said this editorial revision has been made and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 23	<p><i>T 23, Making and Curing Concrete Test Specimens in the Field (TS 3b) – Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>Revise from a Test Method (T) to a Practice (R).</li> <li>Correct rod dimensions in Table 1 to agree with 5.4.</li> </ul> <p>These revisions were approved concurrently on Rolling Ballot 1 and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 30	<p><i>T 30; Mechanical Analysis of Extracted Aggregate – John Bilderback</i></p> <p><u>Status of previous proposals</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>Remove sieves with opening sizes larger than 2 in. and the related rows in Table A1.</li> <li>Remove 350 by 350 mm and 372 by 580 mm sieves and the related columns in Table A1.</li> <li>Add US customary equivalences for remaining sieve sizes in Table A1.</li> </ul> <p>These revisions were approved concurrently on Rolling Ballot 3 and should be included in the 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
T 85	<p><i>T 85, Specific Gravity of Coarse Aggregate (TS 1c) – John Bilderback</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Add ‘according to T 255’ in 8.1 and 8.5.</li> <li>• Add 122°F after 50°C in 8.1 and 8.5.</li> </ul> <p>These revisions were approved concurrently on Rolling Ballot 3 and should be included in the 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 88	<p><i>T 88, Particle Size Analysis of Soils (TS 1a) – Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Move Note 7 into 12.2.</li> <li>• Add dispelling foam with 3 drops of isopropyl alcohol.</li> <li>• Begin 12.3 with ‘placing the graduate in the bath’.</li> <li>• Delete Figure 5 to address equipment discrepancy.</li> </ul> <p>This proposal was not discussed during the 2020 Annual Meeting, so the proposal was resubmitted to Andy Babish, TS 1a Chair. Sean indicated that these revisions will be TS balloted in the spring of 2021.</p> <p><i>Board members will vote on this proposal when it is balloted.</i></p>	EXECUTIVE BOARD MEMBERS
T 121	<p><i>T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric of Concrete) (TS 3b) – Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• <b>7.4 Vibration</b> – change ‘tap the sides’ to ‘tap around the perimeter’.</li> <li>• <b>7.5</b> – Revise ‘sides’ to ‘side’.</li> </ul> <p>These revisions were approved editorially and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
T 152	<p><i>T 152, Air Content of Freshly Mixed Concrete by the Pressure Method (TS 3b) – Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Revise 9.1.3 to say ‘tap around the perimeter’ after consolidation.</li> <li>• Revise ‘sides’ to ‘side’ in 9.1.4, 9.3.1, 9.3.3, 9.4.2, A1.7.2, and A1.7.3.</li> </ul> <p>These revisions were approved editorially and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 166	<p><i>T 166, Bulk Specific Gravity (<math>G_{mb}</math>) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens (TS 2c) – Larry Ilg</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Change ‘samples’ to ‘specimens’ where appropriate.</li> <li>• Change the temperature in the water bath from <math>25 \pm 1^{\circ}\text{C}</math> (<math>77 \pm 1.8^{\circ}\text{F}</math>) to <math>25 \pm 1^{\circ}\text{C}</math> (<math>77 \pm 2^{\circ}\text{F}</math>) in 6.2, 9.2, 9.3, and 10.1.</li> </ul> <p>These revisions were approved concurrently on Rolling Ballot 3 and should be included in the 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 209	<p><i>T 209, Theoretical Maximum Specific Gravity (<math>G_{mm}</math>) and Density of Asphalt Mixtures (TS 2c) – Larry Ilg</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Change 4.0 kPa (30 mmHg). to 3.3 kPa (25 mmHg) in 5.45 and 5.5.</li> <li>• Revise 7.2.1 to read, ‘Plant-produced samples may be short-term conditioned according to R 30. See Note 5.’</li> <li>• Remove current 7.2.1 requirement to dry the samples to constant mass.</li> <li>• Revise 9.1 and 10.1 to require residual pressure for 15 min. <math>\pm</math> 1 min. instead of <math>15 \pm 2</math> min.</li> <li>• Refer to Equation 1 instead of 2 in A1.1.1.</li> <li>• Refer to A1.1.1 in A1.1.2 instead of A1.2.1.</li> </ul>	

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
	<ul style="list-style-type: none"> <li>• Replace repeat ‘three times’ with ‘two times,’ and Equation 3 with 2 in A1.2.1.</li> <li>• Add, ‘Subsequent determinations do not need to stabilize the 10 ± 1 min. if the flask or pycnometer with water is within 25 ± 1°C (77 ± 2°F).’</li> <li>• Include section on Checks for Flask and Pycnometer (A1.2.2).</li> </ul> <p>Larry Ilg, ODOT, WAQTC Vice Chair, and revision Champion, contacted Allen Myers before the Mid-Year Webinar. Allen said that he intended to discuss it briefly during the webinar and include the revisions on a Technical Subcommittee ballot in March or April.</p> <p>Mid-year minutes are not posted but the Agenda reflects this.</p> <p>Larry was unable to attend today’s meeting, Desna was asked to follow up with Larry on Monday.</p> <p><i>Desna Bergold will contact Larry Ilg April 19<sup>th</sup> for status of proposed revisions.</i></p>	<p>DESNA BERGOLD LARRY ILG</p>
T 272	<p><i>T 272; One-Point Method for Determining Maximum Dry Density and Optimum Moisture (TS 1b) – Matt Linneman</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Remove ‘or’ in 6.1.1</li> </ul> <p>Approved as editorial during the 2020 Annual meeting.</p> <p>Sean previously reviewed the document in the AASHTO library, and this revision is incorporated and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	<p>DESNA BERGOLD</p>
T 283	<p><i>T 283, Resistance of Compacted Asphalt Mixtures to Moisture (TS 2d) – Oak Metcalfe</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <p>WAQTC proposed extensive revisions to this method. Proposal was balloted to the Technical Subcommittee and further revisions were made addressing the TS comments. The revisions were then balloted to the full COMP and approved.</p>	



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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
	<p>Oak indicated that these revisions should be included in the 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 308	<p><i>T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method (TS 2c) – Oak Metcalfe</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Add a new 7.8, ‘Reset the internal balance to zero.’</li> <li>• Revise ‘flat pan’ to ‘container’ in 9.1.</li> <li>• 7.2 and 8.2 – Revise to ‘Use T 329 to oven dry the asphalt mixture specimen to a constant mass or determine the moisture content of a companion specimen.’</li> </ul> <p>During the QAC Winter Meeting, the committee noticed this method references <i>T 168, Sampling Bituminous Paving Mixtures</i>, in 2.1 and 6.1. These references should be revised to <i>R 97, Sampling Asphalt Mixtures</i>. John was asked to alert Allen Myers, TS 2c Chair, while he is working on the current revisions. John did so.</p> <p>These revisions were approved concurrently on Rolling Ballot 3 and should be included in the 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 312	<p><i>T 312, Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor (TS 2d)</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Change the reference T 168 to R 97 in Referenced Documents.</li> <li>• Change ‘binder’ and ‘HMA’ in 4.4 to ‘asphalt binder’ and ‘asphalt mixtures.’</li> <li>• Change ‘HMA mixture’ to ‘asphalt mixture’ in Section 8 title.</li> <li>• Reference R 97 instead of T 168 in 8.2.2.</li> <li>• Change HMA to ‘asphalt mixtures’ in 8.2.5.</li> <li>• Update the revision date in the footer of the Word file.</li> </ul> <p>These revisions were considered editorial at annual meeting. Oak will submit to AASHTO Publications and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
T 329	<p><i>T 329, Moisture Content of Asphalt Mixtures by Oven Method (TS 2c) – John Bilderback</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Replace T 168 with R 97 in 2.1 and 5.1.</li> </ul> <p>This was discussed at the annual meeting and listed as an editorial change on the Midyear Webinar agenda and should be included in 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 331	<p><i>T 331, Bulk Specific Gravity (<math>G_{mb}</math>) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method (TS 2c) – Larry Ilg</i></p> <p><u>Status of previous proposal</u></p> <p>2020 proposal:</p> <ul style="list-style-type: none"> <li>• Remove the final two sentences of 6.1.</li> <li>• Add ‘Designate this mass (bag) as <i>B</i>.’ in 6.2.2.</li> <li>• Delete 6.3.</li> <li>• Remove secondary check condition from 6.5.</li> <li>• Delete 6.6 and 6.7.</li> <li>• Revise Formula 1 and definition of <i>B</i>.</li> </ul> <p>These revisions were approved concurrently on Rolling Ballot 3 and should be included in the 2021 AASHTO Standards.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
<b>PROPOSED AASHTO REVISIONS FROM QAC:</b>		
R 47	<p><i>R 47, Reducing Samples of Asphalt Mixtures to Testing Size (TS 2c) (3/8)</i></p> <p><u>Revision proposal from the QAC:</u></p> <ul style="list-style-type: none"> <li>• Apparatus: <ul style="list-style-type: none"> <li>– Add the quartering template from R 47.</li> <li>– Add drywall taping knives.</li> <li>– Allow the size of the tarp to be ‘appropriate for the size and amount of the material being reduced’.</li> <li>– Group the remaining apparatus by equipment type.</li> <li>– Clarify the term ‘tarp’.</li> </ul> </li> </ul>	

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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:

	<ul style="list-style-type: none"> <li>• Procedure             <ul style="list-style-type: none"> <li>– Break the paragraphs of each option into steps.</li> <li>– Title each option.</li> <li>– In ‘quartering on a hard clean surface,’ require the material to be turned over at least four times to be consistent with ‘quartering on a tarp’.</li> <li>– Add instructions on further reduction.</li> <li>– In both ‘quartering’ methods include, ‘The final test sample consists of two diagonally opposite quarters.’</li> <li>– Add section for ‘Reduction by Apex’.</li> <li>– Replace Figures 2 and 3 graphics.</li> <li>– Add graphics for ‘Reduction by Apex’.</li> </ul> </li> </ul> <p>While reviewing the proposed revisions to R 76, John pointed out that the term ‘should’ is used five times. This term has been flagged as problematic in specifications and standards. Desna found that R 47 also uses the term 5 times.</p> <p>Mike San Angelo, AKDOT, agreed saying that ‘should’ indicates uncertainty and ‘shall’ denotes a requirement. Oak referred to the AASHTO Style Guide and said that ‘shall’ is also a word to be used with caution. The AASHTO Model Standard uses ‘must’ exclusively to denote a mandatory directive. Oak consulted Deb Kim, AASHTO Publications, who said that ‘must’ is the only word the Federal government now permits in their documents to denote legal obligation. Deb also provided a link to a brief article from the FAA.  <a href="https://www.faa.gov/about/initiatives/plain_language/articles/mandatory/">https://www.faa.gov/about/initiatives/plain_language/articles/mandatory/ [faa.gov]</a></p> <p>Before the meeting, Desna drafted some recommendations for the use of ‘should.’</p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>9.1 – reword apparatus description and replace one ‘should’ with ‘shall.’ – the Board revised the apparatus section here and in R 76 to match and remove ‘shall’.</li> <li>9.2 – remove usage language, as this is the apparatus section – approved by the Board.</li> <li>10.3 remove ‘should be’ as ‘approximately’ is already there – approved by the Board.</li> <li>11.1 – remove usage language as this is the apparatus section – approved by the Board.</li> </ul>	
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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
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	<p>Desna was asked to draft revisions to remove the term ‘shall’ throughout and to use active voice where possible.</p> <p>The QAC are proposing replacing the graphic for the quartering template in R 76, the Board determined it should also be replaced in R 47.</p> <p>Proposed revisions were approved for submittal to AASHTO COMP TS. The Board decided to ask Larry Ilg to champion the proposed revisions.</p> <p><i>Desna Bergold will draft further revisions to remove the term ‘shall’ and distribute for approval.</i></p> <p><i>Larry Ilg will be asked to submit the proposed revisions to Allen Myers, TS 2c Chair.</i></p>	<p>DESNA BERGOLD LARRY ILG</p>
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<p>R 60</p>	<p><i>R 60, Sampling Freshly Mixed Concrete (TS 3b) (3/8)</i></p> <p><u>Revision proposal:</u></p> <ul style="list-style-type: none"> <li>• Add ‘Sampling from a Pump or Conveyor System’ in 5.2.6</li> </ul> <p>During email exchanges after the proposal was distributed, Oak indicated that sampling after the pump has been discredited by Tyler Ley, Ph. D, PE, OSU. Although the air content of the fresh concrete appears to be lowered during pumping and placement, when the hardened air content, when determined, is acceptable. Some of the member agencies have or will be changing the point of acceptance to the mixer truck for concrete that will be pumped.</p> <p><u>Discussion item</u></p> <p>The Board further discussed concrete sampling locations. There seems to be growing evidence that sampling after the pump or conveyor system does not correlate with the hardened air content. Some agencies are reconsidering the point of acceptance for fresh concrete air content.</p> <p>Craig Wieden, CDOT, offered to share a forensic study of early cracking on a bridge deck. Many members expressed an interest and asked that anyone with similar studies to share with the Board.</p> <p>On further discussion, the Board determined that these revisions will not be presented to AASHTO TS 3b at this time.</p> <p><i>Proposal rejected; no further action necessary.</i></p>	
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TOPIC	Discussion / <i>Decision</i>	ACTION REQUIRED BY:
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R 76	<p><i>R 76, Reducing Samples of Aggregate to Testing Size (TS 1c) (3/30)</i></p> <p><u>Revision proposal:</u></p> <ul style="list-style-type: none"> <li>• Apparatus:             <ul style="list-style-type: none"> <li>– Add the quartering template from R 47.</li> <li>– Add drywall taping knives.</li> <li>– Allow the size of the tarp to be ‘appropriate for the size and amount of the material being reduced’.</li> <li>– Group the remaining apparatus by equipment type.</li> <li>– Clarify the term ‘tarp’.</li> </ul> </li> <li>• Procedure             <ul style="list-style-type: none"> <li>– Break the paragraphs of each option into steps.</li> <li>– Title each option.</li> <li>– In ‘quartering on a hard clean surface,’ require the material to be turned over at least four times to be consistent with ‘quartering on a tarp’.</li> <li>– Add instructions on further reduction.</li> <li>– In both ‘quartering’ methods include, ‘The final test sample consists of two diagonally opposite quarters.’</li> <li>– Add section for ‘Reduction by Apex’.</li> <li>– Replace Figures 2 and 3 graphics.</li> <li>– Add graphics for ‘Reduction by Apex’.</li> </ul> </li> </ul> <p>While reviewing the proposed revisions, John indicated that the term ‘should’ is used five times. This term has been flagged as problematic in specifications and standards. See discussion of ‘should’ and ‘shall’ usage under R 47.</p> <p>Before the meeting, Desna drafted some recommendations for the use of ‘should.’</p> <p>Recommendations:</p> <p style="padding-left: 40px;">4.2 – Change the ‘should’ sentences to active voice – approved by the Board.</p> <p style="padding-left: 40px;">9.5 – reword description – the Board revised the apparatus section here and in R 47 to match and remove ‘shall’.</p> <p style="padding-left: 40px;">10.1.1.3 – reword sentence and remove the final phrase – approved by the Board.</p> <p>Desna was asked to draft revisions to remove the term ‘shall’ using active voice where possible.</p> <p>During review of the proposal, Randy Mawdsley, WSDOT, asked if a picture or graphic of a mechanical splitter would be helpful. The</p>	
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	<p>Board agreed that this would be good and asked Scott to provide a better picture. Desna was instructed to insert the picture in black and white.</p> <p>The QAC are also proposing replacing the graphics in the Procedure section. Desna had new graphics drawn. The Board likes the new graphics but thought that the ‘Quartering on a tarp’ graphics with the stick under the tarp does not adequately illustrate the method. Desna said that she will have the graphics redrawn.</p> <p>Oak suggested that WAQTC provide permission to AASHTO for use of the figures and pictures so AASHTO will not have to request it later. He also provided the form AASHTO requires. Desna agreed to provide the forms and the figures in the required format.</p> <p>Proposed revisions were approved for submittal to AASHTO COMP TS. John volunteered to champion the proposed revisions.</p> <p><i>Desna Bergold will draft further revisions to remove the term ‘shall’ and distribute for approval.</i></p> <p><i>John Bilderback will submit the proposed revisions to Matthew Beeson, TS 1c Chair.</i></p>	<p>DESNA BERGOLD</p> <p>JOHN BILDERBACK</p>
T 176	<p><i>T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a) (2/2)</i></p> <p><u>Revision proposal:</u></p> <ul style="list-style-type: none"> <li>• Remove second sentence in Section 6.2.</li> <li>• Revise the sample size in Section 6.4 to 1000 to 1500 g (2.2 to 3.3 lb.).</li> </ul> <p>Sean presented these revisions to Andy Babish, TS 1a Chair, after the Board approved by email. Sean had mentioned the possibly of further proposed revisions during a TS 1a Task Force and Andy wanted to ballot all the revisions at the same time. Sean indicated that these revisions will be TS balloted in the spring of 2021.</p> <p><i>Board members will vote on this proposal when it is balloted.</i></p>	<p>EXECUTIVE BOARD MEMBERS</p>
T 310	<p><i>T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b) (3/8)</i></p> <p><u>Revision proposal:</u></p> <ul style="list-style-type: none"> <li>• Change the term ‘probe’ to ‘source rod’ in 9.5.2, 9.5.6, 9.5.8, and Note 5</li> </ul>	<p>DESNA BERGOLD</p> <p>MATT LINNEMAN</p>

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	<p>The term ‘probe’ and ‘source rod’ are used interchangeably in the method. Manufacturer’s information uses the term ‘source rod.’</p> <p>Proposed revisions were approved for submittal to AASHTO COMP TS. Matt volunteered to champion the proposed revisions.</p> <p><i>Desna Bergold will draft further revisions to remove the term ‘shall’ and distribute for approval.</i></p> <p><i>Matt Linneman will submit the proposed revisions to Neoma Cole, TS 1b Chair.</i></p>	
T 355	<p><i>T 355, In-place Density of Asphalt Mixtures by Nuclear Methods (TS 2c) (3/8)</i></p> <p><u>Revision proposal:</u></p> <ul style="list-style-type: none"> <li>• Change the term ‘probe’ to ‘source rod’ in 9.3.1.1 and 9.3.2.1</li> </ul> <p>Manufacturer’s information uses the term ‘source rod.’</p> <p>Proposed revisions were approved for submittal to AASHTO COMP TS. Matt volunteered to champion the proposed revisions.</p> <p><i>Desna Bergold will draft further revisions to remove the term ‘shall’ and distribute for approval.</i></p> <p><i>Matt Linneman will submit the proposed revisions to Allen Myers, TS 2c Chair.</i></p>	<p>DESNA BERGOLD</p> <p>MATT LINNEMAN</p>
<b>FROM QAC WINTER MEETING</b>		
D3740, ADDITIONAL EXAM QUESTIONS, AND QAC CONCERNS	<p><i>Exam Task Force</i></p> <p>During the Executive Board Fall Teleconference, a task force was formed to:</p> <ul style="list-style-type: none"> <li>• Identify what new questions would need to be developed for the current exams to comply with ASTM D3740 and C1077.</li> <li>• Determine what changes would need to be made to the program and <i>Administration Manual</i>, if any.</li> <li>• Review the unique scoring of the exams.</li> </ul> <p>The task force met Dec. 17, 2020, and recommended the following actions to the Board:</p> <ol style="list-style-type: none"> <li>1. Forward the ‘WAQTC Exams – additional questions spreadsheet’ to the QAC with direction to use the information to improve the written exams.</li> </ol>	

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	<p>2. Direct the QAC to develop additional questions for the Embankment &amp; Base and In-Place Density written exams to meet the criteria of <i>ASTM D3740, Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction</i>.</p> <p>3. Table discussions of whether to develop additional questions for the Aggregate and Concrete modules to meet <i>C1077, Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation</i>, requirements until the above efforts are complete.</p> <p>4. Disband this Task Force and, if necessary, form another if C1077 discussions resume.</p> <p>The Board Members were polled and approved the above recommendations.</p> <p>During the QAC Summer Meeting, many members of the QAC expressed a concern that the additional questions would add a significant amount of time to administer the written exams.</p> <p>Scott asked if the Board would reconsider the directive. Mike and Oak feel that meeting the ASTM D 3740 requirements would be helpful to their agencies. John suggested that the questions be developed and used to improve existing exams and but not increase the number of questions to comply with D3740.</p> <p>Oak asked that if the additional questions are developed could an agency use them and offer an extended exam to satisfy ASTM D3740. John and Mike both like this idea. It would be at the member agencies discretion whether to offer this certification. Although there are still a lot of details to work out, the Board determined to move forward with this suggestion.</p> <p><i>The QAC will continue to develop additional exam questions to satisfy the requirements of ASTM D 3740.</i></p> <p><i>Developing a written exam to comply with ASTM D3740 will be included on the Strategic Plan.</i></p>	<p>QAC DESNA BERGOLD</p>
PROMETRIC COMPUTER BASED EXAM DELIVERY / EXAM SCORING	<p>Randy discussed WSDOT's conversations with Prometric. Prometric provides ACI examinations at the Prometric testing centers. Originally WSDOT wanted to do the same, but they discovered this approach would be cost prohibitive.</p> <p>WSDOT then explored another Prometric option, remote testing, and delivery of the exams online. Using this system, when a participant begins an exam, the Prometric program shuts down the computer's functionality except what is necessary for the</p>	



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	<p>examination. Prometric’s program allows a proctor to monitor the participant by using the participant’s computer’s camera. The proctor and the program assess eye movements and other signs of cheating (biometrics). Upon signs of cheating the proctor confers with a second proctor and if there is reason to believe a participant is cheating the exam is stopped and the participant’s employer and the agency is informed.</p> <p>WSDOT received a proposal from Prometric which quoted an implementation fee of \$5200 and a charge of \$50 per exam. WSDOT expects that the participant or their employer will pay the exam fee.</p> <p>WSDOT will most likely pursue this option for exam delivery and Randy asked if WAQTC would consider supporting or joining this effort. Scott said that UDOT is interested. He also indicated that if the Board approves the expenditure, UDOT could probably modify the consultant contract to cover it.</p> <p>John asked which agencies would use Prometric to deliver the written exams if this were set up. WSDOT and AKDOT said that they would, UDOT, ITD, and NDDOT said that they would definitely consider using Prometric. MDT said that they are happy with their program but would support this effort if it would benefit other members.</p> <p>Randy suggested setting up a subcommittee to work through any remaining questions and meet with a Prometric representative. The Board agreed. Representatives from ITD, WSDOT, AKDOT, UDOT, CDOT, and NDDOT will form the subcommittee. Randy suggested that the subcommittee meet with Prometric the week of May 10<sup>th</sup> or 17<sup>th</sup>, he will work on setting it up.</p> <p><i>A subcommittee will work through remaining questions and make a recommendation to the Board.</i></p> <p><i>‘Investigate virtual written examinations,’ will be included on the Strategic Plan.</i></p> <p>Scott asked if this would be a good time to consider revising WAQTC written exam scoring. Currently, if a technician scores over 70 percent on the exam but fails one or more sections (test methods), they only have to retest on the failed sections. This has posed problems in electronic delivery of the written exams and is not consistent. He also pointed out that it is not a standard method of retesting. He proposed full retest upon failure of any section. Randy and Dan Gettman, AKDOT, indicated that they would</p>	<p>SUB-COMMITTEE</p> <p>DESNA</p> <p>BERGOLD</p>
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	<p>support this. Misty Miner, MDT, would prefer the reexaminations stay the same.</p> <p>The Board decided that this discussion should be tabled for now but would like to add a review of testing methodology to the <i>Strategic Plan</i>.</p> <p><i>'A thorough review of examination methodology,' will be added to the Strategic Plan.'</i></p>	DESNA BERGOLD
ADMIN MANUAL	<p><i>Administration Manual</i></p> <p>The QAC would like the Board to consider revising the 'Retention of Written Examinations' section. This section states, 'After each Qualification examination process, all used exam materials, both passing and failing, will be retained, in conformance to guidelines contained in the section entitled Examination Materials Security, by the Agency providing the Qualification examination, for a period of one (1) year and <b>will then be destroyed</b> by shredding or other effective method.'</p> <p>Some agencies retain the exams and/or the participants answer sheets for the duration of the qualification.</p> <p>The Board determined that inserting 'at least' before 'one year' would address this issue.</p> <p><i>The Administration Manual will be revised to allow exam retentions beyond one year.</i></p>	DESNA BERGOLD
SUMMER MEETING	<p><i>QAC Summer Meeting Location</i></p> <p>The QAC asked the Board to determine if the Summer Meeting, which is scheduled for July 19<sup>th</sup> thru 23<sup>rd</sup>, will be held in person or virtually.</p> <p>The Board determined that as it is difficult to determine if all the members would be able to travel by July, the QAC Summer Meeting will be held virtually.</p> <p><i>The QAC Summer meeting will be held virtually.</i></p>	QAC
2021 STRATEGIC PLAN	<p><i>2021 Strategic plan</i></p> <p>Desna sent a draft 2021 Strategic Plan to the Board on April 6<sup>th</sup>.</p> <p>John pointed out before the meeting that the term 'accrediting agencies' in the Mission Statement, fifth bullet, is not a term WAQTC uses to refer to member agencies. The <i>Administration Manual</i> uses the terms 'Contributing Members' and 'Accredited Contributing Members' and defines 'Accredited Contributing</p>	

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	<p>Members' as, 'Agencies that have agreed to follow the standards of the TTQP accreditation program.' Desna suggested that as this bullet is referencing reciprocity it should say 'Accredited Contributing Members.' The Board agreed that this should be revised in all locations that contain the Mission Statement.</p> <p><i>Desna will revise the Mission Statement in all publications.</i></p> <p><i>Desna will revise the draft the 2021 Strategic Plan and distribute for approval.</i></p>	<p>DESNA BERGOLD</p>
OTHER ITEMS	<p><i>Executive Board Summer Meeting</i></p> <p>Casey Soneira, AASHTO, recently announced that the AASHTO COMP Annual Meeting will be held virtually, July 26<sup>th</sup> through August 4<sup>th</sup>. The Executive Board Summer Meeting should be held in July before the COMP Annual Meeting.</p> <p><i>Desna will poll the Board Members for the best date and time for the Board Summer Meeting.</i></p>	<p>DESNA BERGOLD</p>