

SUBCOMMITTEE ON MATERIALS

Mid-Year Webinar Meeting

Thursday February 4, 2016

2:00 PM – 4:00 PM EST

TECHNICAL SECTION 1C

MINERAL AGGREGATES

I. Call to Order and Opening Remarks

- Chair: Scott Seiter (OK)
- Vice Chair: Lisa Zigmund (OH)

II. Roll Call/Roster

- A. Attendance record will be based on e-mail submission
- B. Attendees: send an email to Matt Bluman at mbluman@amrl.net
- C. **Roll: AR, IL, AL, ME, AZ, TN, IA, OK, ID, NJ, OR, MO, SC, FL, VT, OH**
AMRL Staff - Bluman, Malusky, Johnson
Warren Chesner
*****See full list below*****

III. Approval of Technical Section Minutes

- Wednesday August 5, 2015 meeting
- **NJ move, ME second – no objections**

IV. Old Business

- A. 2015 SOM Ballot Items:

Item Number:	14
Description:	SOM Ballot item to revise M 45, Aggregate for Masonry Mortar
Decisions:	Yes: 47, No: 0, No Vote: 5
Affirmative votes with comments:	
Florida Department of Transportation (Timothy J. Ruelke) (timothy.ruelke@dot.state.fl.us)	Section 7.1.10 is not designated as Note in accordance with the Ballot Item. the section number should be deleted and replace with "Note 2 - "
New Jersey Department of Transportation (Eileen C. Sheehy) (eileen.sheehy@dot.nj.gov)	is there a recommended value for T 304 (Uncompacted Void Content)?
Virginia Department of Transportation (Charles A. Babish) (andy.babish@vdot.virginia.gov)	Section 7.1.10 would better be considered under a separate subheading such as being listed as 7.1.9.1 under voids or under a "Definitions" section rather than Section 7. Methods of Sampling and Testing.
	We will be moving this forward after the editorial changes are made.

Item Number:	15
Description:	SOM Ballot item to change T 248 to an R standard.
Decisions:	Yes: 46, No: 1, No Vote: 5
Negative votes with comments:	
Mississippi Department of Transportation (James A. Williams, III) (jwilliams@mdot.state.ms.us)	Agree with changing to an R standard because the standard does not yield a test result, however, the marked up version of the change is not included in the meeting minutes. It is unclear what changes to the standard are necessary to change from a test method to a standard practice.
	MS agreed to remove the negative. This will take place using the template of R47 (reducing hot mix). It will be revised.
Item Number:	16
Description:	Concurrent Ballot item to adopt T XX, Pore Index for Carbonate Coarse Aggregate, as a Provisional Standard.
Decisions:	Yes: 47, No: 0, No Vote: 5
Affirmative votes with comments:	
Mississippi Department of Transportation (James A. Williams, III) (jwilliams@mdot.state.ms.us)	Is it intended that this be a jointly owned ASTM/AASHTO test method? If not, the ASTM Logo should be removed from the standard. The test method does not require de-aired water. Because the test attempts to precisely measure the change in volume of the water in the pressure vessel, should de-aired water be required for the test. Tap water can have relatively high air contents that could affect the measurement of the volume change.
Missouri Department of Transportation (Brett Steven Trautman) (brett.trautman@modot.mo.gov)	Recommend an affirmative vote with the following comments: 1) In Section 6.2, room temperature water needs to be better defined. Recommend specifying a temperature along with a range such as 25 +/- 2 deg. C. 2) Section 7.1, "Note 2" needs to be labeled "Note 3". Also need a space added between Section 7.1 and the note. 3) Section 7.2, need to better define what is considered "constant weight". 4) Section 8.7, "Note 3" needs to be labeled "Note 4". 5) Section 9.1, believe "g" in the equations represent "grams". To prevent confusion, recommend removing the letter "g" and only showing the value 9000.
Oregon Department of Transportation (Greg Frank Stellmach) (greg.f.stellmach@odot.state.or.us)	I approve of this as a Provisional standard. Have comments from the tech section ballot been addressed? There are two "Note 2" references. Use of the term "weight" should be "mass". Reference in Section 1.1 should be to "Portland Cement (PC) Concrete". Are these changes going to be made?

	I still feel that the procedure should address what the sample mass should be under Section 7.1 and 8.1. It should also provide a definition of what achieving constant mass means under Section 7.2. However, as a provisional standard I am willing to move forward without those things being defined yet.
	Comments were editorial and addressed. All items will be taken care of prior to publishing. Any technical issues will be addressed with future ballot.
	IA- De-aired water issue. More technical in nature. Will be resolved later on a different TS ballot.
Item Number:	17
Description:	Reconfirm M 29-12
Decisions:	Yes: 47, No: 0, No Vote: 5
No comments	
Item Number:	18
Description:	Reconfirm T 104-99 (2011)
Decisions:	Yes: 47, No: 0, No Vote: 5
Affirmative votes with comments:	
Idaho Transportation Department (Michael J Santi) (mike.santi@itd.idaho.gov)	Need to remove reference to M 92 if it gets deleted by Item Number 4. Then add ASTM E-11.
	Will be passed on to Pubs dept. to see if that needs to be changed.
Item Number:	19
Description:	Reconfirm T 327-12
Decisions:	Yes: 47, No: 0, No Vote: 5
No comments:	
Item Number:	20
Description:	Adopt MP 16-13 (2015) as a full standard
Decisions:	Yes: 46, No: 1, No Vote: 5
Negative votes with comments:	
Colorado Department of Transportation (Bill R Schiebel) (bill.schiebel@state.co.us)	Agency: Colorado Department of Transportation User Name: Eric Prieve, Concrete/Physical Properties Program Manager Comment: Delete. No need for this as a stand-alone standard. Add some notes or an appendix to AASHTO M80 with the precautions to using RCA in concrete. RCA that can meet the requirement of M80 should be used and treated as normal concrete aggregate. RCA that can't meet the requirements of M80 probably should not be used in concrete, but could be used as base or fill.
Affirmative votes with comments:	
Georgia Department of Transportation (Charles Allen Hasty) (chasty@dot.ga.gov) (Peter Wu) (pwu@dot.ga.gov)	Georgia has used the reclaimed concrete aggregate for base materials only. For concrete pavement, we do not use reclaimed concrete aggregate for mainline concrete paving, but have used it on one project for shoulder paving. Our goal is to build concrete pavement with 50 plus years of service life, which is the reason we do not use reclaimed concrete

	aggregate for mainline paving (lack of verified service history of the reclaimed concrete aggregate).
Maine Department of Transportation (Richard L Bradbury) (Richard.Bradbury@maine.gov)	Maine has not used this standard, but it may have use in the future as aggregate sources are depleted.
New Jersey Department of Transportation (Eileen C. Sheehy) (eileen.sheehy@dot.nj.gov)	NJDOT does not use this standard. We do not currently allow the use of RCA in PCC.
Oklahoma Department of Transportation (Scott Seiter) (sseiter@odot.org)	The interest and use of RCA has been increasing, therefore a specification in the Materials book providing guidance is beneficial.
Oregon Department of Transportation (Greg Frank Stellmach) (greg.f.stellmach@odot.state.or.us)	I approve of moving this to a full standard. Would be interested in discussion on whether or not the Note 1 under Section 1 should be changed to include caution for use of reclaimed concrete aggregate in Continuously Reinforced Concrete Pavement (CRCP) because of susceptibility of CRCP to shrinkage that might be affected by the reclaimed concrete aggregate.
Virginia Department of Transportation (Charles A. Babish) (andy.babish@vdot.virginia.gov)	The term recycled concrete aggregate came up recently with our state aggregate industry that they would prefer the term Crushed Hydraulic Cement Concrete rather than Recycled Concrete Aggregate.
	<p>This standard is patterned after M80.</p> <p>CO- No reason to have duplicate standards for the same items. M80 already allows it so why not just added to the appendix of M80.</p> <p>OK- been in contact with AASHTO using DAMS to get this moved.</p> <p>NJ- Issues with states that do not want to use recycled concrete. Some states may have concerns and want to see this as a separate standard.</p> <p>OK- Refer to M80 but has specs on recycle aggregates. They have approved lists of aggregates by quarry. They would still have to meet the specs regardless of the information being all in M80 or in MP16.</p> <p>OR – has anyone written language into M80 that will be used in MP-16? Wants something on the table.</p> <p>OK – no language other than characteristics section. The suggestion is to take what is in MP-16 for CRCP and add it.</p> <p>Not publish information now in MP-16 meaning no guidance would be in new books.</p> <p>TN- Any states on the line using MP-16. TN never really uses it but some other states us it (GA).</p> <p>FL- they have their own spec. most aggregates are crushed for base.</p> <p>CO- Uses 57 and 67 crushed gradations and use it as virgin aggregate.</p> <p>TN- noticed that it needs to be double crushed. If not, paste remains on aggregates. Needs to be processed very close to virgin aggregates.</p> <p>NJ – Used it as an unbound base. Typical have 10% AC in it.</p>

	<p>AL- Requires RCAs to meet the same QC standards as virgin aggregates. Most of the time it won't meet spec. Has anybody created a survey to see if MP-16 is being implemented?</p> <p>FL – Don't restrict it if other states want to use it.</p> <p>OK- Did it come out of RMRC?</p> <p>Move to find Negative vote persuasive (Not publish MP-16): FL moves; OR seconds. Discussion: None Opposed: None. Motion carries.</p>
Item Number:	21
Description:	Reconfirm PP 64-11 (2013) as a provisional standard.
Decisions:	Yes: 47, No: 0, No Vote: 5
Affirmative votes with comments:	
Oregon Department of Transportation (Greg Frank Stellmach) (greg.f.stellmach@odot.state.or.us)	I approve of continuing this as a provisional standard. It seems like there is a lot of common definition between PP64 and TP81. Can these two be combined into one procedure?
Item Number:	22
Description:	Reconfirm PP 81-12 (2015) as a provisional standard.
Decisions:	Yes: 47, No: 0, No Vote: 5
Affirmative votes with comments:	
Oregon Department of Transportation (Greg Frank Stellmach) (greg.f.stellmach@odot.state.or.us)	I approve of continuing this as a provisional standard. It seems like there is a lot of common definition between PP64 and TP81. Can these two be combined into one procedure?

- B. TS letter ballots
 - The 2015 SOM Ballot also went out as a Technical section ballot for 1c. The nine ballot items discussed above also had a TS vote. All nine TS ballot items received the same vote; All of the comments were the same as in the SOM ballot, therefore no further discussion needed for the TS ballot.
- C. Task Force Reports
 - TF 11-01: T112 Revision (KS, NE, AK, AMRL)
 - TF 13-01: AIMS Standards, TP81 & PP64, (FL, OH, AZ, TRB) **FL: purchased an AIMS II unit looking at macrotecture. Research showed that when using same texture with different colors, different readings occurred. AIMS was only calibrated for white or light gray aggregates. It wasn't designed for colored aggregates. Difficult time interpreting results. UF found a way to use a different process analysis which eliminated the color problem. Phase II research used new algorithm, used same AIMS and adjusted the lamps. This changed the texture index. TP 81 is written toward AIMS. Hesitant to accept it. Revise TP 81 to accept other Aggregate Imaging Analyzers. Maybe add cautionary requirements regarding macrotecture. FL appears to be the only state to make this public. Concerned that there isn't enough information on the AIMS device. Micro texture isn't correlated to anything. Glare is causing issues and so are varying pore structures. Looking to try to find some other means of research. No feedback has been given from AIMS manufacturer. TX is the other state that has done research with the AIMS. Used lite limestones and gray gravel. Not sure if they noticed similar issues as FL. A new study may be conducted using various shades and colors of stone.**
OH- Similar experience with AIMS device, mainly contrasting colors. Texture values from AIMS were contradictory to what they know to be true for their good aggregates.
 - TF 14-01: Iowa Pore Index Test (IA, CTL, MI) **OK- is there a need to continue the TF. IA- go ahead and end the TF and add technical stewards. OK- TF 14-01 will be ended.**
 - TF 15-01: T11 Revision (WAQTC, NJ, ME, AMRL): **NJ- Nothing has been done. ME – same.**
 - TF 15-02: T104 Revision (TN, AMRL): **AMRL presented data from AGC 189/190 showing that most labs used similar Na and Mg salts, but there were varying degrees of purity. Discussion indicated that we may need to add a requirement for the level of purity of the salt used. FL,**

OH: continue to look at this prior to evaluating and data. OH, NJ, and TN will look for sources that have a little bit higher breakdown.

- TF 15-03: Centrifuge method for LWA (LA, FL, KS, Jeff Speck): **No work had been done.**

V. New Business

A. Research Proposals

-

B. AASHTO Items/Issues

-

C. NCHRP Issues

- Follow-up to the presentation made at the August TS meeting on the findings from NCHRP 805 by Randy West. Based on NCHRP Project 04-35.

TRB Webinar: Improved Test Methods for Specific Gravity and Absorption of Coarse and Fine Aggregate

TRB will conduct a webinar on Thursday, February 18, 2016 from 2:00PM to 3:30PM ET that features a research [report](#) conducted by the National Cooperative Highway Research Program (NCHRP) that explores test methods for determining the specific gravity and absorption of coarse and fine aggregates. These methods are designed to improve the accuracy, precision, ease of use, and time required for conditioning and testing as compared to the standard test methods (AASHTO T 84 and T 85).

Participants must register in advance of the webinar, and there is a fee for non-TRB Sponsor or non-TRB Sustaining Affiliate employees. A certificate for 1.5 Professional Development Hours (PDHs) will be provided to attendees who register and attend the webinar as an individual.

Webinar Presenters

- Randy West, *National Center for Asphalt Technology*
- Nam Tran, *National Center for Asphalt Technology*

Moderated by: Julie Kliewer, *Arizona Department of Transportation*

Webinar Outline

1. Overview of [NCHRP Report 805](#): Improved Test Methods for Specific Gravity and Absorption of Coarse and Fine Aggregate
2. Objectives and results of study
 - Proposed changes to the AASHTO T84 and T85 methods
3. Question and answer session

The first 60 minutes of the webinar will be for presentations and the final 30 minutes will be reserved for audience questions. The Registered Continuing Education Program (RCEP) categorizes this webinar activity as relating to health, safety, and welfare including core technical.

Learning Objectives

At the end of this webinar, participants will be able to:

- Determine if changes are necessary to improve the precision, ease of use, and time required for conditioning and testing for these test methods and how they can affect their current practices

Registration Information

There is no fee for employees of [TRB Sponsors](#) or [TRB Sustaining Affiliates](#) who register using their work email address. In addition to employees of TRB sponsor organizations, the following are eligible to receive complimentary webinar registration:

- TRB and National Academies employees;
- Chairs of TRB standing committees, sections, or groups;
- CRP panel members who were involved with developing the report or project that is the subject of the webinar;
- Members of the media;
- Employees of tribal governments; and
- Members of Congress or their staff.

Registration questions? Contact Reggie Gillum at RGillum@nas.edu.

- D. Correspondence, calls, meetings/ Presentation by Industry
 - Presentation by Warren Chesner, Principal Investigator for NCHRP Project 168. Pooled Fund Study.
OK- Thanked the presenter and stressed the potential of contributing and participating to the pooled fund study.
- E. Proposed New Standards
- F. Proposed New Task Forces
- G. Standards Requiring Reconfirmation
 - ?
- H. Upcoming Technical Section Ballot Items
 - T 84 – **NCHRP Study**
 - T85 – **NCHRP Study**
 - T210
 - T354

VI. Open Discussion

Inverted Pavements – Pooled Fund Study Solicitation:
TPF 1416 solicitation open until September 25, 2016, Georgia DOT.
“Inverted Base Pavement: A Valuable Pavement Structure Alternative”
OK- This issue was discussed at TRB this past year.

VII. Adjourn**Move to adjourn –****List of attendees from GoToWebinar:**

Last	First	Organization
Benson	Michael	Arkansas
Beshears	Sheila	Illinois
Billinger	Randy	
Blackburn	Lyndi	Alabama
Bluman	Matt	AASHTO
Bradbury	Rick	Maine
Burch	Paul	Arizona
Chesner	Warren	Chesner Engineering, P.C.
Chung	Yung	
Cronin	Mickey	
Dees	Amanda	
Doran	Michael	Tennessee
Gagulic	Mladen	
Geary	Georgene	GGfGA Engineering
Giessel	Richard	
Johnson	Brian	AASHTO
Jones	Kevin	Iowa
Koetsier	Lora	Oklahoma
Malusky	John	AASHTO
Prieve	Eric	
Santi	Mike	Idaho
Seiter	Scott	Oklahoma
Sheehy	Eileen	New Jersey
Shoucair	John	
Stellmach	Greg	Oregon
Thomas	John	Oklahoma
Trautman	Brett	Missouri
Webster	Garrett	
Wilson	Craig	Arizona
Zigmund	Lisa	Ohio
Zwaka	Merril	South Carolina