#### Spec Subcommittee Agenda

March 9, 2023

Members Present:

Albert Kilger Jeff Anderson Ali Arabzadeh Matthew Bertucci Debbie Schwerman Derek Frederixon Jake Amundson James Pforr Steve Bloedow Travis Kurey Zach Lemke

### • Gradation Revisions to %Passing #8 Sieve

- Nominal sizes 1-2 unchanged.
- Nominal sizes 3-5 expanded.
  - Using mix design data from 2018 2022, only 14 / 1,525 mixes would not pass proposed spec.
    - 0.9% of all mixes.
    - 13 #3 mixes and 1 #4 mix.

SIEVE	PERCENT PASSING DESIGNATED SIEVES							
	NOMINAL SIZE							
	No. 1 (37.5 mm) (1 1/2 inch)	No. 2 (25.0 mm) (1 inch)	No.3 (19.0 mm) (3/4 inch)	No. 4 (12.5 mm) (1/2 inch)	No. 5 (9.5 mm) (3/8 inch)	No. 6 (4.75 mm) (3/16 inch)	SMA No. 4 (12.5 mm) (1/2 inch)	SMA No. 5 (9.5 mm) (3/8 inch)
Existing 2.36-mm (No. 8)	15 - 41	19 - 45	23 - 49	28 - 58	32 - 67	90 max	15 - 25	18 - 28
PREV. 2.36-mm (No. 8)	23 - 41	27 - 45	35 - 49	40 - 58	48 - 67	90 max	15 - 25	18 - 28
NEW 2.36-mm (No. 8)	<mark>15</mark> - 41	<mark>19</mark> - 45	<mark>32</mark> - 49	<mark>36</mark> - 58	<mark>40</mark> - 67	90 max	15 - 25	18 - 28

- Less opposition to new proposed limits.
- o Industry is still worried we may be constraining innovation.
- We can proceed with the change, after presenting at full tech team.

## • Upcoming Specification Implementation

- Interlayer STSP
  - Removed SS 211/390. These will be specified as needed so they are not included in the bid price for the interlayer.
- Longitudinal Joint Density STSP
  - Incentive changed from \$0.40/LF to \$0.20/LF.
  - Will be effective for all contracts let for 2024 work.

- Although we proceed with making the change and had received approval from the industry, it seems that they are not still OK with what we have done.
- Plunge Milling SPV
  - Concepts pulled from interlayer STSP into own SPV for applications other than interlayers.
- o SDD 13C19
  - Increased font size of approximation symbol (≈) for overlap detail.
- o Removing Distressed Pavement Milling
  - Make STSP? Any objections to language?
  - Is the SDD needed/wanted?
    - Will send out SDD for review and comments.
    - Likely to be included with STSP.

# • AWP Specification Reorganization

- Nearing completion of first draft.
- Removing belt sample gradations (T11 / T27). Only do T30 on extracted aggregates.
  - No objections from industry.
- Nuclear gauge correlations (CMM 815) moving to appendix section of WTM T355 in MOTP.
- Department procedures/processes that don't necessarily belong in the standard spec will become WTPs.
  - Ignition oven correction factor department process (CMM 836.6.3.7).
  - Mix Design submittals/process (CMM 866).
- Revised "QMP" Program
  - Mixture
    - Sublots / Lots: 750 T / 3,750 T?
    - Same tests/procedures.
  - Density
    - Sublots / Lots: 1,500 LF / 7,500 LF?
    - FHWA Compliant Acceptance Options:
      - Department acceptance with correlated gauges, and/or
      - Department tested cores (smaller projects only to avoid correlations), or
      - Department performs core testing in contractor lab/field office (witnessing the contractor test Department cores is noncompliant).
        - Would need to verify contractor equipment. For example, verify scales with reference weights prior to testing.
      - Other ideas/suggestions? (Would need FHWA approval)
        - Companion cores
        - Contractors seem to be ok with allowing department testing in contractor labs. Also allows for additional scrutiny on both sides in terms of testing.

- Dispute resolution with cores?
  - Triggered by QC data?
  - Triggered by other?
    - 3<sup>rd</sup> core for dispute resolution.
    - Michigan currently takes 3 cores including companion cores, and it seems that this is what we can adopt.
    - Derek and Jake mentioned that they are OK with allowing the DOT to use their labs for density measurements. Debbie raised the concern that such accommodation can become problematic during the test strip production. Ali mentioned that we can use mobile labs.

- o RAP Gsb
  - Tested 18 mixes for Gmm and Gsb to create regression equation.
    - 2 Outliers (16 usable mixes for equation).
  - FHWA would like at least 30 tested mixes to verify/construct regression equation.
    - Only for mixes  $\leq 25\%$  PBR.
    - Mixes > 25% PBR must use extraction to limit risk of inaccurate VMA.
  - Industry is fine with what we have proposed for the RAP and RAS Gsbs; however, they want to have the liberty to perform their own measurements on the extracted aggregate.

## o Future Changes

- PWL on VMA or AC?
  - Looking to implement for 2024 contracts.
  - F&t.
  - Volumetric pay split:
    - o 50% Va / 50% VMA/AC?
    - o 60% Va / 40% VMA/AC?
    - o 40% Va / 60% VMA/AC?
    - o Other?
    - More discussion on which parameter to use. Pros and cons to both. Department doesn't verify many Gsbs therefore making VMA less reliable.
    - AC doesn't change very much, so may not be the best parameter for F&t. It would be more statistically meaningful to use the VMA.

## • Other topics

- PWL Core Projects
  - For density dispute resolution, FHWA suggests we use cores to determine extents of unacceptable material as opposed to un/correlated gauges.
  - Could adjust coring to every 100 feet instead of 50. Could consider the extent of the material to end halfway between the last core with unacceptable density and the first with acceptable density.

- Could require coring for a set distance in either direction (for example 500 ft in each direction or until an area of known acceptable density exists) to make sure we cover the unacceptable area.
  - This is the preferred method by industry.
- o OnStation
  - Industry would like to use this technology. There are reports of hesitation from the regions to use it. Currently specs do no prohibit the application nor do they mandate that a roller wheel be used to determine stations.
  - Will need additional meetings with regions and density subcommittee to address.
- Next Meeting: Approx. 2 months.