

Agenda for Jan 24, 2023 HMA Tech Team

TEAMS Virtual Meeting

12:30p-3:30p

Full Meeting

- A. Minutes, from previous meeting
- B. Roll, members & visitors
- C. Outside Committee Reports
 - a. Aggregate Tech Team (Tirupan)
 - b. IRI Team (Deb B)
 - i. Short and long term initiatives. Goal is to accomplish definitions for project requirements before the spec is published. Long term goals are targeting 2025 specs for issues that require long term study.
 - c. Atwoods/AASHTOWare Team (Deb B/Erik L)
 - i. Reference Data is complete; user interface is in development. Shadow project planning for 2023, pilot project planned for some time after the shadow project portion is complete.
- D. Research Reports (Tirupan)
 - a. Project update
 - i. WHRP interlayer report is coming out soon.
 - ii. BMD pilot summer 2022. Researchers were not able to instrument the sections due to project timelines. Thermocouples going in this spring. Then data analysis will follow.
 - iii. Benchmarking Wisconsin materials – researchers are still working on it.
 - b. Flex team chair and rigid team chair will switch roles. Tirupan and Ali.
- E. Subcommittee Reports
 - a. Density Subcommittee (Brian J)
 - i. Calibration blocks have been moved to GB.
 - ii. All DOT gauges have been calibrated, but contractor gauges need to be calibrated with the blocks.
 - b. Specification Subcommittee - (Albert)
 - i. Revised Interlayer STSP (see attachment)
 - 1. Minor changes presented. No questions from the Committee.
 - ii. New Plunge Milling SPV (see attachment)
 - 1. Minor changes presented. No questions from the committee.
 - iii. SSD 13C19 Longitudinal Joint Construction, monitor height of overlap
 - 1. Current joint SDD was displayed and explained. Proposed changes to this are to provide a range of values for the 0.1” overlap or to provide training to construction staff for installation.

2. Difficult to impose a strict dimension on this, so training might be a better method to address this. Consistency is more important for safety.
 3. The SDD has an ~ symbol for the overlap and it's too small, that should be noted elsewhere or expanded.
 4. In training right now, they teach people to go for an approximate value for this overlap.
 5. Steve: We'll expand on training and then address it if it becomes a prominent problem.
- iv. Longitudinal Joint Density incentive
1. 2021 PWL projects
 - a. Mixture: \$2,200,000
 - b. Density mainline: \$720,000
 - c. Density longitudinal joint density: \$2,600,000
(\$0.38/lf LT, \$0.31 MT, \$0.27 HT)
 2. Proposal is to lower incentive from \$0.40 to \$0.20 per lin ft
 3. Compile statewide data for all mix types and look at the means and stds for longitudinal and mainline paving and use the statistics to determine pay adjustments.
 4. Incentives are still an administrative decision.
 5. Current rates for incentives have been working well and industry has responded appropriately. They've been disproportionate so far and that's why reducing to 0.20 per linear foot, but with all the other incentive sources there is still lots of opportunity to earn incentives.
 6. This decision makes the most sense for the short term. We'll continue to keep evaluating these statistics and adjust as they are needed. We have a lot more data now to adjust in the future. When it was drafted it was based off negotiation and now we can make it based on data.
 7. Deb agrees that this is the cleanest way to address this problem. We've not only been meeting the incentives, but we've been maximizing them. It's a great problem to have. The program has been very successful at improving the quality of the joints.
 8. It's in the STSP stage now and will be published in the next cycle in June.
- v. Gradation revisions for #8 in table 460-1 (see attachment)
1. We've increased the lower limit so that we don't generate coarser mixes in the future.
 2. Data table of mix design tests out of spec per mix type was presented. 0.5% were out for 40-58 mixes, etc.
 3. David Hose: solving a problem we don't have. There is good reason to go coarser sometimes (to pass TSR's). Some performance tests we've needed to go coarser.

4. Derek F: Just because we're comfortable with fine mixes doesn't mean there isn't something better out there. Narrowing the bands maybe ties out hands and prevents some innovation.
 5. Steve H: Coarser mixes need much more compaction in order to meet the density, this has led to crushed and fractured agg at the surface and leads to performance issues. Finer mixes improve many factors and the roads in Wisconsin are benefiting from finer mixes.
 6. The agg supply is a factor too. Fine mixes can be more expensive to produce than coarse mixes sometimes.
 7. FWHA has a sustainability initiative to maximize performance of local materials (aggs). BMD is in the future. So when performance testing becomes more important we'll need to make the best with what we have nearby.
 8. HMA will come up with a proposal and come back to the tech team with some more options.
- vi. Cold Weather Paving, higher production temp for WMA
1. Proposing a temperature of min ~275F degrees to avoid issues from moisture from the WMA.
 2. Extra costs at the plant during cold weather paving increases the overhead. Things generally don't run very smooth (preheat, ice, etc).
 3. How many warm mixes do we place? And how many of those are done during cold weather?
- c. Percent Within Limits (PWL) Subcommittee (Dan K.)
- i. Training
 - ii. No meetings have been had yet but they will be organizing soon.
 1. Send any items to discuss to Dan K.
 - iii. Summarizing and reviewing the data from 2022.
 - iv. Updates and changes to the PWL spreadsheet.
 1. Cals for production VMA.
 - v. Taylor has some recommendations for the spreadsheet. Albert and Dan will work with Taylor offline.
- d. Mix Acceptance Subcommittee (Jeff A.)
- i. Topics for subcommittee meeting
 - ii. Steve has a list of items to provide to the subcommittee.
 1. Ram Gravity
 - a. Ras 2.500
 - b. Rap use eq determined from testing rap gse
 2. TSR
 3. WMA (include compaction aid)
 4. One point vs redesign
 5. FAA
 - a. Performed on blend or equation

1. Expected to get them in May.
2. Superior office not able to install one now due to electrical needs of the building.

I. Section 700 and AASHTOWare Materials

a. Consistent Sublot and Lot for all program

- i. All mix 750/3750
- ii. All density 1500/7500
- iii. This is being addressed in the HMA subcommittee in conjunction with the spec reorg.

b. Project based testing for QV and QC

- i. Can allow test to apply to multiple projects, but this idea can lead to other issues that would need to be discussed in more detail.
 1. How is test frequency impacted? What about staggered paving? What happens with a failing test on multiple projects?

c. Round Robins

J. Inspector Training:

- a. Dan and Debbie can provide inspector training either in-person or virtual. In the past they've presented a recording, while having a live Q/A afterwards.
 - i. Usually done in April.
 - ii. However the regions like to have it organized, the association will be on board.
 - iii. They used to be 8hrs long, and now with the virtual setup we should be able to cut it down to less time.
 - iv. Dan, Debbie and Ali will discuss on to move forward with everyone's suggestions.

K. Chad H: damage caused by milling machine to curb and gutter.

- a. The drum of the mill is tipped. To help you can stay off the flag of the gutter and that creates a triangle piece to remain.
- b. How should we handle that triangle that remains? Remove via a different operation? Mill into the curb and damage it? Others?

L. Next Meeting...Summer, early and late

- a. Will shoot for early June meeting.
- b. Subcommittee members will schedule themselves during all the in between time.