PMPC Materials and QA STG Meeting Minutes

Date: Wednesday - September 4, 2019

Time: 1:00 PM – 2:30 PM Location: OSM Building, Rm 514

Phone Bridge: (866) 676-8836 - Code: 6275887

Facilitator: Jacquelyn Wong (CT Chair)

Attendees: Robert Hightower (CT)*, Jacquelyn Wong (CT), Patrick Lo (CT) *, Samir Ead (CT), David Lim

(CT), Nathan Forrest (CNCA), Spencer Adams (CT, Secretary), Deepak Maskey (CT)

*by phone

1. Introduction (Phone*)

Robert Hightower (CT)* Jacquelyn Wong (CT) Patrick Lo (CT) *

Samir Ead (CT)

David Lim (CT)

Nathan Forrest

(CNCA)

Spencer Adams (CT,

Secretary)

Deepak Maskey (CT)

2. Scoping Document Update/Briefing by WG Chairs

Use 4x8 cylinders for compressive strength test (Patrick)

- Data from pilot projects are on the way.
- Data from completed breaks needs to be compiled for report
- Cylinders from the District 3 project are showing a 28-day difference of 5-7%
- All data so far is from Districts 3 and 4 is being tested by Translab Concrete Lab.
- I5 project may be a good project to collect cylinders for data.
- District 4 construction has been given cylinders to collect samples on sites.
- Need to specify what types of projects and concrete samples we want to collect on.
- Patrick will reach out to other district labs across the state to help with data collection (the more variety, the better).
 - Reach out to Districts 8 and 12 to get more cylinder data
 - Possibly reach out to precasters for their data on 4x8 cylinders.
- Still recommend changing to 4x8 cylinders based on literature and research.

Concrete Mix Design Naming System (Nathan for Brett)

- Sent out Version 4 of specification.
- After discussion, they decided to include the naming ID on the mixture design sheet (not on the batch ticket).
- Modifications have been made to tolerances.

Recycled Crushed Concrete Aggregate for use in Cast In-Place Concrete Pavement (Deepak)

- Developing draft report document on behalf of working groups to CP2 Center with comments and findings; deadline of September 13th.
- Meeting with CP2 Center on September 10th to discuss comments from working groups.
 - o Industry and Caltrans will attend meeting.
- Working group meeting September 16th
 - o Grey area on where the concrete is coming from and its original strength.

Flex Beam Test Method (CT 523/ASTM C78) (Jackie)

- Final draft is out of working group and awaiting Dan Speer signature (State Material Engineer).
- Content of draft will not change but format may change to conform to ADA.
- Contractor will be responsible for initial curing environment.
- Working to get posted by end of September but won't be written into spec right away.

3. Open discussion

M&QA STG Bin List Prioritization (March 2019)

- The approved TG bin list ranks "Allow the use of blended SCMs" as the first priority and "Support tasks associated with ongoing Type IL research" as the sixth priority at TG level.
- #2 evaluating base/concrete pavement interface (CIP Pavement)
 - Change "reflective cracking" verbiage.

DES committee updates

- Corrosion guidance and specs are going to be revised according to LRFD 8th Ed this FY.
- Piloting shrinkage requirement of new approach slabs will decrease from 0.050 to 0.032 and require SRA/fibers similar to deck.
- #1 Finish revisions to drill and bond spec
 - Not needing ACI installer certs because we use AML for non-tension loads only (low risk).

Type IL research

- OSU research team have finished the screening test (ASTM C441) and still in the process to get more reactive aggregate for further ASR evaluations.
- The steering committee will have a meeting with OSU next month to review and discuss the work and progress they have done so far.

Discussion/Hot Topics

- Project for shadow testing, received \$100,000 to do additional tasks.
 - \$100,000 can be used to purchase equipment.

- (D7 JPCP) PEM (performance engineered mixtures) testing
- Plan more testing on other projects where construction just started.
- CarbonCure
 - Received samples from Central Concrete for Lance Li to test and analyze for effects on concrete.
- EPDs (Environmental Product Declarations)
 - o 3 pilot projects currently, more advertising [Districts 1, 2, 5, 7, 8, and 12]
 - More stringent on pilot projects and minimum quantities threshold than legislation for eligible materials.
 - o Require EPDs on eligible materials (steel and rebar) as of December 1st for all bid openings.
 - o Mill specific EPDs
 - July 2021 will begin GWP limits for structural steel and rebar EPDs.

Next Meeting Will Be the First Week of December (Potentially Off-Site).