1. Introductions/Review Agenda
   I. Roll call and group reviewed the agenda.

2. Action Items from PMPC EC + CTG meeting held on 03/18/2021 (All):
   I. Asphalt to share Asphalt smoothness metrics with the Concrete WG. (Brandon/Alan) Allen and Dulce have had conversations on smoothness specifications and Dulce felt the metrics for asphalt and concrete were different. Samir/Ken to follow up and share with committee.

   II. Keith will set up a Webex meeting open to Steering Committee, EC, and working group to share the research from OSU. (Keith) Completed, presentation held May 18th from 12 pm to 2 pm. Presentation was recorded and is available.

   III. Kevin and Keith to present at next EC + CTG quarterly meeting, the efforts going through the DES Committee such as the corrosion issue and bridge items. (Keith or Kevin) Completed with the update in this meeting’s agenda.

Action Items from PMPC EC + CTG meeting held on 9/17/2020:
   I. EC to look at bigger picture for Foundations, should it be a STG or its own TG. (EC) Ongoing.
      a. Place on next EC meeting agenda to discuss.

3. Introductory Urgent Issues (All):
   a. Keith – Wanted to give the EC a heads up, the CTG was recently informed Charles Stuart and Southwest Concrete Pavement Association (SWCPA) has some issues with some specifications and design plans for concrete. Keith needs to understand the issues and what they are to see if it is a project specific issues or more widespread issue. The CTG will try to take care of the issues and if unsuccessful, will elevate it to the EC. We have asked for more specific instances of the issues or problems they have with the specifications and design plans to understand what the issues are.

   b. Tim: Glad they are sharing the information, not looking to solve individual project’s problems but focused more on programmatic issues.

   c. Brandon: How do we ensure the districts are in-line with HQ on design and specifications?
      i. Typically, district engineers must ask for permission to use a NSSP from HQ specifications owner for modifying the specification & why and they aren’t supposed to change the NSSP without permission from specification owner.

   d. Charley: Is it a METS, Design or Construction issue?
      i. Not really a METS issue, more of a construction and design issues.

4. CTG Work Products
   a. Group worked on templates for metrics. Different metrics are being used for concrete versus asphalt. Currently tracking 18 projects and receiving limited data.

   b. Shaila: You mentioned you have limited data, is the intent for all concrete projects to use the NSSP specification?
      i. Yes, then will complete a revised standard specification (RSS).

   c. Samir: We need to find out why the data is slow to come in, is this from construction or the contractor?
II. Tracking Concrete Mix Designs in DIME:
   a. This is the third time around for this work product, we shifted from a new database to utilizing DIME database for our needs. Working group is developing lists of required data for mix designs and then looking to see what needs to be modified in DIME’s database. Hoping to bring e-ticketing into it too if we can.
   b. Action Item: Samir and Ray to see if they have adequate representation on the working group.
   c. Action Item: Tim and Kevin to validate if representation is adequate for their offices in the working group.
   d. Tim: Is the DIME team in the working group?
      i. John is on the team.
      ii. Tim: Encourage Joshua Moore to take on a more active role in the working group.

III. Concrete Pavement Acceptance Based on Compressive Strength:
   a. The final specification language is finalized. In June, we will seek mandatory stakeholder approval and fill out the OCCS publication forms to potentially publish it in July, in addition to finalize the report.
   b. Tim: I see Alex Perez, D7 construction person on the team. How is that working out with having district participation?
      i. He has been very helpful.

IV. Evaluating Maturity to Estimate Open to Traffic Strength of Concrete Pavement:
   a. Working group finalizing draft specification language and continued finalizing the report to be delivered June 30, 2021.
   b. Tim: Do you see this as a job to job calibration maturity meter for design mixes?
      i. Each design mix would have a design strength that would meet maturity curve. This was not to be used as an acceptance test but for deciding for when to open the concrete up for traffic.
      ii. Tim: Not seeing a final report as a milestone that captures methodology.
         a) Report is mentioned in the discussion of the Monthly Updates portion.

V. Impact of Portland Limestone Cement (PLC) on Concrete Performance
   a. Draft specification is out. Pushing hard to get mandatory stakeholders to approve specification before July 5 to make October deadline for publication.
   b. This product is for cast-in-place concrete only and is not approved for precast concrete.

VI. Performance Based ASR Mitigation:
   a. Working group has started their literature search of other agencies’ specifications/guidelines.

VII. Blended Supplementary Cementitious Materials (SCMs):
   a. Working group has started their literature search of other agencies’ specifications/guidelines.

VIII. Replacing the Compaction Method to Determine the Application Rate of Lime for Soil Stabilization:
   a. Working group has started their literature search of other agencies’ specifications/guidelines for lime stabilized soils.

IX. Replacing the R-Value Testing for Unbound Materials with an Alternate Test Method:
   a. Working group has started their literature search of other agencies’ specifications/guidelines.

X. Review Closed/Tracking List
   a. No issues discussed.

5. Review of Bin List (Keith Hoffman):
   I. Concrete STG bin list:
      a. The CTG has not reviewed the bin lists yet to verify the priorities for the department since they were recently submitted.
   II. Foundations Bin list:
      a. Item #3 on bin list was submitted as a short scoping document and STG is exploring a decision document instead since everyone agrees it is easily changed with minimal resources.
   III. MQA STG bin list was presented:
a. This bin list is not ready for EC to review. CTG needs to approve the bin list first. Item #7 is currently an ongoing PMPC activity and will provide an update soon. Item #6 Corrosion will be reviewed by DES Committee.

6. DES Committee Efforts (Keith Hoffman):
   I. Crackless Bridge Deck and Approach Slabs
      a. Group was only tracking failures and no failures listed yet.
      b. Tim: Has the group thought about sending a survey notice to structure reps to see what they felt on the crackless bridge decks.
      c. **Action Item: Tim and Kevin to put together a survey for structure reps on crackless bridge decks.**
   II. Corrosion Specification
      a. Focus has been on reducing the amount of colloidal silica fume since it is dangerous and can be inhaled easily into the lungs.
      b. Contractor’s option is included in the specification and is performance based.
      c. Specification draft language expected to be finished by the end of July.
   III. Report on SCM’s supply
      a. Final Task draft sent to group for review. Final report on track for end of FY.
      b. This is item #7 on M&QA’s bin list.
   IV. 4x8 Cylinders
      a. Comments from Structures Independent Quality Assurance are being addressed for various manuals.
   V. Mass Concrete
      a. Calculated temperatures are within 8% of the measured temperature.
      b. The accuracy of nomogram is within 8 to 9 percent of measured temperature.
   VI. Ultra High Performance Concrete
      a. No update. MOU is submitted but work has not started.
   VII. Grade 80 Reinforcement
      a. Department is looking to switch to using all grade 80 reinforcement.
      b. Each sub-division lead identified potential issues and concerns. The issues and concerns are being compiled into a single tracking spreadsheet.
      c. Each sub-division will be assigned responsibility to address each identified concern.
      d. Tim: We don’t have good optics on the availability of grade 80 steel.
         i. Mark: AGC is the proper group to work with on that.

7. Open Discussion:
   I. Tim: Can you weave GHG reduction into the bin lists items? The departments strategic plan is focused on reducing GHG and would be helpful to see if activities are aligned.
   II. Shaila: We need to identify efforts that are providing climate benefits and quantify the amounts of reductions.
   III. **Action Item: Keith to update 1-page GHG efforts for CTG products.**

8. Decisions made/Approvals given by EC:
   I. None.

11. Action Items
   I. Samir and Ray to see if they have adequate representation on the working group. (Samir/Ray)
   II. Tim and Kevin to validate if representation is adequate for their offices in the working group. (Tim/Kevin)
   III. Tim and Kevin to put together a survey for structure reps on crackless bridge decks. (Tim/Kevin)
   IV. Keith to update 1-page GHG efforts for CTG products. (Keith)

Next Meeting: September 16, 2021
08:30 am – 10:00 am