17 March 2016 Revised: 5 May 2016

COLOR CODE:

Black -- Agenda Item

Orange -- Agenda Item Author/Presenter

Blue -- Agenda Item Discussion

Green -- Action Items

Welcome

- Opening comments (Bergin/Malerk) Welcome, announcements, and introduction of attendees. Discussed anti-trust agreement and the location of the document.
- Action Items from 3/25/15 (Bergin) Discussed the action items from March 2015 meeting and accepted them as complete.

Materials Acceptance and Certification (MAC)

MAC Update (DeLorenzo) – MAC is a web based system with a target release date of April to mid-May. Middle of April to begin training on MAC input requirements. Discuss how concrete design mixes would be issued. Brought forward from LIMS approximately 4000 active mixes (used in the last 5 years on FDOT projects). Mixes comply with specification. Numbering systems for mixes will remain the same as currently used. Continued overview of requirements of MAC for the Concrete Producer. Much discussion concerning the environmental classification and should the classification be on the design mix. Will the producers have to send a mill analysis with the mix design, Koehler. Why can't the Department add this information from the APL listing? Thank you Dave, I feel like FDOT trying to push MAC through to our throat without anything what is concerning us. Per say" used for now and we will adjust down the road "this never happen before and never happen in future.

- 1. Calculations of solid to mix designs is insane.
- 2. Repeatedly generating paperwork /mill certification when MAC supposed to be BIG GAY CONTROLLER and by all means had no APL data???
- 3. Creating chaos in old mixes and new mixes will created spaces for human error
- 4. Set up MAC for MIX DESIGN without controlling limits is very poor judgment and execution as well as spending tax payer money with no finish product
- 5. 0% limits for cement in ter. mixes are prescriptive plan assuming that FDOT das not take any responsibility for it.

This just my opinion and I will understand when no all attendee agrees. Action Item Questions for MAC #1 -- How is feedback on how the system is working to be done, Malerk? When do we to start using MAC? How do we get on the system? How to get training that is specific for industry? Does the system check for specification limits during data entry?

Cementitious Material

 Acceptance of Type IL cement (Koehler) – Type IL cement has limestone ground into the clinker, about 15%. Has on effect on strength but has a higher fineness. Material is in the lab however, work has not begun, FDOT Structures is very

17 March 2016 Revised: 5 May 2016

interested in the type IL cement. What is the price comparison with the currently approved types of cement? To be discussed – Action Item #2.

Fly ash substitution and the paper trail requirement (Lorenz) – Industry has concerns with the amount of paper work required to enter new mixes into system. when it is necessary to make a fly ash change. Producers are getting very little notice from the fly ash supplier on availability. The time frame it takes to switch mixes, need input from the Districts. Price indicated there was not a problem with verifying mixes with more than one material. Currently there is nothing preventing the producer from having multiple mixes at the start of the project so they can switch mixes without a new mix change - just have to verify that the silo is empty before the new fly ash is loaded. Wallace indicated there was no difference in fly ash coming from Florida plants. Lorenz to email to the District Materials Office, no contract with FDOT, contract is with the contractor, discuss with the Districts how to help with the fly ash substitution. Address problem at the producer level, Markert better communication between producer and contractor, Lorenz agrees. Allow producers to submit for all mixes, Westcott. Producer's QCP would show different sources of material and the Contractor's QCP would show different design mixes, what about e-construction, all electronic, O'Leary. Fly ash issues to be an agenda item for the next CMTAG meeting – Action Item #3.

Quality Control Plan

• Enforcement of section 105-4.10, requiring producers to include language in the QCP (O'Leary) Currently in the specification has been put on hold. If data is not in QCP do not hold up acceptance of the QCP, Bergin. New language has been agreed upon and will be forwarded as a change to section 105-4.10.

Batch Plant Operations

- Requirement for digital water meters (Bettman) Should all trucks have digital water meters? Optional in MM 9.2 to the sight glass ensure digital meter is calibrated. Currently not all trucks with digital meters are calibrated at the same time as, Grove. An initial problem was with durability of the meter so the truck would still need a site glass. Would be optional on new trucks with sight glass, would not be a requirement, Hurtado.
- Update aggregate grading testing (Koehler/Lorenz) Same old discussion, we don't need to be doing the aggregate testing. The problem is running gradation on the same material source at different plants month after month. Industry feels that FDOT is not really using the results, the testing doesn't do anything for the producer. We need to maintain the point of use testing, Markert. Aggregate failures are normally due to the sampling process. Sampling frequency may be reduced, this will be plant specific. Tom, thank you for the minutes I have some concerns with the reduction of testing samples at the point of use (i.e. Readymix) we at the source exceed the guidelines' and standards set by the State of Florida for testing now if the testing is eliminated at the point of use (Ready-mix)

17 March 2016 Revised: 5 May 2016

locations who is going to be held responsible for the quality from that point I do not believe the source should be held liable for this, due to the sole purpose we know the state of material when it leaves our location but we do not know or cannot control what or how the point of use does with the material when they receive it. I believe further discussion needs to be completed on this topic thank you for your time have a great day. Thank you, Bryan Sanders, Quality Control Manager, E.R. Jahna Industries, Inc. I seem to recall a request for the Department to reply to Industry by end of June 2016 on elimination, or at least a reduced frequency of aggregate testing, David Westcott Look at sampling frequency at each plant(industry suggest 4 times a year for instance) at the next CMTAG meeting – Action Item #4

 Central batching issues (Markert) – Material coming from two different plants with the same mix number, Markert. Dispatch issue, O'Leary, a testing issue for FDOT. Industry says that instructions to plants are to maintain the same plant on a DOT job for same issue of testing. Get notified on the job if two plants are to be supplying concrete, QC should be notified. Quotes from standardized sample # lot # instruction is the issue, Tubbs. Discuss the using of two different plants on one job number, we need sample, discuss at the CMTAG – Action Item #5

Research Issues -- Presentation

 Evaluation of Pozzolanic Materials for Replacement of Fly ash in FDOT Concrete (DeFord) – Discuss the various sources of replacements for fly ash. Fly ash from ponds to be recycled and blended with class f fly ash, see appendix A.

Chloride Testing and Reporting

Any movement on mitigation of concrete with elevated chloride contents
(O'Leary) – discussed with Ron and Ivan – hold to 0.40 pounds per cubic yard;
discussed looking at plus or minus 5%, look at point of placement chlorides,
sliding scale and the environmental condition to determine the penalty, Bergin.
Would like to see the FDOT use all resources available since placement may be
fine within the monthly test, O'Leary. SDG defines environmental conditions not
the specification, Darji. Discussed the committee putting together clarification as
to the engineering analysis to be completed by an Engineer knowledgeable in
corrosion, Hurtado.

Specification 346

- Cement content set at 30% +/- 0% for ternary mixes in the new 2016 specification section 346-2.3-4.c (O'Leary) Need to have range for cement for ternary blends, say 30 to 50 %, O'Leary. The 2017 specification will show the current ranges are for extremely aggressive environments but may be used in all environments.
 - We did not see this out for industry review
 - This is a rather low value to be locked into and will likely force producers to use binary mix designs
 - o Invalidates current mixes (2015 also invalidated 2014 mixes)

17 March 2016 Revised: 5 May 2016

 Clarification on section 346-10.1 for taking of cores within 10-14 days and contradiction with section 346-11.5 (O'Leary) – need to review the two sections for update, issue is to obtain and test, Malerk/Bergin. Review sections 346-10.1 and 346-11.5 during the next specification update – Action Item #6

Open Forum

- Class VII 10,000 added to the 346 specification, Miles during the next specification update
- Add FC&PA to Materials Bulletins distribution list

Summary of Meeting

- MAC overview and demonstration, feedback on how the system is working
- Substitution of fly ash for mix design approval to be discussed at the next CMTAG meeting (May 17-18)
- QC Aggregate testing at the plants to be reviewed
- Central batching from two different plants for one placement to be discussed
- Industry requested response to action items or questions in two months, by May 9th
- Next meeting October 2016

Adjourn!!!!!

Appendix: A – FDOT-CCF Evaluation of Pozzolanic Materials for Replacement of Fly Ash in FDOT Concrete (DeFord)