

WACA/WSDOT Meeting

Minutes for Wednesday, September 5, 2012

Mike Polodna, WSDOT	Kurt Williams, WSDOT	Allan Kramer, Lehigh
Bruce Chattin, WACA	Scott Diloreto, BASF	Dave Burg, Ash Grove
Anthony Sarhan, FHWA	Tom Weist, Oldcastle	John Harris, Lafarge
Craig Matteson, Oldcastle	Robert Raynes, Cemex	Kevin Wolf, CalPortland
Neil Guptil, CalPortland		

Location: *WSDOT HQ Mats Lab, Main Conference Room*

Next WACA Meeting Date:

Wednesday, December 12, 2012 at WACA's Office in Des Moines, 9:30 AM – 12:00 Noon
Note that this meeting has been moved to the 2nd Wednesday of the month.

Future WACA Meetings Dates:

Wednesday, March 6, 2013 at WSDOT HQ Mats Lab, Main Conf Room, 9:30 AM – 12:00 Noon
Wednesday, June 12, 2013 at WACA's Office in Des Moines, 9:30 AM – 12:00 Noon
Note that this meeting has been moved to the 2nd Wednesday of the month.

Meeting Minutes are available at:

<http://www.wsdot.wa.gov/Business/MaterialsLab/WACAMinutes.htm>

Issue: Degradation for concrete Aggregate/Base Course – Kurt Williams

A research study is on-going to test the effect of using aggregate with low degradation values in concrete mixes.

9/5/12 –Mike Polodna distributed the final report to WACA members in August. Most members had not had time to review prior to today's meeting. Kurt Williams summarized that the report indicated a risk of concrete degradation when using low degradation aggregate, and that the current limit in the WSDOT specification will remain unchanged based on this study. He also reported that the funding has been expended and WSDOT will not continue further studies of this subject.

Action Plan: Review the report before the next meeting and have a final discussion.

Issue: Water for Concrete – Kevin Wolf (for Bob Raynes)

WSDOT Standard Specification 9-25.1 Water for Concrete requires that in order to use recycled water the lab that tests their water must meet R-18. No one is currently using recycled water because of the R-18 requirement.

9/5/12 – Kurt reported that he submitted the specification for the January amendment package.

Action Plan: No further action required.

Issue: Standard Specification 9-23.8 Waterproofing –Jason Brewer

Are changes needed to this specification? Should WSDOT be specifying ASTM C 1585 instead of ASTM C 642?

9/5/12 – Mike Polodna had some concerns regarding the BASF proposed specification for waterproofing. Scott Diloreto will review his concerns and address at the next meeting.

Action Plan: *Continue the discussion at the next meeting.*

Issue: Trial Batches for Concrete Overlay Mixes in WSDOT 6-09.3(3)B & C – Craig Matteson

Discussion on prescriptive mixes in 6-09.3(3)B and C. Both these mixes are prescription designs right down to the coarse & fine aggregate ratios, cement contents and W/C ratios. Are we required to run a trial batch for 5- 28 day compressive results, as there is no compressive strength specified?

9/5/12 – John Harris reported that there was no debonding on the SR 97 Omak and Tonasket projects. Mark Gaines was not in attendance to provide more information on the reported debonding on the Nalley Valley overlay.

6/13/12 – There was discussion regarding the reported debonding along a joint between adjacent lanes on a slag overlay job completed last year. Rob Shogren requested a copy of the CTL report.

Action Plan: *Continue the discussion at the next meeting.*

Issue: Qualification of Concrete Suppliers and the NRMCA – Kurt Williams

Colin Lobo of the NRMCA has contacted WSDOT regarding WSDOT Standard Specification 6-02.3(4)A Qualification of Concrete Suppliers, and the use of the NRMCA Plant Certification checklist by people other than those working through the NRMCA. WSDOT proposes deleting options 2 and 3 of the specification and allowing certification only through the NRMCA.

9/5/12 – Kurt Williams proposed that we use NRMCA certification only and not pursue a WSDOT checklist. There were no objections to this proposal so Kurt will proceed implementing the specification in the January 2013 amendment package. The specification will delete paragraph 2 below.

Proposed Specification:

6-02.3(4)A Qualification of Concrete Suppliers

Batch Plant Prequalification may be obtained through one of the following methods:

1. Certification by the National Ready Mix Concrete Association (NRMCA). Information concerning NRMCA certification may be obtained from the NRMCA at 900 Spring Street, Silver Springs, MD 20910 or online at www.nrmca.org. The NRMCA certification shall be valid for a 2-year period from the date of inspection. When this method of certification is used the following documentation shall be submitted to the Project Engineer.
 - a. A copy of the current NRMCA Certificate of Conformance, the concrete mix design(s) (WSDOT Form 350-040), along with copies of the truck list, batch plant scale certification, admixture dispensing certification, and volumetric water batching devices (including water meters) verification.

- ~~2. Independent evaluation certified by a Professional Engineer using WSDOT Concrete Batch Plant Inspection Checklist (DOT Form 350-010). The Professional Engineer shall be licensed under title 18 RCW, state of Washington, qualified in civil engineering. The independent certification using the WSDOT Concrete Batch Plant Inspection Checklist shall be valid for a 6 month period from the date of inspection. When this method of certification is used the following documentation shall be submitted to the Engineer.~~
- ~~a. A copy of the Professional Engineer's stamped and sealed WSDOT Concrete Batch Plant Inspection Checklist, the concrete mix design(s) (WSDOT Form 350-040), along with copies of the truck list, batch plant scale certification, admixture dispensing certification, and volumetric water batching devices (including water meters) verification.~~

Action Plan: Implement specification in January 2013 amendment package with NRMCA certification only. No further action required.

Issue: Acceptance of Pumped Concrete – Bruce Chattin

It is well known that pumping can change the air content of the concrete. WSDOT requires that sampling be conducted from the end of the delivery system, after the concrete is pumped, and leaves it to the contractor to determine how to get it there within the required specification.

9/5/12 – Bruce Chattin reported that WACA has not met with AGC/WSDOT to discuss implementing pump certification and operator qualifications.

6-13-12 Bruce was not in attendance and the topic was tabled until his next meeting.

3-7-12 There was further discussion of the topic. WSDOT stated their intention of continuing to test at the end of the pump. The March, May, June, and July 2003 AGC/WSDOT Structures Team Meeting minutes indicate that the requirement for pumper certification was discussed and it was removed from the WSDOT Standard Specifications at that time. The reasons stated were that it had not been enforced and that it added no value to the quality of the concrete.

Action Plan: WACA to develop a specification that includes requirements for prequalified pumpers and equipment for WSDOT review. WACA will meet with AGC to discuss the topic. Continue discussion at the next meeting. Bruce will need to coordinate with Mark Gaines to get this topic on the schedule.

Issue: WSDOT Standard Specification 1-06.3 Manufacturer's Certification of Compliance – Greg McKinnon

Greg McKinnon of Stoneway Concrete inquired if the "corporate official" part of this specification applies to concrete.

The Manufacturer's Certificate of Compliance must identify the manufacturer, the type and quantity of material being certified, the applicable Specifications being affirmed, and the signature of a responsible corporate official of the manufacturer and include supporting mill tests or documents. A Manufacturer's Certificate of Compliance shall be furnished with each lot of material delivered to the Work and the lot so certified shall be clearly identified in the certificate."

9/5/12 – WACA will develop and submit to WSDOT specification language allowing no signature on fully automatic plants. Semi-automatic and manual plants will not be included in the proposal.

6-13-12 Bruce and Greg were not present to state whether Mike's response satisfied their concerns. Craig Matteson would like to delete the requirement to have the forms signed.

3-7-12 Mike Polodna distributed copies of WSDOT Standard Specification 6-02.3(5)B Certification of Compliance and explained that it is the specification that applies to concrete, not 1-06.3 above. The requirement is for a signature "... by a responsible representative of the concrete producer, affirming the accuracy of the information provided". Bruce Chattin will forward the handout to Greg McKinnon to determine if this satisfies his concerns on this issue.

Action Plan: Mike will forward a Word copy SS 6-02.3(5)B to Bruce Chattin, John Harris, and Craig Matteson (completed 9-5-12). Review proposal at the next meeting.

Issue: Aggregate Source Approvals for Sources to be Blended with Others – Dick Boss

An Aggregate Source Approval is required for each pit. Since WSDOT is now sampling and testing only processed material instead of pit run or blended material, source owners have issues supplying samples of processed, non-blended aggregates.

9/5/12 – Kurt Williams stated that WSDOT is going to continue to test each source for source approval.

Action Plan: No further action required.

Issue: 4000A and 4000D Mixes with Slag and Fly Ash – Kurt Williams

WSDOT SS 6-02.3(2) Proportioning Materials inadvertently allows up to 40% cement replacement when both slag and fly ash are used in a mix. Are there any concerns with changing the specification back to the intended 30% maximum? Can any WSDOT projects be identified where we have used 40% replacement?

There were no WSDOT projects identified where 40% replacement was used in 4000A or 4000D mixes. Rob Shogren reported that 30% slag and 10% fly ash was used at Fairchild AFB. Tamson Omms reported that the Corp of Engineers uses up to 50% slag, and that they used 30% fly ash at Lewis/McChord.

One concern with limiting replacement to 30% is that it may not be enough to mitigate for ASR.

9/5/12 – Kurt Williams changed the specification to 40% replacement for 4000A and 4000D, and 50% for others. The changes are underlined below.

6-02.3(2) Proportioning Materials

Paragraph under Table: Cementitious Requirement for Concrete

When both ground granulated blast furnace slag and fly ash are included in the concrete mix, the total weight of both these materials is limited to 40 percent by weight of the total cementitious

material for 4000D and 4000A, and 50 percent by weight of the total cementitious material for all other classes of concrete .

Action Plan: No further action required.

Discussion Item: Aggregate Sampling by WSDOT Inspectors – Bruce Chattin

Bruce Chattin stated that sampling and testing is more critical for statistical acceptance of aggregate.

Bruce stated that some producers do not allow WSDOT staff to sample without their own staff observing so that they can note and/or correct any sampling discrepancies. Kurt Williams agreed that observing sampling was a good business practice and that the suppliers should challenge the WSDOT Project Engineer if they observe discrepancies that cannot be resolved with the WSDOT sampling staff.

Action Plan: No further action required.

Discussion Item: LEAN Process – Bruce Chattin

Bruce Chattin inquired how WACA can help with the LEAN Process.

Kurt Williams stated that the quarterly WACA/WSDOT meetings are the concrete and aggregate industries' opportunities to provide input on all items regarding materials, construction, and design. LEAN issues involving these subjects could be presented at these regularly scheduled meetings.

Action Plan: No further action required.

Discussion Item: Portland Limestone Cement – Allan Kramer

Allan Kramer inquired about adding Portland Limestone Cement to the standard specifications.

Kurt Williams stated that WSDOT is concerned with the issues of sulfate attack and thaumasite formation. Allan will provide more research information on these subjects.

Action Plan: This item will be added to the December meeting agenda and we will have further discussions.

Discussion Item: Concrete Consortium Meeting – Allan Kramer

Allan Kramer announced that the International Conference on Long-Life Concrete Pavement will be held in Seattle on September 17 – 21 and that he will distribute the agenda to WACA members.

Action Plan: No further action required.