

Annual AGC/MoDOT Co-op Meeting

Bituminous Breakout Session

December 5, 2018

Open Discussion

14 items

AGCMO



Question No. 1

The CRE20 sheets should be revised to automatically pull in QA data when unfavorable comparisons exist.

Question No. 2

What are the future plans for IC/IR and High Density Initiative?

Question No. 3

We experience many windshield claims. Can there be a discussion on the expectations of the contractor, inspector's role, and procedures to follow after the project has been accepted for maintenance.

A successful Seal Coat project is dependent on a thorough plan that minimizes the loss of aggregate. This takes a cooperative effort between the inspector, RE and contractor staff to develop a plan at the precon, and then review the details of that plan with the field crew at the pre-activity meeting. There are three key elements.

(1) Issue advance notifications to the public through local media outlets, social media and changeable message boards so that motorists are aware and can avoid the route if at all possible. Contractor contact information signs should be placed at both ends of the route facing both directions.

(2) Select an emulsion that is compatible with the aggregate and use a shot rate that maximizes the bond between the existing surface and the cover aggregate (2/3 of the rock is submerged), yet avoids bleeding to the surface. Make sure the surface is thoroughly cleaned prior to the application.

(3) Sound traffic management is imperative to ensure motorist speed is held to the level necessary to minimize vehicle damage. As required by spec, use a pilot car during application of the aggregate. The posted speed limit should be no greater than 35 mph until the excess rock has been swept off the roadway and stabilized to the point that flying rocks are very infrequent. Perhaps consider a marginal increase to 45 mph until full stabilization is achieved.

The sealed route should not be accepted for maintenance for a minimum of 14 days and there is no further loss of aggregate.

Question No. 4

Can the loose mix sample specification be changed to allow mix to be sampled from behind the paver or at the plant/truck, provided proper facilities are provided.

Question No. 5

What outcomes/performances have we seen with the trackless/low-tracking products used in 2018?

Question No. 6

We are placing a lot of thin pavements as part of MoDOT's Asset Management Policy. What results and performance are we seeing concerning smoothness and service life?

Question No. 7

Request a discussion on project completion dates. With the November 1 completion date for most resurfacing projects we continue to see pavement marking in cold weather, and this year reflectivity was read after snow plowing. The contractors struggle to find acceptable days and typically pavement marking is wanted by everyone at the same time. After the routes have been hit with snowplows we really don't have much recourse now if we take reflectivity readings and they don't pass.

We use November 1 completion dates for most overlay work in order to avoid this very issue. When a contractor fails to meet that date, the pavement marking must still meet the retro requirements, regardless if the snow plows have been deployed. There are exceptions, but in general, all retroreflectivity deducts and re-work for pavement marking should be enforced.

In addition, if the pavement marking cannot be applied due to temperature limits, the contractor is responsible for applying temporary “cold weather” paint at their expense. The permanent paint then needs to be applied the following spring.

There is a new Temporary Stripe JSP that will be piloted on several projects next construction season. This will give contractors the opportunity to include the cost of a temporary stripe in their bid if they choose to delay the overlay until fall.

Question No. 8

For cold weather paint used for marking pavements, there is a prequalified list of manufacturers but the time period of approval is from 10/1/2012 to 04/01/2014. Just a little out dated.

The current list appears to be dated due to no submissions to the Lab for cold weather paint. There weren't many contractors using that material since it is more expensive so not a lot of samples were submitted for placement on the list. There are currently samples in the Lab being tested that will be added to the list if they pass testing.

Question No. 9

Differing Site Conditions – Can this specification be further discussed concerning the actual site conditions verses the plans and specifically what the specifications allows.

Definition “Subsurface or latent physical conditions at the site differing materially from those indicated in the contract, or unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work.”

Litmus test (what would a reasonable person expect to encounter). It is what you could have anticipated instead of what you hoped to encounter.

Question No. 10

Need a quick overview of the standard changes made concerning the pinning or strapping of temporary concrete barriers.

Standard 617.20 was updated July 2018 to clarify pavement type tie-down straps and pins can be used. Tie-down straps are to be used on rigid pavements only. Pins may be used with rigid, flexible, and composite pavements. Two-loop temporary concrete barrier traditionally do not have anchor/pin holes; these are best suited for tie-down strap operations on concrete. There are instances where anchoring the barrier is not required (see deflection tables on sheet 8 or 8 Std. 617.20).

Question No. 11

Discuss the Prime Contractors responsibility to insure that Subcontractors perform traffic control appropriately and wear the appropriate PPE. Striping, rumble striping and other moving operations are the bigger challenges now.

TRAFFIC CONTROL - The prime contractor is fully responsible for all actions of their subcontractors. Regarding traffic control, Section 616.3.3 (a) requires the prime to employ a certified Work Zone Specialist (WZS) who has the primary responsibility to implement the Traffic Management Plan and to be directly involved with daily traffic management. For all pre-activity meetings that include the need for traffic control, including any subcontractor activities, the WZS should lead the discussion on the details of what will be required to implement the traffic control plan.

PPE - The prime contractor's on-site project superintendent is responsible for ensuring all employees, including subcontractor employees, are equipped with the required PPE before the work begins. If PPE is not being utilized by any contractor/subcontractor employee, the inspector should first issue a verbal notice to the project superintendent. For repeated violations, the inspector should issue a NCR to the contractor's Project Manager. If the problem persists after those actions, a stoppage of work Order Record should be issued for that activity, along with a Corrective Action Request (see QM website for form). That will trigger a process that requires the prime to propose a corrective action procedure that meets the satisfaction of the engineer before the stopped activity can resume.

Question No. 12

Discuss the role expected of the contractors Work Zone Specialist and MoDOT's QA role concerning the workzone.

Work Zone Specialist - The primary role and responsibility of the Work Zone Specialist (WZS) is defined in Section 616.3.3 (a) and is applicable to all projects. The Work Zone Management JSP lists additional duties of the WZS that are generally only necessary for work on high volume routes or activities that might cause motorist delay.

The WZS is not necessarily required to be present on the job at all times, but should be present as needed to ensure all traffic control operations are performing smoothly and in accordance with the TCP and the TMP. If issues are identified with the current plan, the WZS should make recommendations to the engineer for improvements that are in accordance with MUTCD.

For all pre-activity meetings that include the need for traffic control, including any subcontractor activities, the WZS should lead the discussion on the details of what will be required to implement the traffic control plan.

MoDOT QA Role - As with most activities, MoDOT's QA role for workzones is to attend the pre-activity meeting to ensure all pertinent planning aspects of traffic control and management are covered, and to then monitor the work to ensure the WZS (i.e. QC) is properly implementing the TCP and TMP. Due to the high importance of work zone safety, the inspector's QA monitoring role in this activity will be more frequent than the 10% rule-of-thumb QA check used for other activities.

Question No. 13

Can the Contractor Performance Rating System be improved to better identify contractor's performance?

MoDOT has started revising the questions/evaluation criteria in order to better evaluate the contractor's performance towards the contract expectations of today. For Example, several questions are being proposed concerning the safety expectations with a project like PPE compliance, workzone management, worker accidents/incidents, etc. The revisions are also working towards reducing the evaluation criteria of over #100 to around #60-#70 elements. The State Statue 7 CSR 10-10 outlines this provision. The plan is to share the proposed new questions with industry in early 2019 and "pilot" this new criteria over the 2019 calendar year.

Question No. 14

Should the specifications or the contractors QC procedures be revised to require a hold point for video/mandrel inspections prior to allowing paving to proceed. We have seen several instances of deficient pipe that in some cases is impossible to fix.

The following Hold Point has been added to the list that is posted on the MoDOT QC web page:

For Group A, B, and sometimes C pipe culverts installed under pavement, after completion of the aggregate base, but prior to placing the pavement, a hold point is required in order for QC to perform manual or video inspections and to record the specified measurements in accordance with Sec 724.3. For culverts installed elsewhere (i.e. not under pavement), the hold point and inspection shall occur no sooner than 30 days after completion of the grade. QA should be present when a mandrel is used to measure deflection. For any deficiencies found in the inspection, the contractor shall have a corrective action plan approved by the engineer prior to acceptance of the pipe and prior to placement of pavement above the culvert.

Additional Questions

