

Flexible Pavement Committee -- Meeting Minutes

August 15, 2003 - 9:30 a.m. to 3:00 p.m. Turnpike Turkey Lake Facility Milepost 263

Directions: From Orlando head north on the Turnpike to Mile Post 263. This is north of I-4 and south of Ocoee Road exits (a combination of the E-W Toll Road, Ocoee Road). Turkey Lake Service Plaza, Florida's Turnpike Headquarters Turnpike Mile Post 263 Bldg. 5315 Ocoee, Florida 34761 (407) 532-3999, FAX: (407) 822-6679

Agenda Items:

Welcome: Gale Page and Jim Warren (co-Chairmen) welcomed everyone to the meeting. This meeting provides a forum for issues to be brought up and discussed and a course of action established.

Introductions – self-introductions were made and sign up sheet passed.

1. Research Update (Greg Sholar and Howie Moseley):
 - a. NCAT Test sections – Duplicating the two Florida DOT HVS test sections at NCAT. These new sections: Fine graded Traffic Level D modified versus unmodified. The sections appear to have lower than expected air voids but within “normal construction tolerances”. The PQI model 301 was tested at the NCAT track and showed promise for measuring density.
 - b. SSD Detect device for measuring aggregate specific gravity looks promising.
 - c. NCAT noise trailer will be evaluating different surfaces in FL this fall.
 - d. Highlands County I-27 “Bonded Friction Course” test sections complete – now under traffic.
 - e. SGC angle verification kit by Pine – SMO has one and is evaluating – much simpler than the DAV device. It is a full height device and doesn't require mix to do an angle check and is therefore much quicker and more accurate. Could be 6 months until a production model is available and DOT will start checking all gyratory compactors. Prototype version is available at the SMO on a case-by-case basis in the meantime.
 - f. Looking at use of a dip-and-read portable rotational viscometer to check various binder grades in the field. The test differentiates between polymer modified binders (PG 76-22) and virgin asphalt binders (PG 67-22) and could be used as check if needed.
2. POS/LV Imaging van presentation: - Postponed
3. Positive spot asphalt binder material status: Memo sent out earlier this year has sunset (expired). No producers elected to supply positive spot binders during this period. Other Binder issues: Gale Page reminded the asphalt suppliers the intent to have both a “true” 64-22 and a 67-22. Recycled mixes must meet a recovered viscosity. SMO monitors recovered viscosity of mixes containing RAP. – No problems to report. Small quantity of rubber issue – Can substitute PG 76-22. Bruce Dietrich said we might see some more PG 76-22 with FC-5 projects let to gain experience.

4. EPR-1 status: Gale Page gave a background on the proposed specification change to delete use of EPR-1. Industry provided positive feedback on the use of EPR-1 particularly after the specification was changed a number of years ago to require more asphalt. A compromise to the deletion of EPR-1 that would require no more dilution of EPR-1 was proposed. Ronnie Blacklidge mentioned over 10 thousand lane miles have been placed since 1991. Jim Musselman stated that they would be willing to look at current projects focusing on first lift density issues and see if there is a correlation between lower density and EPR-1. Ronnie Blacklidge is to provide a list of current projects.
5. Sun setting of mix designs – Industry opinion is with project initial production requirements and ability to rescind a mix design that sun setting is redundant and no longer needed: Aggregate specific gravity is checked only at design – sun setting would allow a recheck. Issues: Is mix active? Is production data available? Is the re-upping procedure a full re-verification, or a paper review? Proposed to change life to 3 years and re-verify volumetric data sheet (back sheet) as part of the process. Frank Rader: field production data monitors the mix design. Recommendation to get a small group together to work out a procedure. ACTION ITEM: Pat Upshaw to take the lead in getting this worked out.
6. Mix design verification – When is bituminous lab moving? Looks like first week of September for the move. Lab will be down for about 3 weeks to move and re-calibrate equipment. SMO will notify industry of final date. Status on Paper Verification: 14 mix designers are getting paper reviewed this quarter – randomly 2 per designer.
7. Overbuild-leveling are requiring mixes at same TL for roadway as stated in contract. What do we do about TL D/E? It should be noted that 334-1.3.3 has been changed to drop requirement that overbuild be fine-graded only. Bruce Dietrich to work on design information to clarify differences between leveling, minor overbuild, and thick overbuild sections. ACTION ITEM: Bruce Dietrich to look at this issue. Potentially need to add the mix type for overbuild-leveling in the typical section.
8. Lime pretreatment status: Gale Page provided input. SMO working on a spec change (45 days when uncovered and exposed – Nevada has a lot experience and uses this timeframe). Issue of covering stockpiles came up – when does the time start? – When exposed to the weather. So covered stockpiles would have a longer shelf life. Lime does react on the wet rock. Spec. change will come soon.
9. Gmm dry back correction factor status: Currently used on project-by-project basis. Mike Lindboe (D2 Materials) commented that D2 has used it and it is working well. No spec change, but change will be made to the test method. Still some issues to be worked out related to the correction factor. Who can use? Correction factor run by contractor. Can it be used by VT or RT? If a correction factor is used, the method of reporting and documentation needs to be established. Greg Sholar is working on details with Greg Schiess. Also considering deleting the temperature correction allowed in Gmm test and requiring +/- 1C. Industry supported the change. Mike Lindboe stated that the type of fan might make a difference in dry back.
10. Smoothness Committee status report: David Wang reported on current status of the specification. Laser profiler now being included on high speed limited access (effective January 03 let projects). Incentive specification still under development and is being piloted in each district right now. New: working on improving smoothness of transverse construction joints (best practice) and an incentive

- procedure is being developed to address. Several projects in D2 will be tested and the materials will be developed by ACAF/FDOT by the end of the year.
11. Value Added Asphalt Pavement Program (Performance Warranty) Update: David Wang discussed Section 338.A 3-year criteria to be used on all standard projects (approved by FHWA). Implementation date is January 04. The contractor would be required to repair any items exceeding tolerances during that period. A statewide specialty DRB will be set up to handle conflicts. Performance criteria have been established for Design Build projects for minimum of 5 years.
 12. Lump sum and spread rate (not thickness) – Questions on tolerances, conflicting interpretations. Penalty on the overall spread rate for the overall thickness not on the individual lift or subplot. State Construction to clarify.
 13. Non-lump sum projects: Spread rate for overlays assuming 100psy-in is resulting in less than min. layer thickness for density in some instances (granite mixes used for layer spread rate of 150 psy-in have actual thickness less than 1.5 inch). When the designer estimates tonnage based on 100psy-in and specifies a total spread rate for the project, if the contractor uses granite, the actual thickness will be less than the target. Consider increasing the target the designer uses where granite aggregate is typically used. Bruce Dietrich to follow up where this has been an issue.
 14. SCO: Discuss issues related to using MTV for the placement of FC-5: Industry does not support another method specification change and recommended giving the new smoothness specification a chance. Some believe the MTV can help smoothness by providing a uniform mix temperature. Both conventional paving and MTV paving can produce a quality pavement.
 15. Coarse versus fine graded Traffic level D: Industry brought issue up again and believes the coarse graded mixes are much more prone to construction problems and are much more sensitive to changes than fine graded mixes. If fine and coarse mixes have the same performance characteristics, why not allow both? DOT is concerned about rutting and extremely fine graded mixes using questionable aggregate that might meet the spec, but not perform properly. Jim Musselman recommended a small group to hash out concerns and see if there is enough data for a compromise to be reached.
 16. CTQP re-qualification - mix design - math test - why not based on mix designer performance or other “criteria”? Discussion – no action.
 17. Status report on LIMS and training: The LIMS reporting system will start on projects let after July 2003. Training will be held in each district and will concentrate on personnel on active projects. LIMS will replace CQR. Discussion on possible future developments by FDOT to allow single entry of project data to replace entry of same data on forms, systems, and spreadsheets currently being used. This should be one of the biggest priorities to improve the reporting system
 18. Misc. asphalt - how to address on roadway and plant reports?: Generally need to report miscellaneous asphalt on a separate report. Contact the Technical Advisory Committee (TAC) in each District for assistance.
 19. Quantities running total on reports? Why?: If a single quantity changes, all following reports must be changed to reflect change and it is becoming a nightmare for the QC manager. David Sadler and others mentioned it related to material code numbers and final estimates. Suggestion to form a small group to include final estimate personnel to determine what actually needs to be on the forms and when, if and how following reports need to be changed to reflect corrections.

20. Monthly estimates payment for uncompleted lots: SCO sent out memo to districts to clarify.
21. CQC: 3 core minimum per subplot (what is min/max tonnage in subplot that this applies to 50%, 75%?): Currently there is no minimum tonnage that this applies to, but there was discussion about setting a lower limit to avoid artificially biasing the PWL calculations due to multiple tests on a very small quantity. No action at this time.
22. Use of PWL spec on low volume roads - is density a problem on softer bases?: No problems reported.
23. Lots with mainline and 10-foot shoulders combined in same lot? Density variations?: No problems reported.
24. Is the ride spec the same for HMA and PCC?: David Sadler – they will be the same.
25. Test reporting rounding to 2 versus 1 significant digit: Current specification requires carrying to several decimal places for standardization. Issue on difference in rounding on test data sheet versus spreadsheet for air voids has been corrected.
26. The draft SCO memo... CQC changes in project administration: Issues of timeframes for finishing tests and entering data into CQR was discussed. SCO will be issuing the final memo shortly.
27. What happened to partnering? How do we improve the “attitudes” in the field and restore partnering attitude? A long discussion ensued regarding this issue. It was concluded that there will be bumps in the road as these wide reaching set of specifications are implemented and it will take some time to work out. A bump in the road is what it is – temporary, not fatal. Everyone is encouraged to try to do the “right thing”, communicate, be professional – not petty, and have an attitude of making the new system work. With some patience, we will get through this period of change.
28. Discuss issues for September Asphalt Conference?: Discuss new construction memo at beginning of conference.
29. Bank run shell, coquina, and shell rock on high volume roadways: There was some concern about using these materials in high volume high traffic application. One option discussed was to limit these materials to lower Traffic Levels (i.e., A, B, C)
30. Thick open graded friction courses versus tire pavement noise. FDOT has a research project on “innovative” friction courses to look into this option. Industry is concerned about the life cycle cost of this material.
31. Mechanistic pavement design (AASHTO 2002). New changes coming – DOT is monitoring awaiting final program. Discussion on impact.
32. Adjourned at 4:15 p.m.

Next date tentatively set for December 18, 2003 Gainesville SMO 9:30 a.m. to 3:30 p.m.