

Flexible Pavement Committee (FPC) Minutes

Date: April 17, 2019 10:00am to 3:00

Location:

FDOT State Materials Office

5007 NE 39th Ave, Gainesville, FL 32609

<https://www.mapquest.com/us/florida/transportation-department-355170175>

Agenda:

Jim Warren welcomed. Howie went through administrative meeting issues. Self-introductions made.

Work Zone Safety

1. Demonstration of Advanced Work Zone Awareness Device
<https://vimeo.com/330083007>
 - o Warren reviewed the Pilot study and encouraged everyone to maintain work zones properly and document setups. Please share experiences and ideas.

Research Update:

1. Upcoming HVS Testing – Howie See: [Upcoming HVS Experiments.pdf](#)
 - o *TL D 9.5 vs 12.5 D*
 - o *Balanced mix design concepts – different gyrations and density levels , Possibly Superpave 5 ideas.*
 - o *Single thick lift rehab 6 inch (12.5mm) – conventional and WMA – maybe thick HP sections in future HVS studies.*
 - o *Alternative 76-22 binder Elvaloy*
 - o *Bond strength – scabbing study*
 - o *These sections will start this construction this summer.*
 - o *HP Binder Structural study coming out soon. More research needed prior to implementation.*

Smoothness Committee Update:

1. Update: Rich Hewitt
 - o *Warranty Criteria IRI values added to Section 338 by special provision on limited access. New limit = 110 inches per mile. 120 IPM used for rehab.*
 - o *Primary roadway acceptance update.*

- Do we need to address small patch areas? Need to look at language – minimum length for laser testing. Kevin Wall: What about maintenance contracts? – not being built to same standards. Need to discuss with Maintenance.
- 2. **Presentation:** GIS App local calibration sites. Demo by Jamie Greene (SMO). Originally used to help contractors and profiler providers verify their equipment on local projects. [Ride Acceptance GIS App.pdf](#)
 - 3 years of data available. Graphic interface. Data can be exported to spreadsheet for further analysis. Jamie showed a live demo of the program. Working on a FAQ documents. Contact Jamie for questions.

RAP Issues:

1. TTI Low Volume High RAP Research [FDOT-BE194 Low Volume Road High RAP Report.pdf](#)
 - Moseley reviewed TTI report. Will be talking to FACERS in June. Looking to partner interested contractors with local agencies. If you are, contact Howie.
 - Looked at hot and cold applications.
 - Contractor Feedback for interest areas.

Construction Issues:

1. Section 330-9.2, Texture of the Finished Surface Layers - How small is small, is none... none? Discuss existing language. Warren: needs to be some accommodation and communication as the letter of the law is too severe – no pavement would ever pass. Patches are another issue and will rarely meet mainline paving standards.
 - What is the escalation process? Push up through Project Administrator < Project Manager < Resident Engineer < District Construction Engineer < State Construction Engineer. Either way you must go up the chain of command.
 - Note: these issues can be used as an educational opportunity to help further understand what is and what is not an issue. Mark Marine: Concern this sets up an adversarial relationship. Non-destructive testing effort wasn't as clean as cores. Requires multiple correction factors.

Binder Issues:

1. **Presentation:** Tanya Nash (ATS) Tanya discussed the binder certification process and current FDOT tests – what they are, what they are used for, and what the numbers mean. See PowerPoint: [FDOT Binder Specification - NASH.pdf](#)

2. MAC binder report: See file: [MACBinderTestSummaryReport - How To.docx](#)
Howie updated the group on the new binder test result summary report available now, which was developed at Industry request.
3. Update on recovery testing / binder sampling: Greg Sholar: Program is being revamped. When a binder sample is taken, an additional mix sample will be taken, tested and looking for a correlation between results. Will also sample new "neat binder" mix designs, with an emphasis on making sure the binder is not too soft. Regarding polymer modified binders and mixtures, will be examining whether the binder (from tank and recovered from mix) meets grade and contains polymer. All binder samples are to come from the contractor's storage tank, not the delivery truck.
4. Update on REOB / Delta Tc testing: Greg Sholar: A second round of testing was done in Feb/March. Problem is gone. One sample showed 5% REOB but contained GTR and threw test off due to high zinc content.
5. Jim Warren. Binder testing and IMO 2020 binder changes to Florida's binder: Concern about H₂S. Sulphur scavengers can be used, but have short term effects.

High Polymer Issues:

1. **Presentation:** HP binder best practices Bob Klutz – Krayton. Reviewed best practices. See PP. High loading makes a crack and rust resistant material. Storage, Handling, Mixing, Paving, Compaction. Follow Manufacture/Supplier's recommendations. See PowerPoint: [HiMA Construction 2019.pdf](#)
2. High polymer binder memo: Howie Moseley: Discussed Construction/Materials Memo 06-19 for use of extra HP binder. See: [HP Binder Memo.pdf](#)
3. FC-5 HP temperatures: Warren discussed practical limits for laying HP and granting weather days for nominal weather.
4. FC-5 HP Video <https://www.youtube.com/watch?v=aUnB6PwYvBs>
5. High polymer binder in FC-5 research update: Greg Sholar: TTI project. Currently. FC-5 does not last as long as dense mix; average 14 years for FC5, 19 years + for SP. Final report will be available next month. Results: HP binder in FC-5 performance significantly better either with limestone or granite. Initial reports that the Life Cycle Cost of the HP showed to be more cost effective. More to come.
6. Polymer deterioration, summary of information: Sholar: consensus that all binders age, SBS binders age less. Roofers use SBS.

Tack Coat Issues:

1. Tack Task Group Update - *Wayne Rilko gave an update on the efforts of the Tack/Prime Work Group. Proposed specifications presented. See PowerPoint: [Distributor-Tack-Prime Task Group Update.pdf](#)*
2. Recommendations for tack truck calibration and maintenance.
3. Increase tack rate for new-on-new construction from 0.04 gal/sy to 0.05 gal/sy.

Segregation:

1. Segregation Notification (proper and timely notification)
2. Seeing uptick in end of load segregation.
3. Cat Paving-By-The-Numbers YouTube Video:
https://www.youtube.com/watch?v=EN7y_KgY0DU

Balanced Mix Design/Performance Testing:

1. Industry initiatives - *Indirect Tensile Asphalt Cracking Test (IDEAL-CT) . ACAF working with NCAT on video. NCAT used if during production at the last test track reconstruction.*
2. FDOT initiatives – SMO lab can perform Ideal CT, but being cautious regarding implementation. Will work with Industry and the research community to identify the best cracking test.

Contract Administration Issues:

1. On existing projects when FC-5 designs renew with a binder increase what is the means of additional compensation? *Hewitt: discussed process for additional compensation when designs change during construction.*

Specification update: See PowerPoint: [FCP Specification Update.pdf](#)

1. 2019 July
 - a. Density PF change, density upper limits increased on Small Quantity Pay Table, FC-5 upped dust content.
 - b.
2. 2020 January

- a. HP Polymer blending, FC-5 HP Temps, Tack truck changes. Still under consideration: Sublot under 3 cores issue, 19.0 mm base, Lot time duration revamp recovery testing/binder sampling.

Meeting Adjourned