ASPHALT SMOOTHNESS COMMITTEE TELECONFERENCE

Minutes

8:30 am to 12:00 pm
Wednesday, February 13, 2008
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Members present: Bouzid Choubane, Gale Page, Stacy Scott, Jim Musselman, David Wang, David Sadler, Bruce Dietrich, Jim Warren, Scott Pittman, Todd Trueblood, Frank Crawford, Frank Kreis, Mike Bienvenue, Nour Nazef, Greg Sholar

1. Introduction.

   David Wang welcomed the group and explained the agenda.

2. Testing method (FM 5-509) of 15 foot rolling straightedge at bridge joints and project endings (Greg Sholar/Gale Page).

   Discussed modifications to FM 5-509. The Committee needs to review the revised test method and submit comments to Greg Sholar (gregory.sholar@dot.state.fl.us) by 3/05/08. The test method needs to be reviewed in context with the current straightedging specifications (330-12.4.5).

   Discussed manhole criteria. Manholes currently are not addressed in the Specifications (with respect to straightedging), however, they need to be. The Committee is uncertain what criteria is currently being used on projects today. >3/16" might be an appropriate number. Need to give the Engineer authority to waive corrections if necessary. It was noted that third party adjustments are not the responsibility of the Contractor. Need to talk to Tom Bane to get the utility contractors on line with this. In D-4 they use >3/16" if the Contractor adjusted the

manhole. D-2 generally uses >3/16"; D-3 uses >3/8". SMO will draft a spec change with >3/16" with RSE (or exception to the spec at manholes not adjusted by the Contractor). David will collect the feedback from each District regarding the smoothness acceptance criteria of the manholes/water valves which they are currently using and provide them to SMO for reference. Members need to check with others to make sure the specification is practical.

3. Asphalt Joint Smoothness Incentive Test Specifications - Gale Page.

   Discussed revised specification. Need to delete "…with a rolling straightedge" from 330-12 in the Supplemental Specification. Two test projects per district to try out the new Incentive Specification. Change 50' to 250' in turn lanes and deceleration lanes, etc.

4. Granite Aggregate Ride Numbers and Oolite Aggregate Ride Numbers – Jim Musselman

   In order to determine if there was a limestone/granite issue with ride numbers, a statistical analysis was conducted of data from 100 FC-5 projects constructed over the last several years, with 50 limestone projects and 50 granite projects. (See summary)

Ride Number

District	Granite			Limestone		
	Avg.	Std. Dev.	# Projects	Avg.	Std. Dev.	# Projects
Statewide	4.05	0.124	50	3.92	0.150	50
1	3.90	0.150	2	3.96	0.142	25
2	4.06	0.119	16	3.89	0.297	2
3	4.16	0.097	5			
4				3.81	0.146	10
5	4.00	0.128	17	3.97	0.157	10
6				3.77	0.116	2

7	4.05	0.135	9			
TP	4.20	0.109	1	3.87	0.119	1
ARB-12	4.03	0.132	19	3.93	0.1496	31
Polymer	4.06	0.119	31	3.89	0.1512	19

Mix Design Gradation and AC Content

	Granite						Limestone					
District	P 1/2	P 3/8	P #4	%AC	Avg. RN	# Projects	P 1/2	P 3/8	P #4	%AC	Avg. RN	# Projects
Statewide	94	71	23	5.9	4.05	50	91	67	22	6.6	3.92	50
1	96	75	23	5.5	3.90	2	91	67	22	6.4	3.96	25
4							93	66	23	6.6	3.81	10
5	95	68	21	6.0	4.00	17	89	66	24	7.0	3.97	10
6							91	65	22	7.1	3.77	2

Discussed variations in ride data, as compared to gradations, aggregate type, binder content, etc. In general, the limestone FC-5 projects have slightly lower Ride Numbers when compared to granite FC-5. However, in several districts, the limestone projects have Ride Numbers that are not significantly different than the granite projects. Gradation does not appear to be an issue.

It was noted that there were a couple of projects built recently where the ride quality seemed okay (per seat of the pants), but the Ride Numbers were relatively low (I-75 Collier County and US-1 Monroe County). One possible cause might be slight variations in gradation in each wheel-path – not objectionable to the ride quality, but it is being picked up by the laser profiler nonetheless.

David mentioned about the research work handled by the Transportation Research Institute, University of Michigan, to study the surface texture factor affecting Laser Profiler measurements. The preliminary results show that a wider footprint laser profiler device is needed on OGFC when larger rocks are used. David will try to get the final research report from UM. SMO will start to test the wider footprint laser

device on some sections to study the device-related bias in the RN values.

Action items:

- FDOT to look at wider footprint laser – test sections,
- Get Advanced Testing (a private Laser Profiler Company) to run FDOT calibration pavement test sections,
- Share Advanced Testing data from I-75 Collier County with FDOT (how do we all calibrate, etc.).

5. Others. None. Meeting adjorned.