

DATE: October 12, 2005

SUBJECT: American Concrete Pavement Association
Summer Concrete Pavement Construction Bus Tour
And Meeting Minutes

TO: All Attendees

FROM: James Yee/s/ for Tucker Ferguson, P.E., Director
Bureau of Construction and Materials

The 2005 PENNDOT/Turnpike/ACPA concrete pavement tour and meeting was held on August 23-24, 2005, in Pittsburgh, PA.

On Tuesday the 23rd, there was an overview of the day provided by John Becker and Pat Gardiner along with welcoming comments by District Executive, Dan Cessna. The tour covered the following projects: Pennsylvania Turnpike Commission's Southern Beltway/Findlay Connector, Section 54A (Dick Corporation/Golden Triangle Construction), Section 54B (Mashuda Construction/Golden Triangle Construction), Section 54C (Smith & Johnson /Hi-Way Paving), and District 11-0's US 22 Settlers Cabin Interchange (Balfour Beatty/ John Gulisek Construction). The tour included commentary during the drive through of US-22 (part of the 1998 concrete pavement tour) and the Business SR-60 Cargo Road project (completed in 2003).

On the 24th, a group meeting was held where the following items were discussed:

- A recap of the tour was made by Bob Prisby.
- Gardiner addressed the 2004 follow up items.
- Briefings from the Concrete Pavement Quality Improvement Task Force Teams were presented.
 - Stabilized Subgrade – Gardiner identified that the Special Provision will be available shortly utilizing the tool box approach for stabilized subgrade.
 - Bases - Dan Dawood stated that cement treated permeable base has been updated by special provision regarding gradation, cement content, compaction, and curing. The team is also considering untreated base material (aggregate) with a gradation to provide stability while meeting minimum drainage parameters.
 - Strength and Testing - Bill Miller stated that the team recommends no change in the strength requirement for 501 paving. Some items need additional evaluation in the differences between the 501 and 506 specifications

- Repair Responsibilities - Gardiner discussed the revised specification. Numerous comments were received through the Clearance Transmittal process and as a result the Table has been simplified. The specification has been sent to the Bureau of Design for implementation.
- CPR – Steve Grasseti is going to lead this new team on establishing best construction practices and training on how to rehabilitate concrete pavement.
- Van Port Limestone – Becker informed the group that the team will research the best ways to maximize the skid resistance utilizing Van Port Limestone. Bill Lowry is leading this effort. Industry assistance was requested.

The following new items were discussed and where appropriate, follow up items have been established in the attachment:

- Protective coating – direction is needed on when this item is to be in contract and used. Use is very inconsistent.
- Dowels on full depth shoulders – the need for dowels on shoulders when used for temporary traffic control was posed. It is a project by project determination.
- Grinding patches – the minimum level of 70 IRI is very difficult when the road has a 180 IRI. The plans should identify the current IRI.
- Grinding slurry - the proposal needs to identify if the slurry can be spread on the Right of Way or hauled off site by Special Provision.
- Pavement preservation – voids should be identified in the design process through the use of FWD testing. Currently, the process is highly variable.
- 2006 Material needs – Districts are estimating the concrete, aggregate, and asphalt material needs for 2006. ACPA will be given the data when available.
- Fuel adjustment – industry (APC) has requested consideration for fuel adjustment incentive on material deliveries.
- Hardened air research – The Department and Penn State are working on research on Hardened air evaluation. The scope includes literature search, conclusions, and recommendations.
- Base thickness – ACPA requested the Department to consider reducing the thickness of ATPB and CTPB from 4 inches to 3 inches.
- Centerline joints – ACPA requested consideration to reduce the width of the longitudinal D/4 cut to ¼ inch wide
- Drainage and subbase issues – There is a need for a good foundation and a way to deal with water.
- Cement Availability – Cement availability is not a major consideration this year.

- The Pennsylvania Concrete Conference is scheduled for January 10-12, 2006, at the Holiday Inn in Grantville. ACPA is open to suggestions for topics and speakers.

Action items identified during the meeting are listed on the attached pages. Items 1 thru 12 are continuations or modifications from 2004 action items.

Attachment

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2005 FOLLOW UP ACTIONS

1. BCM will reevaluate the patching standard for reinforced concrete. Details are currently being drafted.
2. BOMO will revise the RC Standards for geotextile covering of pavement base drains. The current detail cannot be built. The separation layer of geofabric is also to be addressed. A Clearance Transmittal will be distributed making geotextile optional.
3. BOD will issue an update to the RC Drawings for an alternate tie bar placement scheme (RC-20).
4. BCM will investigate the effects of adjacent lanes placed in different environmental conditions when there is accumulated movement at isolated joints (ongoing).
5. BOMO will issue a Strike off letter and change RC-25 to specify full depth pavement for shoulders and when to specify dowels for the shoulder.
6. BCM is to evaluate the effectiveness of protective coating, Item 0503-0001 (linseed oil), and policies on when it is required.
7. BOMO will develop patching details to include skewed joint concept in RC-26 drawings.
8. CPQI Task Force will evaluate an option to utilize aggregate bases in lieu of treated subbase material.
9. BCM will evaluate hardened air requirements in Section 501 verse other specifications.
10. BCM will consider cement price adjustment.
11. BOCM will issue policy on sawing over-cuts during patching in areas where mid-slab cracking is acute.
12. BOMO and BCM will reconsider the use of male keyways.
13. BCM is to re-evaluate the grinding specification Section 514.
14. BOD is to provide the existing IRI data in bid packages where diamond grinding is specified.
15. BOD will specify in the special provisions when diamond grinding slurry is to be hauled off site and disposed.
16. BOMO is to evaluate using FWD in determining voids under the pavement for identification of where to perform patching.
17. BCM is to provide ACPA with 2006 estimated material needs.
18. BOMO is to evaluate the thickness requirement for treated bases 4 inches verse 3 inches.
19. BOMO is to consider reducing the centerline saw cut to ¼ inch wide.

Target dates will be established after discussions with the Chief Engineer and coordination through the Concrete Pavement Quality Improvement Task Force.

Attendees

John M. Becker P.E.	ACPA-NE Chapter	Chris B. Speese	PENNDOT BOMO
Sherry Braafhart	ACPA-NE Chapter	John Surenda	PENNDOT District 01-0
Robert A. Prisby	ACPA-NE Chapter	Neal Fannin P.E.	PENNDOT District 02-0
Kirk L. Thompson	Allegheny County Port Authority	Benjamin R. LaParne	PENNDOT District 02-0
Leif G. Wathne P.E.	ACPA National	Christopher J. Sokol	PENNDOT District 02-0
Brad McKibben	Balfour Beatty	Kenneth D. Klingerman	PENNDOT District 03-0
Brian Eberhart	Callahan Paving Products, Inc.	Jonathan F. Sander	PENNDOT District 03-0
Thomas Hunt	Cemex, Inc.	Stephen L. Caruano P.E.	PENNDOT District 05-0
William G. Meek	Cemex, Inc.	Bill Murray	PENNDOT District 05-0
Jay Whitt	Essroc Italcementi Group	George A. Dunheimer P.E.	PENNDOT District 06-0
Zahur Siddiqui	Federal Highway Administration	Lorraine Ryan	PENNDOT District 06-0
H. Wayne Miller	Frank Bryan, Inc.	Harold R. Windisch	PENNDOT District 06-0
Michael J. Stohr	GAI Consultants, Inc.	Joseph R. Palladino	PENNDOT District 08-0
Charles J. Niederriter	Golden Triangle Construction Co.	Randall L. Staudt	PENNDOT District 08-0
Barry J. Adams	Hi-Way Paving, Inc.	Luis R. Villegas	PENNDOT District 08-0
Mike Durst	Hi-Way Paving, Inc.	Bill Weigle	PENNDOT District 08-0
James A. Taylor	Hi-Way Paving, Inc.	Garth D. Bridenbaugh P.E.	PENNDOT District 09-0
Mark Ondecko	John Gulisek Construction Co.	Frank Stahl	PENNDOT District 09-0
Clayton J. Stahl P.E.	John Gulisek Construction Co.	Terry Kerr	PENNDOT District 10-0
John A. Kurtz	L. Robert Kimball & Associates	Richard J. Polenik P.E.	PENNDOT District 10-0
Bill Herguth	Lafarge North America	H. Daniel Cessna P.E.	PENNDOT District 11-0
Michael H. Dufalla P.E.	Mackin Engineering Co.	William E. Dipner	PENNDOT District 11-0
Matthew T. Fleury	Mascaro Contracting, L.P.	James Foringer	PENNDOT District 11-0
John A. Davidyock	McTish, Kunkel & Associates	Robert Kennedy	PENNDOT District 11-0
Craig White	McTish, Kunkel & Associates	Michael McCard	PENNDOT District 11-0
Matthew P. Corra	Meadow Burke Products	Joseph L. Chilzer	PENNDOT District 12-0
Donald L. Detwiler	New Enterprise Stone & Lime Co.	William H. Lowry	PENNDOT District 12-0
James H. Kyper, Jr.	New Enterprise Stone & Lime Co.	Larry Maricondi	PENNDOT District 12-0
John E. Coldren	PENNDOT BOCM	Michael Flack	Pennsylvania Turnpike
Barry Dunmire	PENNDOT BOCM	David B. Sheridan	Pennsylvania Turnpike
Joseph Evanko	PENNDOT BOCM	Jim Mack P.E.	Quality Engineering Solutions
Tucker Ferguson P.E.	PENNDOT BOCM	John Hetrick	SAI Consulting Engineers, Inc.
J. Patrick Gardiner P.E.	PENNDOT BOCM	Kevin W. Lettrich P.E.	SAI Consulting Engineers, Inc.
Steve Grasseti P.E.	PENNDOT BOCM	Michael Horan	Sanders Saws and Blades
Marcella Lucas	PENNDOT BOCM	Robert B. Priest	Sanders Saws and Blades
J. Alberto Medina	PENNDOT BOCM	John McCaskie	Swank Associated Companies
Patricia I. Miller P.E.	PENNDOT BOCM	Greg Tomon	Trumbull Corporation
William J. Miller	PENNDOT BOCM	Julie Vandenbossche	University of Pittsburgh
Clint H. Beck	PENNDOT BOMO	Les Simon BA, MBA	URETEK USA, Inc.
Dan A. Dawood P.E.	PENNDOT BOMO		