

Zack Stewart
Northern District Commissioner

Wayne O. Burkes
Central District Commissioner

Ronnie Shows
Southern District Commissioner



Dr. Robert L. Robinson
Executive Director

Kenneth I. Warren
Deputy Executive Director/
Chief Engineer

Mississippi Department of Transportation / P.O. Box 1850 / Jackson, Mississippi 39215-1850 / FAX (601) 359-7110

November 10, 1997

Mr. Joe Conway
Design & Operations Engineer
Federal Highway Administration
Jackson, Mississippi

Dear Mr. Conway

RE: Pavement Design Revisions

On October 27, 1997, a meeting was held to discuss the pavement design guidelines submitted to FHWA on October 13, 1997 (copy attached). Those in attendance were as follows:

Al Crawley	Research Division
Steve McMahan	Construction Division
Buddy Russell	Construction Division
Leroy Crisco	Construction Division
Keith Purvis	Roadway Design Division

As a result of the meeting, it was decided to revise the guidelines as follows:

- All 12.5 mm HMA shall be placed in 2-inch (50 mm) lifts;
- At the time the pavement recommendation is made, the probable traffic control plan should be considered. If traffic will be placed on an intermediate layer for more than one year, consideration should be given to requiring the intermediate layer to be 12.5 mm HMA. Since it is desirable to place the entire pavement structure prior to allowing traffic to use the pavement, caution should be exercised in making this decision;



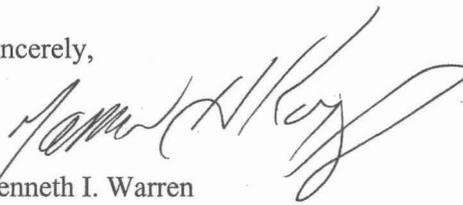
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- Multiple lifts of 9.5 mm HMA should be avoided;
- More than 2 lifts of 12.5 mm HMA should be avoided if possible. Exceptions to this include a low volume route where the use of the larger mixes would result in an excessive amount of pavement, or where traffic is to be placed on an intermediate lift for more than one year;
- All permanent pavement designs should include at least one lift of either 19 mm HMA or 25 mm HMA. In addition, at least one lift of each mix designation (19 mm and 25 mm) should be included unless it results in an excessively oversized pavement structure. The requirement of having one lift of 25 mm HMA may be waived if a lime fly-ash or other alternate base course is included in the pavement structure. For the purpose of this requirement, untreated granular material is not considered to be an alternate base course.

All new pavement recommendations submitted to Roadway Design shall comply with these guidelines.

Should additional information or assistance be deemed necessary, please advise.

Sincerely,


For — Kenneth I. Warren
Chief Engineer

Attachment

pc: Asst. Chief Engineer-Operations (Kopf)
Construction Division (McMahon, Russell, Crisco)
Materials Division (Brumfield)
Research Division (Crawley)
District Engineers
District Materials Engineers
Roadway Design (Ruff, Pickering, Balentine, Reeves, Purvis, Section Engineers, Design Squads)
Central Files

KP

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October 13, 1997

Mr. Joe Conway
Design & Operations Engineer
Federal Highway Administration
Jackson, Mississippi

Dear Mr. Conway

RE: Pavement Design Revisions

On September 11, 1997, a meeting was held to discuss the performance of the asphalt pavements being placed throughout the state. Those in attendance were as follows:

Jim Kopf	Asst. Chief Engineer-Operations
Steve McMahan	Construction Division
* Buddy Russell	Construction Division
* Leroy Crisco	Construction Division
Jimmy Brumfield	Material Division
* Keith Purvis	Roadway Design Division

As a result of the meeting, it was decided that until more observation of pavement performance can be made, all new pavement designs submitted to Roadway Design Division should comply with the following guidelines:

- All 12.5 mm HMA shall be placed in 2-inch (50 mm) lifts;
- The probable traffic control plan should be considered at the time the pavement recommendation is made. If traffic will be placed on an intermediate layer for more than one year, consideration should be given to requiring the intermediate layer to be 12.5 mm HMA. Since it is desirable to place the entire pavement structure prior to allowing traffic to use the pavement, caution should be exercised in making this decision;



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 October 13, 1997

- Multiple lifts of 9.5 HMA should be avoided;
- Multiple lifts of 12.5 mm HMA should be avoided if possible *;
- A lift of 9.5 mm HMA over a lift of 12.5 mm HMA should be avoided if possible *;
- All permanent pavement designs should include at least one lift of either 19 mm HMA or 25 mm HMA. In addition, it is strongly encouraged to include one lift of each mix designation (19 mm and 25 mm) unless it results in an excessively oversized pavement structure.

* Exceptions include a low volume route where the use of the larger mixes would result in an excessive amount of pavement, or where traffic is to be placed on an intermediate lift for more than one year.

As a result of the meeting, it was decided to review the approved pavement design on selected projects, according to the new guidelines shown above. The projects selected for review are as follows:

<u>CONSTRUCTION #</u>	<u>COUNTY</u>	<u>ROUTE</u>	<u>SQUAD</u>	<u>ENGINEER</u>	<u>LETTING**</u>
District One					
46-0018-03-014-10	Oktibbeha	SR 12	McCollum	Reese	Oct 97
46-0005-01-010-10	Lowndes	SR 12	James	Reese	Jan 98
17-0007-01-064-10	Tippah	US 72	Sykes	Reese	Jan 98
46-0048-01-032-10	Chick/Monroe	SR 41	Basden	Reese	July 98
82-2839-00-006-11	Prentiss/Lee	SR 145	Basden	Reese	July 00
District Two					
49-9327-00-002-10	DeSoto	US 51	Breland	Lowe	Feb 98
47-1623-00-007-10	Attala	SR 14	Turner	Lowe	Nov 97
82-2713-00-006-10	Grenada	US 51	Brister	Lowe	July 98
82-2713-00-005-10	Montgomery	US 51	Brister	Lowe	July 98
46-0017-02-005-10	Panola	SR 35	Breland	Lowe	July 00
79-0034-01-002-10	Yalobusha	SR 315	Seal	Lowe	??????

** Proposed Letting Date as of September 11, 1997

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<u>CONSTRUCTION #</u>	<u>COUNTY</u>	<u>ROUTE</u>	<u>SQUAD</u>	<u>ENGINEER</u>	<u>LETTING**</u>
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District Three

97-0072-02-023-10	Yazoo	US 49W	Gar + Gar	Kidd	Mar 98
94-0011-01-048-10	Washington	US 82	Neel Schaffer	Kidd	May 98
85-0061-01-007-10	Humphreys	SR 7	Baker	Kidd	July 98
85-0638-00-001-10	Holmes	SR 14	Spell	Kidd	Oct 00
85-0610-00-014-10	Bolivar	SR 448	Fletcher	Kidd	July 01

District Five

49-7334-00-004-10	Rankin	SR 468	Breland	Whitfield	Nov 97
46-7304-00-004-10	Madison	US 51	Robinson	Whitfield	July 98
46-0002-03-047-10	Noxubee	US 45	Roberts	Whitfield	July 04

District Six

94-0008-01-069-10	Harrison	US 49	Rankin	McCorkle	Nov 97
97-0002-02-046-10	Wayne	US 45	Turner	McCorkle	Jan 98
11-0008-01-061-11	Harrison/Stone	US 49	Garner Russell	McCorkle	July 98
85-0022-01-043-10	Jones	SR 15	Hulitt	McCorkle	Sept 98
46-0066-03-002-10	Greene	SR 57	Dean	McCorkle	Mar 00

District Seven

97-0009-01-104-10	Wilkinson	US 61	Roberts	Pittman	Oct 97
85-0037-01-038-10	Marion	SR 35	Williams	Pittman	July 98
85-0329-00-003-10	Smith	SR 541	Baker	Pittman	July 99
79-0023-01-052-10	Smith	SR 35	Waldon	Pittman	Nov 97

** Proposed Letting Date as of September 11, 1997

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On September 29, 1997, the pavement designs on these projects were reviewed by the Roadway Design and Construction Divisions, and revised according to the new guidelines. A summary of the revised designs are attached.

It was decided that pavement recommendations would be resubmitted, rather than revising the existing designs on the following projects: 1) Montgomery US 51; 2) Grenada US 51; 3) Yalobusha SR 315; and 4) Wayne US 45.

A revised recommendation has been submitted to the FHWA on Tippah US 72 (copy attached).

The approved pavement design on Marion SR 35 was determined to be in accordance with the revised guidelines.

Should additional information or assistance be deemed necessary, please advise.

Sincerely,



C. Keith Purvis
Roadway Design Division

Attachment

pc: Asst. Chief Engineer-Operations (Kopf)
Construction Division (McMahon, Russell, Crisco)
Materials Division (Brumfield)
District Engineers
District Materials Engineers
Roadway Design (Ruff, Pickering, Balentine, Reeves, Purvis, Section Engineers, Design Squads)
Central Files

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