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Inter-Office Memorandum

Date: May 8, 2003
To: Asst. Roadway Design Div. Engineer
Keith Purvis
From: Roadway Design Division Engineer
John Pickering *J. B. P.*
Subject: FHWA's Design and Operations Work Plan for FY2003

Attached is FHWA's Design and Operations Work Plan for FY2003 dated 3/11/03. As you already know, their FY2003 is from October 1, 2002 to September 30, 2003.

You will notice their Transportation Engineer assigned to MDOT's transportation districts.

Notice on Page 3 of 8, Bullet No. 3, regarding FHWA's requirement for approval of an exception if at least 2 lanes in each direction are not kept open at all times on Interstate highways. In the past, you have been requested to inform me of any Interstate work zones that reduce the number of lanes in each direction to one; however, with FHWA's new work plan, each Section Engineer will be required to write a letter of justification for the reduction to one lane. This letter will be addressed to FHWA, and will be furnished to the Roadway Design Division Engineer for submittal to FHWA by the Chief Engineer. This letter needs to be furnished as early as possible during the design phase in order to prevent major plan changes.

If there are any questions, please advise.

Attachment

pc: Section Engineers
FHWA File
File ✓



Vc - Copy 82, 83, 84 & 87
Information on FHWA
Work plan for FY 03.

DESIGN AND OPERATIONS WORK PLAN

FY2003

Background:

The Design and Operations (D&O) Work Plan addresses the Transportation Engineer's (TE's) daily activities in delivery of the Federal Aid Program. The Plan includes Design, Construction, and Maintenance Monitoring programs, which are the core of the TE's responsibilities. The monitoring programs contain the daily activities as well as performance goals and measures for each program.

Five key business processes which support the FHWA National Strategic Plan were identified by FHWA Headquarters. FHWA's Key Business Processes are Safety, Mobility; Productivity, Human and Natural Environment; and National Security. Each of the key business processes is addressed under "Performance Measures...." for each monitoring program.

Oversight:

Oversight projects (or non-exempt projects) are projects that are on the Interstate System and projects on the National Highway System (NHS) that are greater than \$5 million.

Division of Duties:

Listed below are the names of the Transportation Engineers and the MDOT Districts for which they have oversight duties.

Roger McWilliams--- District 1 and District 2
Larkin Wellborn----- District 3 and District 5
Randy Jansen----- District 6 and District 7

DESIGN MONITORING

General Duties:

The Design and Operations (D&O) Team is responsible for monitoring the design of all oversight projects. The Transportation Engineers (TE's) will support the key business processes in their assigned area of the State through the following activities:

- Attendance of each Design Meeting for oversight projects.
- Review and approval of Plans, Specifications, and Estimate (PS&E) for oversight projects.
- Review and make recommendations on MDOT's requests for concurrences in the award of oversight projects.
- Review and approval of design exceptions for oversight projects.
- Review and approval of new/revised standard drawings.

The TE's are responsible for following their projects through the entire design phase, being aware of letting schedules for their projects, and delivering the PS&E package with their recommendation for approval to the D&O Engineer by the authorization date. If any problems arise during the PS&E review, the TE's should notify the D&O Engineer immediately.

L. HAHN

Performance Goals for Each of the Key Business Processes:

Safety

- Review each PS&E to ensure critical geometric design criteria are met in accordance with latest AASHTO Greenbook and MDOT Design Manual. (TE's)
- Assist MDOT in identifying areas where design exceptions are required. (TE's)
- Review and make recommendations on all design exceptions submitted. (TE's)
- Review traffic control plan on each PS&E (TE's)
- Review final signing, striping, guardrail installation plans on each PS&E (TE's)
- Review each PS&E for NCHRP 350 approved crashworthy safety appurtenances in traffic control plan and final design (TE's)
- Notify Roadway Design Division, Traffic Division, Construction Division, and Maintenance Division of NCHRP 350 updates. (Hahn)
- Work with MDOT Roadway Design to select a temporary concrete barrier that meets NCHRP 350 standards. (Hahn)

Mobility

- Attend all design meetings for non-exempt projects. (TE's)
- Participate in selection/design of pavement structure and/or pavement rehabilitation technique. (TE's)

DESIGN MONITORING (continued)

- Review and make recommendation on concurrence of MDOT pavement designs. (TE's, Hahn)
- Encourage the use of QC/QA and warranty specifications. (TE's, Hahn)
- Work with Roadway Design and Districts to ensure that workzones on interstate highways have at least 2 lanes open in each direction at all times. Exceptions must be approved by the Division Administrator. (Kolb, Hahn, TE's)
- Review designs for ADA compliance. (TE's)
- Conduct and report on all ADA complaints. (TE's)
- Submit an annual summary of ADA investigation reports. (Jansen)
- Conduct a Process Review on Compliance with ADA Guidelines included in plans and constructed on Urban/LPA projects. (Jansen)

Productivity

- Work with Districts to select PM projects and PM method of repair. Promote the use of Pavement Management System data in project selection. (TE's, Hahn)
- Keep a log of PM projects in each District. Report project amount, PM method used, expected years of service life gained, etc. Submit report to D&O Engineer in April, 2003 and September 2003. (TE's)
- Share latest PM technology with MDOT. (Hahn, TE's)
- Assist MDOT Research Division in researching PM software that is compatible with MDOT's existing PMS software. (Hahn)
- Promote PM courses available through NHI. (Hahn, TE's)
- Assist MDOT in the evaluation of computer software for estimating soil quantities. Provide an evaluation summary to D&O Engineer in August of 2003. (Wellborn, Cribb)
- Conduct VE studies on all NHS and Interstate section of independent utility (SIU) with total estimated project costs of \$25 million or more. (TE's)
- Review and approve contractor VE proposals. (TE's)
- Submit annual report, summarizing VE studies and contractor proposals cost savings. (Wellborn)
- Review and approve all innovative specifications implemented into projects during design monitoring. (TE's, Hahn)
- Complete annual Process Review to ensure MDOT's Project Development Manual (PDM) Process is working in the public's interest for the Exempt LPA Program.

Human and Natural Environment

- Attend environmental location design committee meetings for oversight projects and for exempt projects on new alignment. (TE's)
- Attend public meetings for oversight projects and for exempt projects on new alignment. (TE's)
- Assist Environmental Specialist in review of environmental documents as requested. (TE's)

DESIGN MONITORING (continued)

- Review and approve erosion control plans in PS&E package. (TE's)
- Review Designs for inclusion of Environmental Commitments. (TE's)

National Security

- Coordinate project development with MTMC, the Army National Guard Mississippi Office of State Aid, Federal Lands, and the County for highway improvements at Camp McCain. (Hahn, McWilliams)
- Provide technical services as requested by MTMC in developing projects. (TE's, Hahn)

CONSTRUCTION MONITORING

Construction Inspections:

The TE's are responsible for construction oversight of all projects on Interstates and projects on the National Highway System that are greater than \$5 million.

Inspection Frequency: Once a project has been let to construction the TE and Design & Operations (D&O) Engineer will review the project amount, size, complexity, work type, etc., to determine the inspection cycle. Most projects are inspected either monthly or every other month. Small interstate projects, such as lighting or fencing, are seen only at the final inspection. The TE's are not limited to the construction cycle and may perform inspections at any time.

Coordination with the State DOT: All Construction Inspections are coordinated with the MDOT District personnel, as well as the MDOT Construction Division. Inspections are performed in accompany with an MDOT representative. The TE will also coordinate inspections with FHWA and MDOT technical experts (bridge engineers, traffic engineers, etc.) when necessary.

Inspection Reports: Inspection Reports are written for each inspection. The reports are to be routed to the D&O Engineer for approval within **2 weeks** from the date of inspection.

The inspection reports will focus on traffic control safety, erosion control, DBE progress, quality of the work, and changed conditions/supplemental agreements. If any issues arise during the inspection, the TE will make every effort to resolve the issue with the MDOT personnel. Items that cannot be resolved during the inspection will be noted in the report for future follow-up.

The TE's will inspect the quality and set-up of traffic control devices during each inspection. Night inspections of traffic control will be done on 25% of the inspections. (MDOT personnel are invited to all night inspections. It is not necessary that they attend, but they will be informed of any findings the following day.)

Construction Scheduling: The TE's will schedule inspections on a quarterly basis. A form has been created for the TE's to use, and it is attached to this document. The completed form will be submitted to the D&O Engineer within one week after completion of each quarter (January 7, April 7, July 7, and October 7).

Performance Goals for Each of the Key Business Processes:

Safety:

- Inspect and report on workzone traffic control on each project inspection. (TE's)
- Conduct and report night inspections of workzones on at least 25% of the project inspections. (TE's)

CONSTRUCTION MONITORING (continued)

- Conduct a joint FHWA/MDOT Construction Division statewide inspection/Quality Review of the condition of workzone traffic control (Wellborn)

Mobility:

- During project inspections inspect and report on pavement construction. Visually inspect and report on condition of newly constructed pavement lifts, and inspect and report on pavement laydown operations. Schedule an inspection of laydown operations during initial stages of paving (10 to 25% of paving complete) and one inspection midway through paving operations (50 to 75% of paving complete) for each project. (TE's)
- During initial stages of pavement construction, conduct at least one review of project records concerning pavement construction (QC/QA records, density reports, smoothness reports, project diaries, etc.) Document findings and recommendations in monthly inspection reports. Conduct follow-up reviews as required. (TE's)

Productivity:

- Follow-up/complete joint FHWA/MDOT Project Records Quality Review.(McWilliams)
- Conduct Process Review on MDOT's QC/QA Program. Team will perform a risk assessment to determine scope of review. (McWilliams)
- Participate in AC Quality Reviews led by MDOT. (McWilliams, TE's)

Human and Natural Environment:

- Review project documents for environmental commitments to be met during construction. Discuss commitments with MDOT project personnel, and inspect project to ensure commitments are being met. Report on environmental commitments in project inspection report.
- Inspect the quality and set-up of erosion control items during each project inspection.

National Security:

(No performance measures identified for Construction Monitoring at this time.)

MAINTENANCE MONITORING

General Duties:

- Detailed Inspections: The TE's will accompany a representative from MDOT Maintenance Division on detailed maintenance inspections once per year for each District. The focus of the detailed inspections will be on Interstate and NHS routes. The inspection report is written by the MDOT representative and forwarded to the TE for additional comments. TE's will follow-up with MDOT District on any maintenance issues that need to be addressed.
- Routine Inspections: During routine travel, the TE's will keep track of all highways driven, including significant city and county maintained routes. TE's will log the routes driven, any maintenance items requiring attention, and follow-up actions taken with the Districts. The log is to be submitted to the D&O Engineer twice annually.

Performance Goals for Each of the Key Business Processes:

Safety:

During routine travel and detailed inspections, document any safety related issues. Follow up on findings with Districts and document discussions with and actions taken by the Districts for safety related issues. (TE's)

Mobility:

During routine travel and detailed inspections document pavement conditions, discuss with Districts, and document actions taken by the Districts to improve condition of pavements.

Productivity:

- Promote Preventive Maintenance (PM)
 - Work with Districts to select PM projects and PM method of repair. Promote the use of Pavement Management System in PM project selection. (TE's, Hahn)
 - Work with MDOT to implement a formal Preventive Maintenance Program. (Hahn)
 - Share latest PM technology with MDOT. (Hahn, TE's)
 - Assist MDOT Research Division in researching PM software that is compatible with MDOT's PMS software. (Hahn)
 - Promote Preventive Maintenance courses available through NHI. (Hahn, TE's)

Human and Natural Environment:

As projects are let to contract, identify environmental commitments to be met after project completion and throughout the maintenance phase. Notify the MDOT District Maintenance personnel and the MDOT Maintenance Division of any such commitments. (TE's)

MAINTENANCE MONITORING (continued)

National Security:

Inspect STRAANET Routes during routine travel and detailed inspections. Note STRAANET Routes in maintenance inspection logs.

FHWA Mississippi Division - Process Reviews Scheduled for FY2003

4-Feb-03

Process Reviews Review Topic and Review Lead ()	Target Due Dates/Actual Completion Dates ()					Comments		
	Work Plan	Start Review	Complete Review	Mgmt Close-out	Final Report	*** ***	*** ***	*** ***
State-Aid BR Program Pre-Construction (R.Ward)	Feb-03	Mar-03	Jun-03	Jul-03	Aug-03			
Construction Work Zone Traffic Control (L.Wellborn)	Feb-03	May-03	Jul-03	Aug-03	Sep-03			
MDOT's QC/QA Program - HMA (R.McWilliams)	Feb-03	Apr-03	Jul-03	Aug-03	Sep-03			
Compliance with ADA on Urban LPA Projects (R.Jansen)	Feb-03	Apr-03	Jun-03	Jul-03	Aug-03			
MDOT's LPA Project Development Manual (PDM) Process (M.Hahn)	Feb-03	Apr-03	Jun-03	Jul-03	Aug-03			
ROW Administrative and Legal Settlements (C.Vick)	Mar-03	Apr-03	Jun-03	Jul-03	Aug-03			
Needed Changes in Environmental SOP's (D.Walters)	Jan-03	Feb-03	May-03	Jun-03	Jul-03			
MDOT's Project Cost Records System (V.Price)	Nov-02 (Nov-02)	Jan-03	Feb-03	Mar-03	Apr-03			
MDOT's HPMS Data Collection, Evaluation & Reporting Procedures (S.Carson)	Feb-03	Mar-03	May-03	Jun-03	Jul-03			
MDOT's Implementation of Research Study Results (R.Webster)	Jan-03	Feb-03	May-03	Jun-03	Jul-03			
(T.Pace)								
(M.Cribb)								
(V.Tsu)								