



**ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
AUGUST 2, 2018, 9:00 A.M. – 11:00 A.M.
MULTI-MODAL CONFERENCE ROOMS**

Present:	Mark Van Port Fleet Carol Aldrich Mark Bott Matt Chynoweth	Mark Geib Jason Gutting Greg Losch Kristin Schuster	Brandy Solak (phone) Gorette Yung Hal Zweng
Absent:	Kim Avery Theodore Burch	Dee Parker Brad Wieferich	
Guests:	Therese Kline	Ryan McDonnell	

OLD BUSINESS

1. Approval of the June 7, 2018, Meeting Minutes

ACTION: Approved

2. Review of the M-29 St. Clair Road Diet – Mark Bott (July Email Review)
3. MDOT Culvert Committee Guidance Document – Matt Chynoweth (July Email Approval)
4. I-196 and I-96 Interchange Reconstruction and Bridge Replacement in Grand Rapids – Greg Losch/David Kent (Expedited June/July Email Approval)

NEW BUSINESS

1. MDOT New Materials and Products – Jason Gutting

Issue - MDOT receives numerous submittals of new materials and products. This process is meant to streamline the procedure and provide a review of submittals by the appropriate subject matter experts. Previous management suggestions are part of this draft procedure.

Background - In 2012 a new materials process and steering team were created, but not implemented. The submitted procedure streamlines submittals into specific focus areas that will review and provide recommendations on new material submittals.

Construction Field Services (CFS) has begun to share a new materials status report at each Engineering Operations Committee (EOC) meeting. This listing will provide the status of each new material submittal in a two-year rolling report.

Recommendation - Review, provide feedback, and eventual approval of the submitted new product evaluation procedure Guidance Document. Review and discussion of the new materials status report and formatting. This report will be provided to EOC members one week prior to all EOC meetings.

ACTION: Comments about the new product evaluation procedure Guidance Document are to be submitted to Jason by September 4, 2018.

2. I-75 Design Build – Greg Losch/Ryan McDonnell

Issue - The use of the Design Build (DB) delivery method is being requested due to the expedited nature of the schedule. The following issues will be addressed:

- Railroad coordination with Lake State Railway will be required to replace one bridge. Preliminary railroad coordination efforts have already begun with assistance from a General Engineering Consultant and approval from the Federal Highway Association (FHWA). To date, coordination includes three meetings with the railroad to discuss project goals and review procedures, drafting a Memo of Understanding, risk assessments, and discussing design requirements. See attachments.
- A structure agreement with Lake State Railway cannot be executed until after plans are available, and plans will not be available until after the letting if this is a DB project. Per discussion with the FHWA, a letter of intent will need to be drafted between MDOT and Lake State Railway stating that a structure agreement will be executed once plans, meeting the design criteria in the contract, have been prepared by the Design Builder and accepted by MDOT and Lake State Railway.
- A railroad easement is being procured by MDOT through CSX.
- Environmental assessment re-evaluation is in progress.

Scope includes I-75 Hess Avenue north to the south I-75 / I-675 interchange; M-46 from Outer Drive East to the Nexteer Signalized Drive. 2.6 miles of freeway reconstruction, including the following:

- Widening I-75 from 3 lanes to 4 lanes
- Reconstructing the I-76 / M-46 to a partial cloverleaf configuration while retaining the two southern loop ramps
- Filling in the low area north of the I-75 / M-46 Interchange
- Bridge Replacement of M-46 over I-75
- Deck Replacement of I-75 over LSR / CSX rail line

Job Number: 127021, 129594

Control Section: 09035

Project Cost: \$50.3M

Letting Date: 12/6/19

Recommendation - The Innovative Contracting Committee has approved the use of the DB contracting method for this project. EOC approval is requested for the use of the DB delivery method for the reconstruction and widening of I-75 from Hess Ave to the south I-75/I-675 interchange in Bay County.

ACTION: Approved

3. Annual Special Experimental Project 14 Reporting – Greg Losch

Issue - Programmatic use of Type 1, Type 2 & Type 3 Fixed Price Variable Scope (FPVS) Contracting Approaches on Capital Preventive Maintenance Projects

Background - Per the FHWA SEP-14 work plan for programmatic use of FPVS contracting, MDOT will prepare and submit an annual report to the FHWA that will include an evaluation of all projects completed within the last calendar year. The report will contain an overall evaluation of the projects along with any suggestions and recommendations for improving the process.

Recommendation - This report is presented to the EOC for information only. The report will be posted on the FHWA website in the near future.

ACTION: For Informational Only. No Action Required

4. Smooth-Lined Corrugated Polypropylene Pipe Acceptance and Use – Therese Kline/Kristin Schuster

Issue/Background - Polypropylene Pipe (PPP) is a new plastic pipe product that meets the requirements of AASHTO LRFD Bridge Design Guide Section 12 and AASHTO M 330 Standard Specifications – similar to Smooth-Lined Corrugated Polyethylene Plastic Pipe (CPE) and AASHTO M 294. There has been a request to the Joint Pipe Operations Committee (JPOC) to consider this product in the manner that CPE is used.

MDOT has three installations in place:

- Installed approximately one (1) year: Saginaw County, parallel to M-46, east of Holland Rd; 1500 feet of 24-inch diameter polypropylene pipe used for storm sewer application. Pipe appears in like new condition with no issues.
- Installed approximately four (4) years, since April 2014: Eaton County, 8 miles south of Charlotte, near M-78 under Greenfield Road, near Bellevue; an emergency replacement by MDOT maintenance of 50 feet of 30-inch diameter polypropylene pipe used for a culvert. Unable to inspect within.

- Installed for approximately one (1) year, since April 2017: Gratiot County, under M-57, approved by the Traffic Safety Committee, 50 feet of 60-inch diameter polypropylene pipe used for a culvert. Settlement issue in pavement. Some joint separation at one end.

MDOT has been told other states use CPE and PPP interchangeably. Only two states responded to an MDOT inquiry, Ohio and Illinois, providing information listed below.

Ohio Use: 2016 – 14,465 feet, 2017 – 8,958 feet, 2018 – 17,454 feet; for total of 40,877 feet; no information on diameters used. Ohio has not reviewed any of these installations since initial construction inspections.

Illinois Use: 12-inch 840 feet, 15-inch 170 feet, 18-inch 581 feet, 24-inch 122 feet, 30-inch 101 feet, 36-inch 102 feet for 1,916 feet of polypropylene pipe. Illinois has not reviewed any of these installations since initial construction inspections.

There has been only one deflection test on PPP pipe, tested per AASHTO M 330, which failed. Industry is aware of the failure and that MDOT requires sampling and deflection testing before approving material.

Accepting PPP as the equivalent of CPE results in allowable uses for culverts (Table 401-1) and storm sewers (Table 402-1) as shown in the attached Special Provisions (SPs). Draft use statements for SPs are:

- all projects that include pay items for Sewer, Class A and B
- all projects that include pay items for Culv, Class A, B and F

Recommendation - The JPOC is seeking approval of the use of PPP as shown in the tables in draft SPs, with the condition that PPP has passed deflection tests.

ACTION: Approved

Carol Aldrich, Secretary
Engineering Operations Committee

RA:

cc: EOC Members	M. DeLong	D. DeGraaf (MCA)
Meeting Guests	D. Jones	J. Becsey (APAM)
K. Steudle	C. Libiran	D. Needham (MAA)
L. Mester	R. Jorgenson (FHWA)	Monica Ackerson Ware (MRPA)
D. Wresinski	R. Brenke (ACEC Michigan)	
Region Engineers	G. Bukoski (MITA)	
Assoc. Region Engineers		
TSC Managers		