OLD BUSINESS

1. Approval of the August 9, Meeting Minutes – G. Johnson

The August 9, 2012, meeting minutes were approved as written.

2. MDOT Accelerated Bridge Construction (ABC) Policy – M. Chynoweth

The use of accelerated bridge construction techniques has the potential to decrease project impacts to the public, businesses and transportation users. Prefabricated Bridge Element Systems (PBES) such as precast superstructures, precast substructures and precast approaches allow for on-site construction that reduce user delay costs to the motorist and allow for increased quality control during fabrication.

FHWA, AASHTO and NCHRP have all published guidelines, details and methods for accelerated bridge construction techniques and considerations, and the practice has been well received and established in other state DOT’s. The MDOT policy focuses on evaluating every project as a potential ABC/PBES candidate, taking into account the following project specific criteria:

- Site Considerations
- Average Daily Traffic
- Delay or Detour Time
- User Costs
- Impact to Local Economy During Construction
- Safety
- Environmental Issues
- Technical Feasibility
- Quality Concerns

A guidance procedure is needed within MDOT to ensure that ABC techniques and typical PBES elements are given proper consideration during scoping and design phases of project development. The outlined procedures states that ABC/PBES project candidates will be identified during the Call for Projects process. Further evaluation will occur during the project development process. Final approval of selected
candidates for implementation will be made by the Statewide Alignment Team (Bridge) formerly known as the Bridge Committee.

**ACTION:** EOC approves the revised guidance document for distribution and use starting with the 2018 Call for Projects. The bridge design manual will also be updated to include additional details relating to accelerated bridge construction (ABC).

**NEW BUSINESS**

1. **MDOT compliance with FHWA Buy America requirements – J. Gutting**

   A technical agenda team was established in June 2012 to evaluate all aspects of Michigan Department of Transportation (MDOT) design specified materials, qualified products, and approved manufacturers/suppliers to ensure that Federal Highway Administration (FHWA) Buy America requirements are met. Buy America requirements are established in federal law per Title 23 of the Code of Federal Regulations (CFR), Section 635.410 and apply to all Federal Aid transportation projects. These requirements stipulate that all steel, iron materials and related products used on federally financed transportation work must be produced (manufactured, processed, altered, etc.) only in the United States.

   The team will be finalizing a draft policy for EOC review at the October 2012 meeting. EOC is requested to approve a draft Design Advisory for immediate distribution to design Project Managers. The Design Advisory clarifies Project Manager responsibilities regarding Buy America requirements.

   **ACTION:** EOC approves distributing the Design Advisory with minor revisions.

2. **MAP-21 changes in Value Engineering (VE) required thresholds – B. Wieferich**

   Title 23 CFR Part 627 under the authority of 23 USC Chapter 1, Section 106(e) required a Value Engineering Study be conducted before the advertisement/letting of all Federal Aid projects with an estimated total project (corridor) cost greater than $25 million for a road project, or $20 million total cost for a bridge project. Federal guidelines define “project” as a portion of a highway that a State proposes to construct, reconstruct, or improve as described in the preliminary design report or applicable environmental document.

   In 2008, the Transportation Funding Task Force (TF2) recommended that MDOT consider the expansion of VE to even more projects. At that time, MDOT considered applying VE to projects greater than $10 million. However, no actions were taken to formalize the guidance.

   MAP-21 now increases the minimum project (corridor) cost requirement for VE to $50 million for a project (corridor), or $40 million for a stand-alone bridge project. In addition, Design-Build projects are now exempt from VE requirements.

   **ACTION:** EOC approves continuing the current policy of requiring VE studies on all Federal Aid Projects with an estimated total project (corridor) cost greater than $25 million for a road project or $20 million total cost for a bridge project. However, future projects (corridors) that have a cost between $25 million and $50 million or stand-alone bridge projects with a cost between $20 million and $40 million may be exempt from VE on a project by project basis if approved by EOC.
3. **CMGC Recommendation for M-139 over the St. Joseph River in the City of Niles, Berrien County, CS 11021 / JN 104152 – C. Youngs**

The purpose of this project is to replace the historic Main Street Bridge (M-139 over the St. Joseph River) and improve the adjoining roadway geometrics. The existing bridge is a four-span reinforced concrete earth-filled arch that was constructed in 1919. The bridge is adjacent to a Riverfront Park, a Farmers Market and is in the vicinity of historic homes. The improvements to the bridge and surrounding area must be accomplished while preserving the nature and character of the City of Niles.

As noted in the FHWA’s Every Day counts website, there are several advantages of using the CMGC process. The contractor’s coordination with the owner, designer, and other stakeholders during the design process will allow for new innovations, reduced costs and schedule risks as a result of the contractor’s experience doing similar work. This process allows the project owner to employ new innovations, lead in the design process, and make informed decisions regarding cost and schedule. Additional benefits for using the CMGC process include mitigating risks, improving design quality, improving cost control and optimizing construction schedules. The owner’s investment is better protected in CMGC because the owner has more control over the way a project’s opportunities and risks are addressed, and the owner is able to retain the knowledge gained from coordinating with a contractor during the design of the project.

The project goals that are expected to be improved by the CMGC process are:

- Reducing Impacts to Local Businesses
- Minimizing Impacts on Vehicular and River Traffic
- Improved Constructability
- Pre-Construction Coordination with Local Stakeholders
- Expedited Construction
- Cost Control & Price Certainty

**ACTION:** EOC approves the use of a CMGC contracting approach on this project.

4. **Funding the Michigan Bottleneck Reduction Program – J. Firman**

Many locations on MDOT’s trunkline system experience recurring traffic congestion which results in significant delay to the traveling public and commercial traffic. This congestion and delay is costly to individuals and businesses in terms of lost time/productivity, increased crashes and higher vehicle operating costs. Negative environment impacts also result in the form of increased vehicle emissions.

Operational fixes to address location specific congestion are typically funded with Rehabilitation and Reconstruction (R&R) funds. However, congestion and traffic patterns can change rapidly (within a few years) while R&R project funding is typically available once every 15 to 20 years depending on the location. A Bottleneck Reduction Program is intended to meet the shorter term funding needs to address these bottleneck locations. In 2010, this proposed program was presented to the Region/Bureau Management Team (RBMT) and received support. The regions have incorporated some locations into proposed R&R projects. However, funding does not presently exist to fund all of the proposed bottleneck projects.
Time of Return (TOR) analysis of existing candidate projects indicates that a bottleneck program would be highly cost effective. On average, the time of return on the proposed investment is less than one year for many of the recommended projects.

EOC is requested to support the creation of budget template item for a Bottleneck Reduction Program.

**ACTION:** EOC, as the Department’s senior technical committee, supports this concept. EOC will recommend to the Program Steering Committee that this new budget template item be given strong consideration.

Steven Bower, Secretary  
Engineering Operations Committee