

Industry Safety and Constructability Review During Design I-69 Reconstruct at I-475 in Genesee County JN 132026, 201632, 204861

Executive Summary:

The goal of the Pilot Project is to test the waters on Industry review of maintaining traffic and staging plans early in the development process. The WZSTF sub-team (Action Team #3) has identified this review as an opportunity to obtain industry perspective on the safety and constructability of a proposed project.

To provide an open and equal opportunity for all potential bidders to review, the pilot will be placed on the Innovative Contracting Web Site (Link: https://www.michigan.gov/mdot/0,1607,7-151-9625_21539_53226---,00.html). MDOT will also post a contractor announcement on the Bid Letting webpage as well as an announcement on MITA's website. This will be reviewed by MDOT based on feedback from the industry. MDOT will provide a compilation of the number of comments submitted on the pilot for all stakeholder's benefit. This has the potential to improve safety, identify construction challenges and enhance the design during the development process. It is intended for use on projects which have complex staging with high mobility requirements.

Disclaimer:

The following documents are in DRAFT format and are provided for informational purposes only. These documents are subject to further revision and are not to be relied upon for bidding or estimating purposes. Under no circumstances are these documents to be submitted or relied upon as part of a request for additional time or compensation, or in support of any type of claim. MDOT specifically disclaims any liability arising out of the use of these documents for any purpose.

Documents:

- Summary Sheet
- Title Sheet
- Typical Sheets
- Detour Routes
- Staging Typical
- Bridge Summary Sheets
- Staging Plan Sheets
- Alignment, Removal, Construction, Drainage and Environmental Plan Sheets
- Profile Sheets

Contact:

All comments must be made by E-mail to the Project Manager by November 13, 2020. E-mails must include I-69 Pilot Project in the E-mail Title, Name of Inquiring Person, Company Name and Phone Number. All comments will be posted on the Innovative Contracting webpage. MDOT will not reply to the provided comments.

- Project Manager – Trevor Block - BlockT2@michigan.gov

Industry Constructability and Safety Review During Design
Summary of I-69 Reconstruction in Genesee County
JN 132026, 201632, 204861

A. Scope of Work

a. Road (JN 132026)

i. 5.256 mi of Reconstruction (Alternate Pavement Bid)

1. Mainline I-69 from Fenton Road to Dort Highway (M-54)
2. All Ramps from Fenton Road to Dort Highway, including all ramps in the I-475 Interchange and the ramps on the west half of the Dort Highway Interchange
3. 8th Street and 9th Street Service Drives (Reducing each from 3 lanes to 2 lanes)

ii. Replacement of all drainage features, median barrier wall, freeway lighting, freeway signing, pavement markings, landscaping

b. Bridge CPM (JN 201632)

- i. Misc. Repairs (Epoxy Overlay, Deck Patching, Substructure Patching, Scour Countermeasures, Joint Replacement, etc.) on 15 Structures within the I-69 Road project limits and just north of I-69 on I-475

c. Bridge Preservation (JN 204861)

i. Deck/Superstructure Replacement, Bridge Approaches, and Misc. CPM Treatments

1. EB I-69 over I-475
2. WB I-69 over I-475
3. EB I-69 Entrance Ramp from 9th Street over EB I-69 to NB/SB I-475 Ramp
4. WB I-69 Exit Ramp to 8th Street over NB/SB I-475 to WB I-69 Ramp
5. SB I-475 Entrance Ramp from SB Chavez Drive over SB I-475 to WB I-69 Ramp
6. NB I-475 Exit Ramp to NB Chavez Drive over WB I-69 to NB I-475 Ramp

d. Project is being designed in a Project PDF Format

e. See attached, below, for various APB Pavement Sections

f. Construction Costs

- i. Road = \$50 Million
- ii. Bridge = \$25 Million

g. Anticipated Letting Date – March 05, 2021

h. Anticipating two construction seasons – 2021 & 2022

B. Maintaining Traffic (Currently Proposed with 3 Stages)

a. Stage 1A – Single lane closures and shoulder closures on EB I-69 for minor widening on outside shoulder

b. Stage 1B – Single lane closure on EB I-69 for median shoulder improvements

c. Stage 2A – Maintain 2 lanes of traffic in each direction on EB I-69

- i. Maintain a third WB lane on WB I-69 for access to I-475
- ii. All ramps from I-475 to I-69 are closed for reconstruction

- iii. Various other ramp and bridge closures
 - d. Stage 2B – Same as Stage 2A, but flip part-width construction from I-475 to Dort Highway where the third WB I-69 lane is being maintained
 - e. Stage 2C – Maintain 2 lanes EB on EB I-69 and 2 lanes WB on WB I-69, maintaining the third WB I-69 lane on WB I-69 for additional capacity to access I-475 (Median construction)
 - f. Stage 3A – Maintain 2 lanes in each direction on WB I-69
 - i. All ramps from I-69 to I-475 are closed for reconstruction
 - ii. Various other ramp and bridge closures
 - g. Stage 3B – Same as 3A, but open up access for a third lane to allow movement from WB I-69 to NB/SB I-475
- C. Complexities
 - a. Work is being performed on 18 different roadways within a length of just over 2 miles. The possibilities for staging are endless, however, the ability to be efficient with construction is compromised when increasing the number of stages to be more flexible with mobility.
 - b. I-69 is primarily depressed freeway through the project limits. Cut slopes provide little horizontal freedom for temporary paving strategies to increase lateral buffers.
 - c. The project is adjacent to downtown Flint, with certain closures limiting access to the city. Great care has to be taken to not eliminate the access to move easily in and out of Flint.