OLD BUSINESS

1. Approval of the June 2, 2011, Meeting Minutes

The June 2, 2011, meeting minutes were approved.

NEW BUSINESS

1. Pavement Selections – B. Krom

   a. M-104 Reconstruction: CS 70081 JN 105708, 40542, 113384

   The reconstruction alternatives being considered are a Hot Mix Asphalt Pavement (HMA Alternative 1 – EUAC $61,756/mile) and a Jointed Plain Concrete Pavement (JPCP Alternative 2 – EUAC $77,754/mile). A life cycle cost analysis was performed and Alternative 1 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

   1.5”................................................................. HMA, 5E3, Top Course (mainline)
   2”......................................................................... HMA, 4E3, Leveling Course (mainline)
   3.25”................................................................. HMA, 3E3, Base Course (mainline)
   1.5”................................. HMA, 5E03, Top Course (shoulders)
   2”......................................................................... HMA, 4E03, Leveling Course (shoulders)
   3.25”................................................................. HMA, 3E03, Base Course (shoulders)
   6”................................................................. Open-Graded Drainage Course, Mod
   18”............................................................................. Sand Subbase
   6” dia............................................................. Subbase Underdrain System
   30.75”............................................................. Total Section Thickness

   Present Value Initial Construction Cost.............................. $1,105,013/directional mile
   Present Value Initial User Cost.................................................. $31,449/directional mile
   Present Value Maintenance Cost................................................ $191,257/directional mile
b. M-231 Construction: CS 70114 JN 88889

The reconstruction alternatives being considered are a Hot Mix Asphalt Pavement (HMA Alternative 1 – EUAC $44,951/mile) and a Jointed Plain Concrete Pavement (JPCP Alternative 2 – EUAC $51,646/mile). A life cycle cost analysis was performed and Alternative 1 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

1.5”........................................................................................... HMA, 5E10, Top Course (mainline)
2”...................................................................................... HMA, 4E10, Leveling Course (mainline)
3.75”........................................................................................HMA, 3E10, Base Course (mainline)
1.5”..........................................................................................HMA, 5E03, Top Course (shoulders)
2”..................................................................................... HMA, 4E03, Leveling Course (shoulders)
3.75”.......................................................................................HMA, 3E03, Base Course (shoulders)
6”.............................................................................................Open-Graded Drainage Course, Mod
18”............................................................................................................................ Sand Subbase
6” dia.....................................................................................................Subbase Underdrain System
31.25”...........................................................................................................Total Section Thickness

Present Value Initial Construction Cost.................................................... $751,740/directional mile
Present Value Initial User Cost............................................................................$0/directional mile
Present Value Maintenance Cost .............................................................. $120,604/directional mile

c. M-24 Reconstruction: CS 44011 & 44012 JN 48945

The reconstruction alternatives being considered are a Hot Mix Asphalt Pavement (HMA Alternative 1 – EUAC $69,576/mile) and a Jointed Plain Concrete Pavement (JPCP Alternative 2 – EUAC $88,215/mile). A life cycle cost analysis was performed and Alternative 1 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

1.5”...............................................................................................................HMA, 5E3, Top Course
2”.......................................................................................................... HMA, 4E3, Leveling Course
3.75”........................................................................................................... HMA, 3E3, Base Course
6”............................................................................................................................. Aggregate Base
18”............................................................................................................................ Sand Subbase
6” dia.....................................................................................................Subbase Underdrain System
31.25”...........................................................................................................Total Section Thickness

Present Value Initial Construction Cost................................................. $1,111,294/directional mile
Present Value Initial User Cost.................................................................................. $0/directional mile
Present Value Maintenance Cost .............................................................. $246,789/directional mile


There are issues to be addressed concerning this item with the proposed maintaining traffic typicals. Items for review include requirements for measuring light source with light meters, providing for light plants with a minimum 10 foot/candles per MIOSHA regulations, and advanced signing possibly including changeable message signs.
ACTION: This item is tabled until the October meeting. Further reviews of the typicals will be submitted and coordinated through the region liaisons.

(Signed Copy on File at C&T)
Eric Burns for Brenda J. O’Brien, Secretary
Engineering Operations Committee

cc:  K. Steudle  D. Jackson  R. Jorgenson (FHWA)
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     EOC Members  D. Wresinski  G. Bukoski (MITA)
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