

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE



FILE: STPIM-0075-03(210) **OFFICE:** Program Delivery
Gordon County
PI # 610930
I-75 @ SR 136 Interchange **DATE:** October 28, 2009

FROM: Bobby K. Hilliard, P.E., State Program Delivery Engineer

B.K.

TO: Ronald E. Wishon, Project Review Engineer

ATTN: Lisa Myers

SUBJECT Value Engineering Implementation Revision Request

This office requests a Value Engineering (VE) Study Implementation Revision on the above noted projects. The VE Implementation letter was sent to your office on June 2, 2009.

This office requests to revise the implementation of alternative No. BR-4. This alternative recommended removing the end spans and use MSE walled abutments. During the preliminary bridge layout review by GDOT Bridge Department Mr. Bill Duvall noted that revising the preliminary bridge layout from a Four Span Bridge over I-75 to a Two Span Bridge created additional 7,200 SF surface area that was not noted during the V.E. Study. In addition there is 90 feet of roadway additional cost due to the 90 feet of reduction in bridge length.

Therefore, this office proposes reversing the V.E. recommendation # BR-4 and using the original Four span bridge over Interstate I-75 as recommended by GDOT Bridge Design Office.

Additionally, Base on Bridge Design calculations, this alternate would have a potential cost increase of \$67,630.00 I have attached a copy of Bridge Design Letter Dated October 19 2009 of their review and recommendation for this reversal.

If you have any questions about this request or need additional information please contact the project manager, Robert Murphy, at 404-631-1586.

Approved: Ronald E. Wishon Date: 11/4/09

Ronald E. Wishon, Project Review Engineer

Approved: Gerald M. Ross Date: 11/9/09

Gerald M. Ross, PE, Chief Engineer

Approved: Richard Wayne Fedora Date: 11/25/2009

for

Rodney Barry, PE, FHWA Division Administrator

BKH:MAH:RPM

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE STPIM-0075-03(210) GORDON COUNTY **OFFICE** Atlanta, GA
P.I. No. 610930 **DATE** October 19, 2009

FROM  Paul V. Liles, Jr., P.E., State Bridge Engineer

TO Bobby Hilliard, P.E., State Program Delivery Engineer
Attn: Robert Murphy

SUBJECT SR 136 BRIDGE OVER I-75 – PRELIMINARY LAYOUT

The Bridge Office provided comments based on our review of the Preliminary Layout in February, 2009. Since that review a VE Study, Report and Implementation for this project was completed. The accepted implementation modified the bridge over I-75 from a four span structure with endroll abutments to a two span bridge with MSE wall abutments.

The revised preliminary layout, incorporating the VE implementation, was recently received for our review. This submittal also included preliminary retaining wall plans for walls 1, 2, 3 and 4. Based on the findings in the VE Study, the potential savings for this alternative is \$171,000. The abutment walls (Walls 1 and 2) provided by the consultant have a surface area which is approximately 7,200 SF greater than that provided in the VE cost worksheet. In addition, there is 90 feet of roadway cost due to the 90 feet reduction in bridge length. Based on our calculation this alternate would have a potential cost increase of \$67,630. This does not include any added cost for staging the wall construction, additional design cost or cost for added geotechnical foundation investigations for the walls. Based on this estimate, please request a reversal with this VE alternative and return to the proposed 4 span bridge with endroll abutments.

The preliminary layouts for the bridge and retaining walls have been reviewed and contain our comments. Please be aware, it appears that a type P Wall would be more appropriate for Wall No. 4 in lieu of an MSE wall. This wall is approximately 11 feet tall at its highest point. After corrections are made, please provide two full-size sets of corrected plans along with our original mark-ups. In addition, we need plan, profile, typical sections and cross sections in the vicinity of the retaining walls to complete our review.

If you have any comments or concerns, please contact Bill DuVall at (404) 631-1883.

PVL:WMD

enclosure

cc: Ron Wishon, Engineering Services
Bill DuVall, Bridge Design, Attn: Susan Beck

cc: Ron Wishon, Engineering Services
Bill DuVall, Bridge Design attn: Susan Beck

