

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: MLP-87(45) Dodge/Bleckley
P. I. No.: 222410
U.S. 27/S.R. 87 Widening/Reconstruction

OFFICE: Engineering Services

DATE: January 23, 2008

FROM: Brian Summers, P.E., Project Review Engineer *REW*

TO: Brent Story, P.E. State Road and Airport Design Engineer

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & LCC	Implement	Comments
EARTHWORK				
E-1	Review Profile Grade/Retain Existing Pavement	(proposed) \$3,200,000 (actual) \$1,900,000	Yes	The profile will be modified in the areas noted in the VE Study Report. The existing pavement is in deteriorating condition and will need to be replaced.
TYPICAL SECTIONS				
1-5	Reduce Clear Zone width	\$1,100,000	Yes	The 6:1 front slopes will be changed to 4:1. The required Clear Zone limits will still be provided and would fall within the limits of the ditch.
2-1	Use Flush Median in Section 2 (Sta. 109+00 to Sta. 135+00) in lieu of a Raised Median	\$105,000	Yes	This should be done.
2-4	If a Raised Median is used, reduce the width and eliminate one opening	\$40,000	N/A	This does not apply since VE Alternative No. 2-1 is being implemented.

ALT No.	Description	Savings PW & LCC	Implement	Comments
TYPICAL SECTIONS - continued				
7-5	Use Flush Median with Curb and Gutter in Section 7 (Sta. 542+00 to Sta. 590+00)	\$380,000	No	Would still impact several parcels. In addition, the terrain will make it necessary to include ditches for drainage purposes.
5-1	Use 44' Median in Section 5 (Sta. 344+00 to Sta. 388+00)	\$140,000	No	Results in additional impacts to homes and the Railroad.
INTERSECTIONS				
4-3	Eliminate Skew at Wilson Woodard Road	Design Suggestion	No	The skew angle is being improved from what is in place now and will be almost 65 degrees. This skew was necessary to avoid a potentially eligible Historic Resource and a Fire Station.
7-6	Eliminate intersection with CR 284	\$45,000	Yes	This should be done.

A meeting was held on January 23, 2008 to discuss the above recommendations. Brent Story, Andy Casey, Tim Matthews, and Joshua Taylor with Road Design, and Brian Summers, Ron Wishon and Lisa Myers with Engineering Services were in attendance. Additional information was provided by the Design Office on January 23, 2008.

The results above reflect the consensus of those in attendance and those who provided input.

Approved: *Gerald M. Ross* Date: 1/29/08
Gerald M. Ross, P. E., Chief Engineer

BKS/REW

Attachments

- c: Gus Shanine
- Todd Long
- James Magnus
- Rusty Merritt

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P.I. No. 222410

VE Study Implementation

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Tim Matthews

Joshua Taylor

Bruce Hart

Ken Werho

Nabil Raad

Lisa Myers

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INTERDEPARTMENT CORRESPONDENCE



FILE MLP-87(45) Dodge / Bleckley Counties
P.I. No. 222410
US 23 / SR 87 Widening & Reconstruction

OFFICE Road Design
Atlanta, Georgia

DATE January 23, 2008

FROM 
Brent A. Story, P.E., State Road & Airport Design Engineer

TO Brian Summers, P.E., Project Review Engineer

SUBJECT Value Engineering Study Final Report Response (REVISED)

This is the response to the VE study conducted on November 5-8, 2007 for the above referenced projects. The VE study recommendations/responses are listed in the table below.

Idea No.	Description	Response
E-1 REVISED	Review the vertical alignment with the goal of keeping the new profile as close to the existing as possible, and specifically consider retaining some or all of the existing pavement in the 44' median sections of the project.	The vertical profile will be adjusted from Stations 195+00 to 212+00 and Stations 422+00 to 448+00 to bring the profile closer to the existing ground, thus alleviating unnecessary cut and fill sections. The existing pavement evaluation states that the mainline pavement is in poor condition. Even with the existing maintenance project (overlay only), to retain any pavement would result in a horizontal alignment shift and additional RW impacts. Full depth replacement is recommended here.
1-5 REVISED	Reduce the clear zone for Sta. 90+00 to Sta. 109+00 and Sta. 109+00 to Sta. 135+00 to 22'. Reduce the clear zone for Sta. 135+00 to Sta. 264+00 and Sta. 542+00 to Sta. 590+00 to 24'.	We will reduce 6:1 front slopes to 4:1. The maximum speed design (55 mph) requires 26'-32' of clear zone to comply with the 2003 Roadside Design Guide. We will adhere to at least 26' of clear zone (10' shoulders + 12' front slopes + 4' flat bottom ditch = 26') throughout the project. Will be implemented.
2-1 REVISED	Use a 14' flush median from Sta. 109+00 to Sta. 135+00 in lieu of a raised median.	District reported no access issues. Will be implemented.
2-4	If Idea No. 2-1 cannot be accomplished, reduce the width of the raised median from 24' to 12' from Sta. 109+00 to Sta. 135+00. Also, eliminate the proposed median opening at Sta. 122+00.	N/A due to 2-1 being implemented.
7-5 REVISED	Use an Urban Shoulder (Curb & Gutter) from Sta. 542+00 to Sta. 591+00.	Adding curb and gutter in this section would cause greater impacts than a rural shoulder.

		The preferred urban shoulder is 16 ft wide were as the rural is 10 ft wide. Additionally, the grade of the roadway is above the parcel terrain which could require ditches for drainage purposed. Will not implement.
5-1 REVISED	Use a 44' depressed median from Sta. 344+00 to 388+00.	Changes would cause Additional impacts to homes & RR. Will not implement.
4-3 REVISED	Eliminate the 64.8° intersection skew angle at Wilson Woodard Road and SR 87. Adjust the alignment such that the skew angle will be a minimum of 70° as required under GDOT design standards, thereby not requiring a design variance.	This does not require Design Variance due to concept approval date. In addition, revising Wilson and Gresston Rd would require additional impacts to a Church, Fire house & historic property. Gresston Church as an established site plan that takes in to account the current design of the roadway. Changes to this area would adversely affect the Church. Will not implement.
7-6	Eliminate the intersection of CR 284 and SR 87.	GDOT will coordinate with local officials to determine the feasibility of closing CR 284. Upon approval from the County, we will make the revision.

If there are any questions or comments concerning these recommendations, please contact Tim Matthews at (404) 656-5406.

BAS:CAC:TWM:jbt

cc: Todd Long, Director of Preconstruction
 Brent Story/Tim Matthews, Road Design
 Bruce Hart, OEL
 Ken Werho/Nabil Raad, Traffic Safety and Design
 Lisa Myers, Engineering Services