DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: NH000-0089-01(026) Baldwin
P.I. No.: 231450
SR 49 Felton Rd. to Milledgeville Bypass

OFFICE: Engineering Services

DATE: May 18, 2011

FROM: Ronald E. Wishon, State Project Review Engineer REW

TO: Sean Bush, District Design Squad Leader, Tennille

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held February 8-11, 2011. Responses were received on May 18, 2011. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
G-1	Start the project west of Horace Veal/Allen Memorial Drive intersection at Sta. 412+00	$1,100,000	No	The concept was revised in 2002 to include this portion of the work due to multiple requests from the county, dating back to 1997.
ROW-3/ ROW-4	Modify shoulders and slopes to reduce ROW impacts	$235,000	Yes	This will be done.
R-1	Reduce extent of driveway reconstruction	Proposed = $24,000 Actual = $10,444	Yes, with modifications	Driveways were reduced where possible.
R-2	Reduce lane width to 11 feet between Horace Veal Drive/Allen Memorial Drive and US 441/SR 29	$245,000	No	SR 49 is classified as an Urban Principal Arterial. Traffic volumes are 15,400 ADT for 2014 and 23,800 ADT for 2034. The speed design is 55 mph. Given the functional class and volume configuration, AASHTO recommends 12 ft travel lanes. Additionally, there have been 16 sideswipe crashes between 2006 and 2008.
R-3	Retain existing bridge approach slabs and overly approach slabs with asphalt	$62,000	Yes	This will be done.

D-1	Use cross drains to reduce the amount of longitudinal pipe runs from Sta. 493+00 to Sta. 513+80	$30,000	Yes	This will be done.
D-2	Delete 18 inch cross drain at Sta. 530+25 and discharge from catch basin on the south side of the road directly into existing ditch	$1,300	Yes	This will be done.
D-3	Eliminate 18 inch storm drain pipe from manhole H-4 to H-5 and discharge storm water directly into existing ditch that flows directly to creek from existing swale	$16,000	Yes	This will be done.
D-4	Install a new drainage structure at Sta. 445+52 to eliminate three concrete flumes	$21,000	Yes	This will be done.
D-5	Install a new drainage structure at Sta. 458+20 to eliminate two concrete flumes	Proposed = $12,000 Actual = $9,203	Yes, with modifications	Since one of the two flumes is downstream of the suggested 1019A, TPE, only one flume can be eliminated. The second one can be shifted down grade and reduced in length.
E-1	Retain the existing vertical profile on SR 49 from Sta. 513+00 to Sta. 522+00 and request a Design Exception for the design speed in this area	$165,000	Yes	This will be done.
E-2	Retain the existing vertical profile from Sta. 513+00 to Sta. 518+50 and raise the proposed profile from Sta. 518+50 to Sta. 523+00 to correct the existing vertical profile to meet design speed requirements	$107,000	No	Since E-1 will be implemented, this will not be done.

S-1	Do not modify bridge and do not add sidewalk on the south side of SR 49 from Frank Bone Road east	$367,000	Yes	This will be done.
S-2	Extend the sidewalk construction on both sides of the road to the end of the existing sidewalk east of Lake Drive	Design Suggestion	No	Extending the sidewalk beyond the project limits would require a concept revision, as well as revised environmental studies. The revised project limits would require reconstruction of a portion of Lake Drive.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved: _____ **Date:** 5/20/11
Gerald M. Ross, PE, Chief Engineer

REW/LLM
Attachments
c: Ben Buchan
George Brewer/Alan Smith/Sean Bush/Marc Jordan
Paul Liles/Ben Rabun/Bill Duvall/Bill Ingalsbe
Jim Kitchings
Jimmy Smith/Lynn Bean
Ken Werho
Nabil Raad
Lisa Myers
Matt Sanders

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

DATE May 18, 2011

FROM: Sean Bush, District Design Squad Leader

TO: Ronald E. Wishon, State Project Review Engineer

Attn: Matt Sanders

SUBJECT: NH-00-0089-01(026) – Baldwin County
P.I. No.: 231450
Value Engineering Study: Response to Recommendations

These are the responses to the Value Engineering Alternatives recommended by the Value Engineering Team:

ALT No.	Description	Savings PW & LCC	Implement	Comments
D-1	Use cross-drains to reduce the amount of longitudinal pipe runs from Sta. 493+00 to Sta. 513+80	$ 30,000.00	Yes	
D-2	Delete the cross-drain on the west side of bridge and discharge from the curb inlet on south side of the road directly to the creek	$ 1,300.00	Yes	
D-3	Eliminate 18 in. storm drain pipe from manhole H-4 to H-5 and discharge storm water directly into ditch that flows directly to creek from existing swale.	$ 16,000.00	Yes	
D-4	Install a new drainage structure at Sta. 445+52 to eliminate two concrete flumes	$ 21,000.00	Yes	
D-5	Install a new drainage structure at Sta. 458+20	$9,203.30	Yes, with modifications	Since one of the two flumes is downstream of the suggested 1019A,

	to eliminate two concrete flumes			TPE, only one flume can be eliminated. However, the second one can be shifted downgrade & therefore be reduced in length.
E-1	Retain the existing vertical profile on SR 49 from sta. 513+00 to 522+00 and request a Design Exception for the design speed in this area	$ 165,000	Yes	
E-2	Retain the existing vertical profile from Sta. 513+00 to 513+50 and raise the proposed profile from Sta. 518+50 to Sta. 523+00 to correct the existing vertical profile for speed design	$ 107,000	No	Do Not Implement due to implementation of E-1.
G-1	Start the project west of Horace Veal / Allen Memorial Drive intersection at approximately Sta. 412+00	$ 1,100,000	No	The concept was revised in 2002 to include this portion of work due to multiple requests from the county dated as far back as 1997.
R-1	Reduce the extent of driveway construction	$ 10,444.13	Yes, with modifications	Driveways were reduced where possible.
R-2	Reduce lane widths to 11 ft. wide between Horace Veal Drive / Allen Memorial Drive and US 441 / SR 29	$245,000	No	SR 49 is classified as an Urban Principal Arterial. The traffic volumes are 15,400 ADT for 2014 and 23,800 ADT for 2034. The speed design is 55 mph. Given the functional class and traffic volume, AASHTO specifies 12 ft travel lanes. Additionally, there have been 16 sideswipe crashes between 2006 & 2008.
R-3	Retain existing bridge approach slabs and overlay approach slabs with an asphalt overlay	$ 62,000	Yes	
ROW-3 / 4	Modify shoulders and slopes to reduce right of way impacts	$ 235,000	Yes	
S-1	Do not modify bridge and do not add sidewalk on the south side of SR 49 from Frank Bone Rd east	$ 367,000	Yes	

S-2	Extend the sidewalk construction on both sides of the road to the end of the existing sidewalks east of Lake Drive	Design Suggestion	No	Extending the sidewalk would be beyond the project limits and would require a concept revision as well as revised environmental studies. Additionally, the revised project limits would require reconstruction of a portion of Lake Drive.

If any further assistance is needed, please contact Sean Bush at (478) 552-4641.

Cost Savings for Alternative D-5

Station	Side	Description	Length	Class A Concrete	Bar Reinf Steel	Sand Cement Bag Rip Rap	Manhole, GDOT STD 1011A	Additional Depth	Drop Inlet, GDOT STD 1019A, TP E	Additional Depth
			LF	CY	LBS	SY	EA	LF	EA	LF
458+00	RT	Concrete Flume	50	9.12	107.8	2.333				
459+00	RT	Concrete Flume	60	10.426	121.16	2.333				
458+42	RT	Manhole					1	4		
Proposed Reductions				19.546	228.96	4.666	1	4		
458+20	RT	Drop Inlet							1	4
459+85	RT	Concrete Flume	35	7.161	87.76	2.333				
Proposed Additions				7.161	87.76	2.333	0	0	1	4
TOTAL REDUCTIONS				12.385	141.2	2.333	1	4	1	4

Items to be removed for Alternate R-1

Item #	Description	Unit	QTY	Unit Cost	Cost
500-3101	Class A Concrete	CY	19.546	$ 671.56	$ 13,126.31
511-1000	Cbar Reinf Steel	LBS	228.96	$ 1.04	$ 238.12
603-6006	Sand Cement Bag Rip Rap, 6 in	SY	4.666	$ 108.79	$ 507.61
668-4300	Storm Sewer Manhole, GP 1	EA	1	$ 2,250.50	$ 2,250.50
668-4300	Storm Sewer Manhole, TP1, Additional Depth	LF	4	$ 267.39	$ 1,069.56
				Total Reductions	$ 17,192.10

Items to be added for Alternate R-1

Item #	Description	Unit	QTY	Unit Cost	Cost
500-3101	Class A Concrete	CY	7.161	$ 671.56	$ 4,809.04
511-1000	Cbar Reinf Steel	LBS	87.76	$ 1.04	$ 91.27
603-6006	Sand Cement Bag Rip Rap, 6 in	SY	2.333	$ 108.79	$ 253.81
668-4300	Storm Sewer Manhole, GP 1	EA	1	$ 2,309.13	$ 2,309.13
668-4300	Storm Sewer Manhole, TP1, Additional Depth	LF	4	$ 131.39	$ 525.56
				Total Additions	$ 7,988.81

Savings for Alternate R-1 $ 9,203.30

Cost Savings for Alternative R-1

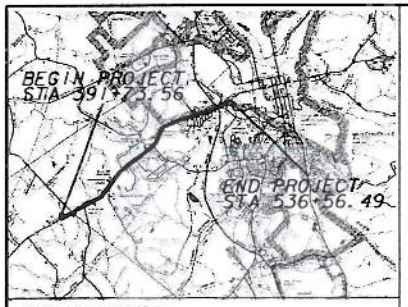
Drive Number	Station	Side	SF	Amount of Reduction: Asphalt SY	Asphalt SY	Concrete SY
1	11+22	L	140	15.6		
2	397+31	R	0	0.0		
3	398+17	L		0.0		
4	398+83	L	294	32.7		
5	399+42	R	70	7.8		
6	400+53	R	182	20.2		
7	401+80	R	42	4.7		
8	403+70	L		0.0		
9	408+15	L		0.0		
10	409+80	L	98			10.9
11	409+48	R	490	54.4		
12	414+33	L	532	59.1		
13	415+89	L	168		18.7	
14	435+11	R	700	77.8		
15	436+02	L	1335		148.4	
16	433+14	L	745		82.7	
17	450+92	R	126	14.0		
18	457+36	L		0.0		
19	164+04	R		0.0		
20	463+94	R		0.0		
21	473+73	R	267	29.6		
22	481+93	R	336	37.3		
23	485+27	R	90	10.0		
24	486+35	R	145	16.1		
25	509+59	L	171	19.0		
26	509+76	R	74			8.2
27	510+71	R	114			12.7
28	511+48	R	135	15.0		
29	512+38	R				0.0
				413.2	**249.8**	**31.8**
				Res	**Com**	**Conc**
				Asphalt		Concrete

Residential Driveway Composition				12.5mm	19mm	Tack
12.5mm	165	413.2	35.1	35.1		
19mm	220	413.2	46.8		46.8	
Tack	0.04	413.2	16.52844			16.5
Commercial Driveway Composition				12.5mm	19mm	Tack
12.5mm	165	249.8	21.2	21.2		
19mm	440	249.8	56.6		56.6	
Tack	0.04	249.8	9.991733			10.0
TOTALS				**56.3**	**103.4**	**26.5**

Drive Concrete	SY
	31.8

Pay Item	Description	QTY	Unit	Unit Price	COST
441-0016	Driveway Concrete, 6 in tk	31.8	SY	$ 37.90	$ 1,206.06
402-3130	12.5 mm Asphalt	56.3	TN	$ 65.00	$ 3,662.06
402-3190	19 mm Asphalt	103.4	TN	$ 65.00	$ 6,722.40
413-1000	Tack	26.5	GL	$ 2.25	$ 59.67
Total Savings					**$ 10,444.13**

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	NH000-0089-01(026)	1	00



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PLAN AND PROFILE OF PROPOSED SR 49 FROM JUST WEST OF FELTON DR TO EAST OF MILLEDGEVILLE BYPASS

FEDERAL AID PROJECT
NH000-0089-01(026)
BALDWIN COUNTY

FEDERAL ROUTE • NH-891
STATE ROUTE • 49
PI: NO. 231450

PROJECT MID POINT
N 1117581.621
E 318485.563
STA 464+15.02

DESIGN DATA:

TRAFFIC A.D.T.:	15400 (2014)
TRAFFIC A.D.T.:	23800 (2034)
S.U.:	6%
COMB:	2%
24 HR. TRUCKS %:	8%
SPEED DESIGN:	45 MPH

FUNCTIONAL CLASSIFICATION:
URBAN PRINCIPAL ARTERIAL

NOTE:
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS, DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION WITH THIS DOCUMENT, TO " STATE HIGHWAY DEPARTMENT OF GEORGIA ", "STATE HIGHWAY DEPARTMENT ", GEORGIA STATE HIGHWAY DEPARTMENT ", " HIGHWAY DEPARTMENT ", OR " DEPARTMENT " WHEN THE CONTEXT THEREOF MEANS THE STATE HIGHWAY DEPARTMENT OF GEORGIA MEAN, AND SHALL BE DEEMED TO MEAN THE DEPARTMENT OF TRANSPORTATION.

PREPARED BY: Robert W. Holtapp, Jr.
DESIGN ENGINEER 2

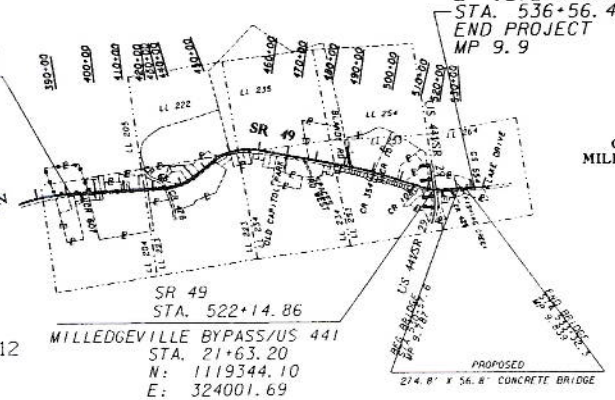
RECOMMENDED FOR SUBMISSION BY: Douglas Alan Smith
DISTRICT DESIGN ENGINEER

SUBMITTED BY: George Brewer
DISTRICT PRECONSTRUCTION ENGINEER

APPROVED BY: James H. Smith, PE
DISTRICT ENGINEER

N 1112857.241
E 313305.984
STA. 391+73.56
BEGIN PROJECT
MP 7.1

N 1120135.307
E 325205.292
STA. 536+56.49
END PROJECT
MP 9.9



SR 49
STA. 522+14.86
MILLEDGEVILLE BYPASS/US 441
STA. 21+63.20
N: 1119344.10
E: 324001.69

HORIZONTAL DATUM NAD83
VERTICAL DATUM NAVD88
ZONE GEORGIA EAST

PROJECT UNITS IMPERIAL
PROJECT DESIGNATION EXEMPT
LOCATION AND DESIGN APPROVAL : 4-5-2000

THIS PROJECT IS 100% IN CONGRESSIONAL DISTRICT NO. 12
THIS PROJECT IS 100% IN BALDWIN CO.
GMD 320,321
LAND LOTS 204,222,223,234,235,253,264
LD 1

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

SCALE IN FEET
0 1000 2000 4000

LENGTH OF PROJECT	BALDWIN COUNTY CODE 009
	MILES
NET LENGTH OF ROADWAY	2.688
NET LENGTH OF BRIDGES	0.052
NET LENGTH OF PROJECT	2.743
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF PROJECT	2.743

DATE	CHIEF ENGINEER
PLANS COMPLETED	- -
REVISIONS	

PRECONSTRUCTION STATUS REPORT FOR PI:231450-

SR 49 FM JUST W. OF FELTON RD TO EAST OF MILLEDGEVILLE BYP

PROJ ID :	231450-	**MPO:**	Not Urban	**PRIORITY CODE:**		**MGMT LET DATE :**	03/15/2014
COUNTY :	Baldwin	**TIP #:**		**DOT DIST:**	2	**MGMT ROW DATE :**	01/15/2012
LENGTH (MI)	2.80	**MODEL YR :**		**CONG. DIST:**	12	**BASELINE LET DATE:**	03/03/2014
PROJ NO.:	NH000-0089-01(026)	**TYPE WORK:**	Widening	**BIKE:**	Y	**SCHED LET DATE :**	10/18/2013
PROJ MGR:	Bush, Sean	**CONCEPT:**	ADD 5R(MED 14)	**MEASURE:**	E	**WHO LETS?:**	GDOT Let
AOHD Initials:	GMB	**PROG TYPE:**	Reconstruction/Rehabilitation	**NEEDS SCORE:**	06	**LET WITH :**	
OFFICE :	District 2	**Prov. for ITS:**	N	**BRIDGE SUFF:**	67.77		
CONSULTANT:	No Consultant, GDOT In-House Design	**BOND PROJ :**					
SPONSOR :	GDOT						
DESIGN FIRM:	GDOT D2 Design Office						

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%
				Concept Development	5/8/2002	7/1/2002	100
				Concept Meeting	12/2/1999	12/2/1999	100
				PM Submit Concept Report	3/16/2000	3/16/2000	100
				Receive Preconstruction Concept Approval	2/16/2000	3/17/2000	100
				Management Concept Approval Complete	**5/8/2002**	**5/10/2002**	**100**
6/7/2010	7/21/2010		6/9/2011	Value Engineering Study	8/2/2010		86
				Public Information Open House Held	1/4/2001	1/4/2001	100
				Environmental Approval	**7/1/2000**	**11/10/2003**	**100**
				Mapping	1/24/2000	2/7/2000	100
				Field Surveys/SDE	6/12/2000	6/2/2001	100
				Preliminary Plans	**7/24/2001**	**4/2/2007**	**100**
				Preliminary Bridge Design	9/15/2004	10/17/2004	100
				Underground Storage Tanks	2/5/2001	1/15/2009	100
				PFPR Inspection	5/17/2007	5/17/2007	100
				R/W Plans Preparation	6/18/2007	9/7/2007	100
				R/W Plans Final Approval	**8/13/2007**	**1/22/2008**	**100**
				L & D Approval	5/8/2002	5/10/2002	100
11/28/2011	1/6/2012	7/15/2011	8/25/2011	R/W Authorization			0
				Stake R/W	4/8/2008	5/13/2008	100
				Soil Survey	5/8/2002	11/15/2005	100
	7/27/2011		**8/11/2011**	**Final Design**	**8/16/2007**		**46**
	10/13/2010		6/9/2011	Final Bridge Plans Preparation	1/15/2010		65
8/25/2011	8/25/2011	9/9/2011	9/9/2011	FFPR Inspection			0
9/2/2011	9/15/2011	9/19/2011	9/30/2011	Submit FFPR Responses (OES)			0

PROGRAMMED FUNDS

Activity	Approved	Proposed	Cost	Fund	Status	Date Auth
PE	1998	1998	747,550.00	315	AUTHORIZED	12/8/1997
ROW	2012	2013	3,703,824.01	L050	PRECST	
CST	2016	2016	9,549,601.75	L050	PRECST	

Cost Estimate Amount

Activity	Amount	Date
PE	$747,550.00	
ROW	$3,560,000.01	3/7/2011
CST	$8,313,503.00	7/31/2008

STIP AMOUNTS

Activity	Cost	Fund
PE	0.00	315
ROW	1,576,386.25	L050
CST	0.00	L050

PDD:	GOOD PROJ. W/O CONTR FOR CONCEPT.NEEDSOONER THAN 2005-NEW SCHOOL. 9/27/99.OCT99 BDMOVED FROM LR Task Order Bridge2/27/03
Bridge:	EJC - 04/05/11
Design:	(Marc Jordan) Answering VE Report
EIS:	CE/Apvd11-10-03/Reeval 3-25-08/OnSchedLet/Updated 5-6-2011(JK)
LGPA:	BALDWIN REF DO UTL 11-6-02|MILLEDGEVILLE SGN DO UTL 5-22-03|RESCISSION LETTER SENT TO BALDWIN & MILLEDGEVILLE 10-21-05.
Planning:	ADDED FM LONG-RANGE 9-19-96 BY BOARD
Programming:	PR2/P=2-19-98|#1 1-03|#2 5-06|#3 11-07|#4 9-2010|#5 10-2010
ROW:	ON HOLD, funds moved out to 2013
Traffic Op:	S/M/SIG DZN CMPL'TD BY D2 4-24-07 $+!PFPR sent 4/18/27 w/r
Utility:	Need items from GPC, AGL, Windstream 5/4/2011
EMG:	2031(H85(94)-E/V88);DOT=M/S,(C=WO#10-ARCADIS);!PHOTOS RETN!
Engr Services:	VE Final Report Distributed 2/22/11, waiting on responses

District Comments

2/9/04 GCSU has asked for bike lanes in a portion of proj (up to Blandy Rd)
8/31/10 Project on-hold pending RW funds,
9/21/10 VE study scheduled for Jan. 10, 2011
10/9/10 Upd Cst Est = $9,665,699
1/25/11 VE study rescheduled for 2/8
2/23/11 - ROW ON HOLD, FUNDS MOVED TO 2013 (RH)

Prel. Parcel CT:	81	**Total Parcel in ROW System:**	82	**Cond. Filed:**	0	**Acquired by:**	DOT	***DEEDS CT:***	0
Under Review:	0	**Options - Pending:**	0	**Relocations:**	4	**Acquisition MGR:**	Hollie, Renee		
Released:	0	**Condemnations- Pend:**	0	**Acquired:**	0	**R/W Cert Date:**			