

D.O.T. 66

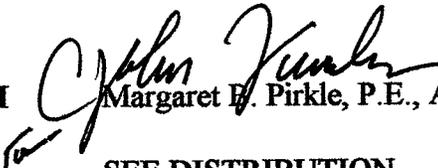
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BR-0000-00(688) Atkinson County
P. I. No. 0000688

OFFICE Preconstruction

DATE December 9, 2003

FROM  Margaret E. Pirkle, P.E., Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

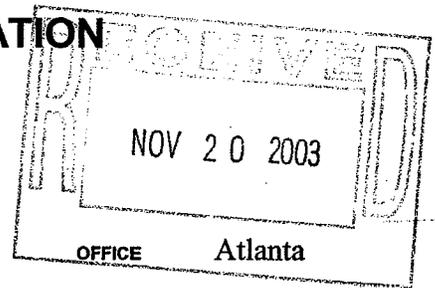
Attachment

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BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE BR-0000-00(688) ATKINSON COUNTY
SR 135 over Dark Bay Creek
P.I. No. 0000688
FROM *Brent A. Story*
Brent A. Story, State Consultant Design Engineer

DATE October 31, 2003

TO Meg Pirkle, Assistant Director of Preconstruction

SUBJECT REVISED PROJECT CONCEPT REPORT

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The original concept report was changed from a bridge crossing at Dark Bay Creek to a bridge culvert crossing, since the drainage area is less than 20 square miles. Further study revealed that longitudinal stream impacts created by the bridge culvert could not be mitigated in the stream basin. For this reason the enclosed revised project concept report restores a bridge as the replacement structure. The revised project concept report also realigns the proposed roadway centerline 44 ft to the east of the existing roadway to avoid a relocation of a mobile home and to minimize property impacts near the end of the project. An additional 85 ft of right-of-way is required to the east for construction of this project.

The revised concept report as presented herein and submitted for approval is consistent with that which is included in the State Transportation Improvement Program (STIP).

DATE 11/19/03

Joseph P. Allen
State Transportation Planning Administrator

Distribution:

- Project Review Engineer
- State Environmental/Location Engineer
- State Traffic Operations Engineer
- State Transportation Planning Administrator
- State Transportation Programming Engineer
- District 4 Engineer
- State Bridge Design Engineer
- Consultant Design Office

COOK _____

FOWLER _____ *OK to sign?*

VANDYKE **RECEIVED** _____

OTHER _____

GROUPS _____

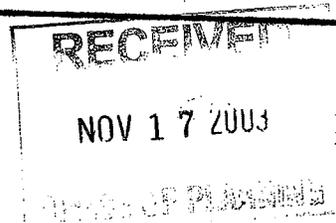
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NOV 17 2003

OFFICE OF PLANNING

ROUTING

<input checked="" type="checkbox"/>	<i>Joel</i>
<input checked="" type="checkbox"/>	<i>Chamice</i>
<input checked="" type="checkbox"/>	<i>Tom</i>
<input checked="" type="checkbox"/>	<i>Jim</i>



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

REVISED PROJECT CONCEPT REPORT

Need & Purpose: Bridge project BR-0000-00(688) will replace the structurally deficient bridge located on State Route (SR) 135 over Dark Bay Creek. The bridge's sufficiency rating is 33.3. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. This project will replace the existing bridge with a structurally adequate bridge.

This section of SR 135 is functionally classified as a rural minor arterial. The posted speed limit along this section of SR 135 is 55 mph. The bridge is located 4 miles northwest of the city of Willacoochee and was constructed in 1951. The Average Daily Traffic (ADT) along this section of roadway was 2,200 in 1998 with 16 percent trucks. The projected 2006 and 2026 ADT for this section of roadway is 2,600 and 4,300 respectively.

Replacing this bridge will bring it up to current design standards and in doing so will improve the operation and safety of this roadway.

Project Location: Project BR-0000-00(688) is located 4 miles northwest of the city of Willacoochee in Atkinson County, in the 1026th G.M.D.

Description of the approved concept: The approved concept is to build a 77 ft long quad 10' x 7' bridge culvert on an alignment shifted 44 ft the west of the existing roadway. To maintain two lanes of traffic, the culvert will be stage constructed, eliminating the need for a temporary bridge. The roadway typical section consists of two 12 ft travel lanes with 2 ft paved and 8 ft grassed shoulders. An additional 80 ft of right-of-way is required on the west side of the existing roadway for construction. The approved construction cost is \$1,031,000.

PDP Classification:

Full Oversight (), Exempt (X), SF (), Other ()

Functional Classification: Rural Minor Arterial

U. S. Route Number(s): N/A

State Route Number(s): 135

Traffic (AADT) as shown in the approved concept:

Current Year: (2006) - 2600

Design Year: (2026) - 4300

Proposed features to be revised: It is proposed to replace the existing bridge structure with a single span bridge to eliminate longitudinal stream impacts on Dark Bay Creek created by the bridge culvert. These impacts cannot be mitigated in the stream basin.

It is also proposed to realign the roadway centerline 44 ft to the east side of the existing roadway to avoid a relocation of a mobile home and to minimize property impacts near the end of the project. An additional 85 ft of right-of-way is required to the east for construction of this project.

Describe the revised feature(s) to be approved: The revised features to be approved are: 1) to use a single span bridge as the replacement structure, 2) to shift the proposed alignment to the east side of the existing alignment, and 3) to shift the majority of the required right-of-way from the west side of the existing roadway to the east.

Updated Traffic Data (AADT): No change from approved concept

Programmed/Schedule:

P.E. 2001

R/W 2004

Construction 2005

Revised cost estimates:

1.	Construction cost including inflation and E&C,	\$1,373,000
2.	Right-of-way, and	\$80,000
3.	Utilities	\$10,000

Is the project located in a non-attainment area? Yes No

Recommendation: The Consultant Design Office recommends that the proposed revision to the concept be approved for implementation.

Attachments:

1. Cost Estimate

Concur:


Director of Preconstruction

Approve:



DESIGNER'S CONSTRUCTION COST ESTIMATE (PRELIMINARY)

11/13/2003 BR-0000-00(688), ATKINSON COUNTY
P.I. No. 0000688
SR 135 OVER DARK BAY CREEK

ITEM NO.	ITEM	UNIT	UNIT COST	QUANT	TOTAL
ROADWAY					
150-1010	TRAFFIC CONTROL - BR-0000-00(688)	LS	\$ 40,000.00	1 \$	40,000.00
210-0100	GRADING COMPLETE - BR-0000-00(688)	LS	\$ 159,410.87	1 \$	159,410.87
318-3000	AGGR SURF CRS	TN	\$ 14.63	211 \$	3,086.93
433-1000	REINF CONC APPROACH SLAB	SY	\$ 231.36	310 \$	71,721.60
436-1000	ASPHALTIC CONCRETE CURB -	LF	\$ 6.24	820 \$	5,116.80
441-0301	CONC SPILLWAY, TP 1	EA	\$ 1,232.67	2 \$	2,465.34
456-2015	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (SKIP)	GLM	\$ 2,405.98	1 \$	2,405.98
500-3101	CLASS A CONCRETE	CY	\$ 360.89	2 \$	721.78
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	\$ 26.47	105 \$	2,779.35
550-1300	STORM DRAIN PIPE, 30 IN, H 1-10	LF	\$ 47.25	72 \$	3,402.00
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	LF	\$ 20.85	450 \$	9,382.50
550-3318	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	EA	\$ 659.71	2 \$	1,319.42
550-3330	SAFETY END SECTION 30 IN, STORM DRAIN, 4:1 SLOPE	EA	\$ 1,485.00	2 \$	2,970.00
550-3618	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	EA	\$ 481.61	16 \$	7,705.76
550-4118	FLARED END SECTION 18 IN, SIDE DRAIN	EA	\$ 325.95	4 \$	1,303.80
576-1015	SLOPE DRAIN PIPE, 15 IN	LF	\$ 21.55	134 \$	2,887.70
577-1100	METAL DRAIN INLET - COMPLETE ASSEMBLY	EA	\$ 941.88	4 \$	3,767.52
622-1033	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	LF	\$ 23.00	1555 \$	35,765.00
634-1200	RIGHT OF WAY MARKERS	EA	\$ 77.89	44 \$	3,427.16
641-1100	GUARDRAIL, TP T	LF	\$ 36.13	83 \$	2,998.79
641-1200	GUARDRAIL, TP W	LF	\$ 8.24	950 \$	7,828.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	\$ 344.14	2 \$	688.28
641-5012	GUARDRAIL ANCHORAGE, TP 12	EA	\$ 1,202.88	2 \$	2,405.76
				SUBTOTAL \$	373,560.34
REQUIRED PAVEMENT					
310-5120	GR AGGR BASE CRS, 12 INCH, INCL MATL	SY	\$ 18.26	9138 \$	166,859.88
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	\$ 36.77	811 \$	29,820.47
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	TN	\$ 35.72	1923 \$	68,689.56
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	TN	\$ 35.23	1173 \$	41,324.79
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	TN	\$ 38.50	1269 \$	48,856.50
413-1000	BITUM TACK COAT	GL	\$ 0.93	1468 \$	1,365.24
				SUBTOTAL \$	356,916.44
EROSION PROTECTION					
163-0232	TEMPORARY GRASSING	AC	\$ 447.06	8 \$	3,576.48
163-0240	MULCH	TN	\$ 258.78	231 \$	59,778.18
163-0300	CONSTRUCTION EXIT	EA	\$ 921.17	4 \$	3,684.68
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	\$ 409.14	9 \$	3,682.26
163-0520	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	LF	\$ 13.55	190 \$	2,574.50
163-0521	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	EA	\$ 146.72	9 \$	1,320.48
163-0530	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	LF	\$ 2.11	1110 \$	2,342.10
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	\$ 1.15	1785 \$	2,052.75
165-0040	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	EA	\$ 64.49	9 \$	580.41
165-0070	MAINTENANCE OF BALED STRAW EROSION CHECK	LF	\$ 1.09	555 \$	604.95
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	EA	\$ 195.39	9 \$	1,758.51
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	\$ 317.68	4 \$	1,270.72
167-1000	WATER QUALITY SAMPLING AND MONITORING	EA	\$ 19,600.00	2 \$	39,200.00
170-1000	FLOATING SILT RETENTION BARRIER	LF	\$ 9.39	320 \$	3,004.80
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	\$ 3.50	3570 \$	12,495.00
603-2180	STN DUMPED RIP RAP, TP 3, 12 IN	SY	\$ 28.63	90 \$	2,576.70
603-7000	PLASTIC FILTER FABRIC	SY	\$ 3.41	90 \$	306.90
700-6910	PERMANENT GRASSING	AC	\$ 653.17	8 \$	5,225.36
700-7010	LIQUID LIME	GL	\$ 16.93	18 \$	304.74
700-8000	FERTILIZER MIXED GRADE	TN	\$ 215.25	8 \$	1,722.00
700-8100	FERTILIZER NITROGEN CONTENT	LB	\$ 1.18	361 \$	425.98
716-2000	EROSION CONTROL MATS, SLOPES	SY	\$ 1.14	1700 \$	1,938.00
				SUBTOTAL \$	150,425.50
TRAFFIC SIGN & MARKING					
636-1020	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	SF	\$ 11.63	16 \$	186.08
636-1031	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	SF	\$ 17.43	84 \$	1,464.12
636-2070	GALV STEEL POSTS, TP 7	LF	\$ 6.71	224 \$	1,503.04
652-2501	SOLID TRAFFIC STRIPE, 5 IN, WHITE	LM	\$ 259.37	2 \$	518.74
652-2502	SOLID TRAFFIC STRIPE, 5 IN, YELLOW	LM	\$ 271.70	2 \$	543.40
652-5701	SOLID TRAF STRIPE, 24 IN, WHITE	LF	\$ 1.84	60 \$	110.40
654-1001	RAISED PVMT MARKERS TP 1	EA	\$ 3.32	98 \$	325.36
657-1054	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, WHITE, TP PB	LF	\$ 3.51	172 \$	603.72
657-6054	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	LF	\$ 3.76	172 \$	646.72
				SUBTOTAL \$	5,901.58

ITEM NO.	ITEM	UNIT	UNIT COST	QUANT	TOTAL
	BRIDGE NO. 1				
500-0100	GROOVED CONCRETE	SY	\$ 4.38	401 \$	1,756.38
500-1006	SUPERSTR CONCRETE, CL AA, BR NO -	LS	\$ 585.86	124 \$	72,646.64
500-2100	CONCRETE BARRIER	LF	\$ 30.57	160 \$	4,891.20
500-3101	CLASS A CONCRETE	CY	\$ 360.89	72 \$	25,984.08
507-9030	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO -	LF	\$ 123.92	498 \$	61,712.16
511-1000	BAR REINF STEEL	LB	\$ 0.49	8088 \$	3,963.12
511-3000	SUPERSTR REINF STEEL, BR NO -	LS	\$ 0.50	27802 \$	13,901.00
520-2216	PILING, PSC, 16 IN SQ	LF	\$ 37.10	600 \$	22,260.00
520-4216	LOAD TEST, PSC, 16 IN SQ	EA	\$ 1.00	1 \$	1.00
540-1101	REMOVAL OF EXISTING BR, STA NO -	LS	\$ 30,000.00	1 \$	30,000.00
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	SY	\$ 33.20	488 \$	16,201.60
603-7000	PLASTIC FILTER FABRIC	SY	\$ 3.41	488 \$	1,664.08
				SUBTOTAL \$	254,981.26

CONSTRUCTION	\$ 1,141,785.12	CONSTRUCTION COST	\$ 1,141,785.12
INFLATION: (2 yrs. @ 5% per yr)	\$ 117,032.97	RIGHT OF WAY	\$ 80,000.00
LET DATE: FY-05		R/W ACQUIRED BY:	DOT
		UTILITIES:	\$ 10,000.00
E & C (10%):	\$ 114,178.51		
TOTAL CONST COSTS	\$ 1,372,996.60		