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D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 742985-, Fulton County
BRST-1044(7)
SR 154/Cascade-Palmetto over Bear Creek

OFFICE Preconstruction

DATE February 28, 2006

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

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Babs Abubakari
Bryant Poole
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **BRST-1044(7) Fulton County**
SR 154/Cascade-Palmetto over Bear Creek 3 mi N OF Palmetto
P.I. No. 742985-

OFFICE Atlanta

DATE February 7, 2006

FROM Mohammed (Babs) Abubakari, State Program Delivery and Consultant Design Engineer

TO Margaret B. 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 proposed an offsite detour using a local road. However, at the PIOH there was widespread opposition to using the offsite detour since it is a residential street and there is some unfavorable geometry at each end of the street. The revised proposal calls for a temporary onsite detour.

If you have any questions or require further information please call (404)463-6135 or Guan Ellis of Transportation Systems Design, Inc. at (404) 255-2220.

Date: 2/16/06

State Transportation Planning Administrator

Distribution:
Brian Summers, Project Review Engineer
Harvey Keepler, State Environmental/Location Engineer
Keith Golden, State Traffic Safety and Design Engineer
Joe Palladi, State Transportation Planning Administrator
Jamie Simpson, State Financial Management Administrator
Bryant Poole, District Engineer – Chamblee
Paul Liles, State Bridge & Structural Engineer

MBA:MAH:EJC

cc: Transportation Systems Design, Inc.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA OFFICE OF CONSULTANT DESIGN

REVISED PROJECT CONCEPT REPORT

Project Number: BRST-1044(7)
County: Fulton
P.I. Number: 742985

Federal Route Number: N/A
State Route Number: 154

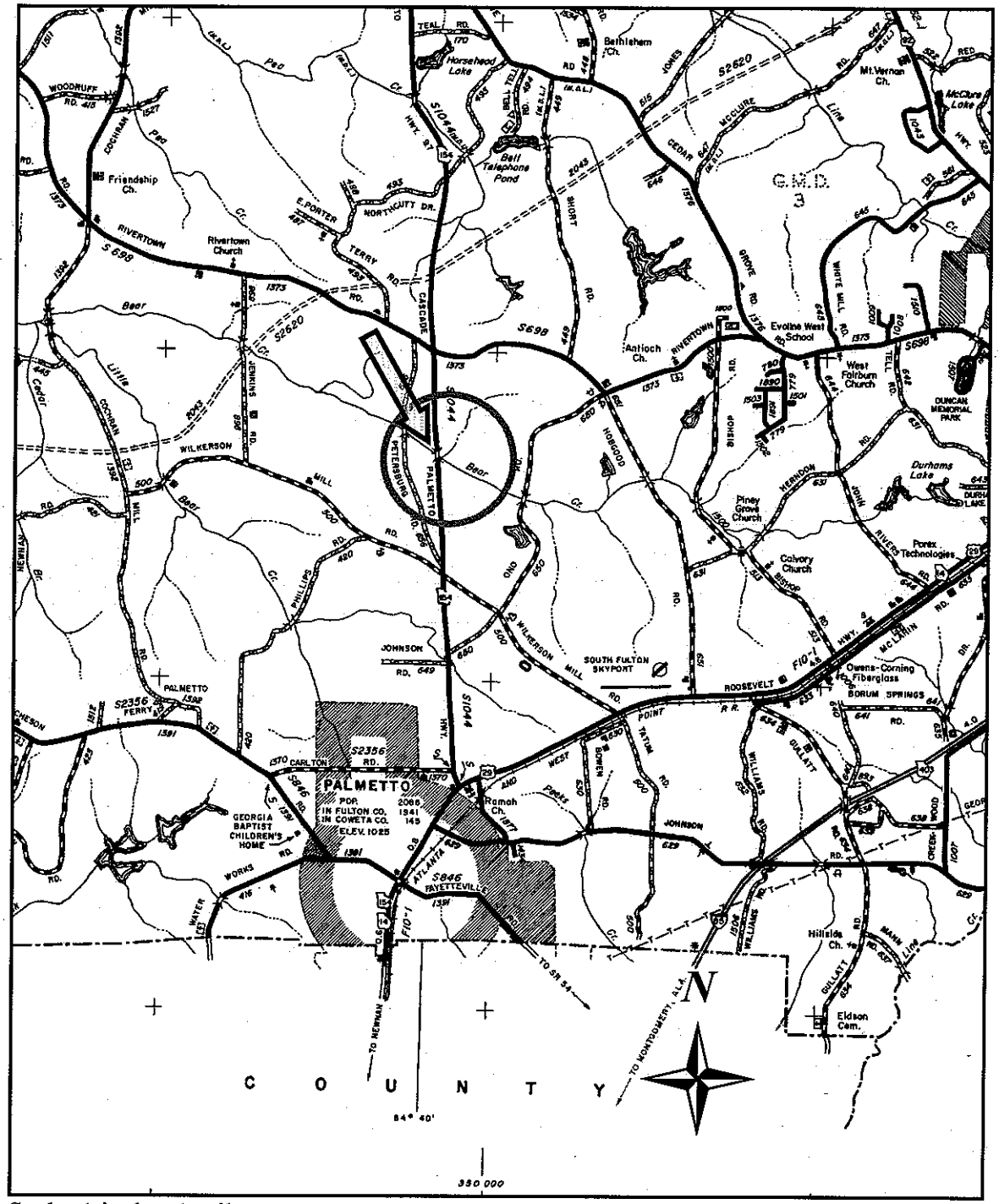
Need and Purpose:

Project BRST-1044(7) consists of the replacement of the bridge on SR 154/Cascade-Palmetto Highway over Bear Creek, 3 miles north of Palmetto the in southwest Fulton County. This route serves commuter traffic traveling north to Fayetteville in Fayette County. SR 74/Clark Howell Memorial Highway is classified as a Rural Minor Arterial and is not a designated bike route.

This bridge was built in 1958 and consists of concrete bents, concrete T- beam superstructure, and a concrete deck. The original design load capacity is H-15. The sufficiency rating on the structure is 63.0, and the bridge is classified as Functionally Obsolete and requires widening. However, in accordance with DOT policy 2405-1, we recommend that this bridge be replaced though due to unacceptable load capacity. Due to this criteria no additional cost analysis or coring by the lab will be required. This bridge does not currently qualify for federal replacement BR funding but does qualify for federal bridge widening funds, which can be used toward replacement up to the estimated cost of widening. The remaining funds would have to come from another funding source.

Existing 2000 traffic volumes along this section of roadway are approximately 3600 vehicles per day (VPD). Future volumes are expected to be approximately 4500 VPD in 2008 and 7000 VPD in 2028 with 10 % trucks.

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



Scale: 1 inch = 1 mile

Location Map

Project: BRST-1044(7) Fulton County **PI No.:** 742985-

Description: SR 154/Cascade-Palmetto over Bear Creek 3 miles north of Palmetto

Project location:

The proposed project is located in Fulton County on SR 154/Cascade- Palmetto Highway. The project consists of replacing the structurally deficient bridge over Bear Creek on its existing location. An onsite detour will be constructed to handle traffic during construction of the new bridge. The proposed project length is 0.27 miles.

Description of the approved concept:

PDP Classification: Major_____ Minor___X___

Federal Oversight: Full Oversight ( ), Exempt (X), State Funded ( ), or Other ( )

Functional Classification: *Rural Minor Arterial*

U.S. Route Number(s): N/A **State Route Number(s): 154**

Traffic (AADT) as shown in the approved concept:

Current Year: (2008) 4500 Design Year: (2028) 7000

Proposed features to be revised:

Detour: The original concept report provided for an off site detour utilizing Petersburg Road to accommodate traffic during construction.

Describe the revised feature(s) to be approved:

Detour: An onsite detour will be provided as a result of comments expressed by the public during a public meeting held on May 25,2004

Updated traffic data (AADT):

Current Year: (2008) 4500 Design Year: (2028) 7000

Programmed/Schedule:

P.E.: 2000 R/W: 2006 Construction: 2007

Revised cost estimates:
1. The construction costs for implementing an onsite detour including inflation and E&C has increased from $1,423,501 million to $1,873,062 million subsequent to the approval of the original concept of August 19, 2003 (see attached)

Is the project located in a Non-attainment area? Yes

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:
1. Cost Estimate
2. Sketch Location Map (included in the body of the report)

Concur: _____
Director of Preconstruction

Approve: _____
Chief Engineer

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: BRST-1044-(7), PI 742985 COUNTY: Fulton

DATE:March, 2005 ESTIMATED LETTING DATE: Jun-09

PREPARED BY: Transportation Systems Design, Inc PROJECT LENGTH: 0.27 mi

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEV.

PROJECT COST			
A. RIGHT-OF-WAY:			
1. PROPERTY (LAND & EASEMENT) 0.85 AC		$	20000
2. DISPLACEMENTS; RES: 0, BUS: 0, M.H.: 0		$	
3. OTHER COST (ADM./COST, INFLATION)		$	-
NUMBER OF YEARS			
SUBTOTAL: A		$	**20,000**
B. REIMBURSABLE UTILITIES:			
1. RAILROAD		$	
2. TRANSMISSION LINES		$	
3. SERVICES		$	
SUBTOTAL: B		$	-
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. BRIDGES (200' X 47.25'X $75)	9450 SF @ $75		708,750
		$	708,750
		$	
SUBTOTAL: C-1.a		$	708,750
b. OTHER			
		$	-
		$	
SUBTOTAL: C-1		$	**708,750**
2. GRADING AND DRAINAGE:			
a. EARTHWORK (Mainline)			
Borrow	18800 CY @ $6	$	112,800
Excavation	7400 CY @ $5		37,000
SUBTOTAL: C-2a		$	149,800
b. EARTHWORK (Detour)			
Borrow	25000 CY @ $	$	150,000
Excavation	8000 CY @ $		40,000
SUBTOTAL: C-2b		$	190,000

c.. DRAINAGE				
1) Side Drain Pipe	44	LF @ $25	$	1,100
2) Storm drain pipe		LF @ $33	$	-
3) Longitudinal System (incl. catch basins)		LF @ $0	$	-
4) Flared End Sections	4	EA @ $475	$	1,900
5) Perforated Underdrain		LF @ $6	$	-
6)Temporary Pipe Slope Drain	1400	LF @ $12	$	16,800
SUBTOTAL: C-2.c			$	19,800
SUBTOTAL: C-2			$	**359,600**
3. BASE AND PAVING:				
a. AGGREGATE BASE CRS	1096	TN @ $14	$	15,344
b. ASPHALT PAVING (Mainline & Cross-Roads):				
19 mm Superpave	266	Tons @ $46	$	12,236
25 mm Superpave	798	Tons @ $46	$	36,708
9.5 mm Superpave	262	Tons @ $39	$	10,218
Tack Coat	259	Gallons @ $1	$	259
SUBTOTAL: C-3.b			$	59,421
c. ASPHALT PAVING (Onsite detour):				
19 mm Superpave	175	Tons @ $46	$	8,050
25 mm Superpave	520	Tons @ $46	$	23,920
9.5 mm Superpave	150	Tons @ $39	$	5,850
Tack Coat	170	Gallons @ $1	$	170
d. AGGREGATE BASE CRS		TN @ $14	$	-
SUBTOTAL: C-3.c			$	37,990
e. OTHER (Leveling,Milling, etc.)			$	1000
f. AGGREGATE SURFACE COURSE		Tons @ $16	$	-
SUBTOTAL: C-3			$	**113,755**

4. EROSION CONTROL (Mainline)					
a. SILT FENCE					
1. TYPE A			1612	LF @ $3	$ 4,836
2. TYPE B				LF @ $3	$ -
3. TYPE C			1000	LF @ $4.5	$ 4,500
					$
b. RIP RAP			150	SY @ $35	$ 5,250
c. PLASTIC FILTER FABRIC			150	SY @ $4	$ 600
d. PERMANENT SOIL REINFORCING MAT			5074	SY @ $5	$ 25,370
e. MULCH			52	TN @ $433	$ 22,516
f. PERMANENT GRASS			3.53	ac @ $755	$ 2,665
h. TEMPORARY GRASS			1.77	ac @ $460	$ 814
		SUBTOTAL: C-4a			$ **66,551**
EROSION CONTROL (Detour)					
e. SILT FENCE					
1. TYPE A			1100	LF @ $3	$ 3,300
2. TYPE B				LF @ $3	$ -
3. TYPE C			1400	LF @ $4.5	$ 6,300
					$ 9,600
f. RIP RAP			100	SY @ $35	$ 3,500
g. PLASTIC FILTER FABRIC			100	SY @ $4	$ 400
h. PERMANENT SOIL REINFORCING MAT			1400	SY @ $5	$ 7,000
					30,100
		SUBTOTAL: C-4			$ **96,651**
5. TRAFFIC CONTROL					$ 30000
CLEARING&GRUBBING					10000
		SUBTOTAL: C-5			$ **40,000**
6. MISCELLANEOUS:					
a. LIGHTING					$
b. SIGNING - MARKING					$ 4000
c. GUARDRAIL					
W Beam			680	LF @ $12	$ 8,160
T Beam			120	LF @ $29	$ 3,480
Anchors	TYPE 12		2	ea @ $1430	$ 2,860
	TYPE 6		4	ea @ 350	$ 1,400
	TYPE 1		2	ea @ $450	$ 900
		SUBTOTAL: C-6.c			$ 16,800
d. SIDEWALK					$
e. MEDIAN / SIDE BARRIER					$
f. APPROACH SLABS			293	SY @ $90	$ 26,370
g. REMOVAL					
Bridges					$ 20,000
		SUBTOTAL: C-6.g			$ 20,000
h. Detour Bridge			8880	SY @ $21	184,800
		SUBTOTAL: C-6			$ **251,970**
7. SPECIAL FEATURES					
		SUBTOTAL: C-7			$ -

SUMMARY		
A. RIGHT-OF-WAY	$	20,000
B. REIMBURSABLE UTILITIES	$	-
C. CONSTRUCTION		
1. MAJOR STRUCTURES	$	708,750
2. GRADING AND DRAINAGE	$	359,600
3. BASE AND PAVING	$	113,755
4. EROSION CONTROL	$	96,651
5. LUMP ITEMS	$	40,000
6. MISCELLANEOUS	$	251,970
7. SPECIAL FEATURES	$	-
SUBTOTAL CONSTRUCTION COST	$	1,570,726
INFLATION (5% PER YEAR)	$	338,501
NUMBER OF YEARS 4		
E. & C. (10%)	$	190,923
TOTAL CONSTRUCTION COST	$	**2,100,150**
DETOUR COST (for information only)	$	258,090
GRAND TOTAL PROJECT COST	$	**2,120,150**