

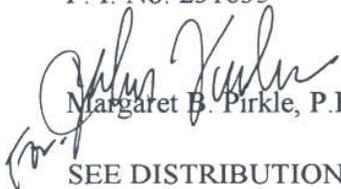
ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE BHF-046-1(30) Newton County **OFFICE** Preconstruction
P. I. No. 231635
DATE June 10, 2003
FROM  Margaret B. 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

DISTRIBUTION:

David Mulling
Harvey Keeper
Jerry Hobbs
Percy Middlebrooks
Michael Henry
Phillip Allen
Joe Palladi
Brent Story
Mike Thomas
BOARD MEMBER

REVISED PROJECT CONCEPT REPORT

Need and Purpose: *See attached sheets.*

Project location: *The project is located on SR 12 at the Alcovy River and Overflow approximately 1.0 miles east of the City of Covington. The project limits are from MP 8.90 to 9.39. The total project length is 0.49 miles.*

Description of the approved concept: *The approved concept proposes to widen the existing bridges from 34.1' to 38' and to construct new parallel 38' wide bridges at the Alcovy River and Overflow.*

PDP Classification:

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

Functional Classification: *Urban Minor Arterial east of the Alcovy River and Rural Minor Arterial west of the Alcovy River*

U. S. Route Number(s): 278

State Route Number(s): 12

Traffic (AADT) as shown in the approved concept:

Current Year: 39,600 (2006) Design Year: 55,000 (2026)

Proposed features to be revised: *The concept is being revised to replace the existing bridges in addition to constructing new parallel bridges. This revision is in accordance with recommendations from the Office of Bridge Maintenance (see attached letter).*

Programmed/Schedule:

P.E.: Authorized R/W: N/A Construction: 2006

Revised cost estimates:

1. Construction cost including inflation and E&C: \$3,768,500
2. Right-of-way: *No additional r/w required*
3. Utilities: \$131,200

Is the project located in a Non-attainment area?YesX.....No.

Recommendation: *The District recommends that the proposed revision to the concept be approved for implementation.*

Attachments:

1. Sketch Map,
2. Need & Purpose,
3. Cost Estimates,
4. Letter from Bridge Maintenance.

• Exempt projects

Concur: Thomas L. Johnson
Director of Preconstruction

Approve: W. L. Ford
Chief Engineer

BHF-046-1(30) Newton



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Mag 14.00

Tue May 06 15:26 2003

Scale 1:31,250 (at center)

2000 Feet

1000 Meters

- | | | | |
|--|---------------------------|--|--------------------|
| | Local Road | | Private Airport |
| | Major Connector | | Cemetery |
| | State Route | | Population Center |
| | Trail | | Water |
| | Interstate/Limited Access | | Woodland |
| | US Highway | | River/Canal |
| | Exit | | Intermittent River |
| | Railroad | | |

NEED AND PURPOSE
PROJECT STP-046-1 (29)/BHF-046-1(30) NEWTON COUNTY
PI NO. 231630 & 231635
SR 12/US 278 FROM THE COVINGTON BYPASS/CR 653 TO SR 142

Project STP-046-1 (29) consists of the widening and improvement of SR 12/US 278 from the Covington Bypass/CR 653 (S2503) to SR 142 (S774). SR 12/US 278 from SR 142 (S2503) to SR 142 (S774) is to be widened from a two-lane section to a four-lane divided section. This 2.5 mile section of SR 12 is functionally classified as the following: an urban minor arterial from SR 142 (S2503) to the Alcovy River; and a rural minor arterial from the Alcovy River to SR 142 (S774).

The 1998 AADT from SR 142 (S2503) to SR 142 (S774) was 13,500, resulting in a LOS of "E". The projected (2026) AADT from SR 142 (S2503) to SR 142 (S774) ranges from 36,600 to 43,000 with a projected LOS of "F". Widening SR 12/US 278 will improve the projected LOS to "C" as well as reduce congestion and driver discomfort.

In 1997, there were 15 accidents along the section of SR 12 from SR 142 (S2503) to the Alcovy River, 13 in 1996 and 17 in 1995. The resulting accident rates for this section were 215 accidents per 100 MMVT in 1997, 200 accidents per 100 MMVT in 1996 and 275 accidents per 100 MMVT in 1995. These rates are below the statewide average for an urban minor arterial for all three years. In 1997, there were 44 accidents along the section of SR 12 from the Alcovy River to SR 142 (S774), 33 in 1996 and 41 in 1995. The accident rates along this section of SR 12 are extremely high for a rural minor arterial: 1268 accidents per 100 MMVT in 1997, 1024 accidents per 100 MMVT in 1996 and 1334 accidents per 100 MMVT in 1995. The statewide averages for a rural minor arterial were 210 in 1997, 224 in 1996 and 200 in 1995. In 1997, 29 of the 44 accidents occurred at the intersection of SR 12 and SR 142 (S774). In 1996, 23 of the 33 accidents occurred at the intersection of SR 12 and SR 142 (S774) and in 1995, 29 of the 41 accidents occurred at the intersection of SR 12 and SR 142 (S774).

Two bridges are located along this section of SR 12, one over the Alcovy River and one over the Alcovy River overflow. Both bridges have a sufficiency rating of 79.8 and are acceptable to be widened.

The land use along SR 12/US 278 is industrial and commercial in use towards the Covington (western) termini of the project but begins changing to rural and residential as you approach the SR 142 (S774) terminus. The western terminus of project STP-046-1(29) ties into an existing multi-lane section just east of SR 142 (S2503). The eastern terminus is SR 142 (S774). Traffic volumes along SR 12 east of the SR 142(S774) intersection decreased to 3,250 AADT from 13,500 AADT west of the intersection in 1998. The 1998 volume along SR 142 south of SR12 is approximately 6,000 AADT. This section of SR 142 is residential in use and is rapidly developing.

Other projects in the area include STP-000S(14), programmed to widen SR 142 ((S2503) from south of the intersection with SR 12 to Interstate 20. Project STP-1418(3) will multi-lane SR 142 north of the I-20 interchange and project IM-20-2(141) will widen and improve the interchange itself. Project NH-20-2(167) is programmed to add an additional lane east and west on I-20 from the Alcovy Road interchange to the SR 142 interchange. The combination of these projects and project STP-046-1 (29) will improve the access between the residential areas of Newton County to the more commercial and industrial areas as well as improve access to the interstate.

TOTAL LENGTH OF PROJECT - 0.32 MILES
ROADWAY

150-1000	TRAFFIC CONTROL - BHF-046-1(30)	LUMP	10000	LUMP	\$10000.00
201-1500	CLEARING AND GRUBBING - BHF-046-1(30)	LUMP	75000	LUMP	\$75000.00
310-1201	GR AGG SUBBASE CRS, INCL MATL	TN	20	4000	\$80000.00
318-3000	AGGR SURF CRS	TN	21	500	\$10500.00
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	40	200	\$8000.00
402-3112	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MA	TN	42	775	\$32550.00
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MA	TN	42	1604	\$67368.00
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	TN	42	580	\$24360.00
413-1000	BITUM TACK COAT	GL	1	560	\$560.00
433-1200	REINF CONC APPROACH SLAB, INCL SLOPED EDGE	SY	95	1280	\$121600.00
441-0301	CONC SPILLWAY, TP 1	EA	1350	8	\$10800.00
456-2003	INDENTATION RUMBLE STRIPS, 3 FT WIDTH	MI	508	0.64	\$325.12
500-3800	CLASS A CONCRETE, INCL REINF STEEL	CY	550	500	\$275000.00
550-1150	STORM DRAIN PIPE, 15 IN, H 1-10	LF	25	1000	\$25000.00
550-4215	FLARED END SECTION 15 IN, STORM DRAIN	EA	375	10	\$3750.00
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA	405	10	\$4050.00
573-2006	UNDRR PIPE INCL DRAINAGE AGGR, 6 IN	LF	10	1000	\$10000.00
634-1200	RIGHT OF WAY MARKER	EA	78	20	\$1560.00
641-1100	GUARDRAIL, TP T	LF	55	336	\$18480.00
641-1200	GUARDRAIL, TP W	LF	11	3200	\$35200.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	480	8	\$3840.00
641-5012	GUARDRAIL ANCHORAGE, TP 12	EA	1400	8	\$11200.00
654-1003	RAISED PVMT MARKERS TP 3	EA	6	40	\$240.00
668-2100	DROP INLET, GP 1	EA	1500	2	\$3000.00

Section SUB TOTAL \$832383.12

EROSION CONTROL

EROSION COMPLETE - BHF-046-1(30)

700-5000	GRASSING COMPLETE - BHF-046-1(30)	LUMP	40000	LUMP	\$40000.00
161-1000	EROSION CONTROL -	LS	15000	LUMP	\$15000.00
163-0300	CONSTRUCTION EXIT	EA	1200	8	\$9600.00
163-0530	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	LF	2.4	2500	\$6000.00
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	LF	1.75	3000	\$5250.00
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	1.45	2500	\$3625.00
165-0070	MAINTENANCE OF BALED STRAW EROSION CHECK	LF	1.5	2500	\$3750.00
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	240	16	\$3840.00
167-0100	WATER QUALITY MONITORING	MO	1800	12	\$21600.00
167-0200	WATER QUALITY SAMPLING	EA	160	1	\$160.00
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	2	3000	\$6000.00
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	5	2500	\$12500.00
715-2100	BITUMINOUS TREATED ROVING, SLOPES	SY	3.2	7000	\$22400.00
716-1000	EROSION CONTROL MATS, WATERWAYS	SY	3	300	\$900.00

Section SUB TOTAL \$40000.00

Section SUB TOTAL \$40000.00

716-2000	EROSION CONTROL MATS, SLOPES	SY	2.5	500	\$1250.00
653-1501	TRAFFIC SIGNS AND MARKINGS		Section SUB TOTAL		\$111875.00
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LF	0.4	2600	\$1040.00
653-3501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LF	0.3	2600	\$780.00
	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	GLF	0.25	2600	\$650.00
			Section SUB TOTAL		\$2470.00
543-9000	BRIDGE NO. 1 LT & RT (ALCOVY RIVER) CONSTR OF BRIDGE COMPLETE (24,320 SF X \$40/SF)	LUMP	972800	LUMP	\$972800.00
543-9000	BRIDGE NO. 2 LT & RT (ALCOVY RIVER OVERFLOW) CONSTR OF BRIDGE COMPLETE (24,024 SF X \$40/SF)	LUMP	Section SUB TOTAL		\$972800.00
			960960	LUMP	\$960960.00
			Section SUB TOTAL		\$960960.00
100-0001	INFLATION & E&C	LUMP	460000	LUMP	\$460000.00
100-0002	INFLATION (5% PER YR FOR 3 YRS)	LUMP	388000	LUMP	\$388000.00
	E&C (10%)		Section SUB TOTAL		\$848000.00
			Total Project Cost		\$3768488.12



DPT/H57

Department of Transportation State of Georgia

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TREASURER
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INTERDEPARTMENT CORRESPONDENCE

April 25, 2003

FROM: Buddy Gratton, P.E., State Maintenance Engineer

TO: Paul Liles Jr., P.E., State Bridge Design Engineer
Attn: John Tiernan

SUBJECT: Bridge Replacement

PI 231635
231630



STP-046-1 (29) / Newton County
BHF-046-1 (30) / Newton
Structure ID 217-0003-0
Location ID 217-00012D-008.76E
SR 12 / US 278 over Alcovy River O/F-

This bridge was built in 1954 and consists of concrete bents, concrete T- beam superstructure, and a concrete deck. The original design load capacity is HS-20, but current load ratings rate the capacity at HS-13. The sufficiency rating on the structure is 53.0, and the bridge is classified as Functionally Obsolete and requires widening. However, based on the age and load rating of the structure, it is recommended that this bridge be replaced rather than widened. 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.

STP-046-1 (29) / Newton County
BHF-046-1 (30) / Newton
Structure ID 217-0004-0
Location ID 217-00012D-009.00E
SR 12 / US 278 over Alcovy River ✓

This bridge was built in 1954 and consists of concrete bents, concrete T- beam superstructure, and a concrete deck. The original design load capacity is HS-20, but current load ratings rate the capacity at HS-12. The sufficiency rating on the structure is 49.9, and the bridge is classified as Functionally Obsolete and requires widening. However, based on the age and load rating of the structure, it is recommended that this bridge be replaced rather than widened. 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.

If further information is required, please contact Brian Summers at (404) 635-8179.

BG/BKS

cc: Percy Middlebrooks