

ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BHF-191-1(14) Gilmer County **OFFICE** Preconstruction
P.I. No. 631580
DATE August 21, 1996
FROM *CWH*
C. Wayne Hutto, Assistant Director of Preconstruction
TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Walker Scott
Bobby Mustin
David Studstill (ATTN: Harvey Keeper)
Jerry Hobbs
Herman Griffin
Darrell Elwell (ATTN: Michael Henry)
Marion Waters
Toni Dunagan
Paul Liles
Jim Kennerly
Charles Law

Wayne Shackelford

Page 2

BHF-191-1(14) Gilmer

August 5, 1996

This project is in the STIP. I recommend this project concept be approved and placed in "LR" until Gilmer County signs LGPA.

WWS:JDQ/cj

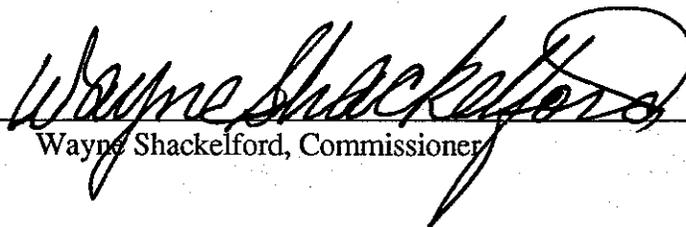
Attachment

CONCUR



Frank L. Danchetz, P.E., Chief Engineer

APPROVE



Wayne Shackelford, Commissioner

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
JUL - 8 1996
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE BHF-191-1(14) GILMER OFFICE Atlanta, Georgia
P.I. NO. 631580 DATE JULY 8, 1996

FROM Bob Mustin, Project Review Engineer *DTM*

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

The concept report submitted July 5, 1996 by the letter from Charles E. Law dated July 2, 1996 has been reviewed and is considered satisfactory except as noted below:

1. Since the route has high truck traffic, the existing bridge has a H-15 design loading, and the sufficiency rating of the existing bridge is below 50, we concur with the concept report recommendation to replace the bridge instead of widening.
2. Consider shifting the alignment enough to allow the new bridge to be completed in one construction stage.
3. The costs listed below are for bridge replacement.

The estimated costs for the project are as follows:

Construction	\$ 1,190,000
Inflation	\$ 179,000
E & C	\$ 137,000
Right of Way	\$ 35,100
Reimbursable Utilities	\$ 3,000

DTM

c: Charles Law - Attention: Greg Parker

RECEIVED

JUL - 8 1996

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PRECONSTRUCTION

INTERDEPARTMENT CORRESPONDENCE

FILE BHF-191-1(14) Gilmer County OFFICE District Six
Bridge Replacement over Tails Crk. Cartersville, GA
DATE July, 2, 1996

FROM Charles E. Law, P.E., District Engineer

TO Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

Attached is the Project Concept Report for the above file project.

If you need any additional information, please contact me at 770-387-3619.



BY: Harold Gregory Parker, P.E.
Preconstruction Engineer

CEL:HGR:jd

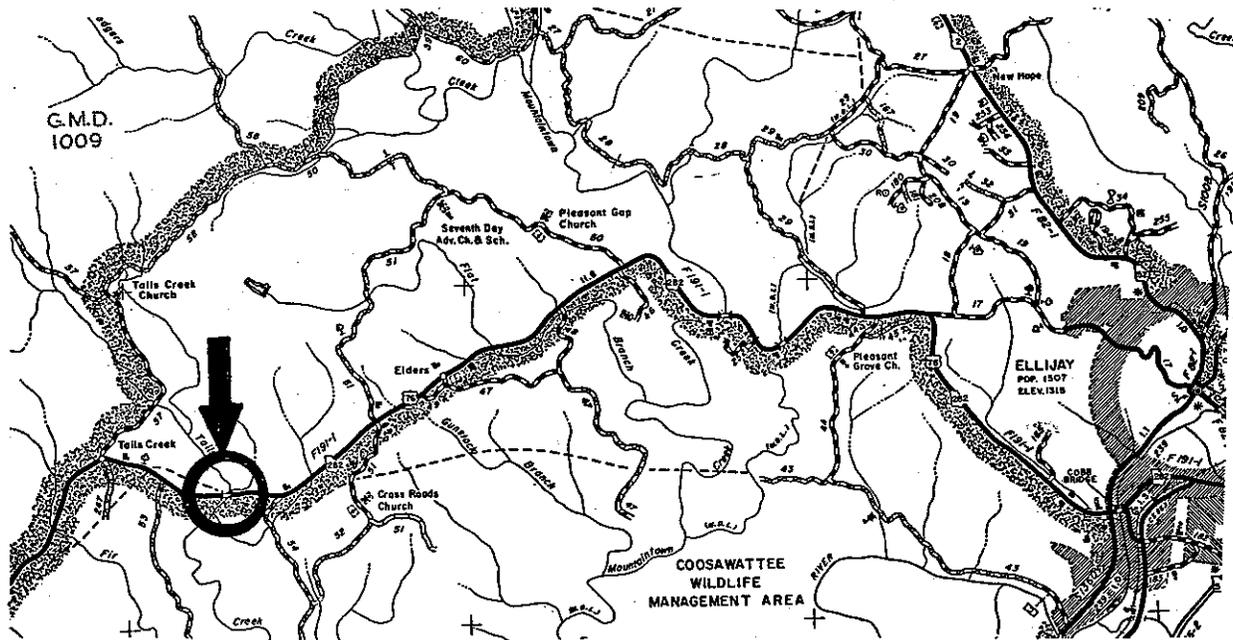
xc: Bobby Mustin
David Studstill
Marion Waters
Paul Liles

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PROJECT CONCEPT REPORT

BHF-191-1(14) Gilmer County
Bridge Replacement over Tails Creek

Federal Route No.: F-191-1
State Route No.: 282
Ga. D.O.T. P.I. No.: 631580



DATE OF REPORT: June 6, 1996

RECOMMENDATION FOR APPROVAL

6-22-96 DATE	PROJECT MANAGER <i>Greg Fisher</i>
DATE	STATE ENVIRONMENTAL/LOCATION ENGINEER
DATE 7/1/96	STATE TRAFFIC OPERATIONS ENGINEER <i>Charles Shaw</i>
DATE	DISTRICT ENGINEER
DATE	STATE REVIEW ENGINEER
DATE	STATE BRIDGE ENGINEER

PROJECT CONCEPT REPORT

DATE: JUNE 6, 1996

PROJECT NUMBER: BHF 191 1 (14) COUNTY: GILMER

PROJECT NAME: BRIDGE WIDENING OVER TAILS CREEK ON SR 282 LENGTH: 0.9 km

P. I. NUMBER: 631580 U.S. ROUTE NO.: 76 STATE ROUTE NO.: 282

LOCATION

SR 282 OVER TAILS CREEK 12 km WEST OF ELLIJAY

YEAR	CURRENT			TRAFFIC		PROJECTED	
	YEAR	AAADT	CA	EXEMPT	YEAR	AAADT	FUNCTIONAL CLASSIFICATION
2001		5550	()	(XX)	2021	9450	PRINCIPAL ARTERIAL
PDP CLASSIFICATION		NON-CA	CA	EXEMPT	FUNCTIONAL CLASSIFICATION		
MINOR		()	()	(XX)	PRINCIPAL ARTERIAL		

EXISTING TYPICAL SECTION

7.3 m PAVEMENT, WITH 1.2 m SHOULDERS

POSTED SPEED	MIN EXIST RADIUS OF CURVE	MAX EXIST GRADE
55 mph	291 m	8. %

EXISTING MAJOR STRUCTURES

RANK:	N.RTG	S.RTG	FEATURES INTERSECTED	LENGTH	WIDTH
		48.2	123-0024-0	53 m X	7.25 m

EXISTING AND REQUIRED RIGHT OF WAY: EXISTING R/W IS ESTIMATED TO BE 30.48 m
 REQUIRED R/W IS ESTIMATED TO BE AN ADDITIONAL 15 m ON THE NORTH (LEFT) SIDE
 ALSO, AN ADDITIONAL 100 m X 30 m PARCEL OF R/W WILL BE REQUIRED ON THE SOUTH
 (RIGHT) SIDE TO TIE IN AN EXISTING COUNTY ROAD.

PROJECT NEED: THE EXISTING BRIDGE IS NARROW (7.25 m), WITH HIGH TRUCK TRAFFIC.

PROJECT CONCEPT REPORT

PROJECT NUMBER: BHF 191 1 (14) GILMER

PROPOSED TYPICAL SECTION

7.2 m PAVING, WITH 3.0 m SHOULDERS (AASHTO ONLY REQUIRES 2.4 m SHOULDERS, BUT
MOG 4265-10.1 FOR BRIDGE WIDTH INDICATES THAT A 13.2 m BRIDGE IS REQUIRED IN
THIS SITUATION. THIS WILL RESULT IN 3.0 m SHOULDERS.

<u>DESIGN SPEED</u>	<u>MIN RADIUS OF CURVE</u>	<u>MAX GRADE</u>
<u>90 kmh</u>	<u>ALLOWABLE: 305 m</u>	<u>ALLOWABLE: 6 %</u>
	<u>PROPOSED: 305 m</u>	<u>PROPOSED: 8 %</u>

MAJOR STRUCTURES

123-0024-0

TYPE ACCESS: CONTROLLED BY PERMIT

TRAFFIC CONTROL DURING CONSTRUCTION: STAGE CONSTRUCTION

ESTIMATED COST:

<u>CONSTRUCTION:</u>	<u>1,047,375</u>	<u>RIGHT-OF-WAY:</u>	<u>35,100</u>
<u>E & C (10%):</u>	<u>104,737.50</u>	<u>ACQUIRED BY:</u>	<u>D.O.T.</u>
<u>INFLATION:</u>	<u>172,816.88</u>	<u>UTILITIES:</u>	<u>3,000</u>
	<u>3 yrs at 5% per yr</u>	<u>ADJUSTED BY:</u>	<u>OWNERS</u>
<u>TOTAL CONST COST:</u>	<u>1,363,029.38</u>		

DESIGN VARIATIONS REQUIRED

	<u>YES</u>	<u>NO</u>	<u>UNDETERMINED</u>
<u>SUBST HORIZ ALIGNMENT</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST ROADWAY WIDTH</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST SHOULDER WIDTH</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST VERT GRADES</u>	<u>(X)</u>	<u>()</u>	<u>()</u>
<u>SUBST CROSS SLOPES</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST STOPPING SIGHT DIST</u>	<u>()</u>	<u>()</u>	<u>(X)</u>
<u>SUBST SUPERELEV RATES</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST HORIZ CLEARANCE</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST SPEED DESIGN</u>	<u>()</u>	<u>()</u>	<u>(X)</u>
<u>SUBST VERT CLEARANCE</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST BRIDGE WIDTH</u>	<u>()</u>	<u>(X)</u>	<u>()</u>
<u>SUBST BR STRUCT CAPACITY</u>	<u>()</u>	<u>(X)</u>	<u>()</u>

PROJECT CONCEPT REPORT

PROJECT NUMBER: BHF 191 1 (14) GILMER

DISPLACEMENTS: NONE

LEVEL OF ENVIRONMENTAL ANALYSIS: CATEGORICAL EXCLUSION

LEVEL OF PUBLIC INVOLVEMENT: NONE

TIME SAVING PROCEDURES APPROPRIATE: XX YES NO

DESIGN VARIATIONS REQUIRED: FOR VERTICAL CURVES, AND POSSIBLY FOR STOPPING
SIGHT DISTANCE AND SPEED DESIGN, DUE TO MOUNTAINOUS TERRAIN.

OTHER PROJECTS IN AREA: NONE

CONCEPT TEAM MEETING DATE: APRIL 24, 1996

LOCATION INSPECTION DATE: APRIL 24, 1996

PERMITS REQUIRED (COE 404, etc.): COE 404

UNDERGROUND STORAGE TANKS: NONE ANTICIPATED

HAZARDOUS WASTE SITES: NONE ANTICIPATED

ALTERNATES CONSIDERED: 1. SHIFT ALIGNMENT APPROXIMATELY 7.6 m (25') TO THE
NORTH AT THE CLOSEST POINT CENTERLINE COMES TO THE PROPOSED BRIDGE. PROPOSE
TO BUILD ENOUGH OF THE NEW BRIDGE TO KEEP TWO LANES OF TRAFFIC OPEN DURING
PHASE 1. REMOVE THE EXISTING BRIDGE, AND CONSTRUCT THE REMAINDER OF THE NEW
BRIDGE. (PROPOSED ALIGNMENT SKETCH INCLUDED)

2. IT WAS CONSIDERED TO CONSTRUCT A DETOUR BRIDGE PARALLEL TO THE EXISTING
BRIDGE, THEN REMOVE AND REBUILD THE BRIDGE ON EXISTING LOCATION. HOWEVER,
DUE TO THE DEPTH OF THE SPAN (MOUNTAINOUS TERRAIN) AND THE LENGTH OF BRIDGE,
IT WAS DECIDED THAT A DETOUR BRIDGE WOULD NOT BE PRACTICAL.

3. NO BUILD

DISTRICT 6 RECOMMENDS ALTERNATE 1.

PROJECT CONCEPT REPORT

PROJECT NUMBER: BHF 191 1 (14) GILMER

COMMENTS: THIS PROJECT IS CURRENTLY PROGRAMMED TO REPLACE THE DECK ON THE
EXISTING BRIDGE, AND TO BE WIDENED TO 13.2 m. THE EXISTING BRIDGE IS A H-15
DESIGN BRIDGE. OTHER RECENT PROJECTS THAT REQUIRED DECK REPLACEMENT ON H-15
DESIGNED BRIDGES ULTIMATELY RESULTED IN THE SCOPE OF THE PROJECT CHANGING
FROM WIDENING TO REPLACEMENT. THEREFORE DISTRICT 6 RECOMMENDS THAT THIS
PROJECT BE CHANGED TO A BRIDGE REPLACEMENT.

RELOCATE THE FARM ACCESS DRIVE IN THE NORTHWEST QUADRANT FAR ENOUGH AWAY FROM
THE BRIDGE IN ORDER TO PLACE ADEQUATE AMOUNT OF GUARDRAIL ON THE BRIDGE END.

ATTACHMENTS: TYPICAL SECTION

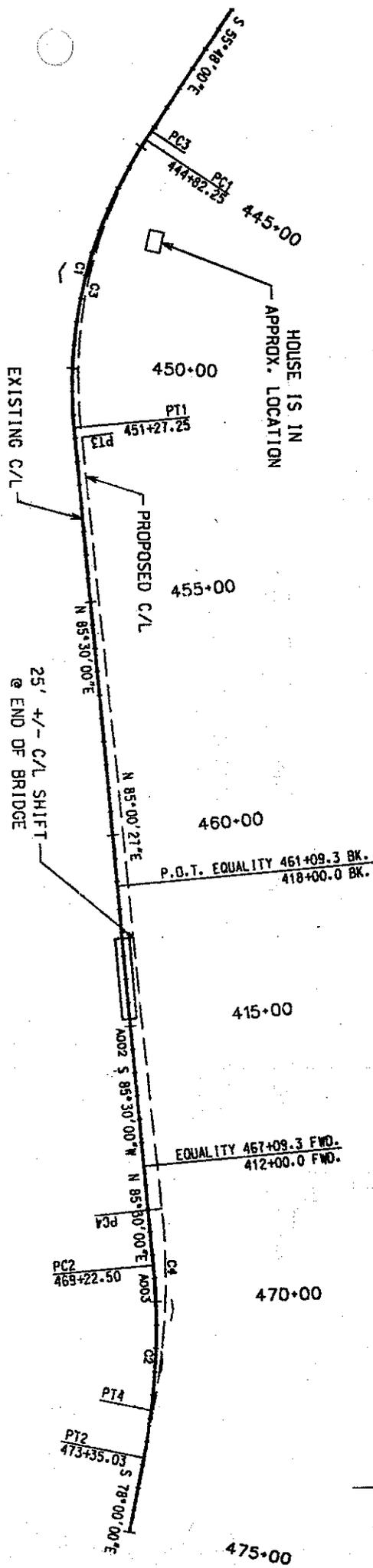
LAYOUT

Prepared By: Dennis Thompson

440+00

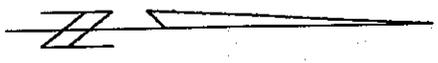
PROPOSED	
CURVE 3	
Δ	4° 04' 43"
D	08° 00' 00"
R	854.94
T	337.79
L	84.88
E	84.83

EXISTING	
CURVE 1	
Δ	38° 42' 00"
D	08° 00' 00"
R	325.83
T	845.00
L	57.17
E	57.17

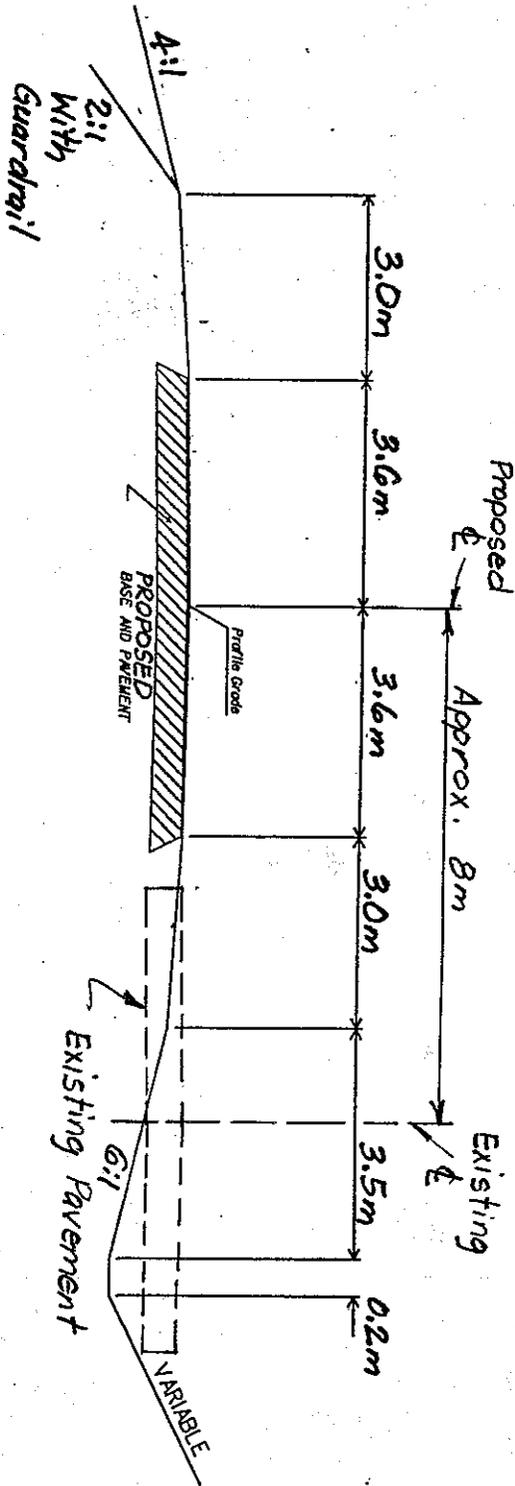


PROPOSED	
CURVE 4	
Δ	17° 18' 41"
D	04° 00' 00"
R	1432.39
T	218.27
L	433.20
E	18.53

EXISTING	
CURVE 2	
Δ	16° 30' 00"
D	04° 00' 00"
R	1432.48
T	207.70
L	412.53
E	14.98



TYPICAL SECTION LOOKING EAST



D. GRADING AND DRAIN

1. EARTHWORK - 125,000 CY @ \$3.50/CY	\$ 437,500
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2. DRAINAGE	
a. Cross Drain Pipes (exc. Box Culverts)	\$
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b. 100 LF 24" SIDE DRAIN @ \$30/LF	\$ 5,100
6 EA FLARED END SECTIONS @ \$350/EA	
<hr/>	
c. Logitudinal System (incl. Catch Basins)	\$
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SUBTOTAL	\$ 442,600

E. BASE AND PAVING

1. AGGREGATE BASE - 2700 T @ \$12.50/T	\$ 33,750
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2. ASPHALT PAVING - 2700 T @ \$40/T	\$ 108,000
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3. CONCRETE PAVING	\$
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4. OTHER - AGG SURF CRS - 500 T @ \$10.50/T	\$ 5,250
<hr/>	
SUBTOTAL	\$ 147,000

F. LUMP ITEMS

1. TRAFFIC CONTROL	\$ 30,000
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2. CLEARING AND GRUBBING - 6.5 AC @ \$3,000/AC	\$ 19,500
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3. LANDSCAPING	\$
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4. EROSION CONTROL - LUMP- GRASSING - LUMP	\$ 17,500
SILT FEN TP A 2000LF@\$3.50/LF-TP B 500LF @\$5/LF	
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5. DETOURS (incl. TEMP. BRIDGES)	\$
<hr/>	
SUBTOTAL	\$ 67,000

G. MISCELLANEOUS

1. LIGHTING	\$
<hr/>	
2. SIGNING - STRIPING - STRIPING - LUMP	\$ 2,000
<hr/>	
3. GUARDRAIL - 850 LF @ \$10.50/LF - 2 TP11 ANCH @ \$1250/EA - 2 TP 1 ANCH @ \$500/EA	\$ 12,425
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4. OTHER	\$
<hr/>	
SUBTOTAL	\$ 14,425

H. SPECIAL FEATURES

	\$
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ESTIMATE SUMMARY

A. RIGHT OF WAY \$ 35,100
B. REIMBURSABLE UTILITIES \$ 3,000

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES \$ 376,350
D. GRADING AND DRAINAGE \$ 442,600
E. BASE AND PAVING \$ 147,000
F. LUMP ITEMS \$ 67,000
G. MISCELLANEOUS \$ 14,425
H. SPECIAL FEATURES \$ _____

SUBTOTAL CONSTRUCTION COST \$ 1,047,375

E & C (10%) \$ 104,737.50

3 YRS INFLATION (5% per year) \$ 172,816.88

TOTAL CONSTRUCTION COST \$ 1,324,929.38

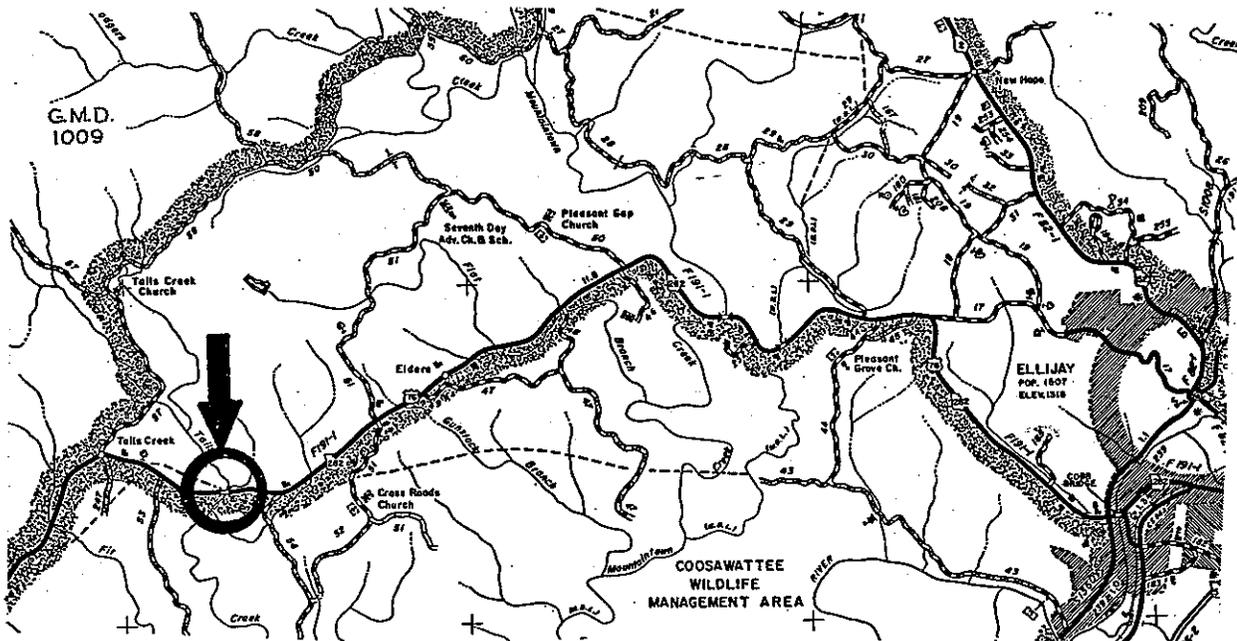
GRAND TOTAL PROJECT COST \$ 1,363,029.38

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PROJECT CONCEPT REPORT

BHF-191-1(14) Gilmer County
Bridge Replacement over Tails Creek

Federal Route No.: F-191-1
State Route No.: 282
Ga. D.O.T. P.I. No.: 631580



DATE OF REPORT: June 6, 1996

RECOMMENDATION FOR APPROVAL

6-22-96
DATE
7/16/96
DATE
DATE
7/1/96
DATE
DATE
DATE

PROJECT MANAGER <i>Cory Fisher</i>
STATE ENVIRONMENTAL/LOCATION ENGINEER <i>[Signature]</i>
STATE TRAFFIC OPERATIONS ENGINEER <i>[Signature]</i>
DISTRICT ENGINEER
STATE REVIEW ENGINEER
STATE BRIDGE ENGINEER