

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE FR-179-1(10); BHF-179-1(11) Bartow County OFFICE Preconstruction
P.I. No. 621440; 621445
Needs Rating-Unk. Suff. Rating-56.6 DATE May 7, 1991

FROM *CWH*
C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL - WIDEN SR 113 & BRIDGE AT RACCOON CREEK

Attached for your files is the approval for subject project.

CWH/se

Attachment

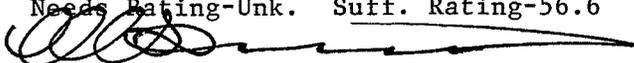
DISTRIBUTION:

Juan Durrence
Robert E. Humphrey
Frank Danchetz
Herman Griffin
Walker Scott
Darrell Elwell
Winn Guthrie
Paul Liles
Felton Rutledge

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE FR-179-1(10); BHF-179-1(11) Bartow County OFFICE Preconstruction
P.I. No. 621440; 621445
Needs Rating-Unk. Suff. Rating-56.6 DATE March 25, 1991

FROM 
William J. "Juan" Durrence, Director of Preconstruction

TO Hal Rives, Commissioner

SUBJECT WIDEN SR 113 & BRIDGE AT RACCOON CREEK - PROJECT CONCEPT REPORT

These combined projects will widen a 4.5 mile section of SR 113 to provide a multilane facility from Co. Rd. 31 in Stilesboro northeast to SR 61 near Cartersville Airport. This northern limit at SR 61 is a change in the original Preprogrammed limit at Richland Creek, thereby extending the project length from 2.91 miles to 4.5 miles. This was recommended in the concept team meeting in order to tie the project into a 5 lane section of Preprogrammed Project FR-018-1(56) also for FY 95. This 1.59 mile extension is included in the cost estimate. The existing road has a rural section with 24' of pavement and 4' shoulders on 100' of right-of-way. Major structures consist of a 23.9'x180' bridge at Raccoon Creek (Suff. Rating-56.6) and a 23.9'x135' bridge at Richland Creek (Suff. Rating-23.6). Minor structures consist of box culverts with sizes: 2 @ 4'x6'; 1 @ 5'x3' and 1 @ 6'x3'. Base year and design year traffic is 9000 VPD (1997) and 14,200 VPD (2017).

Project FR-179-1(10) will widen SR 113 between above termini to have a rural section with 4-12' lanes (2 each direction) w/44' grassed median on minimum 200' of right-of-way and will have a design speed of 55 MPH. Widening will shift from side to side in order to reduce property impacts. Co. Rd. 23 will be relocated to intersect SR 113 across from Richland Drive and SR 61 will be relocated to intersect SR 113 across from Co. Rd. 533. A new 38' wide bridge will be constructed for the new lanes at Raccoon Creek and at Richland Creek with lengths of 180'(±) and 135'(±), respectively. Existing minor structures will be extended to appropriate length.

Project BHF-179-1(11) will widen the existing bridge at Raccoon Creek to 38'. The existing substandard bridge at Richland Creek will be replaced under Project BRF-179-1(4).

Traffic will be maintained on existing road during construction. Environmental considerations are: (1) displacements of 9 residential, 1 commercial, 1 industrial, 9 mobile homes and 1 barn; (2) COE 404; with possible 4f (2 acres wetlands); (3) 1 possible UST site; (4) a public hearing will be held.

Hal Rives
Page 2
March 25, 1991

FR-179-1(10); BHF-179-1(11) Bartow County

The estimated cost of the projects are:

	<u>FR-179-1(10)</u>		<u>PROG. DATE</u>
	<u>PROPOSED</u>	<u>APPROVED</u>	
Constr(Infl&E/C)	\$8,176,000	\$2,790,000	FY 95
Right-of-way	\$ 2,379	No Est.	Preprogram
Utilities	LGPA*	LGPA*	

*LGPA to be sent after concept approval.

	<u>BHF-179-1(11)</u>		<u>PROG. DATE</u>
	<u>PROPOSED</u>	<u>APPROVED</u>	
Constr(Infl&E/C)	\$230,000	\$610,000	FY 95
Right-of-way	0	No Est.	Preprogram
Utilities	LGPA*	LGPA*	

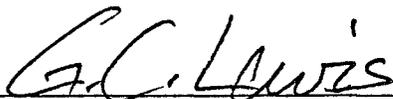
*LGPA to be sent after concept approval.

I recommend that we approve this project concept report for these two projects, that they be removed from Preprogram Status and added to the Construction Work Program for implementation.

WJD/WLP/se

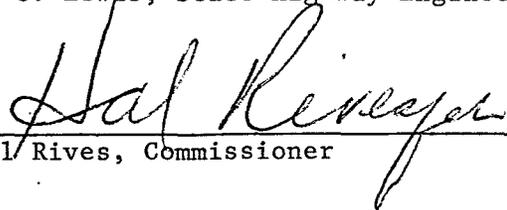
Attachment

CONCUR:



G. C. Lewis, State Highway Engineer

APPROVED:



Hal Rives, Commissioner

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED

MAR - 6 1991

INTERDEPARTMENT CORRESPONDENCE

PRECONSTRUCTION

FILE FR-179-1 (10), BHF-179-1 (11) Bartow OFFICE Atlanta, Georgia
P.I. No. 621440, 621445 County
Widen SR 113 & Bridge at Raccoon Creek DATE March 5, 1991

FROM Robert E. Humphrey, Project Review Engineer **REH**

TO William J. Durrence, Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT

We have reviewed the attached Concept Report for this Major project and have the following comment:

The Concept Report shows the cost of relocating the involved utilities to be \$351,300 while the cost estimate shows no cost for Utility relocation.

We have received signed cover sheets from the following offices.

- 1. Bridge Design
- 2. Road Design

This report is satisfactory for approval.

The estimated costs of this project are as follows:

		<u>FR-179-1(10)</u>	<u>BHF-179-1(11)</u>
Construction	\$6,509,000	\$6,194,000	\$174,000
Inflation (5% per year) x 4 yrs.	1,307,800	1,238,800	34,800
E & C (10%)	781,080	743,280	20,880
Preliminary Engineering (5%)	390,540		
Right of Way	2,379,000		
Utilities	---		

MJB/jmf

Attachments

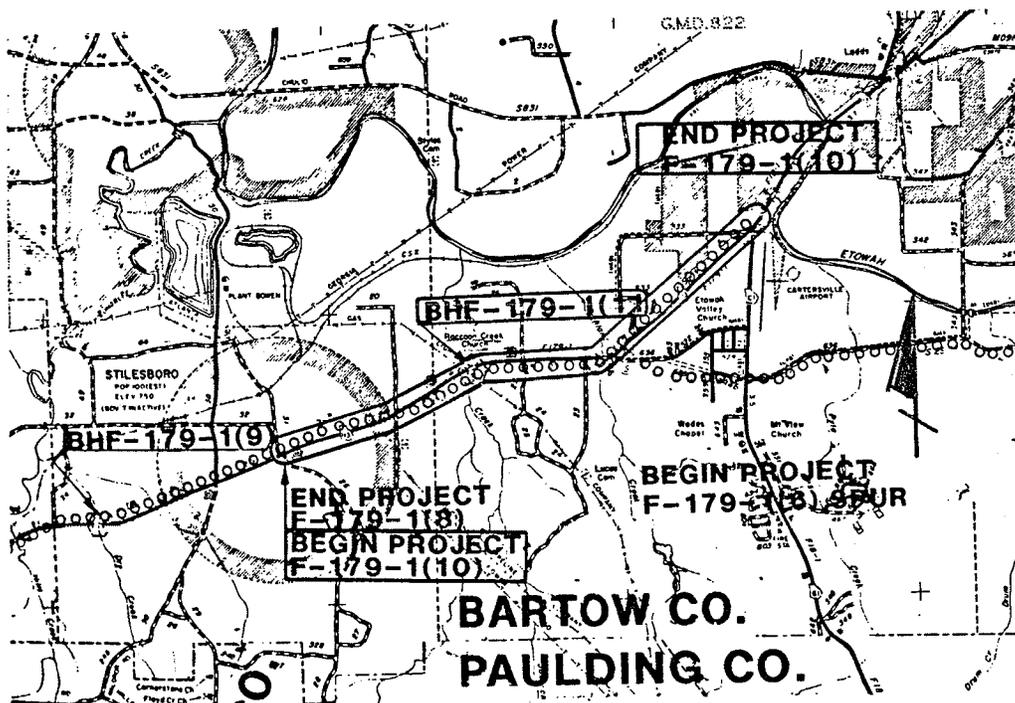
c: Frank Danchetz



OFFICE OF ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT

Project Number: FR-179-1(10)/BHF-179-1(11)
 County: BARTOW
 P.I. Number: 621440/621445
 Federal Route Number: F-179-1
 State Route Number: 113



RECOMMENDATION FOR APPROVAL:

11/30/90
DATE

Frank R. Dambety
STATE ENVIRONMENTAL/LOCATION ENGINEER

DATE

STATE ROAD AND AIRPORT DESIGN ENGINEER

DATE

STATE TRAFFIC AND SAFETY ENGINEER

DATE

STATE BRIDGE AND STRUCTURAL DESIGN ENGINEER

DATE

DISTRICT ENGINEER/CARTERSVILLE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-179-1(7)(8)(10)/BHF-179-(9)(11) OFFICE Environment/Location
Polk/Bartow Counties
P.I. Nos. 621420,621430,621440,621435,621445 DATE December 5, 1990
FROM ^{FLD} Frank L. Danchetz, P.E. State Environmental/Location Engineer
TO Robert Humphrey, Project Review Engineer

SUBJECT CONCEPT REPORT-S.R. 113 IMPROVEMENTS

In accordance with the plan development process, the reports for the above projects are attached for your review and processing.

FLD:JQ/me

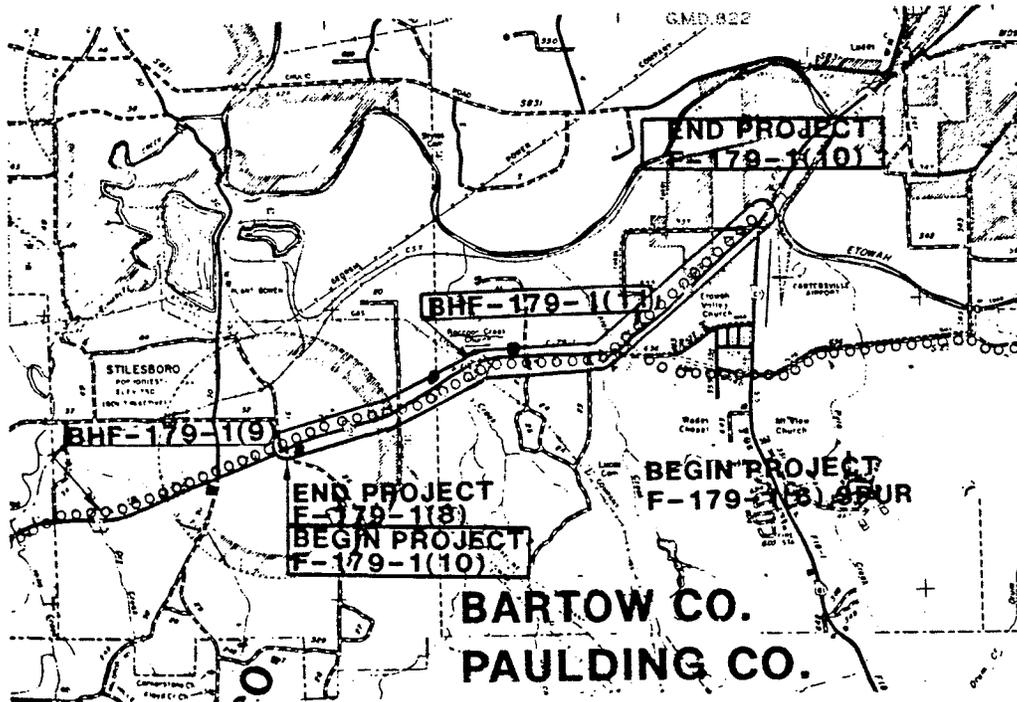
cc: Wayne Hutto
Walker Scott
Ronald Colvin
Paul Liles
Felton Rutledge, District Engineer/Cartersville

OFFICE OF ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT



Project Number: FR-179-1(10)/BHF-179-1(11)
 County: BARTOW
 P.I. Number: 621440/621445
 Federal Route Number: F-179-1
 State Route Number: 113



RECOMMENDATION FOR APPROVAL:

11/30/90
DATE

Frank R. Dambety
STATE ENVIRONMENTAL/LOCATION ENGINEER

DATE

STATE ROAD AND AIRPORT DESIGN ENGINEER

DATE

STATE TRAFFIC AND SAFETY ENGINEER

DATE

STATE BRIDGE AND STRUCTURAL DESIGN ENGINEER

DATE

DISTRICT ENGINEER/CARTERSVILLE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE BHF-179-1(9) & (11), Bartow Co. OFFICE Environment/Location
P.I. Nos. 621435, 621445 DATE January 11, 1991

FROM ^{FLD} Frank L. Danchetz, P.E., State Environmental/Location Engineer

TO Robert Humphrey, Project Review Engineer

SUBJECT Concept Reports Revision

Please be advised that the above concept reports descriptions should have stated that the existing bridges at Dry Creek and Raccoon Creek would be widened instead of replaced. These bridge projects are included in the S.R. 113 improvements concept reports - FR-179-1(8) & (10) Polk/Bartow counties.

If you have any additional questions about these projects contact Jerry Hobbs at 699-4460 or GIST 229-4460.

FLD/JDQ/cdm..

cc: Wayne Hutto
Walker Scott
Ronald Colvin
Paul Liles
Felton Rutledge/Cartersville

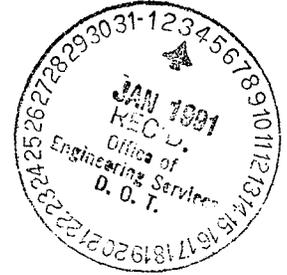
FR-179-1(10); BHF-179-1(11)
Bartow County
P.I. Nos. 621440, 621445

This is a proposal to widen and reconstruct S.R. 113. Projects FR-179-1(10) and BHF-179-1(11) comprise the section from C.R. 31 in Stilesboro northeast to just past S.R. 61, including a proposed bridge widening at Raccoon Creek.

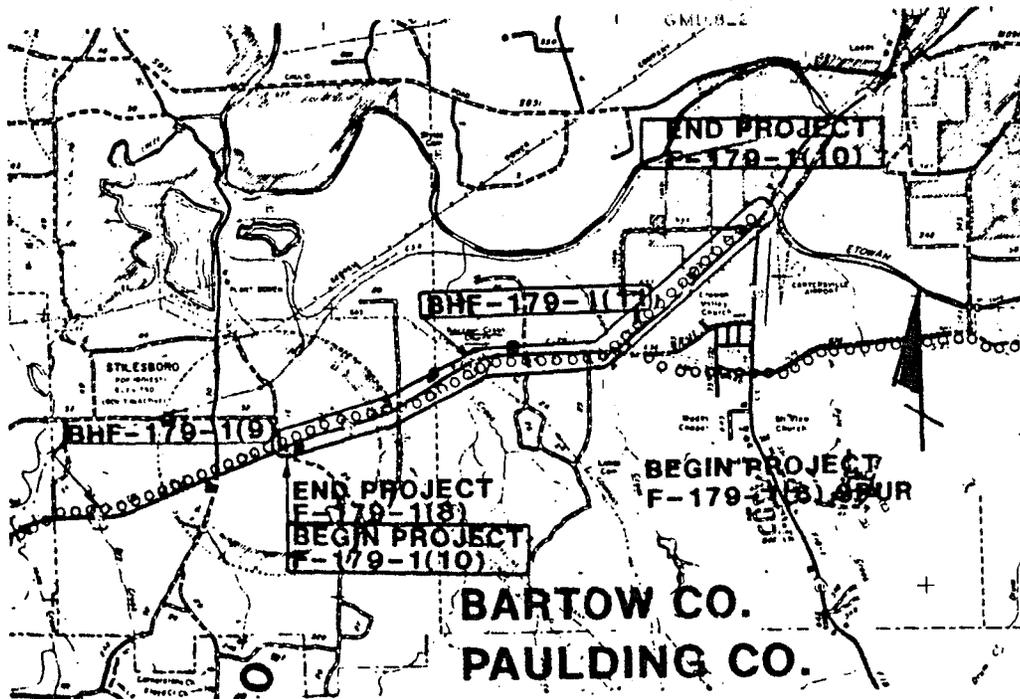
This project would consist of a rural four-lane divided section (two 12-foot lanes in each direction separated by a 44-foot grassed median). The widening would occur on the north side to C.R. 20. The proposed widening would shift back to the south side and continue to Richland Creek, then shift back to the north side to S.R. 61. C.R. 23 would be relocated to intersect S.R. 113 across from the Richland Drive intersection. S.R. 61 would also be relocated to intersect S.R. 113 across from the C.R. 533 intersection. New bridges would be constructed for the new lanes over Raccoon Creek and Richland Creek. Project BHF-179-1(11) would consist of widening the existing bridge at Raccoon Creek. The project length is 4.50 miles.

OFFICE OF ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT



Project Number: FR-179-1(10)/BHF-179-1(11)
 County: BARTOW
 P.I. Number: 621440/621445
 Federal Route Number: F-179-1
 State Route Number: 113



RECOMMENDATION FOR APPROVAL:

11/30/90
DATE

1/2/91
DATE

DATE

DATE

DATE

Frank R. Dambety, Jr.
STATE ENVIRONMENTAL/LOCATION ENGINEER

Walter W. Wood
STATE ROAD AND AIRPORT DESIGN ENGINEER

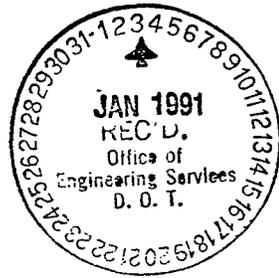
STATE TRAFFIC AND SAFETY ENGINEER

STATE BRIDGE AND STRUCTURAL DESIGN ENGINEER

DISTRICT ENGINEER/CARTERSVILLE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-179-1(8), BHF-179-1(9), FR-179-1(10) OFFICE Atlanta
BHF-179-1(11) Polk/Bartow Cos.
P.I. Nos. 621430, 621435, 621440 & 621445 DATE Dec. 31, 1990
SR - 113 *Walker W. Scott*
FROM Walker W. Scott, P.E., State Road & Airport Design Engineer *RH*
TO *Robert Humphrey*, Project Review Engineer

SUBJECT Approval - Concept Reports

The above project's concept reports have been reviewed by this office and are considered satisfactory.

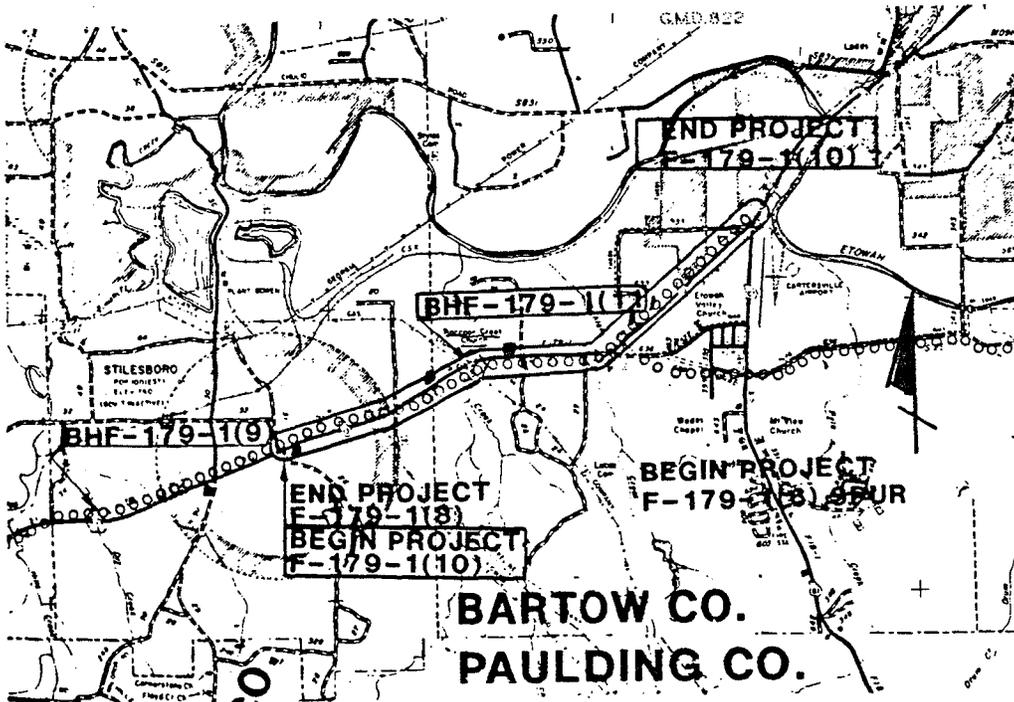
WWS:PDP:bc
Attachment

OFFICE OF ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT



Project Number: FR-179-1(10)/BHF-179-1(11)
 County: BARTOW
 P.I. Number: 621440/621445
 Federal Route Number: F-179-1
 State Route Number: 113



RECOMMENDATION FOR APPROVAL:

11/30/90
 DATE

Frank R. Dambety
 STATE ENVIRONMENTAL/LOCATION ENGINEER

 DATE

 STATE ROAD AND AIRPORT DESIGN ENGINEER

 DATE

 STATE TRAFFIC AND SAFETY ENGINEER

1/16/91
 DATE

Paul V. Tiles Jr.
 STATE BRIDGE AND STRUCTURAL DESIGN ENGINEER

 DATE

 DISTRICT ENGINEER/CARTERSVILLE

PROJECT CONCEPT REPORT

DATE: OCTOBER, 1990

PROJECT NUMBER: FR-179-1(10); BHF-179-1(11)

COUNTY: BARTOW

PROJECT NAME: S.R. 113 IMPROVEMENTS

P.I. NUMBER: 621440/621445

U.S. ROUTE NO: F179-1

STATE ROUTE NO: 113

LOCATION

PROJECT FR-179-1(10) COMPRISES THE SECTION FROM C.R. 31 NORTHEAST TO S.R. 61. PROJECT

BHF-179-1(11) WOULD CONSIST OF REPLACING THE EXISTING BRIDGE AT RACCOON CREEK.

LENGTH @ 4.50 MILES.

widening m 1/16/91

TRAFFIC

CURRENT

PROJECTED

YEAR

AADT

YEAR

AADT

1997

9000

2017

14,200

PDP CLASSIFICATION

FUNCTIONAL CLASSIFICATION

MAJOR PROJECT ON EXISTING LOCATION

RURAL ARTERIAL

EXISTING TYPICAL SECTION

2-LANE RURAL ROADWAY WITH 4 FOOT GRASSED SHOULDERS

POSTED SPEED

MAX EXIST DEGREE OF CURVE

MAX EXIST GRADE

55 MPH

5° - 45'

5.5%

EXISTING MAJOR STRUCTURES

<u>RANK</u>	<u>P. RTG</u>	<u>S. RTG</u>	<u>FEATURES INTERSECTED</u>	<u>LENGTH</u>	<u>WIDTH</u>
472	728	56.6	RACCOON CREEK	180	23.9
453	724	23.6	RICHLAND CREEK	135	23.9

PROJECT NEED: THE PURPOSE OF THIS PROJECT IS TO UPGRADE THE S.R. 113 CORRIDOR BY

INCREASING CAPACITY BETWEEN ROCKMART AND CARTERSVILLE.

PROJECT CONCEPT REPORT

PROJECT NUMBER: FR-179-1(10); BHF-179-1(11)

PROPOSED TYPICAL SECTION

THIS PROJECT WOULD CONSIST OF A RURAL FOUR-LANE DIVIDED SECTION (TWO 12-FOOT LANES IN EACH DIRECTION SEPARATED BY A 44-FOOT GRASSED MEDIAN) WITH 4 FOOT PAVED OUTSIDE SHOULDERS AND 2 FOOT PAVED INSIDE SHOULDERS

<u>DESIGN SPEED</u>	<u>MAX DEGREE OF CURVE</u>	<u>MAX GRADE</u>
55 MPH	ALLOWABLE: <u>4° - 30'</u>	ALLOWABLE: <u>4.50%</u>
	PROPOSED: <u>4° - 00'</u>	PROPOSED: <u>4.50%</u>

MAJOR STRUCTURES

widen PVC 1/16/91

NEW BRIDGES WOULD BE CONSTRUCTED FOR THE NEW LANES OVER RACCOON CREEK AND RICHLAND CREEK.

PROJECT BHF-179-1(11) WOULD REPLACE THE EXISTING STRUCTURE AT RACCOON CRK., BHF-179-1(14)

WOULD REPLACE THE EXISTING STRUCTURE AT RICHLAND CREEK - NOT INCLUDED IN THIS REPORT.

BHF-179-1(4)

PVC 1/16/91

TYPE ACCESS: REGULATED THROUGH DRIVEWAY PERMITS

TRAFFIC CONTROL DURING CONSTRUCTION: MAINTAINED ON EXISTING ROADWAY

ESTIMATED COST:

CONSTRUCTION: <u>\$ 6,508,000</u>	RIGHT-OF-WAY: <u>\$ 2,379,000</u>
E&C (10%): <u>667,000</u>	ACQUIRED BY: <u>DOT</u>
INFLATION: <u>651,000</u>	UTILITIES: <u>\$ 351,300</u>
<u>@ 5% PER YEAR</u>	ADJUSTED BY: <u>UNKNOWN</u>

TOTAL CONST. COST: \$ 7,826,000 (INCLUDES PROJECT BHF-179-1(11) @ \$384,000)

DISPLACEMENTS: 9 RESIDENTIAL; 1 COMMERCIAL; 1 INDUSTRIAL; 9 MOBILE HOMES; 1 BARN

LEVEL OF ENVIRONMENTAL ANALYSIS: ENVIRONMENTAL ASSESSMENT

LEVEL OF PUBLIC INVOLVEMENT: PUBLIC HEARING

TIME SAVING PROCEDURES APPROPRIATE: N/A

DESIGN VARIATIONS REQUIRED: NONE REQUESTED BY ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT

PROJECT NUMBER: FR-179-1(10); BHF-179-1(11)

OTHER PROJECTS IN AREA: FR-179-1(6)SPUR; FR-179-1(7)(8); BHF-179-1(9)(14)

CONCEPT TEAM MEETING DATE: SEPTEMBER 25, 1990

LOCATION INSPECTION DATE: TO BE HELD

PERMITS REQUIRED (4f, COE, 404, etc.): COE 404, POSSIBLE 4F, (WETLANDS @ 2 AC.)

UNDERGROUND STORAGE TANKS: 1 POSSIBLE SITE

HAZARDOUS WASTE SITES: N/A

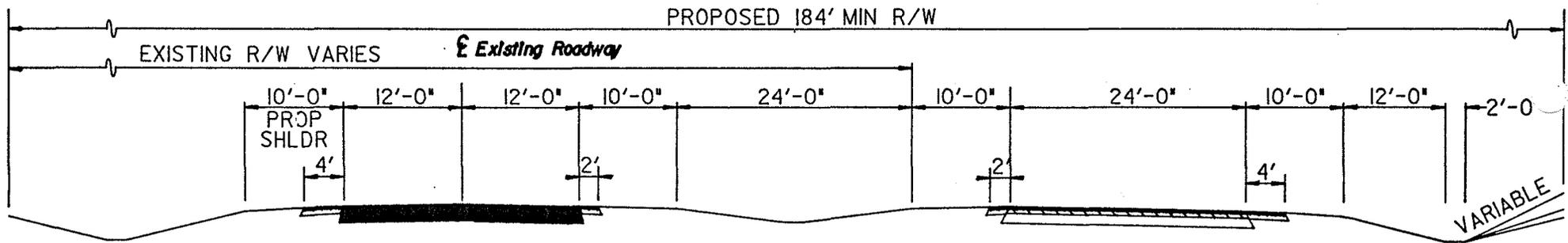
OTHER ALTERNATES CONSIDERED: AN ALTERNATE TO UTILIZE A 4 FOOT FLUSH MEDIAN WAS
CONSIDERED.

COMMENTS: THIS PROJECT IS PART OF A PROPOSAL TO WIDEN AND RECONSTRUCT OR RELOCATE PART
OF S.R. 113. THE PROPOSAL EXTENDS FROM THE ROCKMART BYPASS TO I-75 @ EMERSON.

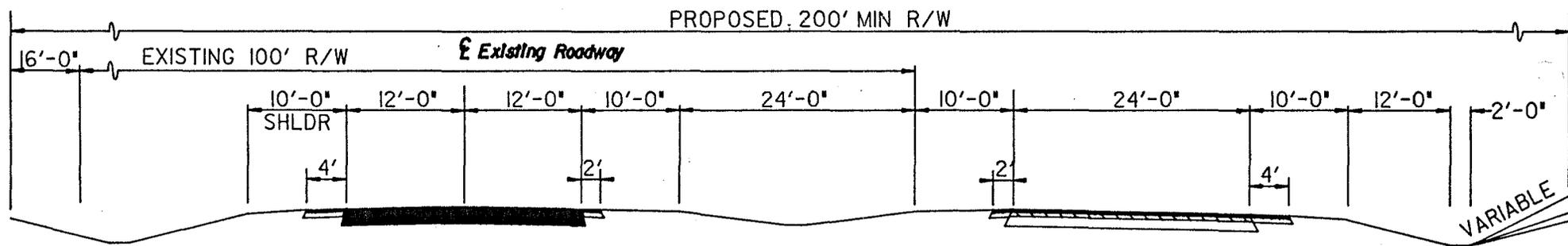
ATTACHMENTS: COST ESTIMATE

TYPICAL SECTION

TEAM MEETING MINUTES



TYPICAL CROSS SECTION



TYPICAL CROSS SECTION
 (RECONSTRUCT EXISTING ROADWAY AND UPGRADE SHOULDERS)

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE FR-179-1(6)Spur, FR-179-1(7)(8)(10) **OFFICE** Environment/Location
BHF-179-1(9) & (11), Polk/Bartow - #621410, 621420, 621430, 621440, 621435, 621445 **DATE** October 19, 1990

FROM John Quarles, T.E. II

TO See Distribution

SUBJECT Concept Team Meeting Minutes

A team meeting for the S.R. 113 Relocation and Improvements was held on Tuesday, September 25, 1990 at 1:30 p.m. at the Office of Environment/Location. In attendance were: Johnny Quarles, Herman Hadarits, Wayne Hutto, John Richard, Ron Brown, David Studstill and Frank Danchetz of Environment/Location; Mike Gannaway and Roland Hinners of Road Design; Del Clippard, Traffic and Safety; Percy Middlebrooks, Programming; Larry Pachoud, Right-of-Way; John Humeston, FHWA; Felton Rutledge, Bill McVey, David Black, District 6; Tim Klob, Planning; Nathan Dean, State Senator-Rockmart; B. Ward, W.L. Ward of the Bartow County Commission Office.

The following describes the concept shown at the meeting:

This is a proposal to widen and reconstruct or relocate part of S.R. 113. The proposal extends from just south of the Rockmart Bypass northeast to I-75 at Emerson.

Project FR-179-1(7) encompasses the section of S.R. 113 from just south of the Rockmart Bypass northeast to the south Taylorsville city limits; project FR-179-1(8) and BHF-179-1(9) comprise the section from the south Taylorsville city limits east to C.R. 31, including a proposed bridge ~~replacement~~ ^{widening} at Dry Creek; projects FR-179-1(10) and BHF-179-1(11) comprise the section from C.R. 31 northeast to SR. 61, including a proposed bridge ~~replacement~~ ^{widening} at Raccoon Creek; and project FR-179-1(6)Spur is the relocation of S.R. 113 from existing S.R. 113 near C.R. 533 east on new location to S.R. 61, then along C.R. 636 to I-75.

The existing right-of-way on S.R. 113 is 100 feet, and the existing right-of-way of C.R. 636 varies from 50 feet to 200 feet of right-of-way is required for project FR-179-1(6)Spur, the required right-of-way would vary from 0 feet to 200 feet. Access control for the upgraded S.R. 113 and C.R. 636 would be regulated through driveway permits. Access control along the new location portion of project FR-179-1(6)Spur would be partial limited. The total length of the combined projects is 21.50 miles long.

Road Design

On CR. 636 improvements, passing lanes should be considered where detours are needed. It was also recommended that a 20' raised median be considered from the Rockmart Bypass northeast for 2.5 miles.

(Continued)

Con. Tm. Mtg. Min.
October 19, 1990
page 2

District

The current bridge projects at Hill Creek and Richland Creek will be put on hold to coincide with this project.

Traffic and Safety

Passing Lanes should be considered along C.R. 636.

FHWA

It was recommended that the Department purchase right-of-way for future interchange at U.S. 41.

Environmental

It as mentioned that Pumpkinvine Creek could possibly contain archaeological sites. The projects from the Rockmart Bypass to north of Richland Creek would require an Environmental Assessment. The S.R. 113 relocation to Emerson would require a Categorical Exclusion. It was also recommended that project FR-179-1(10) be extended north to S.R. 61 to tie into a proposed five lane section. A public hearing would be held in late Spring.

JDQ/cdm

PRELIMINARY COST ESTIMATE

OFFICE OF ENVIRONMENT/LOCATION

P.I. NO: 621440/621445

REVISED: _

PROJECT NO: FR-179-1(10)/BHF-179-1(11)

REVISED: _

PROJECT NAME: S.R. 113 IMP

REVISED: _

COUNTY: BARTOW

DATE: 10-29-1990

PROJECT DESCRIPTION: FROM C.R. 31 IN STILES BORO TO S.R. 61

TYPICAL SECTION LENGTH: 4.500 MILES

TYPICAL SECTION: RURAL WIDENING-2 TO 4 LANES WITH 44' GRASSED MEDIAN & 200' MIN R/W

EXISTING ROADWAY (If Applicable): S.R.113

TRAFFIC:

INITIAL DESIGN YEAR: 1997

DAILY VOLUME (AADT): 9,000

FINAL DESIGN YEAR: 2017

DAILY VOLUME (AADT): 14,200

() PROGRAMMING PROCESS (X) PRE-PROGRAMMING PROCESS () FEASIBILITY STUDY

COMMENTS: _

PREPARED BY: JOHN QUARLES

PROJECT COSTS

A. RIGHT-OF-WAY

1. PROPERTY (Land and Easements)	\$ 2,379,000
<hr/>	
2. DISPLACEMENTS	\$ 0
<hr/>	
3. OTHER COST	\$ 0
<hr/>	
SUBTOTAL	\$ 2,379,000

B. REIMBURSABLE UTILITIES

1. RAILROAD	\$ 0
<hr/>	
2. TRANSMISSION LINES	\$ 0
<hr/>	
3. SERVICES	\$ 0
<hr/>	
SUBTOTAL	\$ 0

C. MAJOR STRUCTURES

1. WALLS	\$ 0
<hr/>	
2. BRIDGE STREAM CROSSING	\$ 864,000 549,000
<p><i>NEW BRIDGES @ RACCOON CREEK, RICHLAND CREEK (180X41.5X42) & (135X41.4X42)</i></p>	
<i>Widen</i> REPLACE EXISTING BRIDGE @ RACCOON CREEK (180X41.5X42)	\$ 864,000 174,000
<p><i>RICHLAND CREEK BRIDGE REPLACEMENT UNDER PROJECT BAF-179-1(14)</i></p>	
<hr/>	
4. BOX CULVERTS	\$ 200,000
<p><i>4X6(2), 5X3, 6X3 - LENGTHEN</i></p>	
<hr/>	
SUBTOTAL	\$ 1,064,000 749,000

D. GRADING AND DRAINAGE

1. EARTHWORK

a. UNCLASSIFIED EXCAVATION	\$ 600,000
250,000 CY @ \$2.00 + 25,000 CY @ \$4.00	
<hr/>	
b. BORROW EXCAVATION	\$ 0
0 CY @ \$0.00	
<hr/>	

2. DRAINAGE

a. MINOR DRAINAGE (INCLUDING CROSS DRAIN PIPES & LONGITUDINAL SYSTEM)	\$ 180,000
4.500 MILES @ \$40,000	
<hr/>	
b. CURB AND GUTTER	\$ 0
0 LF @ \$8.22	
<hr/>	
SUBTOTAL	\$ 780,000

E. BASE AND PAVING

1. GRADED AGGREGATE BASE	\$ 454,825
10.00" -- 39,688 T @ \$11.46	
<hr/>	
2. ASPHALT PAVING	
a. ASPHALTIC CONCRETE "E"	\$ 336,841
1.50" -- 10,454 T @ \$32.22	
<hr/>	
b. ASPHALTIC CONCRETE "B"	\$ 212,628
2.00" -- 7,066 T @ \$30.09	
<hr/>	
c. ASPHALTIC CONCRETE BASE	\$ 868,792
8.00" -- 29,814 T @ \$29.14	
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d. BITUMINOUS TACK COAT	\$ 12,312
15,200 G @ \$0.81	
<hr/>	
3. CONCRETE PAVING	\$ 0
<hr/>	
4. OTHER PAVING	\$ 1,938,540
RECONSTRUCT EXISTING S.R. 113 / PAVED SHOULDERS / S.R. 61 RELOC.	
<hr/>	
SUBTOTAL	\$ 3,823,937

F. LUMP ITEMS

1. TRAFFIC CONTROL	\$	<u>60,750</u>
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2. CLEARING AND GRUBBING	\$	<u>256,364</u>
55 ACRES @ \$4,700		
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3. LANDSCAPING	\$	<u>81,000</u>
4.500 MILES @ \$18,000		
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4. EROSION CONTROL	\$	<u>108,000</u>
4.500 MILES @ \$24,000		
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5. DETOURS (INCL. TEMP. BRIDGES)	\$	<u>0</u>
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	SUBTOTAL	\$ <u>506,114</u>

G. MISCELLANEOUS

1. LIGHTING	\$	<u>0</u>
<hr/>		
2. SIGNING/STRIPING	\$	<u>135,000</u>
4.500 MILES @ \$30,000		
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3. GUARDRAIL	\$	<u>29,510</u>
2,500 LF @ \$9.00 + 10 ANCHORS @ \$701		
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4. OTHER	\$	<u>157,500</u>
4.500 MILES @ \$35,000		
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	SUBTOTAL	\$ <u>322,010</u>

H. SPECIAL FEATURES

ENG OFFICE	\$	<u>12,000</u>
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ESTIMATE SUMMARY

A. RIGHT-OF-WAY.....	\$	2,379,000
B. REIMBURSABLE UTILITIES.....	\$	0

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES.....	\$	749,000 1,064,000 ^{w/b}
D. GRADING AND DRAINAGE.....	\$	780,000
E. BASE AND PAVING.....	\$	3,823,937
F. LUMP ITEMS.....	\$	506,114
G. MISCELLANEOUS.....	\$	322,010
H. SPECIAL FEATURES.....	\$	12,000

SUBTOTAL CONSTRUCTION COST.....\$ 6,508,060

w/b
6,194,000
Use ~~6,508,060~~

INFLATION (5% per year).....	\$	667,076 2 yr(s)
E. & C. (10%).....	\$	650,806

TOTAL CONSTRUCTION COST.....\$ 7,825,942

GRAND TOTAL CONSTRUCTION COST \$ 10,204,940