

ORIGINAL COPY FOR GENERAL FILE
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE FR-076-1(23) Columbia County OFFICE Preconstruction
P.I. No. 262080 DATE August 29, 1991
CWH
FROM C. Wayne Hutto, Assistant Director of Preconstruction
TO SEE DISTRIBUTION
SUBJECT PROJECT CONCEPT REPORT APPROVAL - WIDEN AND RECONSTRUCT SR 104

Attached for your files is the approval for subject project.

CWH/se

Attachment

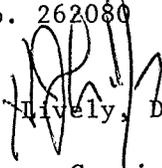
DISTRIBUTION:

John Lively
Robert E. Humphrey
David Studstill
Herman Griffin
Roland Hanners
Darrell Elwell
Winn Guthrie
Kirby Hamil
Paul Liles
Ron Colvin
Edwin Thompson

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE FR-076-1(23) Columbia County OFFICE Preconstruction
P.I. No. 262080 DATE August 14, 1991

FROM Hoyt J.  Hively, Director of Preconstruction

TO Hal Rives, Commissioner

SUBJECT WIDEN AND RECONSTRUCT SR 104 - PROJECT CONCEPT REPORT

This project is the widening and reconstruction of a 2.29 mile section of SR 104 to provide a multilane facility from Co. Rd. 91/Scotts Way/M.L. 6.66 northwest to $\frac{1}{2}$ mile(\pm) west of Long Branch (M.L. 8.95). The existing road has a rural section with 24' of pavement and 6' shoulders on 100' of right-of-way. Major structures consist of a 34.8'x252' bridge at Uchee Creek (Suff. Rating 92.0) and a dbl. 10'x8' bridge culvert at Long Branch. The existing road has several substandard crest and/or sag verticals below 55 MPH. Base year and design year traffic is 7300 VPD (1990) and 11,800 VPD (2010).

The proposed project will widen SR 104 between above termini to have 4-12' lane (2 each direction) with a 56' grassed median. The additional lanes will be constructed on the north side of existing road and will serve westbound traffic. Due to the nature of the vertical alignment of existing road, the 56' median is necessary in order to provide adequate safe slopes and drainage which could not be accomplished with a 44' median. Substandard vertical curves on the existing road will be corrected to 55 MPH design speed. The existing bridge at Uchee Creek will be retained and a new 38'x252'(\pm) parallel concrete bridge will be constructed at the site. The dbl. 10'x8' bridge culvert will be extended to appropriate length. Environmental considerations are: (1) displacements of 4 residences and 3 commercial; (2) COE 404 permit; (3) Environmental Assessment; (4) a public hearing will be held; (5) possible wetlands at Uchee Creek. This project was originally programmed as part of MLP-104(13) which has reprogrammed into 3 separate projects, i.e., FR-076-1(21) & (22) and (23) (subject project). Traffic will be maintained on existing road during construction. The estimated cost of the project is:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG. DATE</u>
Constr(Infl&E/C)	\$3,502,000	\$3,810,000	FY 94
Right-of-way	\$1,995,000	No Est.	Preprogram
Utilities	LGPA*		

*LGPA to be sent after concept approval

Hal Rives
Page 2
August 14, 1991

FR-076-1(23) Columbia County

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

HJL/WLP/se

Attachment

CONCUR: G. C. Lewis
G. C. Lewis, State Highway Engineer

APPROVED: Hal Rives
Hal Rives, Commissioner

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

RECEIVED
JUL 15 1991

FILE FR-076-1 (23) Columbia County OFFICE Atlanta, Georgia
P.I. No. 262080
Widen & Reconstruct SR 104 DATE July 12, 1991

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

TO William J. Durrence, Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT - Revised

We have reviewed the attached revised Concept Report for this Major project.

We have received signed cover sheets from the following offices:

Bridge Design

Traffic and Safety

Environmental

This report is satisfactory for approval.

The estimated costs of this project are as follows:

Construction	\$2,768,000
Inflation (5% per year) x 3 yrs.	415,200
E & C (10%)	318,320
Preliminary Engineering (5%)	159,160
Right of Way	1,995,000
Utilities	Not Available

MJB/jmf

Attachments

c: Edwin Thompson

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-076-1 (23) Columbia
P. I. No. 262080

OFFICE Tennille
DATE April 1, 1991

FROM ^{JHN} Edwin L. Thompson, District Engineer

TO Robert E. Humphrey, Project Review Engineer

SUBJECT REVISED CONCEPT REPORT

Attached is one copy of the revised Project Concept Report on the above noted project. This Concept Report is being revised to shorten the limits of this project (previously designated as MLP 104 (13) and to add two other projects (units 21 and 22) to reconstruct this route (SR 104) from Scotts Way to SR 47 (Pollars Corner).

Please process for approval.

JHN:dg
Attachments

- c: Walker Scott, w/attachments
- Frank Danchetz, w/attachments
- Ron Colvin, w/attachments
- Paul Liles, w/attachments
- Wayne Hutto, w/attachments



DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PROJECT CONCEPT REPORT

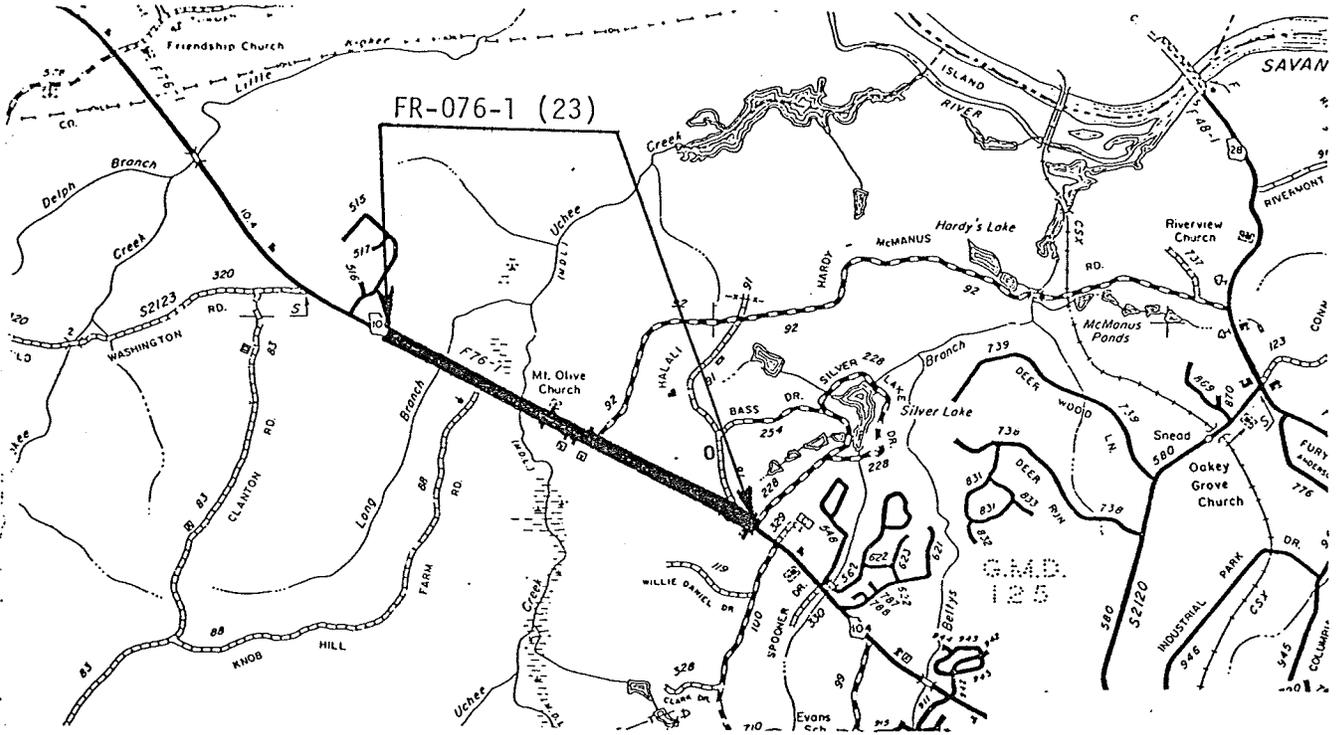
MULTI-LANE PROJECT

STATE ROUTE 104

FR-076-1 (23)

COLUMBIA COUNTY

Federal Route No: NONE
 State Route No: 104
 GaDOT P.J.No: 262080
 Federal Aid Route No: F76-1



DATE OF REPORT: August 8, 1988

RECOMMENDATION AND CONCURRENCE FOR APPROVAL REV. April 1, 1991

March 22, 1991
DATE

DATE

DATE

April 23, 1991
DATE

DATE

DATE

James H. Norris
DISTRICT DESIGN ENGINEER

DISTRICT PRECONSTRUCTION ENGINEER

DISTRICT ENGINEER

STATE ENVIRONMENTAL ANALYSIS/LOCATION ENGINEER

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

STATE TRAFFIC AND SAFETY ENGINEER

STATE ROAD AND AIRPORT DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA PROJECT CONCEPT REPORT

MULTI-LANE PROJECT

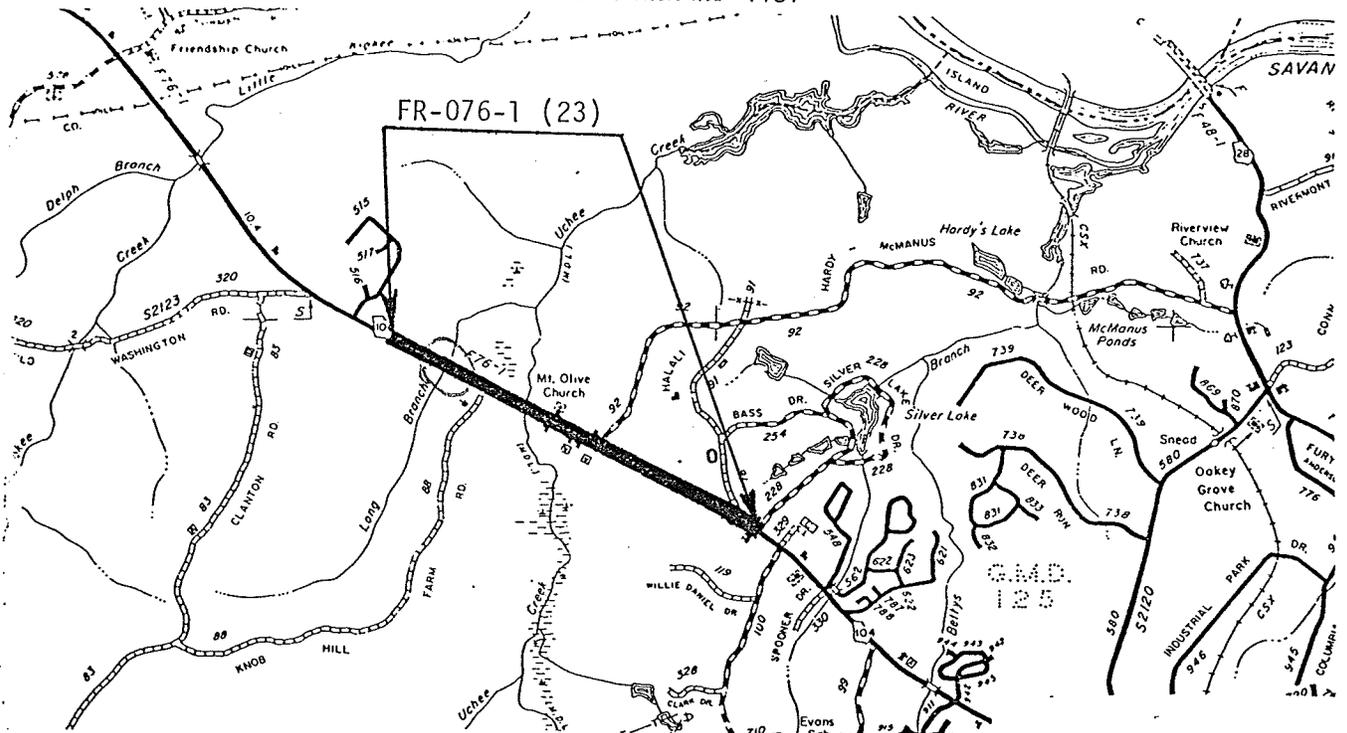
STATE ROUTE 104

FR-076-1 (23)



COLUMBIA COUNTY

Federal Route No: NONE
 State Route No: 104
 GoDOT P.J.No: 262080
 Federal Aid Route No: F76-1



DATE OF REPORT: August 8, 1988

RECOMMENDATION AND CONCURRENCE FOR APPROVAL REV. April 1, 1991

March 22, 1991
DATE

DATE

DATE

April 12, 1991
DATE

DATE

DATE

DATE

James H. Norris
DISTRICT DESIGN ENGINEER

DISTRICT PRECONSTRUCTION ENGINEER

DISTRICT ENGINEER
Frank L. Oumety, III
STATE ENVIRONMENTAL ANALYSIS/LOCATION ENGINEER

STATE BRIDGE AND STRUCTURAL DESIGN ENGINEER

STATE TRAFFIC AND SAFETY ENGINEER

STATE ROAD AND AIRPORT DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-076-1 (23) Columbia County OFFICE Environment/Location
P.I. No. 262080 DATE April 16, 1991

FROM Frank L. Danchetz, P.E., State Environmental/Location Engineer
Robert Humphrey, Project Review Engineer

SUBJECT CONCEPT REPORT

The concept report for the above listed project has been reviewed. If an environmental assessment is to be prepared and a public hearing is to be held, then time saving procedures are not appropriate.

If you have any questions, please let me know.

FLD/GAS/gas

cc: Edwin L. Thompson

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

PROJECT CONCEPT REPORT

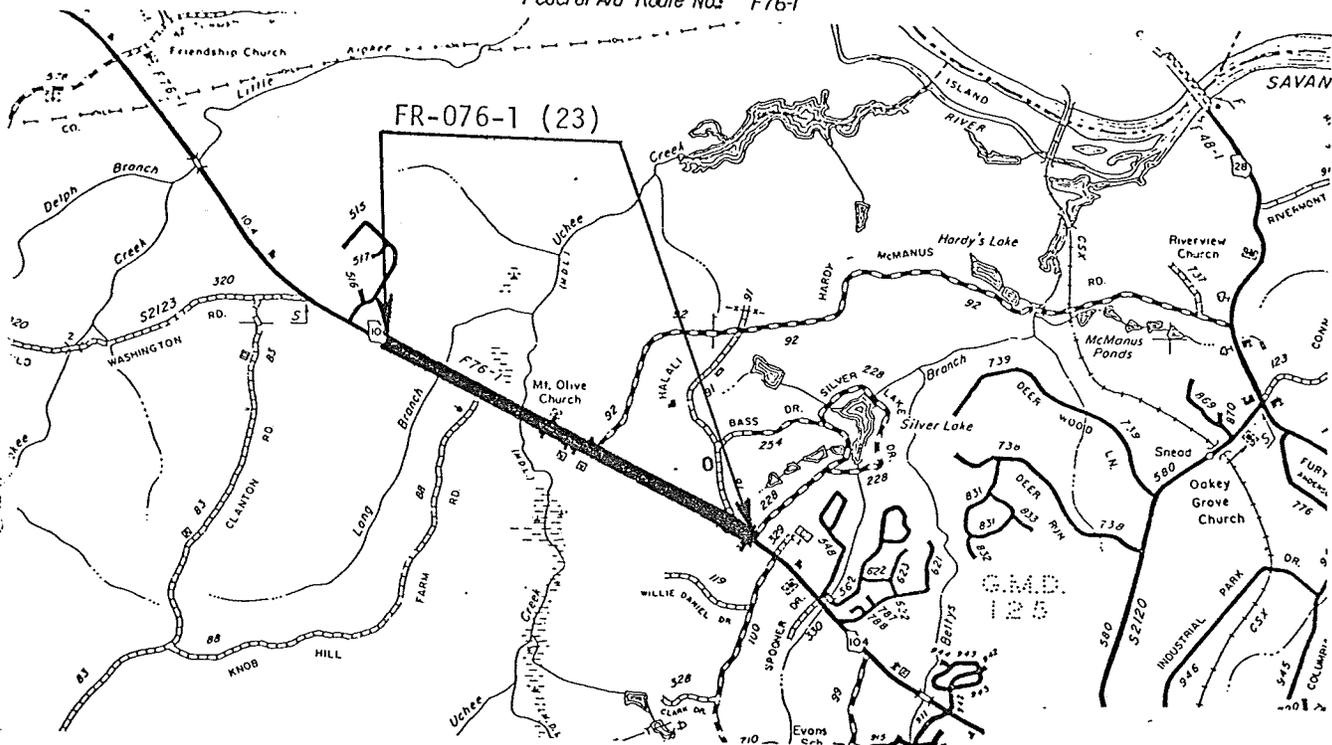
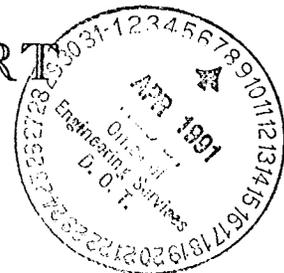
MULTI-LANE PROJECT

STATE ROUTE 104

FR-076-1 (23)

COLUMBIA COUNTY

Federal Route No: NONE
State Route No: 104
GaDOT P.J.No: 262080
Federal Aid Route No: F76-1



DATE OF REPORT: August 8, 1988

RECOMMENDATION AND CONCURRENCE FOR APPROVAL REV. April 1, 1991

March 22, 1991
DATE

James H. Norris
DISTRICT DESIGN ENGINEER

DATE

DATE

DATE

DATE

DATE

DATE

7/5/91
DATE

Ron Coleman
STATE BRIDGE AND STRUCTURAL DESIGN ENGINEER
STATE TRAFFIC AND SAFETY ENGINEER

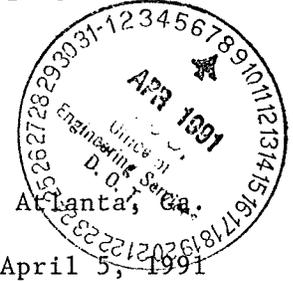
DATE

DATE

STATE ROAD AND AIRPORT DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-076-1 (23) **OFFICE**
Columbia County
P.I. No. 262080 **DATE**

April 5, 1991

FROM *RC*
Ron Colvin, P.E., State Traffic & Safety Engineer
TO Robert E. Humphrey, P.E., Project Review Engineer

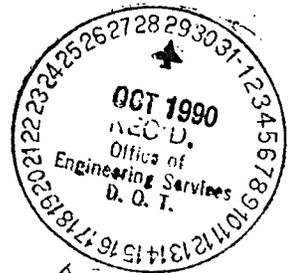
SUBJECT Project Concept Report Review Revised

We have reviewed the revised concept report on the above project to shorten the limits of this project (previously designated as MLP-104 (13) and add two other projects (unit 21 and 22) to reconstruct this route (S.R. 104) from Scotts Way to S.R. 47 (Pollars Corner).

We concur with the revised concept.

RC:LEO:lw
Attachment (signature page)
cc: James H. Norris - Tennille; Edwin Thompson - Tennille

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA



INTERDEPARTMENT CORRESPONDENCE

FR 076-1(23)
FILE MLP-104 (13) Columbia OFFICE Tennille
P.I. No. 262080
D.O.G. DATE October 26, 1990
Our copy

FROM Edwin L. Thompson, District Engineer

TO J.B. Johnson, Assistant Director of Pre-Construction

SUBJECT PROJECT LIMITS

Listed below are the extended project limits and the recommended split into three (3) segments as requested by you on September 28, 1990. James Norris, District Design Engineer visited the site and the splits are in accordance with the physical evidence along the roadway.

SECTION 1 ~~MLP-104~~ *FR-076-1(23)*

M.P.
6.75 Inter. County Road 91 - Beginning
8.90 Beg. of 3-lane section - End
2.15 miles - length

SECTION 2 - *FR-076-1(21)*

8.90 Beg. of 3-lane section - Beginning
10.10 End of 3-lane section
10.80 Beg. of 3-lane section
11.40 End of 3-lane section
11.95 Beg. of 3-lane section - End
3.05 miles - length

SECTION 3 - *FR-076-1(22)*

11.95 Beg. of 3-lane section - Beginning
13.05 End of 3-lane section
14.50 Inter. S.R. 47 - End
2.55 miles - length
7.75 miles total length

Attached is a map for your use in identifying these sites.

CWN:DOG:meg
Attachment.

REVISED PROJECT CONCEPT REPORT

PROJECT NUMBER: FR 076-1 (23)

COUNTY: Columbia

P. I. NUMBER: 262080

ROUTE: S.R. 104

PREVIOUS PROJECT NUMBER: MLP 104 (13)

GENERAL DESCRIPTION AND LOCATION:

On S.R. 104 one-half mile West of Long Branch to Scott's Way.

TRAFFIC:* CURRENT ADT: 7,250 VPD(1990) PROJECT ADT: 11,810 VPD(2010)

* Traffic shown was taken from the concept submitted 8-8-88, updated traffic is to be furnished by Frank Danchetz. Updated traffic should not effect the geometric design.

EXISTING TYPICAL SECTION:

Existing R/W = 100 Ft., Two 12 Ft. width travel lanes (one in each direction) (asphalt) with 6 Ft. width grassed shoulders and open ditches.

EXISTING MAJOR STRUCTURES:

- (1) Uchee Creek Bridge existing 36 Ft. wide X 252 Ft. long.
- (2) DBL 10' X 8' bridge culvert at Long Branch.

STATEMENT OF NEED AND PURPOSE OF PROJECT:

(See Attached)

AIRPORTS:

There are no known airports within two miles of this proposed project.

UNDERGROUND STORAGE TANKS:

None known of at this time.

WETLAND INVOLVEMENT:

There appears to be wetlands involved near Uchee Creek.

HISTORIC SITES:

None known of at this time.

PROJECT CONCEPT:

Add two - 12 Ft. width lanes on the north side of the existing lanes with a 56 Ft. width grassed median, 10 ft. graded shoulders in median and on the outside with open ditches.

LENGTH: 2.29 Miles BEGINNING: On S.R. 104 one-half mile West of Long Branch (M.L. 8.95).

ENDING: On S.R. 104 at Scott's Way (M.L. 6.66)

REVISED PROJECT CC EPT REPORT

PDP CLASSIFICATION:

Major, existing location

FUNCTIONAL CLASSIFICATION:

~~Urban~~ Rural Arterial

MAX. DEGREE OF CURVE:

1°-00'

MAX. GRADES:

6.5%

DESIGN SPEED:

29 M.P.H. existing
55 M.P.H. posted
55 M.P.H. design -
crest vert. curves

PROPOSED TYPICAL SECTION: (See Attached)

MAJOR STRUCTURES:

A new bridge 38 Ft. width on the westbound lane and ~~widened~~ ^{retain} the 36 Ft. width existing eastbound lane bridge on the outside at Uchee Creek.

TYPE ACCESS:

Controlled with grassed median and driveway permits.

TRAFFIC CONTROL DURING CONSTRUCTION:

Construct under traffic.

ESTIMATED COST: *

CONSTR. INCL. 10% =
R/W =
UTILITIES =
TOTAL =

ESTIMATED:

\$3,321,000.00
1,995,000.00
N/A
\$5,316,000.00

PROGRAMMED:

\$2,800,000.00
N/A
N/A
\$2,800,000.00

* Costs were prorated using 8-8-88 concept costs.

PERMITS REQUIRED:

A Corps of Engineers 404 Permit is applicable for this project.

LEVEL OF PUBLIC INVOLVEMENT: Public Hearing

TIME SAVINGS PROCEDURES APPROPRIATE: ~~Yes~~ No

DESIGN EXCEPTIONS REQUIRED:

None - The existing crest verticals which are below the 55 M.P.H. speed design will be improved to 55 M.P.H.

ALTERNATIVES CONSIDERED:

- (A) Addition of two lanes with a 56 Ft. width median on the north side of the existing two lanes.
- (B) 5 lanes with a 14 Ft. width two-way turn lane in median.
- (C) No build.

OTHER PROJECTS IN AREA: FR-076-1 (21) and FR 076-1(22)

REVISED PROJECT CONCEPT REPORT

LEVEL OF ENVIRONMENTAL ANALYSIS:

Environmental assessment, Environmental Office to verify.

CONCEPT TEAM MEETING HELD: July 18, 1988

PRESENT: (See Attached Minutes)

FIELD REVIEW HELD: None at Present.

COMMENTS:

- (1) The 56 Ft. width median on Alternate (A) is necessary to provide proper drainage and safe slopes between the existing lanes and proposed lanes.
- (2) Recommend Alternate "A".
- (3) A 12 inch water line exists on the north side and a natural gas line on the south side which the local government would have to relocate.

ATTACHMENTS:

Cost Estimates
Minutes of Concept Meeting - From 8-8-88 concept report
Typical Section
Need and Purpose Statement - From 8-8-88 concept report

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE MLP-104 (13) Columbia County OFFICE Atlanta, Georgia
P.I. No. 262080
SR-104 Widening DATE July 18, 1988

FROM Walker W. Scott, Jr., P.E., State Road & Airport Design Engineer WWS/DKE

TO DISTRUBTION BELOW

SUBJECT Minutes of Concept Team Meeting

A Concept Team Meeting was held on July 13, 1988 at 10:00 A.M. in the Road Design Conference Room, on the above project. Persons in attendance included: Jack Murphy, John Richard, Frank Golder, Ron Wishon, Don Emery, Jim Howell, Franklin Grubbs, Anita Thornton, Larry Pachoud and Louis Owen.

The Office of Road and Airport Design is the team leader on the above project.

The project begins on SR-104 at Little Kiokee Creek and extends southeast along SR-104 for 3.3 miles to Scott's Way.

The existing roadway is two-12 foot width travel lanes with open ditches.

Traffic Projections are: 1990 A.A.D.T. - 7,250 V.P.D.
2010 A.A.D.T. - 11,820 V.P.D.

The speed design will be 55 mph. The posted speed limit is 55 mph.

The project consists of adding two lanes on the north side of the existing lanes with a 56 ft. width grassed median, 10ft. width graded shoulders and open ditches on the outside and 10ft. width graded shoulders in median. The construction cost for this project is \$5,339,000.00 and the R/W cost is \$2,265,000.00 for a total of \$7,604,000.00. Displacements are 4 - residences and 3 commerical buildings.

The following comments were made:

(1) Jim Howell, explain the existing vertical alignment speed design is 29 mph, therefore, major grade changes throughout a majority (80%) of the project are required to improve the vertical alignment to 55 mph. The existing roadway can be used to maintain traffic until the 2-lanes on the north side are constructed and traffic shifted, then the two existing lanes will be removed to bring the south side lanes to grade. The 56 ft. width median is necessary to provide proper drainage and

PAGE 2

Minutes of Concept Team Meeting
July 18, 1988

safe slopes between the existing lanes and proposed lanes during construction due to the vertical alignment changes of up to 25 feet.

(2) Frank Golder said a funding change might be needed due to the more extensive construction being proposed.

(3) Comments were made concerning utility problems. A 12 inch water line exists on the north side and a natural gas line on the south side which the local government would be asked to fund.

(4) It was suggested to extend the project 3 miles to Pollard's Corner. This would proportionately increase the already high estimated cost.

(5) The environmental considerations for the project include possible wetlands at Little Kiokee Creek and Uchee Creek.

Utilities is requested to furnish by August 1, 1988 a cost estimate, both reimbursible and noimbursable.

Right of Way has already provided a cost estimate.

Location has already provided mappings. PHOTOS.

Traffic and Safety has already provided design traffic and three-year accident data.

District Schedule will furnish a project schedule when the concept is approved.

A concensus of the team was to recommend a build or no build as the only alternates.

WWS:DKE:bc

cc: Alva Byrom
Alton Dowd, Jr.
Gene Skeen/Frank Golder
R.L. Alston
Frank Danchetz/John Richard
Rodney Tarrer/Larry Pachoud
Dewey Jones
Bob Bowling/Franklin Grubbs
Ron Colvin/Louis Owen
Pete Malphurs
George Lyons/Jack Murphy
R.E. Humphrey/Ron Wishon
Don Bartles, Columbia County

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE OFFICE *Atlanta*
DATE *August 5, 1988*
FROM *Robert E. Bowling, P. E., Chief, Bureau of Plan Development*
TO *Walker Scott, State Road and Airport Design Engineer*
Attention: Jimmy Howell
SUBJECT ***Need and Purpose Statement***
MLP-104(13), SR 104 Columbia County

The proposed project is the widening and reconstruction of 3.5 miles on SR 104 (Washington Road). The project will begin at the end of the present four-lane at Scotts Way and extend northwesterly to Little Kiokee Creek. State Route 104 will be widened from two to four lanes with a 56 foot depressed median.

This section of roadway is presently carrying 4,500 vehicles per day (1987) and by the year 2010 it will be carrying an estimated 13,000 vehicles per day. If no improvements are made to the existing two-lane facility, it will not have sufficient capacity to handle the future traffic at an acceptable level-of-service.

SR 104 is on the FAP System (F76-1) and functions as a Federal-Aid Primary Minor Arterial Route. This route serves traffic between Augusta and the north-west part of Columbia County. It is also the primary route to the Clark Hill Lake recreational area from the Augusta area.

The proposed project would provide the additional capacity needed to handle future traffic (year 2010). It would provide a more efficient and safe route for the traveling public.

The land use along this route consists of a mixture of undeveloped land, some residential and spotted commercial use.

There are no other proposed projects in this area at the present time.

The proposed project is a part of the Augusta Regional Transportation Study's Adopted Plan. This plan was developed to handle the transportation needs through the Year 2000. The transportation study is a comprehensive, cooperative and continuing transportation planning process conducted by the local governments and the Georgia Department of Transportation in cooperation with FHWA.

FG:cld

RED ALTERNATE

Rouney R. Tarrer

DATE OF ESTIMATE: 6/22/88 BY: John Lord

TYPE ESTIMATE: Preliminary R/W Cost

PROJECT: MLP-104(13)Columbia

P.I. 262080

EXISTING R/W 100' REQUIRED R/W Varying

ESTIMATED NUMBER OF PARCELS: 75±

PROJECT TERMINI: S.R. 104 from C.R. 228 north to Little Kiokee Creek

PROJECT DESCRIPTION: Widen S.R. 104 north of Evans

TYPE OF LAND USE: Rural Mixed VALUE APPLIED S.F. BASIS: \$0.25

TOTAL LAND COST: \$ ~~396,000.00~~ ^{226,710.00}

IMPROVEMENTS IMPACTED AND COST: (IF APPLICABLE) \$ 800,000.00

- 4 - Residences, 3 - Commercial,
- 2 - Miscellaneous, Signs & Fences

RELOCATION COST: (IF APPLICABLE) \$ 198,000.00

CONSEQUENTIAL DAMAGES: (IF APPLICABLE) \$ 26,000.00

Proximity

NET COST		<u>1,230,710</u>
		\$1,420,000.00
ADM./COURT COST FACTOR	<u>45 % -</u>	<u>562,120.00</u>
		\$ 639,000.00
INFLATION FACTOR	<u>10 % -</u>	<u>181,263.00</u>
		\$ 206,000.00
TOTAL COST		<u>\$2,265,000.00</u>
		\$2,265,000.00

PRELIMINARY COST ESTIMATE
(CONSTRUCTION)

DATE 8-3-88

PROJECT NO. MLP-104(13) COLUMBIA

P.I. NO. 262080

PROJECT DESCRIPTION FROM 1/2 MILE WEST OF ~~LITTLE KIOKKEE CR.~~ ^{Long Branch} TO Scott's
RECONSTRUCT FULL LENGTH (EXCEPT STA 460+
- 484+00 & 590-610 INCL. (~~LITTLE KIOKKEE CR. BRIDGE~~) UCHEE CREEK BRIDGE) RETAIN
& WIDEN THIS SECTION) - 4 LANES WITH 56 FT
MEDIAN - IMPROVE CREST VERTICAL TO 55 MPH,

PROPOSED CONCEPT 4 LNS WITH 56 FT WIDTH MEDIAN

EXISTING ROADWAY (If Applicable) 2 - 12 FT WIDTH LANES

TRAFFIC: Existing 7250 VPD (1990) Design 11820 VPD (2010)

() PROGRAMMING PROCESS () CONCEPT DEVELOPMENT () DURING PROJECT DEVELOPMENT

PROJECT COSTS

A. RIGHT OF WAY

- 1. PROPERTY (Land and Easements) \$ SEE ATTACHED
- 2. DISPLACEMENTS \$ R/W EST.
- 3. OTHER COSTS \$
- SUBTOTAL \$

B. REIMBURSABLE UTILITIES

- 1. RAILROAD \$
- 2. TRANSMISSION LINES \$
- 3. SERVICES \$
- SUBTOTAL \$

C. MAJOR STRUCTURES

- 1. WALLS \$
- 2. BRIDGE STREAM CROSSINGS
~~LITTLE KIOKKEE CR. = 120 x 38 x 11 x 600 = 453,000~~
~~UCHEE CR. = 252 x 35 x 11 x 600 = 635,040~~
 \$ 635,000.00
 \$ 1,088,700.00
- 3. BRIDGE OVER/UNDERPASS \$
- 4. BOX CULVERTS \$ 224,000.00
INCL. DBL 10x3 BRIDGE R/W AT LONG BRANCH
- SUBTOTAL \$ 1,312,700.00
\$ 859,000.00

D. GRADING AND DRAINAGE

1. EARTHWORK

170000
 UNC. EXC. = 274,000 X 3% / yd.
 92000
 Box = 160,000 X 3% / yd. =

186,000.00
~~\$1,362,000.00~~

2. DRAINAGE

a. Cross Drain Pipes (exc. box culverts)

\$ 21,000.00

b. Curb and Gutter

\$

c. Longitudinal System (Incl. Catch Basins)

\$

SUBTOTAL

~~807,000.00~~
~~\$1,383,000.00~~

E. BASE AND PAVING

1. AGGREGATE BASE

10" - 55607 DN X \$11.50

370500.00
~~\$ 639,500.00~~

2. ASPHALT PAVING

w/OVERLAY

7 1/4" - 41209 DN X \$11.50

24000
~~\$ 648,000.00~~
~~\$ 1,649,000.00~~

3. CONCRETE PAVING

\$

4. OTHER

\$

SUBTOTAL

1,027,500.00
~~\$ 2,288,500.00~~

F. LUMP ITEMS

1. TRAFFIC CONTROL

\$ 50,000.00

2. CLEARING AND GRUBBING

\$

3. LANDSCAPING

\$

4. EROSION CONTROL

\$

5. DETOURS (Incl. Temp. Bridges)

\$

SUBTOTAL

\$

G. MISCELLANEOUS

1. LIGHTING

\$

2. SIGNING - STRIPING

\$

3. GUARDRAIL

\$ 24,000.00

4. OTHER

\$

SUBTOTAL

\$

H. SPECIAL FEATURES

\$

ESTIMATE SUMMARY

- A. RIGHT OF WAY \$ SEE ATTACHED
- B. REIMBURSABLE UTILITIES \$ NOT AVAILABLE

CONSTRUCTION COST SUMMARY

- C. MAJOR STRUCTURES \$ ~~1,312,700.00~~ 859,000.00
- D. GRADING AND DRAINAGE \$ ~~1,383,000.00~~ 807,000.00
- E. BASE AND PAVING \$ ~~2,288,500.00~~ 1,027,500.00
- F. LUMP ITEMS \$ ~~50,000.00~~ 0.00
- G. MISCELLANEOUS \$ ~~24,000.00~~ 0.00
- H. SPECIAL FEATURES \$ ~~0.00~~ Use 1,768,000

SUBTOTAL CONSTRUCTION COST \$ ~~5,058,200.00~~ 2,767,500.00

E. & C. (10%) \$ ~~505,820.00~~ 276,750.00

(24%) INFLATION (5% per year) \$ ~~505,820.00~~ 276,750.00

TOTAL CONSTRUCTION COST \$ ~~6,069,840.00~~ 0.00

GRAND TOTAL PROJECT COST

~~3,321,000.00~~
~~6,069,840.00~~
0.00

----- SECTION 3 - Programming Data -----
 Screen 4 -----
 201 Project No.: RAB (4) SP-1117 (8)
 202 Plans Available.: 2
 249 Proposed Proj No: FR-076-1 (23)
 250 Approval Status.: 0000
 251 P.I. No.: 262080
 252 Contract Date.: 00/00/00
 260 Ranking No.: 00000
 75 Type Work.: 00 1
 94 Bridge Imp. Cost.: \$000000
 95 Roadway Imp. Cost.: \$000000
 96 Total Imp. Cost.: \$000000
 76 Imp. Length.: 000000
 97 Imp. Year.: 00
 114 Future ADT.: 008685 Year: 10

----- SECTION 5 - Measurements -----
 Screen 6 -----
 * 29 ADT.: 005790 Year: 90
 109 % Trucks.: 06
 * 28 Lanes On.: 02 Under: 00
 *210 No. Tracks On: 00 Under: 00
 254 FC Classification.: 9
 255 FC Rank Factor.: 9993
 * 48 Max. Span Length.: 0036
 * 49 Structure Length.: 000252
 51 Br. Rdwy. Width.: 034.8
 52 Deck Width.: 037.1
 * 47 Tot. Horz. Cl.: 34.8
 50 Curb/Sdewlk Width.: 00.7/00.7
 32 Approach Rdwy Width.: 028
 *229 Shlder Width
 Rear Lt: 02.0 Type: 2 Rt: 02.0
 Fwrd Lt: 02.0 Type: 2 Rt: 02.0
 Pvmnt Width
 Rear: 24.0 Type: 2
 Fwrd: 24.0 Type: 2
 Intersection Rear: 0 Fwrd: 0
 36 Safety Features Br. Rail.: 2
 Transition.: 2
 App. G. Rail.: 2
 App. Rail End: 2

----- SECTION 6 - Ratings -----
 Screen 8 -----
 66 Inventory Type: 2 Rating: 36
 64 Operating Type: 2 Rating: 54
 231 Calculated Loads
 H-Modified.: 20 0
 HS-Modified: 25 0
 Type 3.: 28 0
 Type 3S2.: 40 0
 Timber.: 36 0
 Piggyback.: 00 0
 261 H Inventory Rating: 22
 262 H Operating Rating: 42

----- SECTION 4 - Hydraulic Data -----
 Screen 5 -----
 215 Waterway Data
 Highwater Elev.: 0212.0 Year: 40
 Flood Elev.: 0212.0 Freq: 050
 Avg Streambed Elev: 0196.0
 Drainage Area.: 00058
 Area of Opening.: 002487
 113 Scour Critical.: 6
 216 Water Depth.: 04 Bridge Height: 20
 222 Slope Protection.: 1
 221 Spur Dikes Rear.: 0 Fwrd: 0
 219 Fender System.: 0
 220 Dolphin.: 0
 223 Culvert Cover.: 000
 Type.: 0
 No Barrels: 0
 Width.: 00.0
 Height.: 00.0
 Length.: 000

Screen 7 -----
 53 Minimum Cl. Over.: 99 99"
 54 Under: N 00 00"
 *228 Min. Vert. Cl
 Act. Odm. Dir.: 99 99"
 Oppo. Dir.: 99 99"
 Posted Odm. Dir: 00 00"
 Oppo. Dir.: 00 00"
 55 Lateral Undercl. Rt: N 99.9
 56 Lateral Undercl. Lt: 00.0
 * 10 Max Min Vert Cl.: 99 99" Dir: 0
 39 Nav Vert Cl: 000 Horz: 0000
 116 Nav Vert Cl Closed.: 000
 245 Deck Thickness Main.: 08.0
 Deck Thick Approach.: 00.0
 246 Overlay Thickness.: 00.0
 211 Tons Structural Steel: 0000
 *212 Year Last Painted.: 0071

----- SECTION 7 - Posting Data -----
 Screen 9 -----
 70' Bridge Posting Required: 5
 41 Struct Open, Posted, Cl: A
 *103 Temporary Structure.: 0
 232 Posted Loads H-Modified: 00
 HS-Modified: 00
 Type 3.: 00
 Type 3S2.: 00
 Timber.: 00
 Piggyback.: 00

*208 Inspection Area: 02 Initials: SGM
 *Location I.D. No: 073-00104D-00828N
 *XReferen I.D. No: 000-000000-000000

253 Notification Date: 00/00/00
 258 Fed Notify Date: 00/00/00 0

