

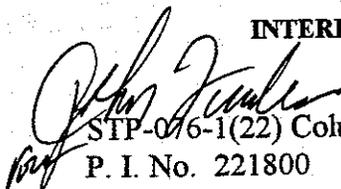
ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

  
STP-076-1(22) Columbia County  
P. I. No. 221800

OFFICE Preconstruction

DATE February 13, 2001

FROM 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:

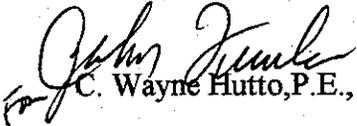
Tom Turner  
David Mulling  
Harvey Keeper  
Jerry Hobbs  
Herman Griffin  
Michael Henry  
Marion Waters  
Marta Rosen  
Paul Liles  
Jimmy Chambers (ATTN: Ted Cashin)  
Jim Kennerly  
Mike Thomas

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-076-1(22) Columbia County OFFICE Preconstruction  
P.I. No. 221800

DATE February 5, 2001

FROM  C. Wayne Hutto, P.E., Assistant Director of Preconstruction

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

SUBJECT PROJECT CONCEPT REPORT

This project is the widening and reconstruction of SR 104 from 0.5 mile west of US 221/Pollard's Corner to just east of Mt. Rosemont Road/CR 80 for a total of 3.30 miles. Existing SR 104 consists of 2 and 3 lanes with 6' rural shoulders on 100' of existing right-of-way. State Route 104 is a northwesterly corridor serving Augusta-Richmond County, Columbia County and the Clark's Hill Lake area. This route is experiencing traffic congestion and delays as this area of Columbia County continues to develop and grow residentially as a bedroom community of Augusta. The projected (2006) traffic volumes along this section of SR 104 is 8,904 VPD. The current Level of Service (LOS) along SR 104 is "D." The projected design year (2026) traffic volume is 11,958 VPD, resulting in a LOS "F." To provide an acceptable LOS in year 2026, four lanes are needed to meet the projected demand.

The construction proposes to widen SR 104 to provide four, 12' lanes, two in each direction with a 44' wide depressed grassed median on 200' of minimum proposed right-of-way. Traffic will be maintained via staging during construction.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; a public hearing will be held; time saving procedures are not appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$9,192,000	\$9,110,000	2006	FY-06
Right-of-Way	\$2,313,000	-----		
Utilities*	LGPA	LGPA		

Frank L. Danchetz

Page 2

STP-076-1(22) Columbia

February 5, 2001

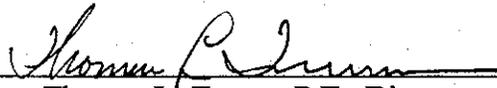
\*Columbia County signed LGPA on 3-17-92 for utilities.

This project is in the STIP. I recommend this project concept be approved.

CWH:JDQ/cj

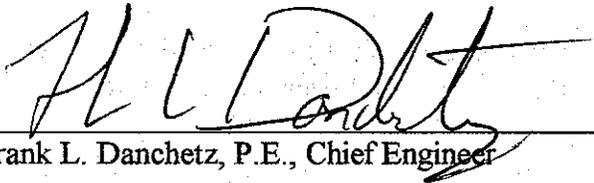
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CONCUR



Thomas L. Turner, P.E., Director of Preconstruction

APPROVE

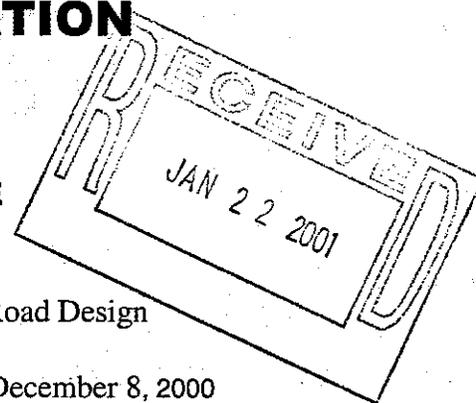


Frank L. Danchetz, P.E., Chief Engineer



**DEPARTMENT OF TRANSPORTATION**  
**STATE OF GEORGIA**

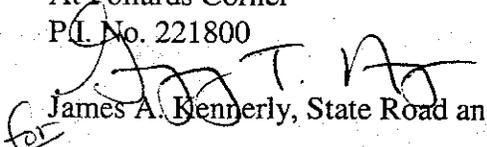
**INTERDEPARTMENT CORRESPONDENCE**



**FILE** STP-076-1 (22), Columbia County  
S.R. 104 From M.P. 11.95 S/C.R. 80 to S.R. 47  
At Pollards Corner  
P.L. No. 221800

**OFFICE** Road Design

**DATE** December 8, 2000

**FROM** *for*  James A. Kennerly, State Road and Airport Design Engineer

**TO** Wayne Hutto, P.E., Assistant Director of Preconstruction

**SUBJECT** Concept Report Submittal

Attached for your review and approval is the Project Concept Report for the above project.

If you have any questions, please contact Stanley Hill of this office.

JAK: SH: hcc

Attachment

cc: David Mullin, w/attach  
Harvey Keepler, w/attach  
Marion Waters, w/attach  
Mike Thomas, District Two Engineer, w/attach  
Paul Liles, w/attach  
Marta Rosen, w/attach  
Herman Griffin, w/attach

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

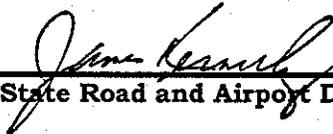
STP-076-1(22)  
COLUMBIA COUNTY  
P.I. NO. 221800

FEDERAL ROUTE NO: None  
STATE ROUTE NO: S.R. 104

Date of Report: September 6, 2000

RECOMMENDATION FOR APPROVAL

01-20-01  
DATE

  
State Road and Airport Design Engineer

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and/or in the State Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the RTIP and/or the STIP.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Transportation Planning Administrator

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Transportation Programming Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Environmental/Location Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
District Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Project Review Engineer

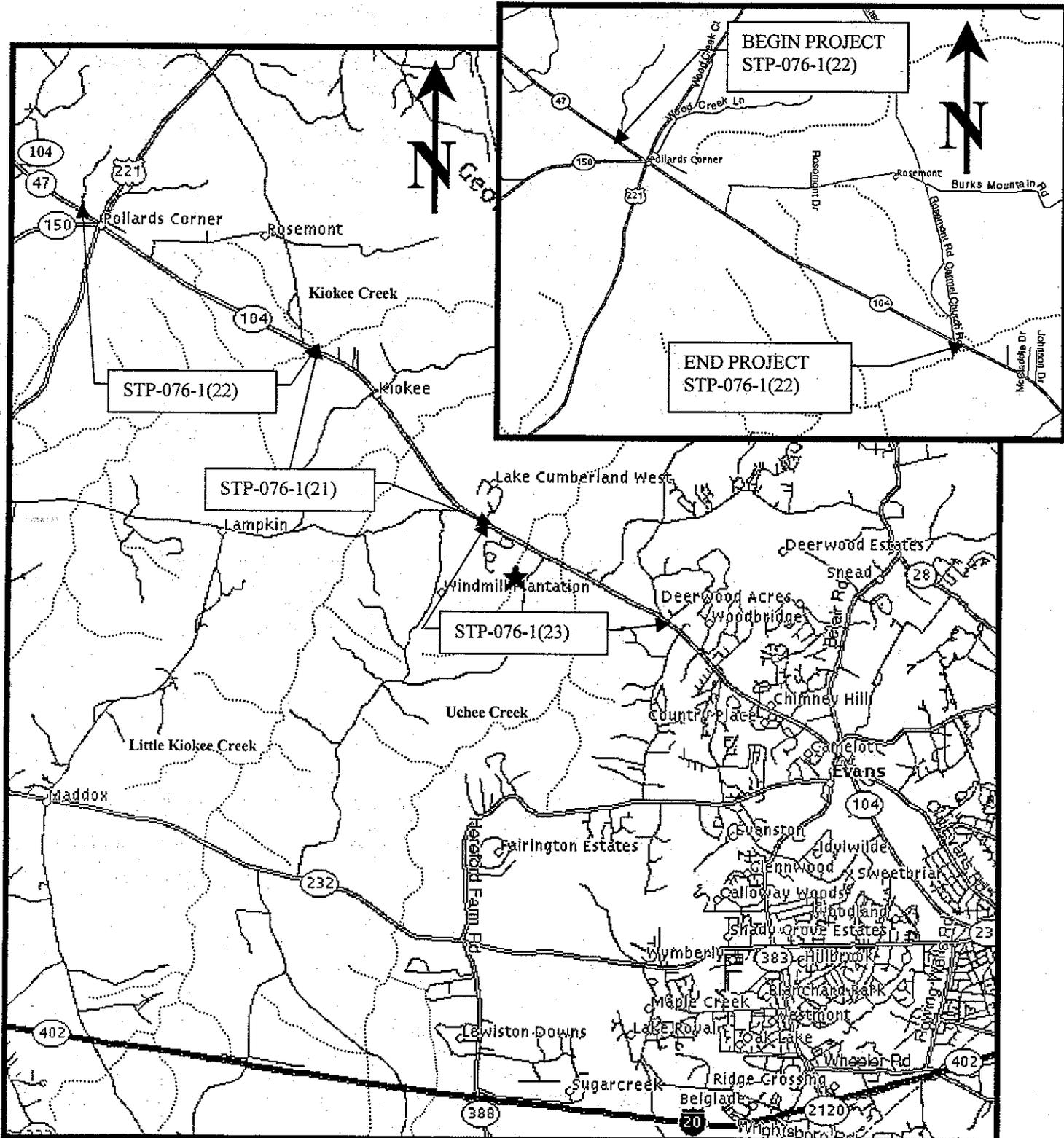
\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Traffic Operations Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Bridge & Structural Engineer

**PROJECT LOCATION MAP:  
STP-0760-1(22)**



PROJECT NUMBER: STP-076-1(22)

**PROJECT LOCATION & DESCRIPTION**

This project consists of the widening and reconstruction of 3.30 miles of SR 104 from approximately half of a mile west of US 221 (Pollard's Corner, Milepost 15.25) to just east of Mt. Rosemont Road/County Road 80 (Milepost 11.95), in Columbia County. In its current condition, SR 104 provides a rural typical section consisting of two 12-foot-wide travel lanes with occasional three-lane climbing sections. There are also 6-foot-wide grassed shoulders and open ditches on each side. The existing right of way is 100 feet wide.

The proposed project is to widen SR 104 to provide a typical section comprising of four 12-foot-wide travel lanes (two lanes in each direction) with a 44-foot-wide median. The shoulder treatments for the median are proposed to be 6-foot wide (2-feet paved.) The shoulder treatments for the outside are proposed to be 10-foot-wide (6.5-feet paved) with open ditches. The right of way of the improved facility will be 200 feet wide minimum.

This project was originally programmed as part of project MLP-104(13) which has been reprogrammed into three separate projects, i.e. STP-076-1(21), STP-076-1(22) (subject project) and STP-076-1(23).

**TRAFFIC**

ROADWAY	ON COMPLETION		PROJECTED	
	YEAR	AADT	YEAR	AADT
SR 104	2006	8,904	2026	11,958

**CLASSIFICATIONS**

PDP CLASSIFICATION	FUNCTIONAL CLASSIFICATION
MAJOR PROJECT/EXISTING LOCATION	RURAL MINOR ARTERIAL

FULL OVERSIGHT ( )

EXEMPT ( X )

SF ( )

### PROJECT NEED & PURPOSE

S.R. 104 is a northwesterly corridor serving Augusta-Richmond County, Columbia County and the Clark's Hill Lake area. Project STP-076-1(22) involves the widening and reconstruction of SR 104 to four lanes with a divided median from just south of CR 80 (Rosemont Rd.) to SR 47 at Pollard's Corner for a distance of 3.30 miles. S.R. 104 is functionally classified as a rural minor arterial. S.R. 104 is experiencing traffic congestion and delays as this area of Columbia County continues to develop and grow residentially as a bedroom community of Augusta.

The roadway geometry of SR 104 consists of 24' of pavement with six foot grassed shoulders on 100' of right of way. Current (1999) traffic volumes along this section SR 104 are at 7,691 Average Annual Daily Traffic (AADT). The current level of service (LOS) along SR 104 between Rosemont Rd. and SR 47 is at "D", indicating that the roadway is experiencing congestion and major delays. The projected or design year (2016) traffic volume is estimated at an AADT of 10,850, resulting in a LOS "F". To provide an acceptable LOS in the year 2016, four lanes of roadway are needed to meet the projected demand.

In 1997, the latest year that complete accident data is available, there were 5 accidents along this 3.30 mile section of SR 104. This number of accidents resulted in an accident rate per 100 million vehicle miles traveled (MVMT) of 67, below the statewide average of 99 for a rural minor collector. In 1996, there were 18 accidents along this section of SR 104, resulting in an accident rate of 255 per 100 MVMT, well above the statewide average of 123 accidents per 100 MVMT for a rural minor collector. In 1995, there were 9 accidents along this section of SR 103 resulting in an accident rate of 125 accidents per 100 MVMT. In 1995, the statewide accident rate for a rural minor collector was 119 accidents per 100 MVMT.

The southern termini of project STP-076-1(22) is programmed project, STP-076-1(21), identified to widen SR 104 to four-lanes from south of CR 515 to south of CR 80. STP-076-1(21) is programmed for construction in 2003. Project STP-076-1(23) is identified to multi-lane SR 104 from project STP-076-1(21) on into the city of Augusta. The northern termini of project STP-076-1(22) is Pollard's Corner. The community of Pollard's Corner developed around the convergence of several regional routes. Today, the "five points" intersection of Pollard's Corner provides trip interchanges between SR47, SR104, and SR150. The latter route provides interstate access between Georgia and South Carolina. As one of the primary trip interchanges in Columbia County, Pollard's Corner serves as a logical termini for the proposed SR104 improvements. With the completion of projects STP-076(23), STP-076-1(21), and STP-076-1(22), a continuous four-lane section of roadway will exist between the city of Augusta and Pollard's Corner.

SR 104 is currently operating at an unacceptable level of service and will continue to worsen as this area of Columbia County grows and develops. To provide for better accessibility and less congestion, SR 104 needs to be widened to four lanes from Rosemont Rd. to SR 47.

**EXISTING ROADWAYS**

**SR 104**

TYPICAL SECTION: Two-lane rural with 6-foot-wide grassed shoulders and open ditches

R/W WIDTH  
100'

POSTED SPEED  
55 MPH

MAX. DEGREE OF CURVE  
0°-30'

MAXIMUM GRADE (%)  
5.90

MAJOR STRUCTURES:

No major structures within the project limits, except some single concrete box culverts.

**PROPOSED ROADWAYS**

**SR 104**

TYPICAL SECTION: Four 12-foot-wide lanes (two lanes in each direction), 44-foot-wide median (including 2-foot-wide paved shoulders on each side), and 10-foot-wide (6.5 feet paved) shoulders and open ditches on each side. The typical section will also include right and left turn lanes at selected intersections.

DESIGN SPEED  
55 MPH

MAX. DEGREE OF CURVE  
ALLOWABLE: 6°-00'  
PROPOSED: 0°-30'

MAXIMUM GRADE (%)  
ALLOWABLE: 5.00  
PROPOSED: 5.00

MAJOR STRUCTURES:

No major structures within the project limits. Existing concrete box culverts will be extended.

**PROPOSED RIGHT OF WAY**

R/W WIDTH  
200' (min.)

DISPLACEMENTS  
RES: 6 BUS: 2 M.H.: 0

NUMBER OF PARCELS: 25

**COORDINATION**

CONCEPT TEAM MEETING DATE:	August 16, 2000
CONFORMS TO TIP/STIP:	Yes
MEETS LOGICAL TERMINI REQUIREMENTS:	Yes
P.A.R. MEETING:	To Be Determined
LOCATION INSPECTION DATE:	11/3/99, 2/1/00, 3/1/00 by ARCADIS
PERMITS REQUIRED (4f, COE, 404, ETC.):	COE 404 Permit
LEVEL OF PUBLIC INVOLVEMENT:	Public Hearing (to be scheduled later)
TIME SAVING PROCEDURES APPROPRIATE:	No
LOCAL GOVERNMENT COMMITMENTS:	LGPA signed on 3/17/92. Columbia County agreed to purchase utilities.
OTHER PROJECTS IN THE AREA:	STP-076-1(21), STP-076-1(23), STP-7073(1) and STP-073-1(32)

**SCHEDULING CONSIDERATIONS**

TIME TO COMPLETE ENVIRONMENTAL:	12 Months
TIME TO COMPLETE PRELIMINARY RD / RW PLANS:	12 Months
TIME TO COMPLETE 404 PERMIT:	12 Months
TIME TO COMPLETE FINAL CONSTRUCTION PLANS:	12 Months
TIME TO BUY RIGHT OF WAY:	12 Months

**MISCELLANEOUS**

TRAFFIC CONTROL DURING CONSTRUCTION: Widen while maintaining traffic; detours required at major grade changes.

LEVEL OF ENVIRONMENTAL ANALYSIS: CE

DESIGN EXCEPTIONS REQUIRED:	YES	NO	UNDETERMINED
SUBST HORZ ALIGNMENT	( )	(X)	( )
SUBST ROADWAY WIDTH	( )	(X)	( )
SUBST SHOULDER WIDTH	( )	(X)	( )
SUBST VERT GRADES	( )	(X)	( )
SUBST CROSS SLOPE	( )	(X)	( )
SUBST STOPPING SIGHT DIST	( )	(X)	( )
SUBST SUPERELEV RATES	( )	(X)	( )
SUBST HORIZ CLEARANCE	( )	(X)	( )
SUBST SPEED DESIGN	( )	(X)	( )
SUBST VERTICAL CLEARANCE	( )	(X)	( )
SUBST BRIDGE WIDTH	( )	(X)	( )
SUBST BR STRUCT CAPACITY	( )	(X)	( )

ACCESS CONTROL: Driveway permit only

UNDERGROUND STORAGE TANKS: Possible at corner of SR 47 and SR 109.

HAZARDOUS WASTE SITES: Possible hazardous wastes on lumber company parcel.

**DESIGN VARIANCES**

A design variance will be required for the distance between the median openings at the lumber company entrance and Burke Mountain Rd.

**ALTERNATIVES CONSIDERED**

1. Addition of two travel lanes and a 44-foot-wide median entirely on the north side of the existing roadway
2. Addition of two travel lanes and a 44-foot-wide median on the south side of the existing roadway, except at Scott's Ferry Road and Mt. Rosemont Road, where the new lanes transition from the north to the south side
3. Addition of two travel lanes and a 44-foot-wide median entirely on the south side of the existing roadway, except at Mt. Rosemont Road, where the new lanes transition from the north to the south side.
4. No Build

Alternative number two was chosen because it presented the least number of displacements.

**ESTIMATED COST**

CONSTRUCTION:	\$6,963,285	RIGHT-OF-WAY:	\$2,313,348
E & C (10%):	\$696,329	ACQUIRED BY:	GDOT
INFLATION (5%, 4yrs):	\$1,650,695	UTILITIES:	\$451,000
		ADJUSTED BY:	LGPA (3/17/92)
<b>TOTAL CONSTRUCTION COST:</b>	<b>\$9,310,000</b>		

COMMENTS:

ATTACHMENTS: Cost Estimate, Environmental Scan, Typical Sections, Programming Document, Traffic Diagrams and Concept Team Meeting Minutes

**PRELIMINARY COST ESTIMATE**

PROJECT NUMBER: STP-076-1(22) COUNTY: Columbia  
 DATE: 7/19/00 ESTIMATED LETTING DATE: Long Range  
 PREPARED BY: C.Lane PROJECT LENGTH : 3.3 miles  
 ( ) PROGRAMMING PROCESS (X) CONCEPT DEV. ( ) DURING PROJECT DEV.

<b>PROJECT COST</b>	
<b>A. RIGHT-OF-WAY:</b>	
1. PROPERTY (LAND & EASEMENT)	\$930,375
2. DISPLACEMENTS; RES:6, BUS: 2, M.H.: 0	\$520,000
3. OTHER COST (DAMAGES, ADM. / COURT, INFL., ETC.)	\$862,973
SUBTOTAL: A	\$2,313,348
<b>B. REIMBURSABLE UTILITIES:</b>	
1. RAILROAD	N/A
2. TRANSMISSION LINES	N/A
3. SERVICES	\$451,000
SUBTOTAL: B	\$451,000
<b>C. CONSTRUCTION:</b>	
<b>1. MAJOR STRUCTURES:</b>	
No Major Structures	\$0
SUBTOTAL: C-1	\$0
<b>2. GRADING AND DRAINAGE:</b>	
a. EARTHWORK - Unclassified 230,000 cu. yds. (\$5 / cu. yd)	\$1,150,000
b. DRAINAGE	\$330,000
SUBTOTAL: C-2	\$1,480,000
<b>3. BASE AND PAVING:</b>	
a. 12" GR AGGR BASE CRS - (141,700 SY @ \$12 / SY)	\$1,700,400
<b>b. ASPHALT PAVING:</b>	
1. Asph Conc, 4" superpave base (31,600 tons x \$40)	\$1,264,000
2. Asph Conc, 2" superpave binder (15,815 tons x \$40)	\$632,600
3. Asph Conc, 1 1/2" superpave surface (11,860 tons x \$40)	\$474,400
SUBTOTAL: C-3.b	\$2,371,000

c. BITUMINOUS TACK COAT - (9,885 gal x \$1)	\$9,885
d. Milling, Asph Conc, 1 1/2"	\$0
SUBTOTAL: C-3	\$4,081,285
4. LUMP ITEMS:	
a. TRAFFIC CONTROL	\$330,000
b. CLEARING AND GRUBBING	\$660,000
c. GRASSING	\$66,000
d. EROSION CONTROL	\$110,000
SUBTOTAL: C-4	\$1,166,000
5. MISCELLANEOUS:	
a. SIGNING & STRIPING	\$165,000
b. SIGNALS S.R.104 @ Scott's Ferry Road (S.R.150/U.S.221)	\$60,000
C. GUARDRAIL	\$11,000
SUBTOTAL: C-5	\$236,000

<b>ESTIMATE SUMMARY</b>	
A. RIGHT-OF-WAY:	\$2,313,348
B. REIMBURSABLE UTILITIES:	\$451,000
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	\$0
2. GRADING AND DRAINAGE	\$1,480,000
3. BASE AND PAVING	\$4,081,285
4. LUMP ITEMS	\$1,166,000
5. MISCELLANEOUS	\$236,000
SUBTOTAL CONSTRUCTION COST	\$6,963,285
E. & C. (10%)	\$696,329
INFLATION (5% PER YEAR)	\$1,650,694.58
NUMBER OF YEARS: 4	
TOTAL CONSTRUCTION COST	<b>\$9,310,000</b>

ENVIRONMENTAL SCAN:

Cultural Resources

During a survey conducted along the project corridors in October 1995, one property that is believed to exceed 50 years of age was identified within the projects' area of potential effect. The house is a c. 1900 Central Hallway house type located on the north side of S.R. 104 west of C.R. 80/Rosemont Road. This resource is not considered eligible for the National Register due to the extensive alterations, which have compromised its integrity of materials and design. Among the alterations include the application of asbestos shingle siding, the replacement of the original foundation with a concrete block foundation, the reconstruction of the exterior end chimney, the alteration of historic windows, and the addition of a stylistically noncompatible front porch. Furthermore, it is also questionable if the resource was moved to its present location given its unusual side orientation to the roadway.

Jurisdictional Wetlands and Surface Waters.

An inspection of the proposed corridor was conducted by the GDOT Environmental office to determine if any jurisdictional wetlands or surface waters were present within the corridor. During this investigation several sites of probable impact to wetlands or jurisdictional areas were identified. These sites are grouped into two main areas.

The first area is across the roadway from of the Pollard Lumber Company. At this location there is approximately 9000 S.F. of identified wetlands, approximately 5300 S.F. of this is impacted by the proposed project.

The second area of jurisdiction is 4300' west of the intersection of S.R. 104 and Mt. Rosemont Rd. There is approximately 3.5 acres of wetlands in this area. .25 acres of this wetland is likely to be impacted by the proposed project.

Both of the jurisdictional areas are subject to US Army Corps of Engineers (COE) regulation. Areas impacted by development of the corridor will require a section 404 permit through the COE. However, if more than one third of an acre or 500 linear feet of stream is impacted an Individual COE permit would be required.

Environmental Hazards

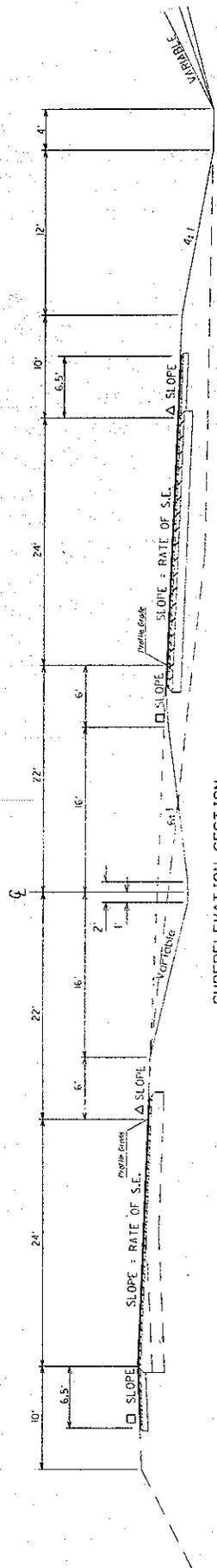
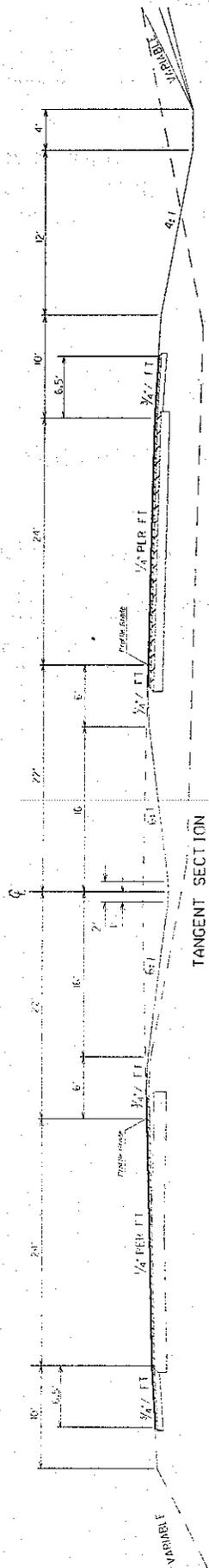
None have been identified.

### Endangered Species

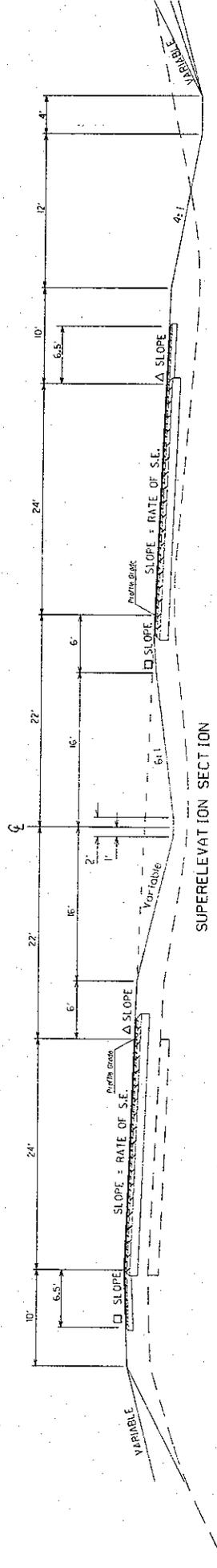
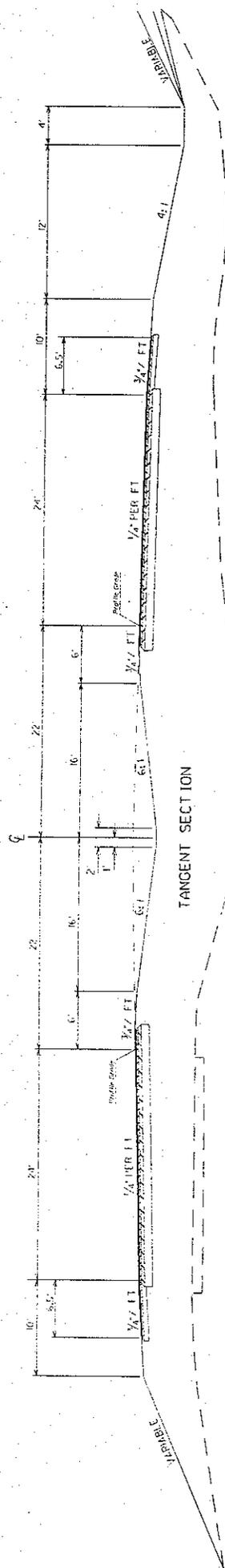
The following species have been identified by the Georgia Natural Heritage Program as being located in the same quadrant of the U.S.G.S. Quadrangle map as the proposed project. The project and species are both located in the NE quadrant of the Appling Quadrangle Map.

- Amphiathus pusillus – Pool Sprite, Snorklewort
- Anemone berlandieri – Glade Windflower
- Arabis missouriensis – Missouri Rockcress
- Bare Rock/Lichens, PD Granite Outcrop – Granite Outcrop Rock/lichens
- Draba aprica – Open-ground Whitlow-grass
- Herbaceous Veg., PD Granite Outcrop – Granite Outcrop Herb Community
- Isoetes tegetiformans – Mat-forming Quillwort
- Sedum pusillum – Dwarf Granite Stonecrop
- Shrub/Scrub Veg., PD Granite Outcrop – Granite Outcrop Shrub/scrub Community

The Open-ground Whitlow-grass and the Dwarf Granite Stonecrop are both listed as Georgia Protected Species. The Pool Sprite/Snorklewort and the Mat-forming Quillwort are both listed as U.S. protected species. It is unknown if any of these species will be impacted by the project.

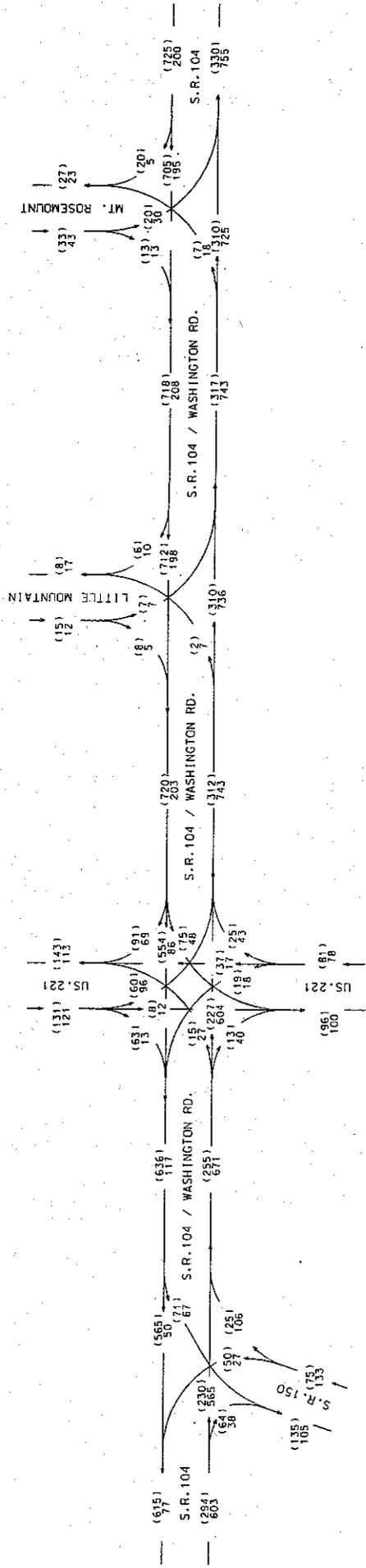
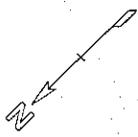


S.R. 104 TYPICAL SECTIONS  
RETAIN EXISTING PAVEMENT



S.R. 104 TYPICAL SECTIONS  
TOTAL RECONSTRUCTION





STP-076-1(22)  
 P.I.# 221800  
 S.R. 104  
 COLUMBIA COUNTY  
 2026 A.M. DHV=(000)  
 2026 P.M. DHV=(000)  
 T=7%



ARCADIS Geraghty & Miller, Inc.  
2849 Paces Ferry Road  
Suite 400  
Atlanta  
Georgia 30339  
Tel 770 431 8666  
Fax 770 435 2666

## MEETING REPORT

Participants:  
See Attached Sign-In Sheet

Copies:  
Participants

## TRANSPORTATION

Place/date of meeting:  
GDOT Room 444, August 16,2000

Minutes by:  
Jess Billmeyer

Subject:  
Concept Team Meeting for SR 104  
Improvements – Columbia County:  
STP-076-1 (21), STP-076-1 (22)  
STP-076-1 (23)

ARCADIS Geraghty & Miller Project No.:  
GA062571.0330  
GA062571.0340  
GA062571.0560

This document should be reviewed by all recipients. Any additions, revisions, or deletions should be called to the attention of the writer within ten (10) days.

The meeting commenced at 10:00 a.m. Mr. Rick Reasons, from GDOT, chaired the meeting and highlighted the main elements of the draft concept reports developed by ARCADIS Geraghty & Miller. The Concept Team Meeting was for three projects: STP-076-1 (21), STP-076-1 (22) and STP-076-1 (23). Copies of the draft concept reports were made available to all team members, and plots of the preferred concepts were displayed.

Mr. Reasons began the meeting by discussing the common aspects of the three projects:

### Project identification:

- A. STP-076-1 (22), 3.30 miles from ½ mile west of SR 47/Pollards Corner (MP 15.25) to east of Mt. Rosemont Road/CR 80 (MP 11.95).
- B. STP-076-1 (21), 3.0 miles from the end of STP-076-1(22) to east of Cumberland Drive/CR 515 (MP 8.95).
- C. STP-076-1 (23), 2.35 miles from the end of STP-076-1(21) to east of Halali Farm Road/CR 91 (MP 6.60).

C  
O  
P  
Y

**Classification/Designation – three projects:**

**PDP** – Major Project/Existing Location  
**Functional** – Rural Arterial  
**Designation** – Exempt

**Existing and proposed typical section – three projects:**

Posted speed – 55 mph

Existing – two lanes with 6-foot rural grassed shoulders, 100-foot right-of-way

Proposed – retain existing two lane where possible, add two lanes with 44-foot depressed grassed median, rural shoulders with 6-foot paved, 200-foot normal required. Right-of-way, slightly wider in a few locations. These are shown on the displays.

**Design criteria – three projects:**

55 mph

Existing – degree of curve varies from 0°30' to 1°

Maximum grade – (22) 5.9%, (21) 6.73%, (23) 6.5%

Proposed – degree of curve varies 0°30' to 1°

Maximum allowable and proposed grade 5%

Following are the meeting minutes of key issues that were addressed by the various members of the team for each specific project.

**STP-076-1 (22), PI 221805 – SR 104 from SR 47 to Mt. Rosemont Road**

1. Mr. Rick Reasons described the typical section for the proposed concept, which is a four lane rural section with a 44-foot depressed median. Mr. Reasons asked if everyone had read the Need & Purpose Statement. There were no additional comments. Mr. Reasons read the traffic projections. The median openings in the proposed concept are the same median openings proposed in the previously approved concept report.
2. Mr. Keith Franklin of ARCADIS Geraghty & Miller described the proposed concept. The concept shows widening to the south side of SR 104 for the majority of the project. The widening shifts to the north side near Pollards Corner to avoid impacts to a lake.
3. Mr. Reasons stated that a design variance has been approved to allow a median opening at the Lumber Company entrance. This median opening is below 1,320 feet from Burks Mountain Road.
4. Mr. Reasons stated that there are no major structures, right-of-way displacements consist of six residences and two businesses, and approximately 25 parcels are involved.
5. Mr. George Brewer, GDOT district office, asked if all three projects would be let at once. Ms. Katie Mullins, GDOT's Office of Planning and Programming, responded that Units 21 and 23 would be let at the same time. Unit 22 right-of-way purchasing is scheduled for 2003. Unit 22 construction is long

range, but may be moved up. The GDOT district office commented that if the projects are not let at the same time, the tie-ins between the proposed and existing would need to be looked at in more detail.

6. Mr. Reasons commented that GDOT has an LGPA agreement with the county for utilities.
7. Mr. Michael Murdock, GDOT Office of Environment/Location, commented that it is likely that there are underground storage tanks (USTs) in the northeast corner of the intersection of SR 47 and SR 104. A test will need to be conducted at the lumber company site to determine if there are any hazardous wastes on the parcel.
8. Mr. Tim Smith, GDOT Traffic Operations, asked if any signals would be required on this project. A signal will be required at the intersection of SR 104 and SR 47.
9. Mr. Jimmy Smith, GDOT Traffic Operations, commented that right and left turn lanes for SR 47 at the intersection with SR 104 should be included in this project.
10. Mr. Jerry Wylie, Georgia Power, commented that the power lines are located on the north side of the road. The lines have been in place since 1937 and are therefore reimbursable.
11. Georgia Power offered to allow their power poles to be used as strain poles for any proposed traffic signals. They would also like to meet with the design team to work to prevent excessive utility relocations.
12. Mr. Reasons commented that there is a letter in the file stating that a fiber optics line is on the north side. District Utilities will be requested to provide markups showing these limits. This will apply to all three projects since the exact limits and location were unknown.

#### **STP-076-1 (21), PI 221805 – SR 104 from Mt. Rosemont Road to Cumberland Drive**

1. Mr. Rick Reasons described the typical section for the proposed concept, which is a four lane rural section with a 44-foot depressed median. Mr. Reasons asked if everyone had read the Need & Purpose Statement. There were no additional comments. Mr. Reasons read the traffic projections. The median openings in the proposed concept are the same median openings proposed in the previously approved concept report (August 22, 1991).
2. Mr. Keith Franklin of ARCADIS Geraghty & Miller described the proposed concept. The concept shows widening to the south side of SR 104 for the majority of the project. The widening shifts to the north side near the west end of the project to avoid a hazardous waste site. The widening shifts to the north near the east side of the project to tie into the proposed improvements in Unit 23.
3. Mr. Reasons described the major structures (bridges over Kiokee Creek and Little Kiokee Creek). The existing bridges will be widened and parallel bridges built. Right-of-way displacements consist of four residences, and approximately 36 parcels are involved.
4. Ms. Katie Mullins, GDOT Office of Planning and Programming, stated that the right-of-way for the project will be purchased beginning in fiscal year 2002. Construction will begin in fiscal year 2003. The project is estimated to be let in July 2002.

5. Mr. Michael Murdoch, GDOT Office of Environmental Location, commented that the hazardous waste site on the project is identified correctly on the concept layouts. He also commented that there may have been an old gas station on the corner of SR 104 and Mt. Rosemont Road. If the parcel used to be a gas station, an investigation will need to be made to determine if there are any USTs or hazardous waste.
6. Mr. Murdoch, GDOT Office of Environmental Location, commented that the revolutionary war soldier gravesite might not be impacted by the proposed improvements. The alignment may need to shift farther away from the cemetery to prevent impacts.
7. Mr. Reasons commented that GDOT has an LGPA agreement with the county for utilities.
8. Mr. Ron Hutto, Columbia County, commented that the median opening at SR 104 and Old Washington Road is definitely needed. A large golf course community is planned to have an entrance at that location. William Few Parkway may be relocated to this median opening in the long-range plan.
9. Mr. Jimmy Smith, GDOT Traffic Operations, asked if the new alignment of Old Washington Road has an intersection angle of 90 degrees. Columbia County responded that the angle is 75 degrees and was approved by the GDOT district office. Columbia County will provide GDOT with a set of construction plans for the Old Washington Road realignment.
10. Mr. Ron Hutto, Columbia County, commented that a contract to realign North Tubman Road will be let this year and construction will begin next year.
11. Mr. Jerry Wylie, Georgia Power, commented that the power lines are located on the south side of the road. The lines have been in place since 1936 and are therefore reimbursable.
12. Mr. Wylie of Georgia Power offered to allow Georgia Power's power poles to be used as strain poles for any proposed traffic signals. They would also like to meet with the design team to work to prevent excessive utility relocations.
13. Mr. Mike Thomas, District 2 engineer, questioned which project would include the intersection at CR 80. Mr. Reasons responded that the project to be let first would include the full design necessary for the intersection with associated lane drops and tapers.

#### **STP-076-1 (23), PI 221805 – SR 104 from Cumberland Drive to Halali Farm Road**

1. Mr. Rick Reasons described the typical section for the proposed concept, which is a four lane rural section with a 44-foot depressed median. Mr. Reasons asked if everyone had read the Need & Purpose Statement. There were no additional comments. Mr. Reasons read the traffic projections. The median openings in the proposed concept are the same median openings proposed in the previously approved concept report (August 8, 1991).
2. Mr. Keith Franklin of ARCADIS Geraghty & Miller described the proposed concept. The concept shows widening to the north side of SR 104 for the entire length of the project.

3. Mr. Reasons described the major structures (bridges over Kiokee Creek and Little Kiokee Creek). The existing bridges will be widened and parallel bridges will be built. Right-of-way displacements consist of seven residences and two businesses, and approximately 36 parcels are involved.
4. Ms. Katie Mullins, GDOT Office of Planning and Programming, stated that the right-of-way for the project will be purchased beginning in fiscal year 2003. Construction will begin in fiscal year 2004. The project is estimated to be let in July 2002. This project will be let with Unit 21.
5. Mr. Reasons commented that GDOT has an LGPA agreement with the county for utilities.
6. Mr. Jimmy Smith, GDOT Traffic Operations, commented that traffic on William Few Parkway is very heavy turning left toward Augusta. They requested that a dual left turn lane be evaluated at this location.
7. Mr. Ron Hutto, Columbia County, commented that the traffic on William Few Parkway would increase due to a recently completed school. He also stated that many residential developments are planned off of William Few Parkway.
8. Mr. Mike Thomas, District 2 engineer, asked if the impacts to the Windmill subdivision had changed since the original concept. There is no change from the original concept. Mr. Reasons stated he had been in contact with District right-of-way personnel in regard to the corner parcel.
9. Mr. Jerry Wylie, Georgia Power, commented that the power lines are located on the south side of the road. The lines are considered reimbursable.
10. Mr. Jerry Wylie with Georgia Power offered to allow their power poles to be used as strain poles for any proposed traffic signals. They would also like to meet with the design team to work to prevent excessive utility relocations.
11. Mr. Jimmy Smith with the GDOT District Operations commented that the end of this project is near the beginning of an ITS corridor in Augusta. ITS improvements may be incorporated into this project if the project falls within the ITS system limits.
12. Mr. Jimmy Smith with GDOT District Operations stated that there is a commercial parcel with an automotive body shop on the south side of SR 104 at the end of this project. This parcel should be tested for hazardous waste.
13. Senator Joey Brush represented the 24<sup>th</sup> District. He stated that the concepts for all three projects are acceptable to him and he had no comments.

Attachments: Concept Team Meeting Agenda, Sign-In Sheet



MONTH February 1992

REVISION REQUEST  
FOR THE  
CONSTRUCTION WORK PROGRAM

IN ACCORDANCE WITH THE BOARD RESOLUTION DATED AUGUST 16, 1973,  
BOARD APPROVAL IS REQUESTED TO REVISE THE CONSTRUCTION WORK PROGRAM  
FOR THE PROJECT AND ACTIVITY OUTLINED BELOW:

- ADDITION TO THE PROGRAM
  - DELETION FROM THE PROGRAM
  - SHIFT IN THE PROGRAM
  - CHANGE IN COST ESTIMATE
  - OTHER
- PE FROM FY \_\_\_\_\_  ROW To FY \_\_\_\_\_  CONST. To FY \_\_\_\_\_

PROJECT DATA

COUNTY	PROJECT No. P.I. No.	TYPE WORK	DESCRIPTION
Columbia	STP-076-1(22) 221800	Widen & Reconstruct (4-Lanes)	State Route 104 & 47: Begins on S.R. 47 at ML 6.2 extends S.E. to Pollards Corner at S.R. 104 (ML 14.4 extends S.E. to ML 11.95. Length = 2.96 Miles

Fund 1 = 33E  
Fund 2 = MLP

ESTIMATED COST (\$1,000's)	LOW ROAD	HIGH ROAD	FISCAL YEAR	CONG. DISTRICT	FIELD DISTRICT
PE \$113	X		1992		
ROW \$635	X		1995		
CONST \$3,948	X		1997	10	2

REASON FOR REVISIONS:

To add this project per the approved Project Concept Report dated 12-3-91.

This project moves from Preprogram.

**GDOT BOARD**

FEB 20 1992

**APPROVED**

RECOMMENDED

*Jack L. Durbitt*  
\_\_\_\_\_  
DIRECTOR, DIVISION OF PLANNING AND PROGRAMMING

RECOMMENDED

*Wayne Shackelford*  
\_\_\_\_\_  
COMMISSIONER

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

STP-076-1(22)  
COLUMBIA COUNTY  
P.I. NO. 221800

FEDERAL ROUTE NO: None  
STATE ROUTE NO: S.R. 104

Date of Report: September 6, 2000

RECOMMENDATION FOR APPROVAL

01-20-01  
DATE

*James Kessell*  
State Road and Airport Design Engineer

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and/or in the State Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the RTIP and/or the STIP.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Transportation Planning Administrator

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Transportation Programming Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Environmental/Location Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
District Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Project Review Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Traffic Operations Engineer

01-27-01  
DATE

*Paul V. Giles Jr*  
State Bridge & Structural Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

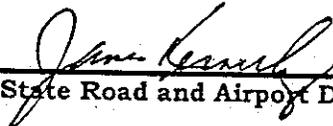
STP-076-1(22)  
COLUMBIA COUNTY  
P.I. NO. 221800

FEDERAL ROUTE NO: None  
STATE ROUTE NO: S.R. 104

Date of Report: September 6, 2000

RECOMMENDATION FOR APPROVAL

01-20-01  
DATE

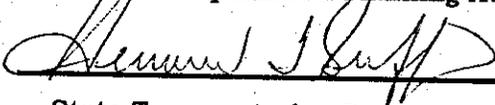
  
State Road and Airport Design Engineer

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DATE

State Transportation Planning Administrator

1/23/01  
DATE

  
State Transportation Programming Engineer

DATE

State Environmental/Location Engineer

DATE

District Engineer

DATE

Project Review Engineer

DATE

State Traffic Operations Engineer

DATE

State Bridge & Structural Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

STP-076-1(22)  
COLUMBIA COUNTY  
P.I. NO. 221800

FEDERAL ROUTE NO: None  
STATE ROUTE NO: S.R. 104

Date of Report: September 6, 2000

RECOMMENDATION FOR APPROVAL

01-20-01  
DATE

*Jane Kessell*  
State Road and Airport Design Engineer

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DATE

State Transportation Planning Administrator

DATE

State Transportation Programming Engineer

DATE

State Environmental/Location Engineer

DATE

District Engineer

1/25/00  
DATE

*D.J. Melby*  
Project Review Engineer

DATE

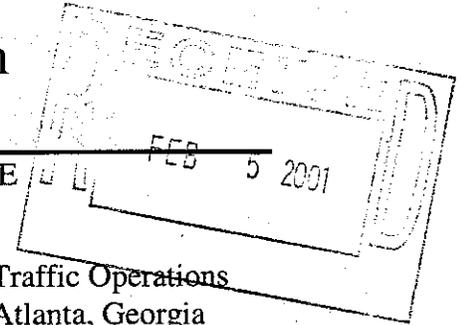
State Traffic Operations Engineer

DATE

State Bridge & Structural Engineer

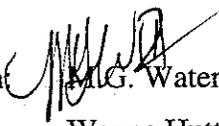
Department of Transportation  
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE



File: STP-076-1(22)/Columbia County  
P.I. No. 221800

Office: Traffic Operations  
Atlanta, Georgia  
Date: January 25, 2001

From:  M.G. Waters, III, P.E., State Traffic Operations Engineer  
To: Wayne Hutto, Assistant Director of Preconstruction

Subject: Project Concept Report Review

We have reviewed the concept report on the above project for the widening of SR 104(Washington Road), beginning approximately a half mile west of Pollard's Corner/US 221 to east of Mt. Rosemont Road(CR 80), a distance of 3.30 miles. This is one of several projects along the corridor which purpose is to provide improvement for local and through traffic between Augusta and Pollard's Corner.

SR 104 is currently a rural two lane roadway with 6 foot grassed shoulders, open ditches and a posted speed limit of 55mph. It is currently operating at an unacceptable level of service due to continuing development in the area and the rolling terrain. Accidents on the corridor exceed the statewide averages for similarly classified facilities.

This project proposes to widen SR 104 to a four lane divided roadway with a 44 foot grassed median, 10 foot shoulders, of which 6.5 feet will be paved, and left and right turn lanes at selected intersections. The design speed is based on 55mph. Traffic is to be maintained, via staging, during construction with possible detours required at major grade changes.

We believe this concept will improve safety and traffic operations along this section of roadway.

We therefore find this report satisfactory for approval.

MGW:TWS

Attachment (signature page)

c: Harvey Keepler  
James A. Kennerly, State Road and Airport Design Engineer  
Attention: Stanley Hill

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

STP-076-1(22)  
COLUMBIA COUNTY  
P.I. NO. 221800

FEDERAL ROUTE NO: None  
STATE ROUTE NO: S.R. 104

Date of Report: September 6, 2000

RECOMMENDATION FOR APPROVAL

01-20-01  
DATE

*Jan. Kessner*  
State Road and Airport Design Engineer

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and/or in the State Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the RTIP and/or the STIP.

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Transportation Planning Administrator

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Transportation Programming Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Environmental/Location Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
District Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
Project Review Engineer

01/31/2001  
DATE

*Marion H. ...*  
State Traffic Operations Engineer

\_\_\_\_\_  
DATE

\_\_\_\_\_  
State Bridge & Structural Engineer

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ROAD AND AIRPORT DESIGN

PROJECT CONCEPT REPORT

STP-076-1(22)  
COLUMBIA COUNTY  
P.I. NO. 221800

FEDERAL ROUTE NO: None  
STATE ROUTE NO: S.R. 104

Date of Report: September 6, 2000

RECOMMENDATION FOR APPROVAL

01-20-01  
DATE

*Jane Kennedy*  
State Road and Airport Design Engineer

This project concept is contained in the Regional Transportation Improvement Program (RTIP) and/or in the State Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the RTIP and/or the STIP.

01/29/01  
DATE

*Marta T. Rosen*  
State Transportation Planning Administrator

DATE

State Transportation Programming Engineer

DATE

State Environmental/Location Engineer

DATE

District Engineer

DATE

Project Review Engineer

DATE

State Traffic Operations Engineer

DATE

State Bridge & Structural Engineer