

ORIGINAL TO GENERAL FILES

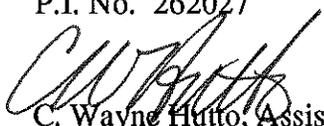
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(20) Laurens County  
P.I. No. 262027

OFFICE Preconstruction

DATE January 3, 1995

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/se

Attachment

DISTRIBUTION:

John Lively  
Bob Mustin  
David Studstill  
Herman Griffin  
Toni Dunagan  
James Kennerly  
Darrell Elwell  
Marion Waters  
Charles Norris  
Paul Liles



H

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

---

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(20) Laurens County OFFICE Preconstruction  
P.I. No. 262027 DATE December 16, 1994

FROM Hoyt J. Lively, Jr., P.E., Director of Preconstruction

TO Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT

This project is the widening and reconstruction of US 441 & 319/SR 31 from CR 272 to just south of CR 354 near I-16 for a total of 12.2 km. The existing roadway consists of 2 to 3-3.6 m lanes with 2.1 m rural shoulders from SR 31 to Turkey Creek and 4-3.6 m lanes with 2.1 m rural shoulders for the remainder of the project. The existing major structures are: (1) Reedy Creek - double 2.4 m x 3.0 m culvert with a sufficiency rating of 71.3; (2) Turkey Creek - 98.6 m x 25.5 m bridge with a sufficiency rating of 86.8. The base year traffic (2000) is 11,300 VPD and the design year traffic (2020) is 2200 VPD. The posted speed is 90 km/h (reduced to 60 km/h in school zone) and the design speed is 90 km/h.

The proposed construction will provide 4-3.6 m lanes with a 13.4 m depressed grassed median from the beginning of the project to CR 302, where it transitions to 4-3.6 m lanes with 6.0 m raised median to the end of the project. The 6.0 m raised median section will be utilized near CR 302 to avoid a power substation. The proposed right-of-way will vary from 63.7 m to 76.2 m. The existing bridge structure at Turkey Creek will be widened to 31.4 m. The existing culvert at Reedy Creek will be lengthened to accommodate the widen section. Approximately one-fourth of the existing roadway will require reconstructing. The roadway will remain open to traffic during construction.

Environmental concerns include requiring a COE 404 permit; 1.6 hectares of hydric soil impacted; an Environmental Assessment will be prepared; 21 displacements; 18 residences; 1 business, 1 mobile home and 1 church; a public hearing will be held; time saving procedures are appropriate.

Wayne Shackelford  
Page 2  
December 16, 1994

EDS-441(20) Laurens County

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG. DATE</u>
Constr(Infl&E/C)	\$12,101,000	\$10,000,000	1999
Rights-of-way	\$3,619,000	\$3,900,000	98-07
Utilities*	---	---	

\*LGPA anticipated

This project is part of the Governors Road Improvement Program. I recommend this project concept be approved.

HJL/JDQ/se

Attachment

CONCUR:

  
\_\_\_\_\_  
Frank Danchetz, P.E., Chief Engineer

APPROVED:

  
\_\_\_\_\_  
Wayne Shackelford, Commissioner

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

RECEIVED

NOV 08 1994

PRECONSTRUCTION

---

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(20) LAURENS OFFICE Atlanta, Georgia  
P. I. No. 262027 DATE NOVEMBER 8, 1994

FROM Bob Mustin, P.E., Project Review Engineer *DTM*

TO C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT PROJECT CONCEPT REPORT

The attached concept report has been reviewed and is considered satisfactory.

The estimated costs for this project are as follows:

Construction	\$	9,977,000
Inflation	\$	1,126,000
E & C	\$	998,000
Right of Way	\$	3,619,000
Reinurseable Utilities	\$	0

DTM

Attachments

c: David Studstill

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS 441(20), Laurens County OFFICE Environment/Location  
P.I. Nos. 262027 DATE October 25, 1994

*David E. Studstill SAM*

FROM David E. Studstill, P.E., State Environmental/Location Engineer

TO Bob Mustin, Project Review Engineer

SUBJECT **Concept Report - S.R. 31 Improvements in Laurens County**

In accordance with the Plan Development Process, the concept report for the above project is attached for your review and processing.

DES/FRM

Attachment

cc: C. Wayne Hutto  
Jim Kennerly  
Marion Waters  
Paul Liles  
Charles Norris/Tennille District



DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
OFFICE OF ENVIRONMENT/LOCATION

# PROJECT CONCEPT REPORT

## EDS 441(20) LAURENS COUNTY P.I. NO. 262027

Federal Route No.: F 42-1

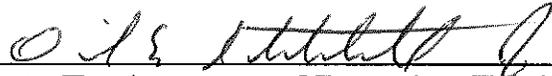
Date of Report: October 13, 1994

State Route No.: 31

Prepared By: Fred Mathey

### RECOMMENDATION FOR APPROVAL

10/20/94  
Date

  
State Environmental/Location Engineer

\_\_\_\_\_  
Date

\_\_\_\_\_  
State Road & Airport Design Engineer

\_\_\_\_\_  
Date

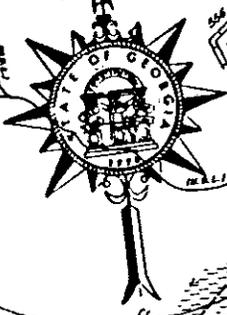
\_\_\_\_\_  
State Traffic Operations Engineer

\_\_\_\_\_  
Date

\_\_\_\_\_  
District Engineer, Tennille

\_\_\_\_\_  
Date

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



**END EDS 441 (20)**

**BEGIN EDS 441 (20)**

20' MED

G.M.D. 1369

G.M.D. 343

RENTZ  
POP. 337  
ELEV. 310

SCALE IN MILES

DEPARTMENT OF TRANSPORTATION	
STATE OF GEORGIA	
OFFICE OF ENVIRONMENT/LOCATION	
ATLANTA, GEORGIA	
<b>EDS-441 (20)</b>	
<b>US 441/SR 31 IMP</b>	
scale: 1"=1 MILE	date: JUNE 1994
county: <b>LAURENS</b>	

## PROJECT CONCEPT REPORT

**PROJECT NUMBER:** EDS 441(20)

### PROJECT LOCATION AND DESCRIPTION

THE PROJECT IS TO WIDEN SR 31 FROM CR 272 TO JUST SOUTH OF CR 354 AT I-16 IN LAURENS COUNTY. THE PROJECT LENGTH IS 12.2 km.

THE PROPOSED CONCEPT IS TO IMPROVE SR 31 FROM THE EXISTING TWO AND THREE LANES TO FOUR LANES WITH A 13.6 m DEPRESSED GRASSED MEDIAN FROM CR 272 TO CR 302(PAYNE ROAD). ALSO TO IMPROVE SR 31 FROM THE EXISTING TWO AND FOUR LANES TO A RURAL DIVIDED WITH A 6.0 m RAISED MEDIAN.

SEE ATTACHED PROJECT DESCRIPTION FOR DETAIL DESCRIPTION.

### TRAFFIC

CURRENT		PROJECTED	
YEAR	AADT	YEAR	AADT
2000	11300	2020	22000

### PDP CLASSIFICATION

MAJOR WIDENING

### FUNCTIONAL CLASSIFICATION

RURAL ARTERIAL

NON-CA ( )

CA ( )

EXEMPT ( )

(X) N/A FOR GRIP PROJECTS

### NEED AND PURPOSE

THE PROPOSED PROJECT IS PART OF THE GOVERNOR'S ROAD IMPROVEMENT PROGRAM (GRIP) THAT HAS BEEN PROPOSED TO SPUR ECONOMIC GROWTH THROUGHOUT THE STATE. IN ADDITION TO THE ECONOMIC GROWTH, THE PROPOSED IMPROVEMENTS WILL PROVIDE A SAFER AND MORE EFFICIENT HIGHWAY. SUBSTANDARD VERTICAL AND HORIZONTAL ALIGNMENT WILL BE IMPROVED TO CURRENT AASHTO STANDARDS.

**EXISTING ROADWAY**

<b>TYPICAL SECTION:</b>	2- 3.6 m LANES W/ 2.1 m SHLDS RURAL 3- 3.6 m LANES W/ 2.1 m SHLDS RURAL 4- 3.6 m LANES W/ 2.1 m SHLDS RURAL	<b>R/W WIDTH VARIES</b> 30.5 m RURAL TO 61.0 m RURAL
<b>POSTED SPEED</b>	<b>MAXIMUM RADIUS OF CURVE</b>	<b>MAX GRADE</b>
89 kph RURAL 56 kph SCHOOL ZONE	1164.3 m	4.1%

**MAJOR STRUCTURES**

<b>FEATURES INTERSECTED/TYPE</b>	<b>LENGTH</b>	<b>WIDTH</b>	<b>PRIORITY RATING</b>	<b>SUFF. RATING</b>
REEDY CREEK CULVERT TURKEY CREEK BRIDGE	16.2 m 98.6 m	DBL 2.4 m X 3.0 m 25.5 m	00590 00000	71.3 86.8

**PROPOSED ROADWAY**

<b>TYPICAL SECTION:</b>	4-3.6 m LANES W/ 13.6 m DEPRESSED-GRASSED MEDIAN RURAL 4-3.6 m LANES W/ 6.0 m RAISED MEDIAN RURAL			
<b>DESIGN SPEED</b>	<b>MAXIMUM RADIUS OF CURVE</b>		<b>MAX GRADE</b>	
90 kph RURAL	<b>ALLOWABLE</b>	305.0 m	<b>ALLOWABLE</b>	4.50%
	<b>PROPOSED</b>	1 750.0 m		

<b>FEATURES INTERSECTED/TYPE</b>	<b>LENGTH</b>	<b>WIDTH</b>
WIDENING OF REEDY CREEK CULVERT WIDENING OF TURKEY CREEK BRIDGE	18.0 m 98.6 m	DBL 2.4 m X 3.0 m 5.9 m

**PROPOSED RIGHT-OF-WAY**

<b>RIGHT-OF-WAY WIDTH</b>	<b>DISPLACEMENTS</b>			
63.7 m TO 76.2 m	<b>RES.:</b> 18	<b>BUS.:</b> 1	<b>M.H.:</b> 1	
	<b>OTHER:</b> 1 CHURCH		<b>PARCELS:</b> 68	

**TYPE OF ACCESS CONTROL:** BY DRIVEWAY PERMIT

---

**COORDINATION**

---

**CONCEPT TEAM MEETING DATE:** MAY 26, 1994

**LOCATION INSPECTION DATE:** NONE SCHEDULED

**PERMITS REQUIRED:** \* C.O.E. 404 (APPROX. 1.6 HECTARES HYDRIC SOIL IMPACTED )

**LEVEL OF PUBLIC INVOLVEMENT:** PUBLIC HEARING TO BE SCHEDULED

**TIME SAVING PROCEDURES APPROPRIATE:** NO

**OTHER PROJECTS IN THE AREA:** EDS 441(19), LAURENS COUNTY  
IM 16-1(106), LAURENS COUNTY

---

**MISCELLANEOUS**

---

**TRAFFIC CONTROL DURING CONSTRUCTION:** MAINTAINED BY STAGED CONSTRUCTION AND  
DETOURS AS NECESSARY

**LEVEL OF ENVIRONMENTAL ANALYSIS:** ENVIRONMENTAL ASSESSMENT REPORT

**UNDERGROUND STORAGE TANKS:** NONE KNOWN OF AT THIS TIME. INVESTIGATION  
REQUESTED

**HAZARDOUS WASTE SITES:** NONE KNOWN OF AT THIS TIME.  
INVESTIGATION REQUESTED

**DESIGN VARIATIONS REQUESTED:**

	YES	NO	UNDETERMINED
SUBST HORIZ ALIGNMENT	( )	( X )	( )
SUBST ROADWAY WIDTH	( )	( X )	( )
SUBST SHOULDER WIDTH	( )	( X )	( )
SUBST VERTICAL GRADES	( )	( X )	( )
SUBST CROSS SLOPES	( )	( X )	( )
SUBST STOPPING SIGHT DIST	( )	( X )	( )
SUBST SUPER-ELEVATION RATES	( )	( X )	( )
SUBST HORIZONTAL CLEARANCE	( )	( X )	( )
SUBST SPEED DESIGN	( )	( X )	( )
SUBST VERTICAL CLEARANCE	( )	( X )	( )
SUBST BRIDGE WIDTH	( )	( X )	( )
SUBST BRIDGE STRUCTURE CAPACITY	( )	( X )	( )

---

---

**ALTERNATIVES CONSIDERED**

---

1. ALTERNATE TO WIDEN ALL THE WEST SIDE; ELIMINATED DUE TO IMPACTS ON HISTORIC STRUCTURES, CEMETERY AND DISPLACEMENTS.

---

**ESTIMATED COST**

---

<b>CONSTRUCTION:</b>	\$ 9,977,000	<b>RIGHT-OF-WAY:</b>	\$ 3,619,000
<b>E &amp; C ( 10%):</b>	\$ 998,000	<b>ACQUIRED BY:</b>	D.O.T.
<b>INFLATION:</b>	<u>\$ 1,126,000</u>	<b>UTILITIES:</b>	\$ 90,000
<b>( 2 yrs at 5% per yr):</b>		<b>ADJUSTED BY:</b>	LGPA ANTICIPATED
<b>TOTAL CONS'T COST:</b>	\$ 12,101,000		

---

**COMMENTS**

---

1) THE ALIGNMENT WAS CHANGED AS A RESULT OF THE CONCEPT TEAM MEETING. THE 6.0 m RAISED MEDIAN TYPICAL SECTION WAS EXTENDED TO THE SOUTH APPROXIMATELY 1.6 km ; FROM TURKEY CREEK TO CR 302. THIS WOULD ELIMINATE THE DISPLACEMENT OF THE POWER SUBSTATION.

2) HE EXISTING T/W JUST NORTH OF TURKEY CREEK, ON THE WEST SIDE, NEEDS TO BE MAINTAINED WHERE THE HISTORIC BOUNDARY IS SHOWN. THE ALIGNMENT MAY NEED TO BE SHIFTED IF DESIGN FINDS IT NECESSARY TO STAY OFF THE HISTORICAL BOUNDARY.

3) 28% OF THE EXISTING ROADWAY REQUIRES TO BE RECONSTRUCTED BECAUSE OF SUBSTANDARD VERTICAL ALIGNMENT.

\*4) 404-B(1) GUIDELINES COORDINATION WITH THE FEDERAL RESOURCE AGENCIES HAS NOT BEEN DONE AND THERE MAY BE SOME SHIFTS. THE APPLICATION FOR THE 404 PERMIT NEEDS TO BE SUBMITTED ALONG WITH EDS 441(18) AND EDS 441(19) TO ACCOMMODATE LOGICAL TERMINI REQUIREMENTS BY THE CORPS OF ENGINEERS.

5) ONE ENVIRONMENTAL DOCUMENT WILL INCLUDE PROJECTS EDS 441(18), EDS 441(19), AND EDS 441(20).

**ATTACHMENTS: PROJECT DESCRIPTION, COUNTY STRIP MAP, COST ESTIMATE, TYPICAL SECTIONS  
TEAM MEETING MINUTES**

## PROJECT DESCRIPTION

EDS 441(20)

P.I. NO. 262027

October 11, 1994

The proposed project is to improve the existing two, three, and four lane roadway to a rural four lane divided highway with a 13.6 m median and a 6.0 m raised median. The length of this project is 12.2 km. The proposed speed design is 90 kph and the required R/W varies from 39.3 m to 76.2 m. The existing R/W varies from 30.5 m to 61.0 m. The project ties into proposed project IM-16-1(106) to the north, which is an interchange improvement project and proposed project EDS 441(19) to the south, which is an existing improvement project from SR 46 to CR 272.

Beginning at CR 272 (Barron Road) the concept is to widen to the east side of S.R. 31 to the end of the project just south of CR 354 (Pinehill Road) at I-16. A 13.6 m median is proposed from CR 272 to CR 302 (Payne Road) where the 6.0 m raised median begins. The 6.0 m raised median is proposed from CR 302 to the end of the project just south of CR 354 at I-16.

The following intersecting roads are proposed to be realigned: CR 249 (J. J. Club Road), CR 163 (Groin Tucker Road), CR 196 (Butts Road), CR 195 (Tobe Dixon Road), S.R. 117, CR 521, CR 157, and CR 155 (McGowen Road). The intersection of CR 547 (Fountain Road) with SR 31 is proposed to be closed. Median crossovers are proposed at the intersection of the following roads: CR 249/CR 165 (Grant Rowe Road), CR 196, CR 248 (Emily Curre Road), SR 117/CR 195, CR 302, CR 292 (Springhaven Road)/CR 521, CR 157, and CR 355.

North of Turkey Creek there is a historical structure on the west side of SR 31. The proposal is to widen to the east side holding the existing R/W on the west side. The number of displacements are; 13 residences, 7 mobile homes, 1 business (lawn decorations), and 1 church. It is anticipated to reconstruct 28% of the existing roadway. It is also estimated that 1.6 hectares of hydric soils will be impacted. The bridge at Turkey Creed was reconstructed in 1991. It has a sufficiency rating of 86. The roadway width is 25.0 m. It is proposed to widen this bridge to the east side an additional 5.9 m.

FRM

ESTIMATE SUMMARY

SECTION I AND II  
PROJECT LENGTH 7.6 MILES

EDS 441(20) SR 31 IMPROVEMENTS LAURENS COUNTY

A. RIGHT OF WAY	\$ <u>3,619,000</u>
B. REIMBURSABLE UTILITIES	\$ <u>0</u>

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES	\$ <u>432,000</u>
D. GRADING AND DRAINAGE	\$ <u>1,549,000</u>
E. BASE AND PAVING	\$ <u>4,443,000</u>
F. LUMP ITEMS	\$ <u>1,394,000</u>
G. MISCELLANEOUS	\$ <u>864,000</u>
H. SPECIAL FEATURES	\$ <u>1,297,000</u>

SUBTOTAL CONSTRUCTION COST	\$ <u>9,977,000</u>	
E & C (10%)	\$ <u>998,000</u>	
INFLATION (5% PER YEAR)	\$ <u>1,126,000</u>	(2 YEARS)
TOTAL CONSTRUCTION COST	\$ <u>12,101,000</u>	\$ 1,593,000 per mile

GRAND TOTAL PROJECT COST \$ 15,720,000

PRELIMINARY COST ESTIMATE

OFFICE OF ENVIRONMENT/LOCATION

P.I. NO: 262027

DATE: 06-29-1994

PROJECT NO: EDS 441 (20)

PROJECT NAME: SR 31 IMPROVEMENTS

COUNTY: LAURENS

PROJECT DESCRIPTION: SECTION I OF III OF PROJECT ALONG SR 31 FROM CR 272  
TO JUST SOUTH OF CR 354 OF I-16

PROJECT LENGTH: 7.600 MILES

SECTION LENGTH: 2.470 MILES

TYPICAL SECTION:

RURAL WIDENING-2 TO 4 LANES WITH 44' DIV MEDIAN (48' PAV'T)

Minimum R/W = 209 ft

EXISTING ROADWAY (If Applicable): SR 31

TRAFFIC:

INITIAL DESIGN YEAR: 2000

DAILY VOLUME (AADT): 11,300

FINAL DESIGN YEAR: 2020

DAILY VOLUME (AADT): 22,000

FEASIBILITY STUDY  PRE-PROGRAMMING PROCESS  PROGRAMMING PROCESS

COMMENTS: 1)SECTION I IS ADD 5 LN WITH 44' MEDIAN TO EXISTING 2 LN FOR  
2.47 MILES 2)SECTIONS II IS 4 LN WITH 44' MEDIAN FOR 2.08 MILES 3)SECTION  
III IS TO ADD 2 LN WITH A 20' RAISED MEDIAN FOR 3.01 MILES 4)R/W COST IS FO

PREPARED BY: STEVE STEPHENS

PROJECT COSTS

<b>A. RIGHT-OF-WAY</b>		
1. PROPERTY (Land and Easements)		\$ 388,000
2. DISPLACEMENTS		\$ 1,881,000
3. OTHER COST		\$ 1,350,000
	<b>SUBTOTAL</b>	\$ 3,619,000
<b>B. REIMBURSABLE UTILITIES</b>		
1. RAILROAD		\$ 0
2. TRANSMISSION LINES		\$ 0
3. SERVICES		\$ 0
	<b>SUBTOTAL</b>	\$ 0
<b>C. MAJOR STRUCTURES</b>		
1. WALLS		\$ 0
<hr/>		
2. BRIDGE STREAM CROSSING		\$ 0
<hr/>		
3. BRIDGE OVER/UNDERPASS		\$ 0
<hr/>		
4. BOX CULVERTS		\$ 0
<hr/>		
	<b>SUBTOTAL</b>	\$ 0
<b>D. GRADING AND DRAINAGE</b>		
1. EARTHWORK		
a. UNCLASSIFIED EXCAVATION SOIL		\$ 29,000
11,407 CY @ \$2.55		
b. UNCLASSIFIED EXCAVATION ROCK		\$ 0
0 CY @ \$4.00		
c. BORROW EXCAVATION		\$ 0
0 CY @ \$3.00		
2. DRAINAGE		
a. MINOR DRAINAGE (INCLUDING CROSS DRAIN PIPES & LONGITUDINAL SYSTEM)		\$ 99,000
2.470 MILES @ \$39,960		
b. CURB AND GUTTER		\$ 0
0 LF @ \$7.74		
	<b>SUBTOTAL</b>	\$ 128,000

ESTIMATE SUMMARY

		SECTION COST (per mile)
A. RIGHT-OF-WAY.....	\$ 3,619,000	\$ 1,465,000
B. REIMBURSABLE UTILITIES.....	\$ 0	\$ 0

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES.....	\$ 0	
D. GRADING AND DRAINAGE.....	\$ 128,000	
E. BASE AND PAVING.....	\$ 1,323,000	
F. LUMP ITEMS.....	\$ 426,000	
G. MISCELLANEOUS.....	\$ 161,000	
H. SPECIAL FEATURES.....	\$ <u>485,000</u>	
 SUBTOTAL CONSTRUCTION COST.....	\$ 2,523,000	\$ 1,021,000
 E. & C. (10%).....	\$ 252,000	
 INFLATION... <u>2 yr(s) @ 5% per year</u>	\$ <u>285,000</u>	
 TOTAL CONSTRUCTION COST.....	\$ 3,060,000	\$ 1,239,000
<hr/>		
 GRAND TOTAL CONSTRUCTION COST	\$ 6,679,000	\$ 2,704,000

RURAL WIDENING-2 TO 4 LANES WITH 44' DIV MEDIAN (48' PAV'T)

PRELIMINARY COST ESTIMATE

OFFICE OF ENVIRONMENT/LOCATION

P.I. NO: 262027

DATE: 07-13-1994

PROJECT NO: EDS 441(20)

PROJECT NAME: SR 31 IMPROVEMENTS

COUNTY: LAURENS

PROJECT DESCRIPTION: SECTION II OF III OF PROJECT ALONG SR 31 FROM CR 272 TO JUST SOUTH OF CR 354 AT I-16.

PROJECT LENGTH: 7.600 MILES

SECTION LENGTH: 2.080 MILES

TYPICAL SECTION:

RURAL NEW LOCATION-4-LANES WITH 44' DIV MEDIAN (48' PAV'T)

Minimum R/W = 250 ft

EXISTING ROADWAY (If Applicable): SR 31

TRAFFIC:

INITIAL DESIGN YEAR: 2000

DAILY VOLUME (AADT): 11,300

FINAL DESIGN YEAR: 2020

DAILY VOLUME (AADT): 22,000

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

COMMENTS: 1) SECTION I IS ADD 2 LN W/44' MEDIAN TO EXIST 2 LN FOR 2.47 MILES 2) SECTION II IS 4 LN W/44' MEDIAN FOR 2.08 MILES 3) SECTION III IS ADD 2 LN W/20' RAISED MEDIAN FOR 3.01 MILES 4) R/W COST INCLUDED IN SECTION

PREPARED BY: FRED MATHENY

PROJECT COSTS

A. RIGHT-OF-WAY

1. PROPERTY (Land and Easements)	\$	0
2. DISPLACEMENTS	\$	0
3. OTHER COST	\$	0

SUBTOTAL \$ 0

B. REIMBURSABLE UTILITIES

1. RAILROAD	\$	0
2. TRANSMISSION LINES	\$	0
3. SERVICES	\$	0

SUBTOTAL \$ 0

C. MAJOR STRUCTURES

1. WALLS	\$	0
----------	----	---

---

2. BRIDGE STREAM CROSSING	\$	0
---------------------------	----	---

---

3. BRIDGE OVER/UNDERPASS	\$	0
--------------------------	----	---

---

4. BOX CULVERTS	\$	59,000
-----------------	----	--------

EXTEND DOUBLE 8X10 CULVERT AT REEDY CK FOR 59'

SUBTOTAL \$ 59,000

D. GRADING AND DRAINAGE

1. EARTHWORK

a. UNCLASSIFIED EXCAVATION SOIL	\$	865,000
339,170 CY @ \$2.55		

b. UNCLASSIFIED EXCAVATION ROCK	\$	0
0 CY @ \$4.00		

c. BORROW EXCAVATION	\$	0
0 CY @ \$3.00		

2. DRAINAGE

a. MINDR DRAINAGE (INCLUDING CROSS DRAIN PIPES & LONGITUDINAL SYSTEM)	\$	171,000
2.080 MILES @ \$82,080		

b. CURB AND GUTTER	\$	0
0 LF @ \$7.74		

SUBTOTAL \$ 1,036,000

PROJECT COSTS

con't.

E. BASE AND PAVING

1. GRADED AGGREGATE BASE	\$	458,000
10.00" -- 40,415 T @ \$11.32		
2. ASPHALT PAVING		
a. ASPHALTIC CONCRETE "E"	\$	190,000
1.50" -- 6,315 T @ \$30.01		
b. ASPHALTIC CONCRETE "B"	\$	245,000
2.00" -- 8,420 T @ \$29.15		
c. ASPHALTIC CONCRETE BASE	\$	471,000
5.00" -- 16,840 T @ \$27.96		
d. BITUMINOUS TACK COAT	\$	6,000
7,087 G @ \$0.81		
3. CONCRETE PAVING	\$	0
4. OTHER PAVING	\$	137,000
	SUBTOTAL	\$ 1,507,000

F. LUMP ITEMS

1. TRAFFIC CONTROL	\$	20,000
2. CLEARING AND GRUBBING	\$	296,000
63 ACRES @ \$4,700		
3. LANDSCAPING	\$	106,000
2.080 MILES @ \$51,000		
4. EROSION CONTROL	\$	100,000
2.080 MILES @ \$48,000		
5. DETOURS (INCL. TEMP. BRIDGES)	\$	0
	SUBTOTAL	\$ 522,000

G. MISCELLANEOUS

1. SIGNING/STRIPING	\$	77,000
2.080 MILES @ \$37,000		
2. GUARDRAIL	\$	24,000
1,600 LF @ \$10.84 + 8 Anchors @ \$843.93		
3. OTHER	\$	335,000
2.080 MILES @ \$161,100		
	SUBTOTAL	\$ 436,000

H. SPECIAL FEATURES

3 CROSSROAD REALIGNMENTS	\$	296,000
--------------------------	----	---------

ESTIMATE SUMMARY

		SECTION COST (per mile)
A. RIGHT-OF-WAY.....	\$ 0	\$ 0
B. REIMBURSABLE UTILITIES.....	\$ 0	\$ 0

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES.....	\$ 59,000	
D. GRADING AND DRAINAGE.....	\$ 1,036,000	
E. BASE AND PAVING.....	\$ 1,507,000	
F. LUMP ITEMS.....	\$ 522,000	
G. MISCELLANEOUS.....	\$ 436,000	
H. SPECIAL FEATURES.....	<u>\$ 296,000</u>	
 SUBTOTAL CONSTRUCTION COST.....	 \$ 3,856,000	 \$ 1,854,000
E. & C. (10%).....	\$ 386,000	
INFLATION... <u>2 yr(s) @ 5% per year</u>	<u>\$ 435,000</u>	
 TOTAL CONSTRUCTION COST.....	 \$ 4,677,000	 \$ 2,249,000

GRAND TOTAL CONSTRUCTION COST \$ 4,677,000 \$ 2,249,000

RURAL NEW LOCATION-4-LANES WITH 44' DIV MEDIAN (48' PAV'T)

PRELIMINARY COST ESTIMATE

OFFICE OF ENVIRONMENT/LOCATION

P.I. NO: 262027

DATE: 06-29-1994

PROJECT NO: EDS 441(20)

PROJECT NAME: SR 31 IMPROVEMENTS

COUNTY: LAURENS

PROJECT DESCRIPTION: SECTION III OF III OF PROJECT ALONG SR 31 FROM CR  
272 TO JUST SOUTH OF CR 354 AT I-16

PROJECT LENGTH: 7.600 MILES

SECTION LENGTH: 3.010 MILES

TYPICAL SECTION:

RURAL WIDENING-2 TO 4 LANES WITH 20' RAISED MEDIAN WIDEN ON ONE SIDE (48' PAV'T)

Minimum R/W = 137 ft

EXISTING ROADWAY (If Applicable): SR 31

TRAFFIC:

INITIAL DESIGN YEAR: 2000

DAILY VOLUME (AADT): 11,300

FINAL DESIGN YEAR: 2020

DAILY VOLUME (AADT): 22,000

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

COMMENTS: 1)SECTION I IS ADDING 2 LN WITH 44 FT MEDIAN TO EXISTING 2 LN

FOR 2.47 MILES 2)SECTION II IS 4 LN WITH 44 FT MEDIAN FOR 2.08 MILES

3)SECTION III IS ADD 2 LN WITH 20 FT RAISED MEDIAN FOR 3.01 MILES 4)R/W INC

PREPARED BY: STEVE STEPHENS

PROJECT COSTS

A. RIGHT-OF-WAY

1. PROPERTY (Land and Easements)	\$	0
2. DISPLACEMENTS	\$	0
3. OTHER COST	\$	0

SUBTOTAL \$ 0

B. REIMBURSABLE UTILITIES

1. RAILROAD	\$	0
2. TRANSMISSION LINES	\$	0
3. SERVICES	\$	0

SUBTOTAL \$ 0

C. MAJOR STRUCTURES

1. WALLS	\$	0
----------	----	---

---

2. BRIDGE STREAM CROSSING WIDENING TURKEY CREEK BRIDGE	\$	373,000
---	----	---------

3. BRIDGE OVER/UNDERPASS	\$	0
--------------------------	----	---

---

4. BOX CULVERTS	\$	0
-----------------	----	---

SUBTOTAL \$ 373,000

D. GRADING AND DRAINAGE

1. EARTHWORK

a. UNCLASSIFIED EXCAVATION SOIL 18,338 CY @ \$2.55	\$	47,000
b. UNCLASSIFIED EXCAVATION ROCK 0 CY @ \$4.00	\$	0
c. BORROW EXCAVATION 0 CY @ \$3.00	\$	0

2. DRAINAGE

a. MINOR DRAINAGE (INCLUDING CROSS DRAIN PIPES & LONGITUDINAL SYSTEM) 3.010 MILES @ \$29,970	\$	90,000
b. CURB AND GUTTER 31,834 LF @ \$7.74	\$	246,000

SUBTOTAL \$ 383,000

PROJECT COSTS

con't.

E. BASE AND PAVING		
1. GRADED AGGREGATE BASE		\$ 432,000
12.00" -- 38,143 T @ \$11.32		
2. ASPHALT PAVING		
a. ASPHALTIC CONCRETE "E"		\$ 329,000
1.50" -- 10,966 T @ \$30.01		
b. ASPHALTIC CONCRETE "B"		\$ 426,000
2.00" -- 14,621 T @ \$29.15		
c. ASPHALTIC CONCRETE BASE		\$ 273,000
4.00" -- 9,748 T @ \$27.96		
d. BITUMINOUS TACK COAT		\$ 6,000
7,931 G @ \$0.81		
3. CONCRETE PAVING		\$ 0
4. OTHER PAVING		\$ 147,000
SUBTOTAL		\$ 1,613,000
F. LUMP ITEMS		
1. TRAFFIC CONTROL		\$ 46,000
2. CLEARING AND GRUBBING		\$ 235,000
50 ACRES @ \$4,700		
3. LANDSCAPING		\$ 75,000
3.010 MILES @ \$24,960		
4. EROSION CONTROL		\$ 90,000
3.010 MILES @ \$30,000		
5. DETOURS (INCL. TEMP. BRIDGES)		\$ 0
SUBTOTAL		\$ 446,000
G. MISCELLANEDUS		
1. SIGNING/STRIPING		\$ 111,000
3.010 MILES @ \$37,000		
2. GUARDRAIL		\$ 5,000
260 LF @ \$10.84 + 2 Anchors @ \$843.93		
3. OTHER		\$ 151,000
3.010 MILES @ \$50,100		
SUBTOTAL		\$ 267,000
H. SPECIAL FEATURES		\$ 516,000
3 CROSS ROAD REALIGNMENTS		

ESTIMATE SUMMARY

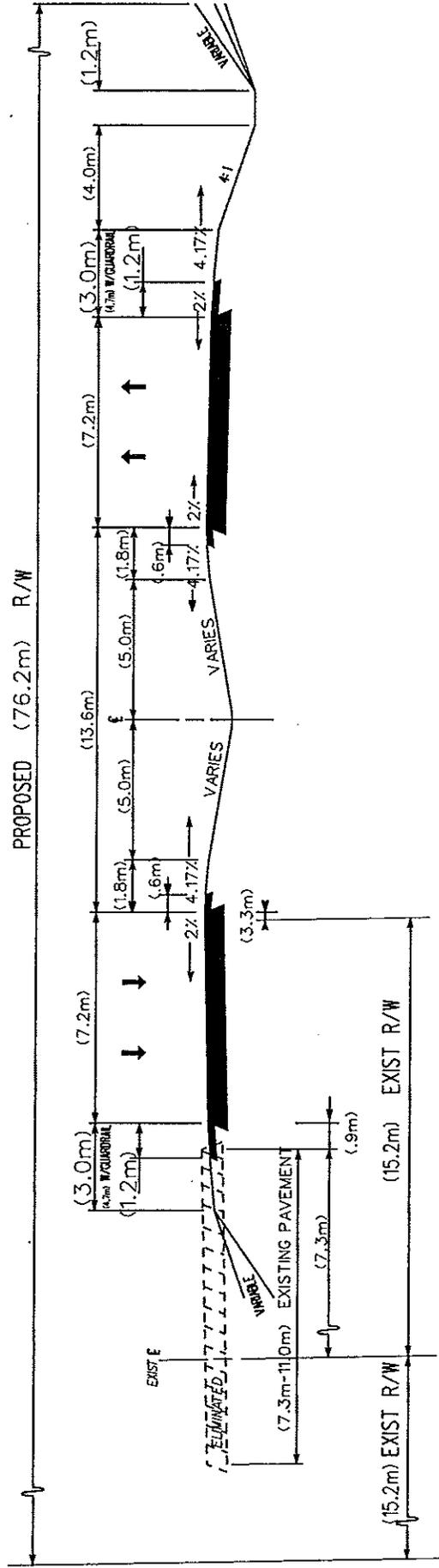
			SECTION COST (per mile)
A. RIGHT-OF-WAY.....	\$	0	\$ 0
B. REIMBURSABLE UTILITIES.....	\$	0	\$ 0

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES.....	\$	373,000	
D. GRADING AND DRAINAGE.....	\$	383,000	
E. BASE AND PAVING.....	\$	1,613,000	
F. LUMP ITEMS.....	\$	446,000	
G. MISCELLANEOUS.....	\$	267,000	
H. SPECIAL FEATURES.....	\$	<u>516,000</u>	
SUBTOTAL CONSTRUCTION COST.....	\$	3,598,000	\$ 1,195,000
E. & C. (10%).....	\$	360,000	
INFLATION...2 yr(s) @ 5% per year	\$	<u>406,000</u>	
TOTAL CONSTRUCTION COST.....	\$	4,364,000	\$ 1,450,000

GRAND TOTAL CONSTRUCTION COST   \$   4,364,000       \$ 1,450,000

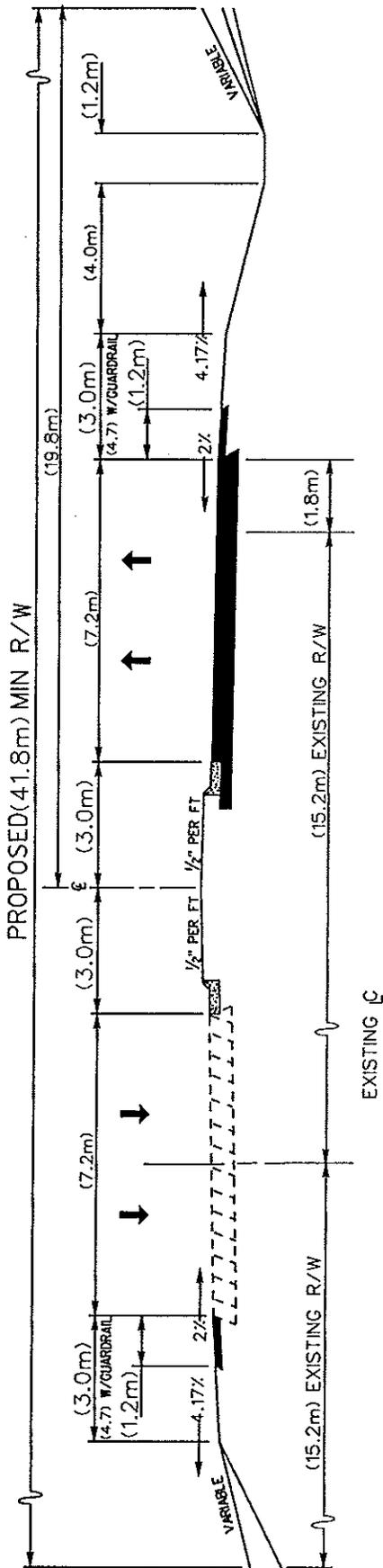
RURAL WIDENING-2 TO 4 LANES WITH 20' RAISED MEDIAN WIDEN ON ONE SIDE (48' PAV'T)



TYPICAL CROSS SECTION  
 SR 31 IMPROVEMENTS

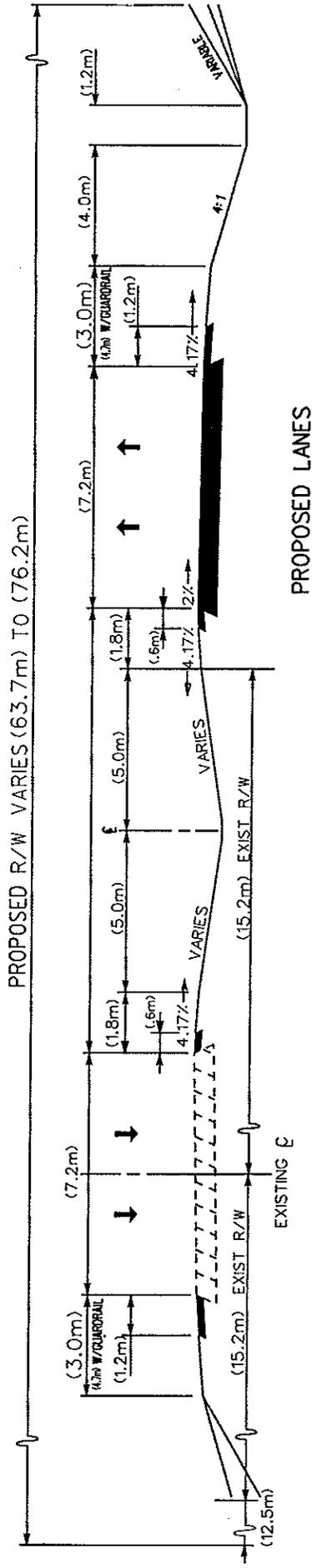
SECTION APPLIES TO: CR 272 TO 1585.0 m NORTH OF CR 272  
 670.6m SOUTH OF CR 165  
 TO 640.1m NORTH OF CR 249

NOT TO SCALE

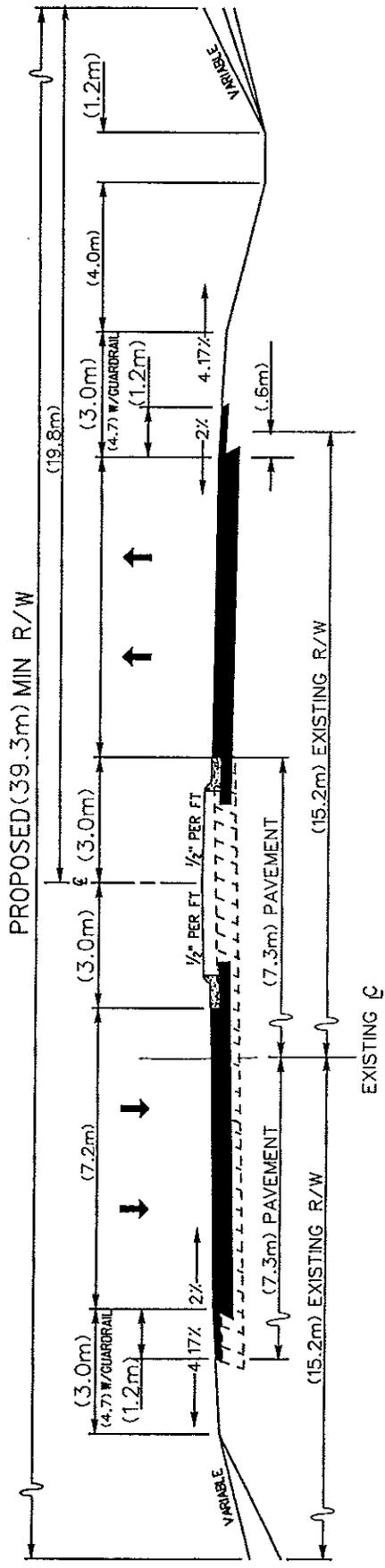


TYPICAL CROSS SECTION  
 SR 31 IMPROVEMENTS  
 EDS-441 (20), LAURENS COUNTY  
 SECTION APPLIES TO: CR 302 TO CR 521  
 NOT TO SCALE





TYPICAL CROSS SECTION  
 SR 31 IMPROVEMENTS  
 EDS-441(20), LAURENS COUNTY  
 SECTION APPLIES TO: 640.1m NORTH CR 249 TO CR 302  
 NOT TO SCALE



TYPICAL CROSS SECTION  
 SR 31 IMPROVEMENTS  
 EDS-441 (20), LAURENS COUNTY  
 SECTION APPLIES TO: CR 521 TO 518.2m SOUTH OF CR 354  
 NOT TO SCALE

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

**FILE** EDS 441(19 & 20), Laurens County  
P.I. No. 262064 & 262027

**OFFICE** Environment/Location

**DATE** May 31, 1994

**FROM** David E. Studstill, P.E., State Environmental/Location Engineer

**TO** See Distribution

**SUBJECT:** Concept Team Meeting Minutes - SR 31 Improvements

Date: May 26, 1994  
Time: 1:30 p.m.  
Place: Office of Environment/Location

In Attendance: Utilities; Debbie Chambers, Bell South; Dan Everitt and Haroll Cox, Georgia Power; Terri Tuberville, Oglethorpe Power Corp.; Bob Gardner and Keith Brook, Atlanta Gas Light; Environmental Consultant; Thomas Tkacs, Greenhorne and O'Mara; D.O.T.; David Studstill, Fred Matheny, Johnny Quarles, Lesa Walker, Gail D'Avino, Environment/Location Office; Henry Ashmore, Kimbal Fulbright, Joe Garland, and Adolfo Guzman, Road Design; Del Clippard and Rhonda Cannady, Traffic Operations; Mike Norris, Programming; Clovia Hamilton, Planning; David Mulling, Engineering Services; D.O.T. Tennille District; Mike Schriver and Francis Hussey, Dublin Area office; Phillip Scarborough, UST; D.O.T. Jesup; Frank Sweat, Pre-Construction; Federal Agencies; Young Kim, FHWA; Johnny Bradfield, RDC-Eastman.

The proposed concept for EDS 441(19 & 20) is to improve S.R. 31 from S.R. 46 to just south of Pinehill County Road at I-16, a total of 16.3 miles/26.2 km. The projects were described by Fred Matheny:

EDS 441(19) is to improve the existing two and three lane roadway along S.R. 31, from S.R. 46 to CR 272 (Barron Farm Road), to a rural four lane divided highway with a 44 foot/13.6 m median. The length of this project is 8.7 miles/3.4 km. The proposed speed design is 55 mph/90 kph and the proposed R/W varies from 209'/63.7 m to 250'/76.2 m. The existing R/W is 100 feet/30.5 m. The projected traffic for the year 2017 is 20,600 AADT. The design traffic is being calculated and should be available for the concept report. This project ties into proposed project EDS 441(18) to the south.

Beginning at SR 46 the concept is to widen to the east side of SR 31. Just south of CR 204 (Sears Browning Road) the alignment is proposed to shift to the west side removing an existing broken back curve and then shift back to the east side at CR 204. North of CR 204 there is a historic structure on the west side of SR 31. It is proposed to widen to the east side holding the existing R/W on the west side.

From CR 200(Parvis Road) to just north of CR 201(Bowie Road), the existing alignment goes through an historic area. The historic boundary incorporates a old turpentine plantation, and because the boundary is so extensive it is proposed to widen on the east side of SR 31. This concept will displace 3 historical structures. To widen to the west side would have displaced 5 historical structures. The project continues widening to the east side to CR 272.

The following intersecting roads are proposed to be realigned: CR 197(Rentz Road), CR 525(Baker Church Road), CR 527(South Poplar Springs Church Road), CR 173(Anderson Road), CR 275(James Evans Road), CR 273(Williams Road), and CR 176(Mayberry Road). The intersection of CR 555 with SR 31 is proposed to be closed. Median crossovers are proposed at the intersection of the following roads: CR 204, CR 206(Oakdale Road), CR 233(Moye Road), CR 200, CR 201, CR 528(Fountain Road), CR 197/CR 525, CR 527, CR 275/CR 173, CR 176, and CR 272.

The number of displacements are; 19 residences, 1 mobile home, 1 business(service station), and 3 historical structures. It is anticipated to reconstruct 60% of the existing roadway. It is also estimated that 12 acres/4.9 hectares of hydric soils will be impacted.

EDS 441(20) is to improve the existing two, three, and four lane roadway to a rural four lane divided highway with a 44 foot/13.6 m median and a 20 foot/6.0 m raised median. The length of this project is 7.6 miles/12.2 km. The proposed speed design is 55 mph/90 kph and the required R/W varies from 129'/39.3 m to 250'/76.2 m. The existing R/W varies from 100 feet/30.5 m to 200 feet/61.0 m. The projected traffic for the year 2017 is 20,600 AADT. The design traffic is being calculated and should be available for the Concept Report. This project ties into proposed project IM-16-1(106) to the north, which is an interchange improvement project.

Beginning at CR 272(Barron Road) the concept is to widen to the east side of S.R. 31 to the end of the project just south of CR 354(Pinehill Road) at I-16. A 44 foot/13.6 m median is proposed from CR 272 to CR 521 where the median transitions to a 20 foot/6.0 m raised median before crossing the Turkey Creek Bridge. The 20 foot/6.0 m raised median is proposed from Turkey creek just north of CR 521 to the end of the project just south of CR 354. North of Turkey Creek there is a historical structure on the west side of SR 31. The proposal is to widen to the east side holding the existing R/W on the west side.

The following intersecting roads are proposed to be realigned: CR 249(J. J. Club Road), CR 163(Groin Tucker Road), CR 196(Butts Road), CR 195(Tobe Dixon Road), S.R. 117, CR 521, CR 157, and CR 155(McGowen Road). The intersection of CR 547(Fountain Road) with SR 31 is proposed to be closed. Median crossovers are proposed at the intersection of the following roads: CR 249/CR 165(Grant Rowe Road), CR 196, CR 248(Emily Curre Road), SR 117/CR 195, CR 302, CR 292(Springhaven Road)/CR 521, CR 157, and CR 355.

The number of displacements are; 13 residences, 9 mobile homes, 2 business(power station and lawn decorations), and 1 church. It is anticipated to reconstruct 28% of the existing roadway. It is also estimated that 4 acres/1.6 hectares of hydric soils will be impacted. The bridge at Turkey Creed was reconstructed in 1991. It has a sufficiency rating of 86. The roadway width is 82 feet/25.0 m. It is proposed to widen this bridge to the east side an additional 19.5 feet/5.9 m.

The following comments were made.

**Local Officials:** No Comments

**Road Design Office:** Joe Garland asked about the median break distance between CR 528 and CR 525. It was approximately 1500 feet/457.2 m which is more than the minimum distance of 1320 feet/402.3 m required. He also stated that the project at I-16 would need to be coordinated to tie the median section in. This had been taken into consideration in that the S.R. 31 project would overlap the I-16 Project where the median was tapered out. It would remove the tapering out of the median so the medians of both projects could be tied together.

**Environmental:** It was asked what type of Environmental Document would there be. Lesa Walker said that an EA(Environmental Assessment) was anticipated. Lesa Walker then ask if there were any hazardous waste sites on the project. That was not known at this time. The district would be asked to investigate for UST's and hazardous waste sites as part of the assignments of this meeting. David Studstill said that we ought to get the lab to check the turpentine plantation for possible waste sites. Gail D'Avino ask why the typical section changed from a 44 foot/13.6 m median to a 20 foot/6.0 m raised median on unit 20. There is 48 foot/14.6 m of existing pavement on the section where the 20 foot/6.0 m median is proposed. This typical would allow the most efficient use of the pavement. Also this section of project was the most developed and the proposed typical would have the least impact environmental and with displacements.

**Federal Resource Agencies:** No Comments

**RDC(Regional Development Center):** No Comment

**Planning Office:** Furnished a need and purpose statement at the meeting.

**Right Of Way:** No Comments

**D.O.T. Utilities:** No Comments

**Local Utilities:** Terri Tuberville of Oglethorpe Power Corp. said that the sub station that was proposed to be displaced would cost any where from \$470,000 to \$750,000 to replace including the Georgia Power poles around the sub station. There were also plans to upgrade this station by 1998 and they would appreciate as advance notice as possible. The District would be coordinating our plans and schedule with the utility companies.

**Railroads:** No Comments

**Traffic Operations:** Del Clippard suggested extending the proposed 20 foot raised median south past the sub station before it transitions from the 44 foot/13.6 m median. It was agreed by those present that if it was feasible and this would lessen the impact on the sub station that this shift in the typical section should be studied.

**Engineering Services:** David Mulling ask if there were any design exceptions. There were no design exception proposed. David Mulling also ask if the existing bridge at Turkey Creek could be better used; since there was 82 feet/25.0 m of roadway; to go symmetric across the bridge utilizing the existing bridge by reducing the median width. This would eliminate the cost of widening and leveling across the bridge. This would be discussed with the Design Office and if feasible would be studied. David Mulling ask if the amount of leveling was considered where the 20 foot/6.0 m raised median was proposed. This is taken into consideration and also the overlaying of the existing road that is retained.

**Pre-Construction:** No Comments

**Materials and Research:** No Comments

**Maintenance:** No Comments

**Programming:** Construction let date is 7-98

**EMG (Engineering Management Group):** No Comments

**FHWA:** Young Kim ask if the project will involve any federal funding. At this time there wasn't any federal funds, but DOT would be asking FHWA to clear the document for possible future federal funding.

The District is requested to do a UST/Hazardous waste investigation, and to coordinate with the Forest Park Lab on checking the turpentine plantation as a possible hazardous waste site. A utility cost estimate request will follow after further investigation of shifting the 20 foot/6.0 m raised median typical section south past the power sub station.

The R/W Office will be requested to furnish a right-of-way cost estimate at a later date.

The Road Design Office and Location Office will discuss the use of Turkey Creek Bridge and the alignment to lessen the impact of the power sub station.

DES/FRM

Distribution: Wayne Hutto  
Ronald Collins/ Attn.: Melvin Collins  
Herman Griffin  
Toni Dunagan  
James Kennerly  
Paul Liles  
Marion Waters  
Bobby Mustin  
Dudley Ellis  
Don Welch  
Larry Seabrook  
Rowe Bowen  
Lesa Walker  
Wink Kirk  
Charles Norris/Tennille District  
Craig Brack/Jesup District