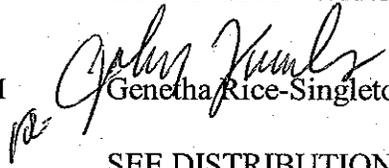


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 122660, Oconee County **OFFICE** Preconstruction
EDS-441(43)
US 441/ SR 24 Widening **DATE** July 17, 2007

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Angela Alexander
Russell McMurry
Robert Mahoney
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE EDS-441(43), Oconee County **OFFICE** Environment/Location
PI # 122660

DATE June 18, 2007

FROM *HDK/DRP*
Harvey D. Keepler, State Environmental/Location Engineer

TO Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT Revised Project Concept Report – *US 441/5224* ~~US 175R~~ + Improvements

Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

For EDS-441(43), the proposed changes to the approved concept would be revisions to the alignment. The approved alignment would be revised to avoid and minimize environmental and social impacts.

This project is part of the Department's Governor's Road Improvement Program (GRIP). This revised concept as presented herein and submitted for approval is not currently listed in the Department's State Transportation Improvement Program (STIP), but is consistent with the Department's Construction Work Program (CWP).

DATE *7/2/07*

Angela T. Alexander
State Transportation Planning Administrator

Distribution:

Brian Summers – State Project Review Engineer
Keith Golden – State Traffic Safety and Design Engineer
Angela T. Alexander – State Transportation Planning Administrator
Jamie Simpson – State Transportation Financial Management Administrator
Babs Abubakari – State Consultant Design Engineer
Russell McMurry – Gainesville District Engineer
Paul Liles – State Bridge and Structural Design Engineer

REVISED PROJECT CONCEPT REPORT

EDS-441(43) – OCONEE COUNTY

Need and Purpose: US 441/SR 24 is the major north-south corridor in northeast Georgia. The proposed project, EDS-441(43) would widen and reconstruct US 441/SR 24 from just north of the Apalachee River to just north of CR 107/Thomas Farm Road in Oconee County. The existing roadway serves as a catalyst for the development of this region, and improvements would be required to maintain an acceptable level of service. Improvements would also eliminate congestion, enhance the traffic flow, aid in the economic development of the surrounding area and increase capacity while improving the operational characteristics and the safety along US 441/SR 24.

The US 441/SR 24 Improvements are part of the Governor's Road Improvement Program (GRIP). GRIP was initiated in the 1980's to address the importance of stimulating economic growth via an improved transportation network. It identified a system of economic development highways that consist of existing primary routes, plus additional truck connector routes. GRIP would place approximately 98 percent of the state's population within 20 miles of a multi-lane highway, and connect 95 percent of our state's cities (with a population of 2,500 or more) to the Interstate System. It would provide improved access for oversized trucks to all cities having populations above 2,000. Among the many benefits of such a system, areas lagging in growth would be provided greater opportunities to attract industry, business and jobs.

Project Location: EDS-441(43) would be located along US 441/US 129/SR 24, and would begin in Oconee County at milepost 0.01 and end at milepost 9.30.

Description of the approved concept: The approved concept for EDS-441(43) in Oconee County is proposed to widen and reconstruct US 441/SR 24 from just north of the Apalachee River to just north of CR 107/Thomas Farm Road Oconee County. From the beginning terminus of the project, the concept would proceed north as east side widening, holding existing pavement, and would utilize a typical section consisting of four 12 foot lanes and a 44 foot depressed grassed median on open ditch drainage. Proceeding northward, the alignment would maintain east side widening, holding existing pavement for approximately 1200 feet, and would then proceed as east side widening, holding west side existing right-of-way for approximately 2100 feet to correct substandard horizontal geometry of the existing roadway. The alignment would continue north along existing US 441/SR 24 and transition to west side widening, holding existing pavement to approximately 0.5 miles north of CR 116/Tappan Spur Road. The concept alignment would then transition to west side widening, holding east side existing right-of-way north to approximately 0.6 miles north of CR 110/Old Farmington Highway to avoid adversely impacting three eligible historic resources along existing US 441/SR 24. The concept alignment would then proceed as new location, bypassing the City of Bishop on the east side in order to avoid an adverse impact to the Bishop Historic District. The alignment would intersect CR 127/Astondale Road and CR 265/Old Bishop Road on new location and would then tie into existing US 441 29/SR 24 approximately 0.6 miles south of the Watkinsville Bypass. The alignment would proceed north as west side widening holding existing pavement to the end of the project, where the alignment would tie into the existing 4 lane typical section of the Watkinsville Bypass.

Existing right-of-way along US 441/SR 24 varies between 80 feet & 250 feet. The proposed right-of-way would be 250 feet for the length of the project. The speed design would be 65 mph, and access would be by permit. The project length would be approximately 9.0 miles.

PDP Classification: Major/Construction on existing roadway.

Full Oversight () Exempt (X) SF () Other ()

Functional Classification: Rural Principal Arterial

U. S. Route Number(s): 441 & 129

State Route Number(s): 24

Traffic (AADT) as shown in the approved concept:

Current Traffic		Design Traffic	
Year: 2001	ADT: 7,150-11,200	Year: 2021	ADT: 12,150-19,050

Proposed Features to be revised:

Project Alignment: The approved concept alignment for a portion of the project is proposed to be revised in order to avoid and minimize environmental and social impacts.

Revised feature(s) to be approved:

Project Alignment:

1. In order to avoid impacts to a roadside cemetery, the concept alignment is proposed to be revised from west side widening, holding existing pavement to west side widening, holding existing east side right-of-way from approximately 0.8 miles south of CR 116/Tappan Spur Road north to CR 116/Tappan Spur Road.
2. In order to reduce displacements and minimize impacts to a business, as well as improve horizontal geometry, the concept alignment is proposed to be revised from CR 116 Tappan Spur Road to CR 167/Leachmon Road. The approved west side widening, holding east side existing right-of-way would be revised to an alignment that would begin at CR 116/Tappan Spur Road with west side widening, holding east side existing right-of-way and transition to east side widening, holding existing west side right-of-way. The proposed revision would then immediately transition back to west side widening, holding east side existing right-of-way just south of CR 167/Leachmon Road.

3. In order to minimize impacts to resources eligible for the National Register of Historic Places, and minimize impacts to numerous eligible archeological resources, as well as streams and wetlands., the approved concept alignment is proposed to be revised from CR 109/Branch Road to just south of the projects' ending terminus at the beginning of the 4 lane typical section of the Watkinsville Bypass. At CR 109/Branch Road, the approved concept alignment of west side widening, holding east side existing right-of-way is proposed to be revised to new location west of Farmington in order to avoid impacting the Farmington Historic District as well as three eligible historic resources along CR169/Freeman Creek Road. The proposed revision would intersect CR 169/Freeman Creek Road approximately 1300 feet west of the existing US 441/CR 169 intersection, and would then proceed northeast, crossing existing US 441 at grade just north of the CR 110/Old Farmington Road access.

The approved concept would grade separate the closed Norfolk-Southern Rail line. This grade separation crossing is proposed to be revised to an at-grade crossing south of the approved location to minimize impacts to a recently expanded boundary for The Branch Farm, an eligible historic resource. The concept alignment is then proposed to be revised to transition to west side widening, holding the existing east side right-of-way of CR 110/Old Farmington Road for approximately 2600 feet to minimize impacts to the same Branch Farm resource boundary and Greenbrier Creek. The proposed revised alignment would then proceed northward on new location and parallel Greenbrier Creek to minimize impacts to eligible archeological resources, and would intersect CR 127/Astondale Road just east of Greenbrier Creek.

The proposed alignment revision would then continue northward onto new location and intersect CR 265/Old Bishop Road approximately 300 feet west of CR 111/Hardigree Bell Road to minimize impacts to wetlands and eligible archeological resources, and to avoid impacts to an eligible historic resource. The proposed alignment revision would then cross the privately owned Athens Line railroad at existing grade to minimize impacts to wetlands and streams, and would then transition back to existing US 441 as west side widening holding existing lanes just south of CR 107/Thomas Farm Road. The project would then proceed north as described in the approved concept description to the end of the project. The project length would be approximately 9.4 miles.

Updated traffic data (AADT):

Current Traffic		Design Traffic	
Year: <u>2008</u>	AADT: <u>11,350 - 12,400</u>	Year: <u>2028</u>	AADT: <u>20,400-22,200</u>

Programmed/Schedule:

PE: FY 1995-EDS
FY 2002-GRVA R/W: LR Construction: LR

Revised Cost Estimates:

Construction cost including E&C:
Right-of-way:
Utilities:
Total:

\$ 45,308,000.00 ✓
\$ ~~9,928,200.00~~ 13,900,000
\$ ~~441,000.00~~ 421,000
~~\$ 55,677,200.00~~

TOTAL = \$59,629,000

JDEP
7/9/2007

NOTE: The above costs do not include any inflation costs.

Is the project located in a Non-attainment area? _____ Yes _____ X No

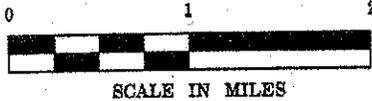
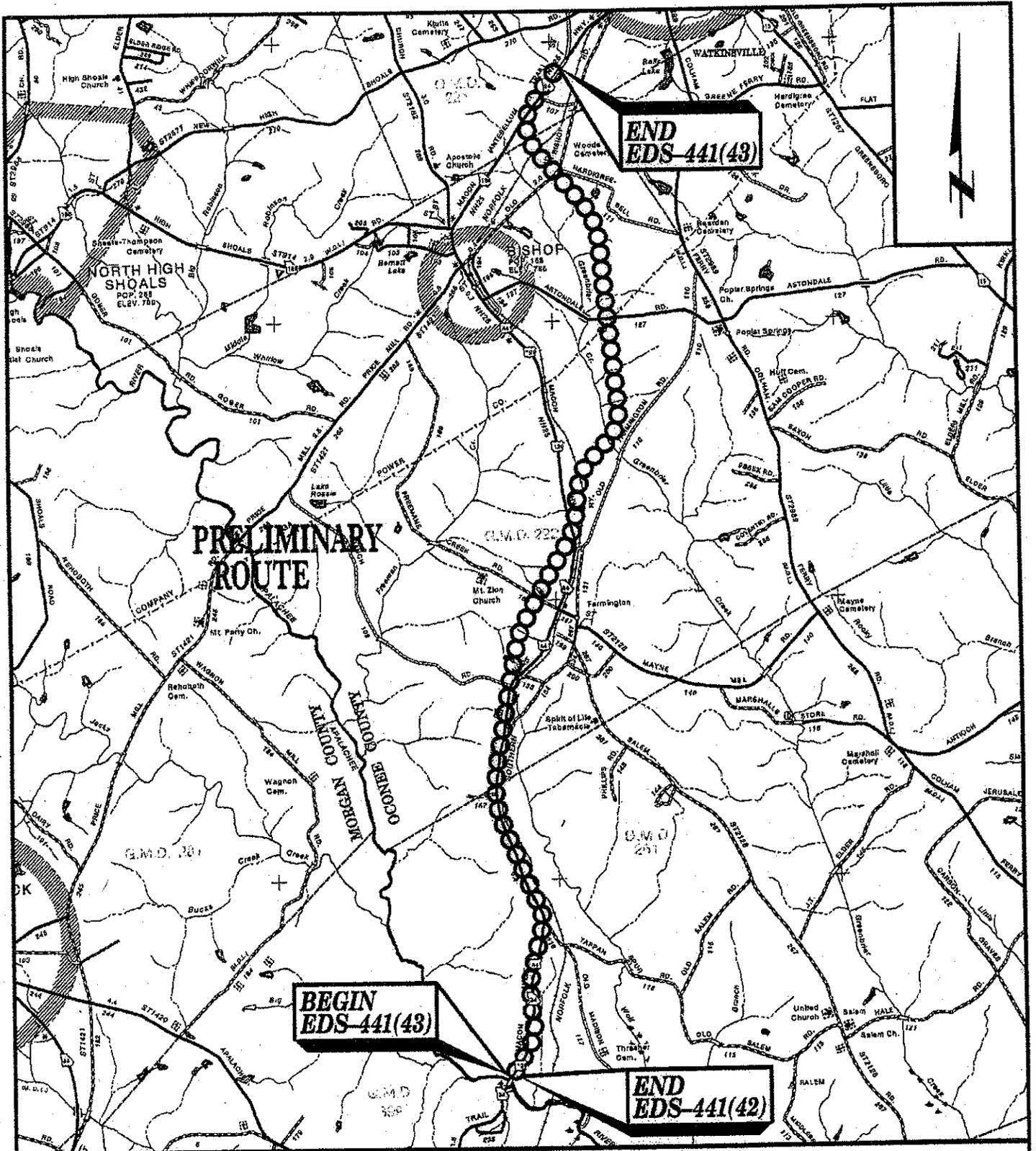
Recommendation: It is recommended that the proposed revisions to this concept be approved for implementation.

HDK/EKP

- Attachments:
Sketch Map
Typical Sections
Cost Estimates

Concur: _____
Director of Preconstruction

Approve: _____
Chief Engineer



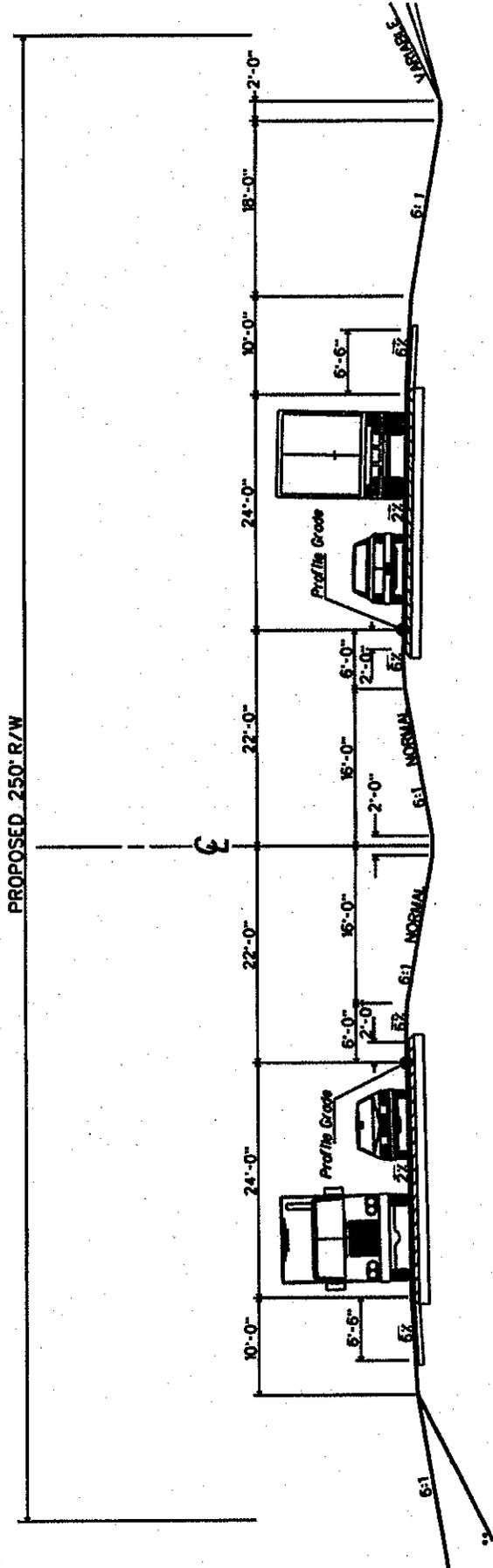
LOCATION

PROJECT LOCATION MAP

EDS-441(43)
 S.R. 24/U.S. 441 IMPROVEMENTS
 OCONEE COUNTY
 P.I.# 122660

SOURCE: GENERAL HIGHWAY MAP, MORGAN CO., GEORGIA
 PREPARED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION, 1992

G.R.I.P. TYPICAL SECTION
 44-FOOT DEPRESSED GRASS MEDIAN RURAL SECTION
 65 MPH SPEED DESIGN



•• Guardrail Required when steeper than 6:1

EDS-441(43) OCONEE
 US 441/US 129/SR 24 IMPROVEMENTS

FROM PROJECT BEGINNING JUST NORTH OF APALACHEE RIVER
 TO PROJECT END 700 FEET NORTH OF CR 107/THOMAS FARM ROAD.

NOT TO SCALE

CONCEPT COST ESTIMATE

Office of Environment/Location

June 18, 2007 1:26 PM

County(s)

PI Number Project Number

Project Name Project Length Miles

Project Description

From just north of the Oconee River north as widening to CR 109/Branch Road. From CR 109/Branch Road north onto new location, bypassing Farmington and Bishop to just north of CR 107/Thomas Farm Road on to existing US 441.

Existing Roadway

Comments

TRAFFIC:

Current Design Year Daily Volume (AADT)

Future Design Year Daily Volume (AADT)

Concept Estimate Feasibility Estimate

Typical Section(s) Used in Estimate	Typical Section Length
Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	<input type="text" value="3.50"/> Miles
Rural New Location: 4-Lanes with 44 ft Divided Median	<input type="text" value="5.50"/> Miles
Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	<input type="text" value="5.50"/> Miles
<input type="text"/>	<input type="text"/> Miles
<input type="text"/>	<input type="text"/> Miles
<input type="text"/>	<input type="text"/> Miles

Prepared By

MAJOR STRUCTURES

Note! All distances are in feet

Bridges: Stream Crossings & Grade Separations

NO	LOCATION	QTY	CROSSING TYPE	WIDTH	LENGTH	UNIT COST	TOTAL
1	Greenbrier Creek on new location	2	Stream-New	41.30	120.0	80.00	793,000
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Bridge Culverts

NO	LOCATION	TYPE / W x H / FILL	LENGTH	UNIT COST	TOTAL
1					
2					
3					
4					
5					
6					
7					
8					

Walls

NO	LOCATION	TYPE	HEIGHT	LENGTH	UNIT COST	TOTAL
1						
2						
3						
4						
5						
6						

MAJOR STRUCTURES SUBTOTAL \$ 793,000

Typical Section

Rural Widening: 2 To 4-Lanes with 44 ft Divided Median

Typical Section Length Miles

Right-of-Way Width Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTITY		UNIT COST	TOTAL
77,710	CY	7.36	572,000
8,600	CY	15.00	129,000
	CY		
3.50	MI	100,927	353,000
GRADING AND DRAINAGE SUBTOTAL			\$1,054,000

BASE AND PAVING

- 1. GRADED AGGREGATE BASE
- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS and SPREAD RATE	QUANTITY		UNIT COST	TOTAL
10"	44,693	TN	24.69	1,103,000
1 1/2" (165 LB/SY)	10,539	TN	85.00	896,000
3" (330 LB/SY)	13,742	TN	90.00	1,237,000
4" (440 LB/SY)	16,032	TN	80.00	1,283,000
	10,723	GL	2.30	25,000
		LF		
	3.50	MI	28,410	99,000
				464,000
BASE AND PAVING SUBTOTAL				\$5,107,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. EROSION CONTROL
- 4. SIGNING & MARKING
- 5. MISCELLANEOUS

QUANTITY	UNIT COST	TOTAL
3.50 MI	88,000	308,000
106.06 AC	25,000	2,652,000
3.50 MI	139,527	488,000
3.50 MI	17,594	62,000
3.50 MI	110,500	387,000
LUMP ITEM SUBTOTAL		\$3,897,000

MISCELLANEOUS PROJECT ITEMS

- 1. GUARDRAIL
- 2. GUARDRAIL ANCHORS
- 3. DETOURS
- 4. SPECIAL FEATURES

QUANTITY	UNIT COST	TOTAL
4,790 LF	19.95	96,000
20 EA	691.40	14,000
	MI	300,000
MISCELLANEOUS SUBTOTAL		\$110,000

Typical Section

Rural New Location: 4-Lanes with 44 ft Divided Median

Typical Section Length Miles

Right-of-Way Width Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTITY	UNIT COST	TOTAL
1,124,900 CY	7.36	8,279,000
125,000 CY	15.00	1,875,000
5.50 MI	100,927	555,100
GRADING AND DRAINAGE SUBTOTAL		\$10,709,000

BASE AND PAVING

- 1. GRADED AGGREGATE BASE
- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS and SPREAD RATE	QUANTITY	UNIT COST	TOTAL
10"	119,046 TN	24.69	2,939,000
1 1/2" (165 LB/SY)	17,303 TN	85.00	1,471,000
3" (330 LB/SY)	34,913 TN	90.00	3,142,000
4" (440 LB/SY)	43,063 TN	80.00	3,445,000
	25,344 GL	2.30	58,000
	5.50 MI	42,000	231,000
			1,129,000
BASE AND PAVING SUBTOTAL			\$12,415,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. EROSION CONTROL
- 4. SIGNING & MARKING
- 5. MISCELLANEOUS

QUANTITY	UNIT COST	TOTAL
5.50 MI	41,000	226,000
166.67 AC	25,000	4,167,000
5.50 MI	177,002	974,000
5.50 MI	19,321	106,000
5.50 MI	96,000	528,000
LUMP ITEM SUBTOTAL		\$6,001,000

Typical Section

Rural Widening: 2 To 4-Lanes with 44 ft Divided Median

Typical Section Length Miles

Right-of-Way Width Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTITY	UNIT COST	TOTAL
2,400 CY	7.36	18,000
270 CY	15.00	4,000
0.40 MI	100,927	40,000
GRADING AND DRAINAGE SUBTOTAL		\$62,000

BASE AND PAVING

- 1. GRADED AGGREGATE BASE
- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS and SPREAD RATE	QUANTITY	UNIT COST	TOTAL
10"	5,181 TN	24.69	128,000
1 1/2" (165 LB/SY)	1,258 TN	85.00	107,000
3" (330 LB/SY)	1,599 TN	90.00	144,000
4" (440 LB/SY)	1,857 TN	80.00	149,000
	1,254 GL	2.30	3,000
	LF		
	0.40 MI	28,410	11,000
			54,000
BASE AND PAVING SUBTOTAL			\$596,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. EROSION CONTROL
- 4. SIGNING & MARKING
- 5. MISCELLANEOUS

QUANTITY	UNIT COST	TOTAL
0.40 MI	88,000	35,000
12.12 AC	25,000	303,000
0.40 MI	139,527	56,000
0.40 MI	17,594	7,000
0.40 MI	110,500	44,000
LUMP ITEM SUBTOTAL		\$445,000

ESTIMATE SUMMARY

TYPICAL SECTION	COST (per mile)
1. Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	\$ 2,874,000
2. Rural New Location: 4-Lanes with 44 ft Divided Median	\$ 5,295,000
3. Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	\$ 2,758,000
PROJECT COST	
A. MAJOR STRUCTURES	\$ 793,000
B. GRADING AND DRAINAGE	\$ 11,825,000
C. BASE AND PAVING	\$ 18,118,000
D. LUMP ITEMS	\$ 10,343,000
E. MISCELLANEOUS	\$ 110,000
SUBTOTAL CONSTRUCTION COST	\$ 41,189,000
ENGINEERING & CONTINGENCIES (10%)	\$ 4,119,000
INFLATION _____ yr(s) @ _____ % per yr	
GRAND TOTAL CONSTRUCTION COST	\$ 45,308,000

Preliminary Right of Way Cost Estimate

Date: October 12, 2006
Project: STP-EDS-441(43)Oconee
Existing/Required R/W: Varies/Varies
Project Termini: County Line to SR 24 Bus
Project Description: S.R 24/US 441 Widening and New Location Project

P.I. Number: 222660
No.Parcels: 98

Land:

Commercial	2 acres @ \$ 80,000/acre = \$ 160,000	
Small Residential	27 acres @ \$ 15,000/acre = \$ 405,000	
Large Residential	38 acres @ \$ 9,000/acre = \$ 342,000	
Agricultural	203.33 acres @ \$ 7,000/acre = \$ 1,423,310	
		\$ 2,330,310

Improvements:

13 houses, 2 mobile homes, 1 business, curbing, asphalt, landscaping, signs, fencing and site improvements

\$ 1,300,000

Relocation:

1 Commercial @ \$ 25,000 / parcel =	\$ 25,000
15 Residential @ \$ 20,000 / parcel =	\$ 300,000

\$ 325,000

Damages:

Proximity - 8 Parcels \$ 48,000

\$ 48,000

\$ 4,003,310

Net Cost		\$ 4,003,310
Scheduling Contingency 55 %		\$ 2,201,820
Adm/Court Cost 60 %		\$ 3,723,078
Inflation Factor 40 %		\$ 3,971,283
		\$ 13,899,491

Total Cost \$ 13,899,500

Prepared By : Anita Payne
 Anita Payne

Approved : Gerald S. Willy
 GDOT R/W

Morgan and Oconee County Land Sales

<u>Highest & Best Use</u>	<u>Size (acres)</u>	<u>Value (acre)</u>	<u>Sales Price</u>
Commercial	1.00	\$ 95,000	\$ 95,000
	3.00	\$ 83,335	\$ 250,000
	8.80	\$ 41,000	\$ 360,800
	1.08	\$ 115,000	\$ 125,000
	1.00	\$ 99,000	\$ 99,000
Small Residential	2.22	\$ 8,560	\$ 19,000
	2.00	\$ 18,000	\$ 36,000
	4.18	\$ 11,004	\$ 46,000
	2.94	\$ 12,585	\$ 37,000
	2.88	\$ 13,420	\$ 38,641
Large Residential	9.98	\$ 8,570	\$ 85,500
	10.35	\$ 8,860	\$ 91,700
	6.52	\$ 7,975	\$ 52,000
	8.87	\$ 11,840	\$ 105,000
	6.51	\$ 13,000	\$ 84,600
Agricultural	61.14	\$ 10,635	\$ 650,000
	151.50	\$ 5,020	\$ 757,500
	25.06	\$ 11,000	\$ 275,700
	17.86	\$ 9,470	\$ 169,115
	421.81	\$ 8,500	\$3,585,385

Jeffrey,

Thanks for getting this back to me.

If you could go ahead and send me the detailed estimate once you get the information back from the utility owners, that would be great.

Thanks again,

Keith Posey
Georgia Department of Transportation
Office of Environment/Location
Location Engineer III
(404) 699-4463

From: Jacques, Jeffrey
Sent: Tuesday, April 24, 2007 1:54 PM
To: Posey, Keith
Cc: Day, Gary H.; Mahoney, Robert
Subject: Concept Utility Cost Estimate - EDS-441(3) Oconee County

Keith

The following is a total cost utility relocation estimate for the subject project. The cost breakdown is shown below.

Power - Distribution, 50 poles @ \$ 3,480.00 =	\$174,000.00
Power-Transmission, 2 poles @ 46,400.00 =	81,200.00
Telephone Aerial, 20 poles @ 2320.00 =	46,400.00
Telephone Buried, 21,648 feet @ 5.50 =	<u>119,064.00</u>

Total Estimated Cost \$ 420,664.00

There was no visible evidence of water, sewer or gas that is to be impacted per the current alignment. We will be able to provide this information in more detail once 1st submission plans have been received back from Utility Owners. If any additional information is required please advise.

Jeffrey S. Jacques
District One Utilities Engineer
Georgia Department of Transportation
P.O. Box 1057
Gainesville GA 30503
Mail to : jeffrey.jacques@dot.state.ga.us
Office (770) 718-5031
Fax (770) 532-5581