

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

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: 2008 AADT: 11,350 - 12,400

Year: 2028 AADT: 20,400-22,200

**Programmed/Schedule:**

PE: FY 2002 - GANA

R/W: LR

Construction: LR

**Revised Cost Estimates:**

Construction cost including E&C:	\$ 45,308,000.00
Right-of-way:	\$ -9,928,200.00 <i>13,200,000</i>
Utilities:	\$ 441,000.00 <i>421,000</i>
Total:	\$ 55,677,200.00

*TOTAL = \$59,629,000*  
*1000*  
*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

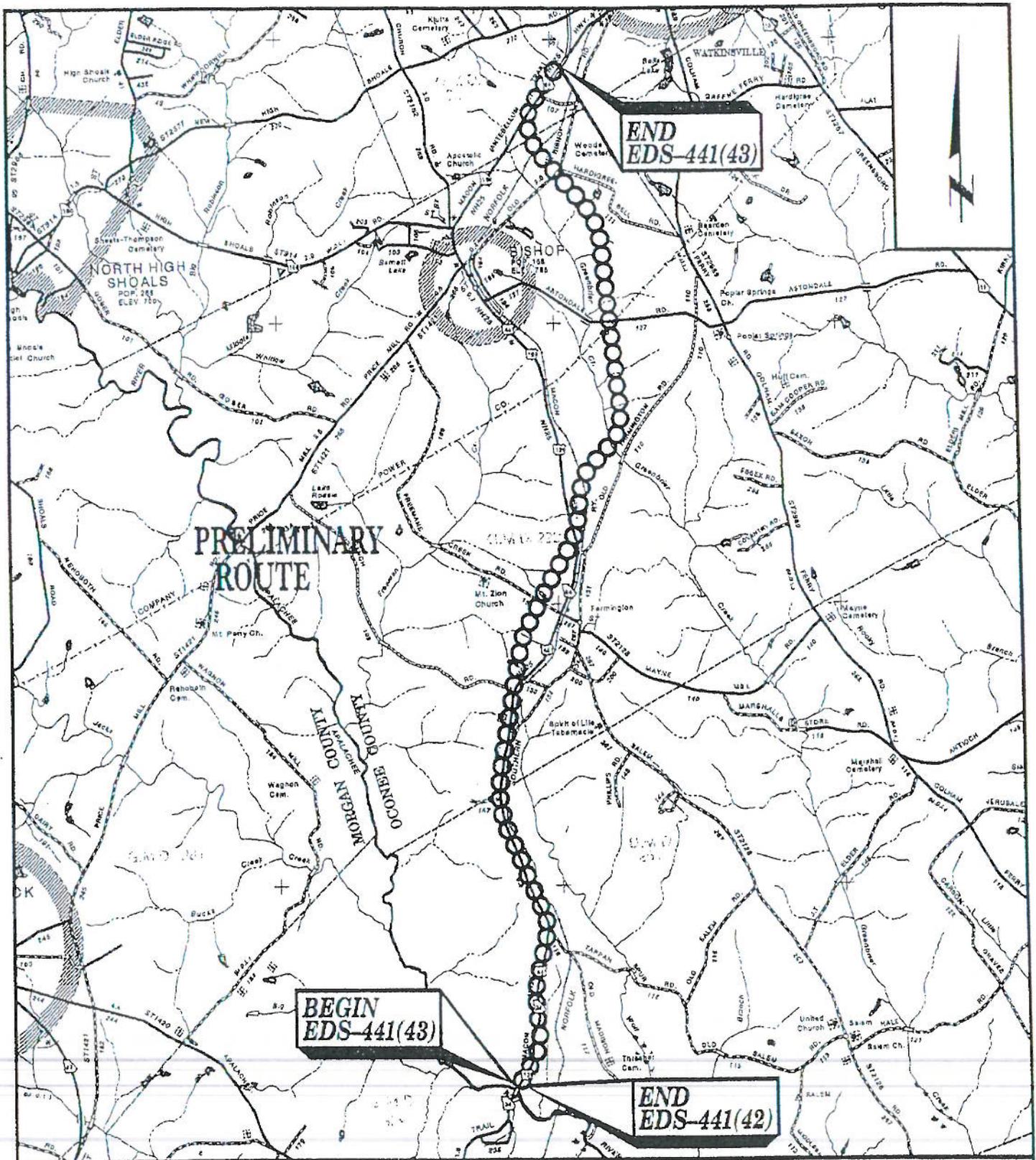
**Attachments:**

- Sketch Map
- Typical Sections
- Cost Estimates

Concur: \_\_\_\_\_  
*[Signature]*  
Director of Preconstruction

Approve: \_\_\_\_\_  
*[Signature]*  
Chief Engineer

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



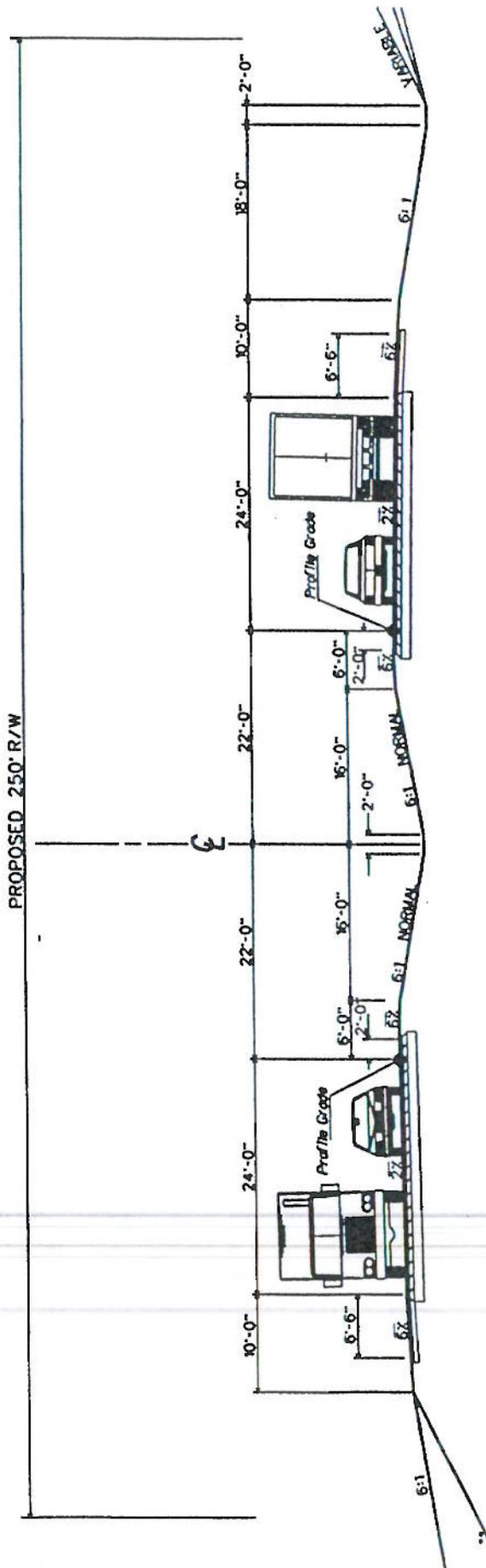
LOCATION

**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



EDS-441(43) OCONEE

US 44/US 129SR 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

<input type="text" value="Rural Widening: 2 To 4-Lanes with 44 ft Divided Median"/>	<input type="text" value="3.50"/> Miles
<input type="text" value="Rural New Location: 4-Lanes with 44 ft Divided Median"/>	<input type="text" value="5.50"/> Miles
<input type="text" value="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
3.50 MI	100,927	353,000
<b>GRADING AND DRAINAGE SUBTOTAL</b>		<b>\$1,054,000</b>

**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
<b>BASE AND PAVING SUBTOTAL</b>			<b>\$5,107,000</b>

**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
<b>LUMP ITEM SUBTOTAL</b>		<b>\$3,897,000</b>

**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
<b>MISCELLANEOUS SUBTOTAL</b>		<b>\$110,000</b>

**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
<b>GRADING AND DRAINAGE SUBTOTAL</b>		<b>\$10,709,000</b>

**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
<b>BASE AND PAVING SUBTOTAL</b>			<b>\$12,415,000</b>

**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
<b>LUMP ITEM SUBTOTAL</b>		<b>\$6,001,000</b>

**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
<b>GRADING AND DRAINAGE SUBTOTAL</b>		<b>\$62,000</b>

**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
<b>BASE AND PAVING SUBTOTAL</b>			<b>\$596,000</b>

**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
<b>LUMP ITEM SUBTOTAL</b>		<b>\$445,000</b>

