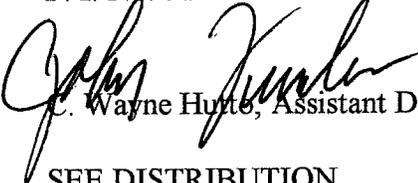


ORIGINAL TO GENERAL FILES

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-475-1(247) Bibb County **OFFICE** Preconstruction
P. I. No. 311950
DATE May 22, 2002
FROM  C. Wayne Hutto, Assistant Director of Preconstruction
TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Ben Buchan
Glenn Durrence
Gerald Ross
BOARD MEMBER
FHWA

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

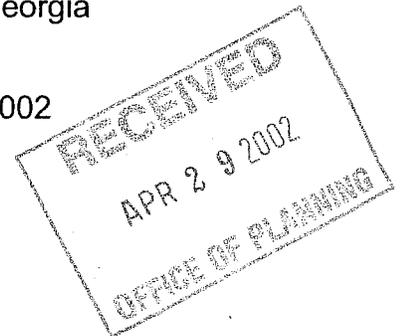
INTERDEPARTMENT CORRESPONDENCE

FILE NH-IM-475-1(247) Bibb County
I-475 @ Zebulon Road Interchange and
Lamar Road Relocation
P.I. No. 311950

OFFICE Atlanta, Georgia

DATE April 24, 2002

FROM *James B. Buchan*
James B. Buchan, P. E., State Consultant Design Engineer
to Wayne Hutto, P. E., Assistant Director of Preconstruction



SUBJECT **Revised Project Concept Report**

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

The concept is being revised to include the relocation of Lamar Road away from the Zebulon Road / I-475 interchange. The Department agreed to design and construct the relocation of Lamar Road based on a request from Bibb County.

If you have any questions, please contact Joe Wheeler at (404)657-9759.

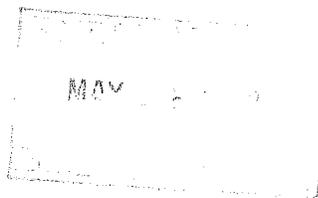
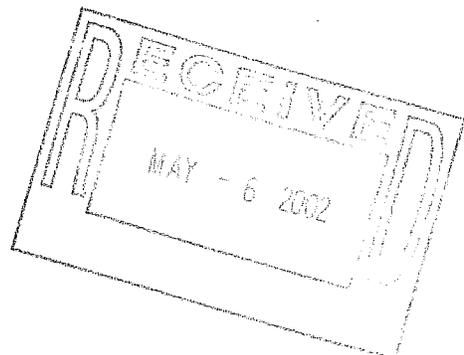
JDW
JBB:JDW
Attachment

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

DATE: 5-2-02

Mark R. ...
State Transportation Planning Administrator

cc: David Mulling
Harvey Keepler
Phillip Allen
Marta Rosen
Herman Griffin
Glenn Durrence
Paul Liles



REVISED PROJECT CONCEPT REPORT

Need and Purpose:

Project Description: The proposed project is located in western Bibb County. The existing Zebulon Road (CR 726) is a rural two-lane facility. The proposed improvement will widen the existing two-lane facility to four through lanes with a 20-foot raised median, 12-foot outside shoulders and 5-foot sidewalks. The project begins on the west side of I-475 at the entrance of the Lake Wildwood Subdivision (Lake Wildwood Drive) and extends eastward 0.42 miles to the I-475 northbound ramp. The proposed project would also relocate Lamar Road because of its proximity to the northbound on ramp for I-475. The Department design incorporates a raised median within the interchange; however the Bibb County widening project along Zebulon Road has a flush median. Bibb County and the Department will coordinate the transition between these differing designs.

Project History: Due to the zoning changes for sites in western Bibb County near I-475, Zebulon Road is undergoing a dramatic change from rural, low density residential to high density mixed used developments. As a result of the zoning change in western Bibb County, the County is proposing to increase the capacity of Zebulon Road. Bibb County's improvements to Zebulon Road are funded by a voter-approved special purpose local option sales tax program (SPLOST). The County's improvements are divided into three sections and are being built in two stages.

Both the Zebulon Road widening and proposed improvements are included in the Macon Area Transportation Study's (MATS) Adopted Transportation Plan and Transportation Improvement Program (TIP). Both improvements are components of the Local Option Sales Tax Program (1% Sales Tax Referendum) approved by the voters of Macon and Bibb County on November 8, 1994. The Zebulon Road interchange project is included in the TIP and the MATS TIP number is MCN-54.

Zebulon Road is functionally classified as an urban minor arterial. I-475 is functionally classified as an Interstate Principal Arterial. The Federal Highway Administration approved these classifications on December 14, 1994.

Travel Demand: The 2000 Average Annual Daily Traffic (AADT) on Zebulon Road from Bass Road/CR 742 to just west of the I-475 interchange is 16,768 AADT. The existing traffic conditions results in an average Level of Service (LOS) "E" for this section of Zebulon Road.

Projected future (2006) volumes on Zebulon Road are 31,000 vehicles per day (vpd). The project 2026 traffic volume is 40,500 vpd. Without the proposed improvements, this corridor will operate at a LOS "F". The widening of Zebulon Road by Bibb County and the improvements to the interchange will improve the operational conditions to a LOS "C".

Termini: The termini at the interchange are logical because they are incorporated into Bibb County's Zebulon Road widening project and improvements along the roadway corridor.

Other Programmed Projects: The widening of Zebulon Road from the northbound I-475 ramps eastward to Bass Road is under construction. Bibb County proposes to widen Zebulon Road from Bass Road to US 41 for the second stage of improvements to this corridor and the final improvement to Zebulon Road would from Lamar Road to Lake Wildwood.

Need and Purpose: The need and purpose of the proposed project is to alleviate the existing and future traffic demands, provide lane continuity on Zebulon Road and improve the operating conditions at the interchange. The interchange improvements would help in providing direct access between rapidly growing areas of Bibb County, I-475, and employment/retail centers of Macon and the Zebulon Road corridor.

Project Location and Description of Approved Concept: This project consists of the widening of Zebulon Road in Macon, Bibb County, Georgia, to a four lane urban section divided by a 20-foot raised median with additional widening for dual left turn lanes onto southbound I-475, through the I-475 interchange and including the bridge over I-475. The existing bridge will be retained and widened. Lighting for the interchange will also be included as part of this project to provide better visibility for the interchange traffic. A 20-foot raised median will also be added to Zebulon Road from the northbound ramps of I-475 east to the Peake Road intersection. This section will include a 5-foot sidewalk on each side.

The project has a total distance of approximately 3,100 feet.

PDP Classification: Full Oversight (FOS) — MAJOR EXISTING AND NEW LOCATION
FEDERAL OVERSIGHT: FULL OVERSIGHT (X) EXEMPT () SFL () OTHER ()
Functional Classification: Urban Minor Arterial (Zebulon Road), Interstate Principal Arterial (I-475)

U.S. Route Numbers: I-475 (I-475), None (Zebulon Road)

State Route Numbers: SR 408 (I-475), None (Zebulon Road)

Traffic in approved Concept:

Current Year: 2002 28,800 (AADT) Design Year: 2022 38,500 (AADT)

Proposed feature to be revised: The relocation of Lamar Road on the east side of I-475 is to be added to this project for design and construction by the Department.

Description of revised feature to be approved: Lamar Road was originally to be relocated by Bibb County. The county asked the Department to design and construct Lamar Road with this project. Lamar Road is being relocated due to its proximity to the northbound on ramp to I-475. It will be relocated on new location to tie in at Peake Road in front of the new Bibb County Fire Station in the Southern Pines Plantation Development. Lamar Road will be designed as a 2-lane rural roadway with 10-foot shoulders. The Lamar Road Relocation will have a minimum required right of way width of 80 feet. The design speed will be 35 mph. The approximate length of the Lamar Road Relocation will be 3,800 feet.

Lamar Road is classified as an Urban Local Street.

Updated traffic data (AADT):

Zebulon Road: Current Year: 2006 31,000 Design Year: 2026 40,500
I-475: Current Year: 2006 56,000 Design Year: 2026 90,500

Programmed/Schedule:

P.E.: 12/95 R/W: 2002 Construction: 2006

Revised Cost Estimates:

	Proposed	Approved
Zebulon Road		
Construction (incl. E & C)	\$6,628,340	\$3,978,000
Right of Way	\$180,000	\$180,000
Utilities	LGPA	LGPA
Lamar Road		
Construction (incl. E & C)	\$1,052,608	
Right of Way	\$937,500	
Utilities	LGPA	LGPA

This project is not located in a Non-attainment area.

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:

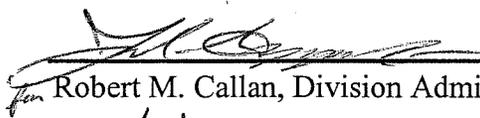
- Location Sketch
- Typical Sections
- Revised Cost Estimate

CONCUR:



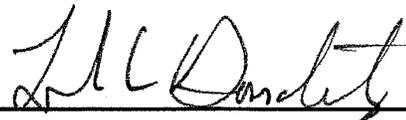
Thomas L. Turner, P.E., Director of Preconstruction

APPROVE:



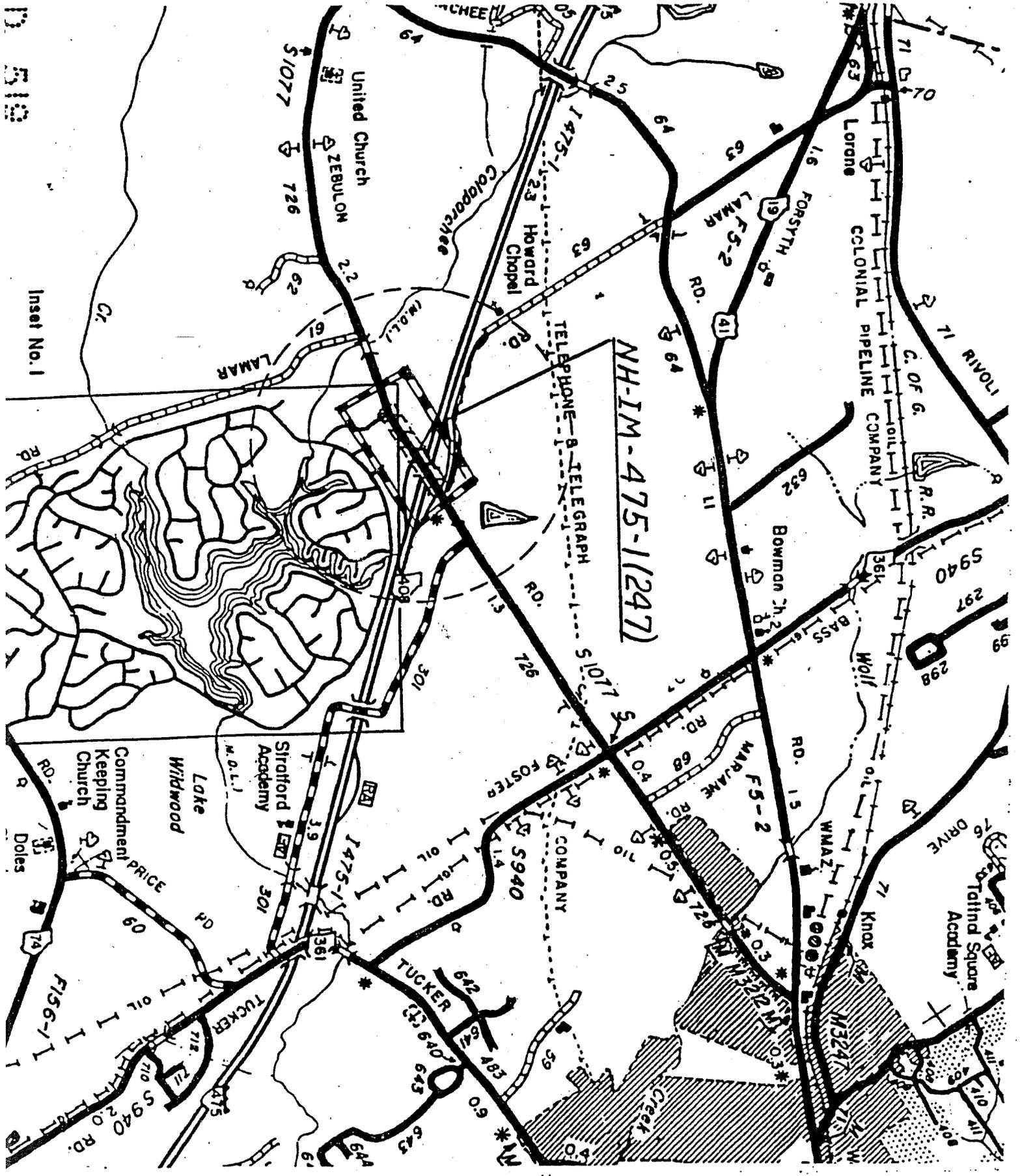
for Robert M. Callan, Division Administrator, FHWA

APPROVE:



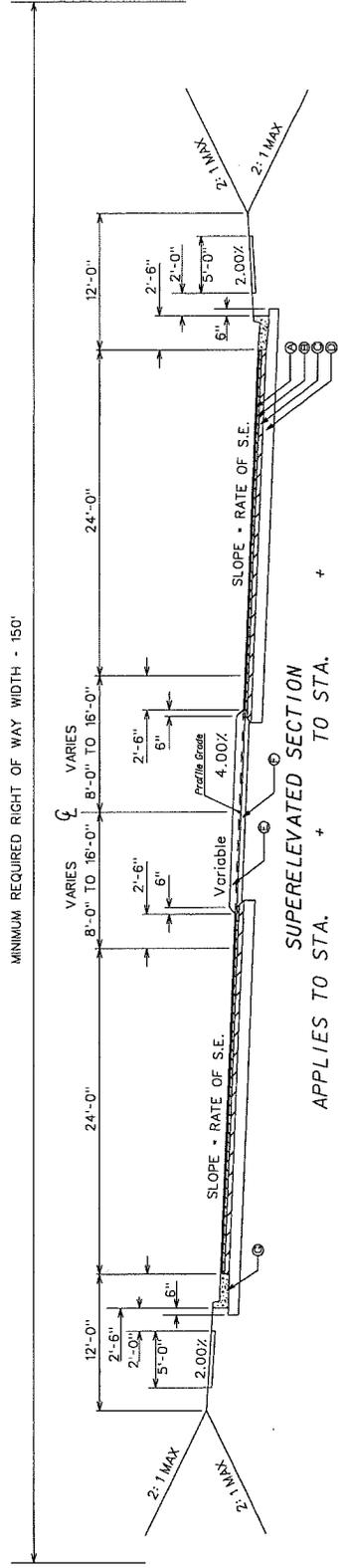
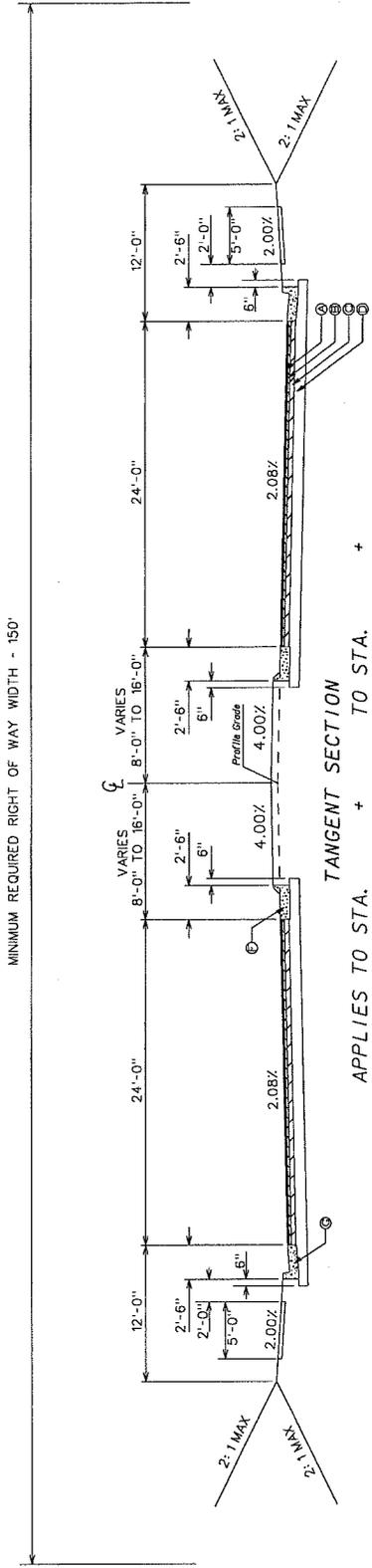
Frank L. Danchetz, P.E., Chief Engineer

PROJECT MAP - Project No. : 1



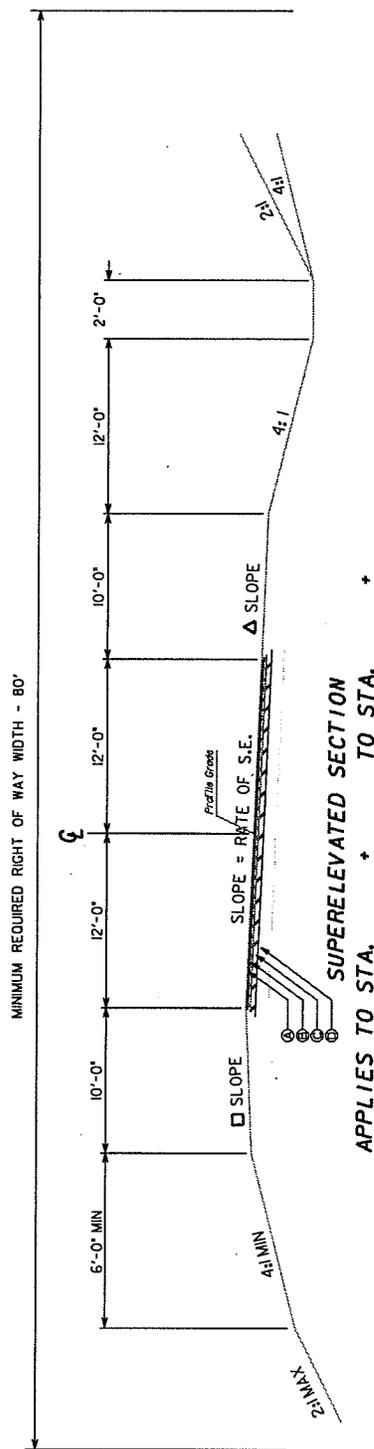
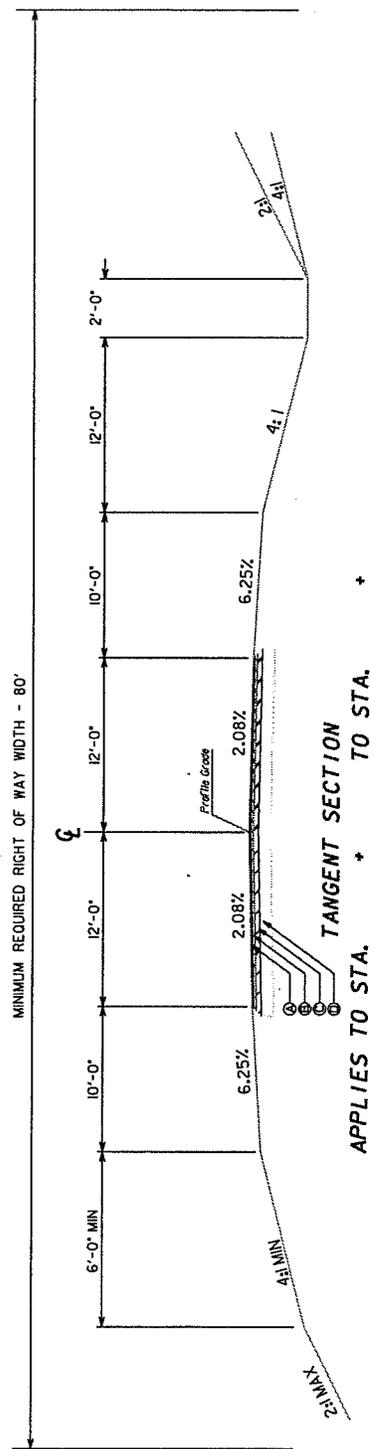
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STATE	PROJECT NUMBER	SHEET TOTAL
GA.	NH-114-475-1(247)	24



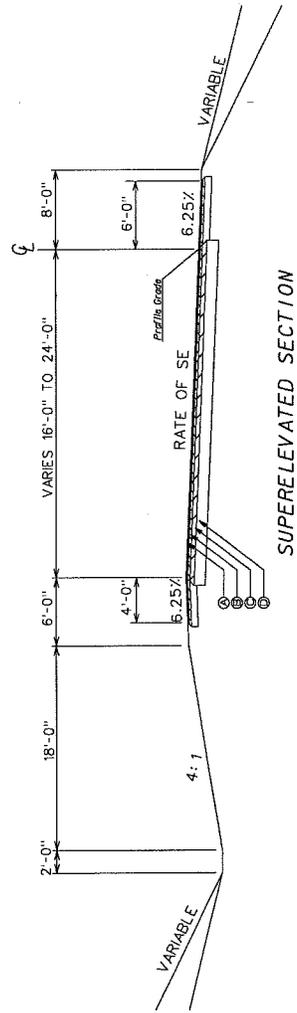
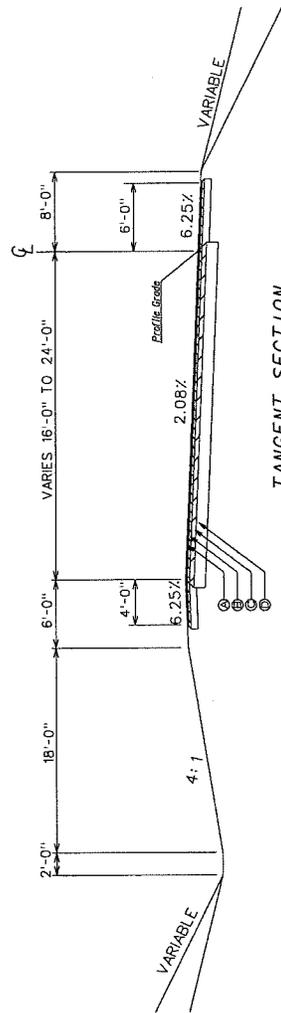
TYPICAL SECTIONS
ZEBULON ROAD

NH-11-475-1(247)



TYPICAL SECTIONS
LAMAR ROAD RELOCATION

STATE	PROJECT NUMBER	DRAWING NO.
G.A.	NH-1M-475-1(247)	NO. 100074



TYPICAL SECTIONS
I-475 SOUTHBOUND ON-RAMP

PRELIMINARY COST ESTIMATE FOR ZEBULON ROAD

PROJECT NUMBER: NH-IM-475-1(247)

COUNTY: Bibb

DATE: 4/12/02

ESTIMATED LETTING DATE: 02-07

PREPARED BY: Jay Simone – American Engineers, Inc

PROJECT LENGTH : 0.59 miles

() PROGRAMMING PROCESS (X) CONCEPT DEV. () DURING PROJECT DEV.

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (LAND & EASEMENT)	\$180,000.00
SUBTOTAL: A	\$180,000.00
B. UTILITIES:	
1. LGPA	LGPA
SUBTOTAL: B	LGPA
C. CONSTRUCTION:	
1. MAJOR STRUCTURES:	
a. Bridge widening over I-475 24,282 SF @ \$150/sf	\$3,642,300.00
SUBTOTAL: C-1	\$3,642,300.00
2. GRADING AND DRAINAGE:	
a. Earthwork	\$56,250.00
b. DRAINAGE	
1) Cross Drain Pipe	\$8,500.00
2) Longitudinal Drainage System (incl catch basins)	
2000 ft @ 31.50 + 10 @ 1756.58	\$80,726.00
SUBTOTAL: C-2	\$145,476.00
3. BASE AND PAVING:	
a. GR AGGR BASE CRS 10,280 sy @ 9.29/sy	\$95,501.00
b. ASPHALT PAVING:	
1. 19 mm Asph superpave A, 2 in 1,130 tons @ \$37.40/ton	\$42,262.00
2. 12.5 mm Asph superpave A, 165 lb/sy 2,600 tons @ \$35.32/ton	\$91,832.00
3. 25 mm Asph Superpave A, 6 in 3,400 tons @ \$34.80/ton	\$118,320.00
SUBTOTAL: C-3.b	\$252,414.00
c. BITUMINOUS TACK COAT – (4,700 gal x \$0.89)	\$4,183.00
d. MILLING, ASPH CONC, 1½" Depth, 20,300 sy @ \$1.08/sy	\$21,924.00
e. CONCRETE CURB & GUTTER, 3,700 ft @ \$7.37/ft	\$27,269.00
f. CONCRETE SIDEWALK 2050 sy @ \$24.94/sy	\$51,230.00
g. LEVELING	\$35,620.00
h. Raised Concrete Median, 71/2"	\$190,508.00

ESTIMATE SUMMARY for Design Alternative	
A. RIGHT-OF-WAY:	\$180,000.00
B. REIMBURSABLE UTILITIES:	LGPA
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	\$3,642,300.00
2. GRADING AND DRAINAGE	\$125,475.00
3. BASE AND PAVING	\$774,107.00
4. LUMP ITEMS	\$350,000.00
5. MISCELLANEOUS	\$465,000.00
6. SPECIAL FEATURES	\$0.00
SUBTOTAL CONSTRUCTION COST	\$5,356,882.00
E. & C. (10%)	\$602,576.00
Inflation (4% per year) 3 years	\$668,882.00
TOTAL CONSTRUCTION COST	\$6,628,340.00
GRAND TOTAL PROJECT COST	\$6,808,340.00

PRELIMINARY COST ESTIMATE FOR LAMAR ROAD

PROJECT NUMBER: NH-IM-475-1(247)

COUNTY: Bibb

DATE: 4/12/02

ESTIMATED LETTING DATE:02-07

PREPARED BY: Jay Simone – American Engineers, Inc

PROJECT LENGTH : 0.72 miles

() PROGRAMMING PROCESS (X) CONCEPT DEV. () DURING PROJECT DEV.

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (LAND & EASEMENT)	\$937,500.00
SUBTOTAL: A	\$937,500.00
B. UTILITIES:	
1. LGPA	LGPA
SUBTOTAL: B	LGPA
C. CONSTRUCTION:	
1. MAJOR STRUCTURES:	
a. 7'x7' Conc Box Culvert	\$38,782.00
SUBTOTAL: C-1	\$38,782.00
2. GRADING AND DRAINAGE:	
a. Earthwork	\$75,000.00
b. DRAINAGE	
1) Cross Drain Pipe	\$9,200.00
SUBTOTAL: C-2	\$84,200.00
3. BASE AND PAVING:	
a. GR AGGR BASE CRS 9,870 sy @ 9.29/sy	\$91,692.00
b. ASPHALT PAVING:	
1. 19 mm Asph superpave A, 2 in 1,085 tons @ \$37.40/ton	\$40,579.00
2. 12.5 mm Asph superpave A, 165 lb/sy 840 tons @ \$35.32/ton	\$29,593.00
3. 25 mm Asph Superpave A, 6 in 3,260 tons @ \$34.80/ton	\$113,448.00
SUBTOTAL: C-3.b	\$183,620.00
c. BITUMINOUS TACK COAT - (2,700 gal x \$0.89)	\$2,403.00
d. MILLING, ASPH CONC, 1½" Depth, 1,000 sy @ \$1.08/sy	\$1,080.00
e. Leveling	\$1,000.00

f. LEVELING	\$1,000.00
g. AGGR SURFACE CRS – 100 tons @ \$19.18	\$1,918.00
SUBTOTAL: C-3	\$281,713.00
4. LUMP ITEMS	
a. TRAFFIC CONTROL	\$25,000.00
b. GRASSING	\$50,000.00
c. EROSION CONTROL	\$150,000.00
d. Clearing & Grubbing	\$200,000.00
SUBTOTAL: C-4	\$425,000.00
5. MISCELLANEOUS:	
a. SIGNING & STRIPING	\$20,000.00
SUBTOTAL: C-5	\$20,000.00
6. SPECIAL FEATURES	N/A

ESTIMATE SUMMARY for Design Alternative	
A. RIGHT-OF-WAY:	\$937,500.00
B. REIMBURSABLE UTILITIES:	LGPA
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	\$38,782.00
2. GRADING AND DRAINAGE	\$84,200.00
3. BASE AND PAVING	\$281,713.00
4. LUMP ITEMS	\$425,000.00
5. MISCELLANEOUS	\$20,000.00
6. SPECIAL FEATURES	\$0.00
SUBTOTAL CONSTRUCTION COST	\$850,695.00
E. & C. (10%)	\$95,692.00
Inflation (4% per year) 3 years	\$106,221.00
TOTAL CONSTRUCTION COST	\$1,052,608.00
GRAND TOTAL PROJECT COST	\$1,990,108.00

Total Cost for Zebulon and Lamar Roads

	Proposed	Approved
Zebulon Road		
Construction (incl. E & C)	\$6,628,340	\$3,978,000
Right of Way	\$180,000	\$180,000
Utilities	LGPA	LGPA
Total	\$6,808,340	\$4,158,000
Lamar Road		
Construction (incl. E & C)	\$1,052,608	
Right of Way	\$937,500	
Utilities	LGPA	LGPA
Total	\$1,990,108	
Total Zebulon Road and Lamar Road		
Construction (incl. E & C)	\$7,680,948	\$3,978,000
Right of Way	\$1,117,500	\$180,000
Utilities	LGPA	LGPA
Total	\$8,798,448	\$4,158,000