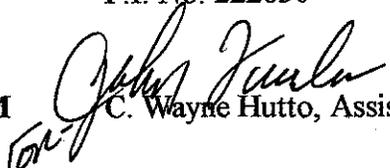


**ORIGINAL TO GENERAL FILES**

D.O.T. 66

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** NH-038-1(40) Emanuel County **OFFICE** Preconstruction  
P.I. No. 222630  
**DATE** May 30, 2001  
**FROM** *for*  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 Keepler  
Jerry Hobbs  
Herman Griffin  
Michael Henry  
Marion Waters  
Marta Rosen  
Paul Liles  
Jimmy Chambers (ATTN: Ted Cashin)  
Mike Thomas

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** NH-038-1(40) Emanuel County **OFFICE** Preconstruction  
P.I. No. 222630  
*CW Hutto* **DATE** May 11, 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 4/US 1 Business from the Swainsboro Bypass (presently under construction) to the existing segment of SR 4 which has four lanes with a flush median at Injunction Road/CR 382. The project length is 2.04 miles. SR 4 currently consists of two, 12' lanes on 100' of existing right-of-way. SR 4 is classified as a rural principal arterial. Traffic is projected to be 8,700 VPD and 12,800 VPD in the years 2009 and 2029 respectively. The project corridor is presently operating at Level of Service (LOS) "C." With no improvements this segment of SR 4 will operate at LOS "D" in 2020. Widening and improving this section of SR 4 would improve the LOS in 2020 to "A."

The proposed construction will widen SR 4 to a four-lane roadway with a 44' depressed median from the Swainsboro Bypass to Mixon Road/CR 471. This section of roadway will have 10' rural shoulders (4' paved) and a speed design of 55 MPH. The proposed typical section from Mixon Road/CR 471 to Injunction Road/CR 382 is four, 12' lanes with a 14' flush median. This section will include sidewalks with curb and gutter and a speed design of 45 MPH. Traffic will be maintained during construction.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion is anticipated; a public information meeting 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)	\$4,217,000	\$4,462,000	2007	FY-07
Right-of-Way	\$ 480,000	\$ 134,000		
Utilities*	----	----		

Frank L. Danchetz

Page 2

NH-038-1(40) Emanuel

May 11, 2001

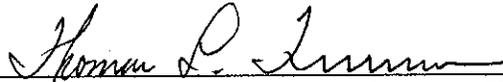
\*LGPA to be sent.

This project is in the STIP. I recommend this project concept (Alternative "B") be approved as described herein.

CWH:JDQ/cj

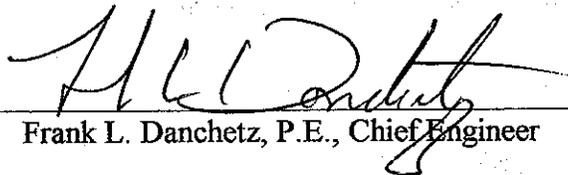
Attachment

CONCUR



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

APPROVE



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

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

-----  
INTERDEPARTMENTAL CORRESPONDENCE

**FILE:** NH-038-1(40) Emanuel  
P.I. Number 222630-

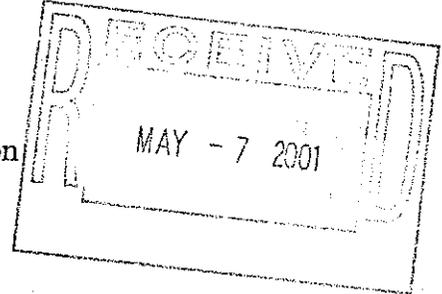
**OFFICE:** Engineering Services

**DATE:** May 2, 2001

**FROM:** David Mulling, <sup>DTM</sup> Project Review Engineer

**TO:** Wayne Hutto, Assistant Director of Pre-construction

**SUBJECT:** CONCEPT REPORT



We have reviewed the concept report submitted April 24, 2001 by the letter from George Brewer dated April 19, 2001, and have no comment.

The costs for the project are:

Construction	\$3,334,000
Inflation	\$ 500,000
E&C	\$ 383,000
Reimbursable Utilities	\$ 0
Right of Way	\$ 480,000

DTM

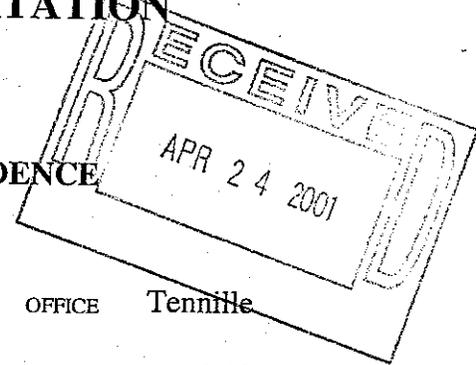
c: George Brewer-- District 2 Preconstruction

## SCORING RESULTS AS PER MOG 2440-2

<b>Project Number:</b> NH-038-1(40)		<b>County:</b> EMANUEL		<b>PI No.:</b> 222630-	
<b>Report Date:</b> 4/19/01		<b>Concept By:</b> DOT Office: DISTRICT 2			
<input checked="" type="checkbox"/> CONCEPT		DOT Project Manager: GEORGE BREWER			
		Consultant: N/A			
<b>Project Type:</b> Choose One From Each Column		<input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input type="checkbox"/> Bridge <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input checked="" type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
<b>FOCUS AREAS</b>	<b>SCORE</b>	<b>RESULTS</b>			
Presentation	100%				
Judgement	100%				
Environmental	100%				
Right of Way	100%				
Utility	100%				
Constructability	100%				
Schedule	100%				

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**



FILE NH-038-1(40) Emanuel County  
P.I. No. 222630

OFFICE Tennille

DATE April 19, 2001

FROM *GMB* George M. Brewer, District Design Engineer

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

SUBJECT **CONCEPT REPORT**

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

If any further assistance is needed, please contact George Brewer at (478)552-4642.

GMB

cc: David Mulling  
Harvey Keepler  
Marion Waters  
Marta Rosen  
Herman Griffin

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

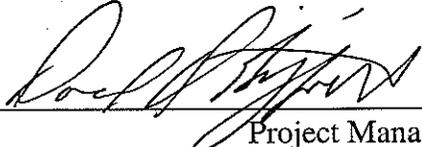
*District 2 - Design Office*

Project Number: NH-038-1(40)  
County: Emanuel  
P. I. Number: 222630

Federal Route Number: 1 Business  
State Route Number: 4 Business

Recommendation for approval:

DATE 4/19/01

  
\_\_\_\_\_  
Project Manager

DATE 4/19/01

  
\_\_\_\_\_  
Office Head/District Engineer

The 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 \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

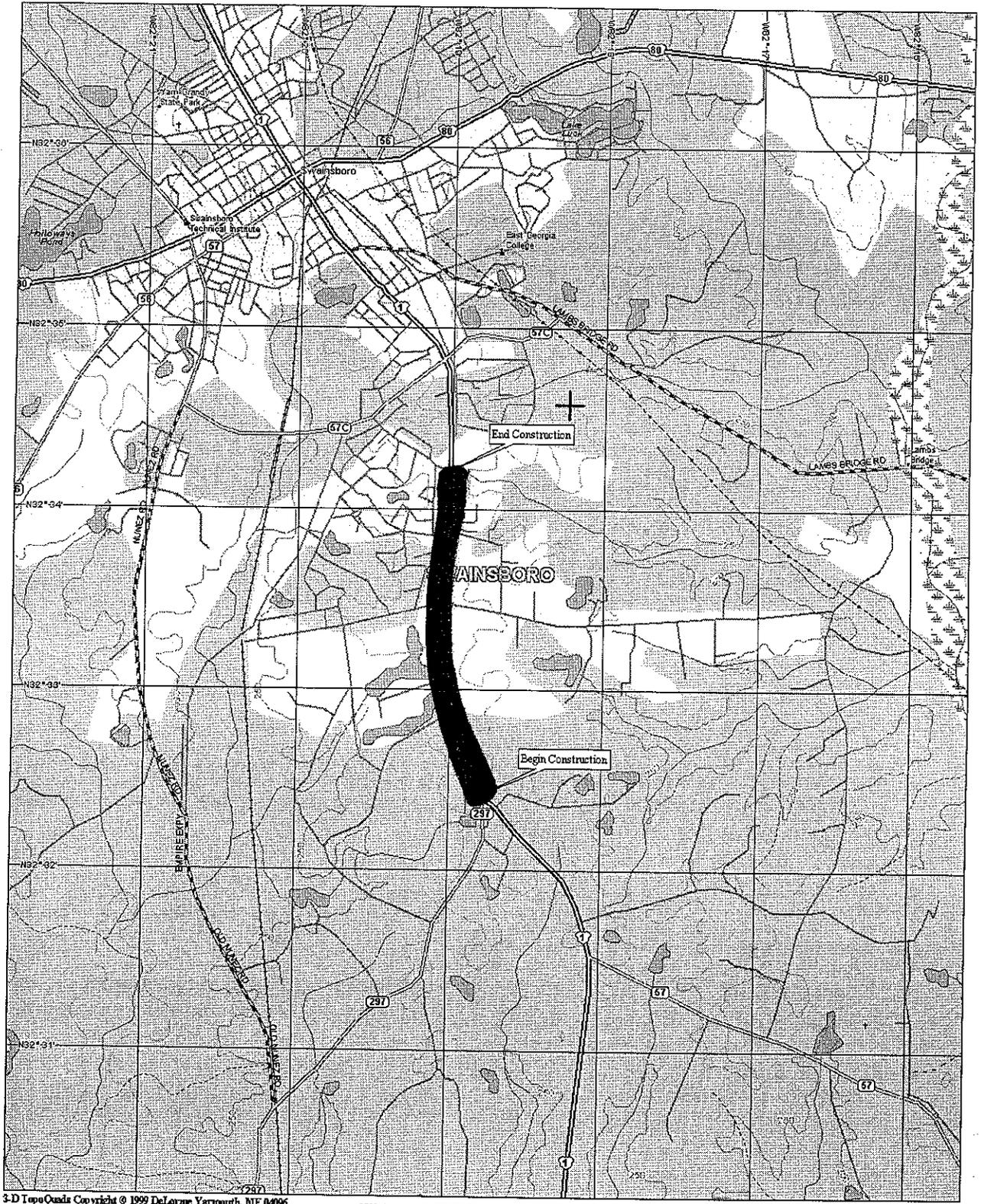
\_\_\_\_\_  
State Environmental/Location Engineer

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 | 1500 ft Scale: 1:50,000 Detail: 12.0 Datum: WGS84

## PROJECT CONCEPT REPORT

**PROJECT NUMBER:** NH-038-1(40) Emanuel County

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### PROJECT LOCATION AND DESCRIPTION

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This project consists of the widening and reconstruction of SR 4/US 1 Business from the Swainsboro Bypass to existing 5-lane section at Injunction Road. The project is located in Emanuel County. The concept report recommends widening SR 4 Business to accommodate a 4-lane section. The project length is 2.0 miles.

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### TRAFFIC

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	CURRENT		PROJECTED	
	YEAR	AADT	YEAR	AADT
SR 4	2009	8700	2029	12800

---

### PDP CLASSIFICATION

### FUNCTIONAL CLASSIFICATION

Major on existing alignment

Bypass (MP 18.4) to CR 271(MP 19.6) -  
Rural Principal Arterial  
CR 271 (MP 19.6) to Injunction Rd (MP 20.4)-  
Urban Principal Arterial

FOS ( )

EXEMPT (X)

N/A ( )

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### NEED AND PURPOSE

See attached sheets.

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**Need and Purpose Statement**  
**SR 4/US 1 from Swainsboro Bypass to Injunction Road**  
**Emanuel County; PI No. 222630,**  
**Project No. NH-038-1(40)**

**Background**

The purpose of project NH-038-1(40) is to widen and reconstruct SR 4/US 1 from the Swainsboro Bypass, which is presently under construction, to the existing segment of SR 4 which has four lanes and a flush median at Injunction Road (CR 382). The project length is 2.04 miles.

**Design**

SR 4 currently consists of two twelve foot wide lanes. The proposed improvement will widen SR 4 to four twelve foot wide lanes with a fourteen foot wide flush median between Mixon Road (CR 471) and Injunction Road (CR 382), this section will also include sidewalks and curb & gutters. Between the Swainsboro Bypass and Mixon Road the roadway will consist of four twelve foot wide lanes separated by a forty-four foot wide depressed median, the outside shoulders will be ten feet wide, four feet of which will be paved. The section of SR 4 separated by the depressed median will have a design speed of 55mph. The section of SR 4 with the flush median will have a design speed of 45 mph.

**Travel Demand and Operational Conditions**

SR 4 is classified as a Rural Principal Arterial. In 1999, this segment of SR 4 carried 7,800 vehicles per day. Based on a two percent growth rate this portion of SR 4 will carry 11,800 vehicles per day in 2020. The project corridor is presently operating at Level of Service (LOS) "C". With no improvements this segment of SR 4 will operate at LOS "D" in 2020. Widening and improving this section of SR 4 would improve the LOS in 2020 to "A". The accident rate along this section of SR 4 is below the statewide average for Rural Principal Arterials.

**Logical Termini**

The termini for this project are logical. The northern terminus of the project will connect to an existing segment of SR 4, which has four lanes and a flush median. The southern terminus of the project will connect with another segment of SR 4, which is also going to be widened to four twelve foot wide lanes separated by a forty-four foot wide median (Project Number EDS-545(44)). The southern end of the project will also intersect the South Swainsboro Bypass (Project Number EDS-545-(7)01). The Swainsboro Bypass is presently under construction.

**Other Projects in the Area**

Project Number	Project Description	FY '01-'03 Schedule
EDS-545-(17) PI No. 221900	SR 4/US 1 New location-4 lanes in Oak Park, Ga.	PE-Authorized ROW-FY '01 CONST-FY '04
EDS-545-(18) PI No. 221910	SR 4/US 1 Widen from 2 to 4 lanes. From Oak Park to I-16.	PE-Authorized ROW-FY '01 CONST-FY '04

EDS-545-(44) PI No. 222490	SR 4/US 1 Widen from 2 to 4 lanes. From I-16 to SR 297.	PE-Authorized ROW-FY '01 CONST-FY '05
EDS-545-(48) PI No. 222490	SR 4/US 1 Widen from 2 to 4 lanes. From CR 104 to Wadley, Ga.	PE-Authorized ROW-Long Range CONST-Long Range
EDS-545-(50) PI No. 222510	SR 4/US 1 Widen from 2 to 4 lanes. From Swainsboro to CR 104.	PE-Authorized ROW-FY '04 CONST-FY '07
NH-043-1(55) PI No. 222620	SR 4/US 1 Widen from 2 to 4 lanes. From Modoc Road to US 1 Bypass.	PE-Long Range ROW-Long Range CONST-Long Range
EDS-545-(8)01 PI No. 262390	North Swainsboro Bypass from SR 26/US 80 to SR 4/US 1 near CR 98. New location-4 lanes.	Under Construction
EDS-545-(7)01 PI No. 262395	South Swainsboro Bypass from SR 297 to US 80. New location-4 lanes	Under Construction

**Need and Purpose**

The need exists to provide local and through traffic an improved travel way on SR 4. The purpose of the proposed improvement is to provide a facility that will adequately and safely serve current and future travel demand.

**EXISTING ROADWAY**

<b>TYPICAL SECTION:</b>	2 Lane Rural	<b>RIGHT-OF-WAY WIDTH:</b> 100'
<b>POSTED SPEED</b>	<b>MAXIMUM DEGREE OF CURVE</b>	<b>MAX. GRADE</b>
55 mph	3°-30'	3.0%

**MAJOR STRUCTURES**

<b>FEATURES INTERSECTED/TYPE</b>	<b>WIDTH</b>	<b>HEIGHT</b>	<b>SUFF. RATING</b>
None			

**HAZARD INDEX:** There will be no railroad involvement.

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**PROPOSED ROADWAY**


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**TYPICAL SECTION:**

Swainsboro Bypass to CR 471 (Mixon Road): 4-12' lanes separated by a 44' depressed median with 10' outside shoulders (4' paved)

CR 471 (Mixon Road) to CR 382 (Injunction Road): 4-12' lanes separated by a 14' flush median with curb & gutter and sidewalks

DESIGN SPEED	MAXIMUM DEGREE OF CURVE		MAX. GRADE	
	55/45 mph	ALLOWABLE	6°	ALLOWABLE
	PROPOSED	3°-30'	PROPOSED	3%

**PROPOSED MAJOR STRUCTURES**

FEATURES INTERSECTED/TYPE	LENGTH	WIDTH
All existing box culverts and pipes will be extended.		

**PROPOSED RIGHT-OF-WAY**

RIGHT-OF-WAY WIDTH	PARCELS IMPACTED	DISPLACEMENTS
200' - 44' MED	42	4

130' - 5 LANE

TYPE OF ACCESS CONTROL: Permit

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**COORDINATION AND SCHEDULING**

**CONCEPT TEAM MEETING DATE:** March 27, 2001

**CONFORMS TO TIP/STIP?** Y X N \_\_\_

**MEETS LOGICAL TERMINI REQUIREMENTS?** Y X N \_\_\_

**P.A.R. MEETING:** Not required

**PERMITS REQUIRED:** 404

**LEVEL OF PUBLIC INVOLVEMENT:** *PUBLIC INFORMATION MEETING*  
~~Public Hearing Required~~  
~~Public Meeting Conducted~~

**TIME SAVING PROCEDURES APPROPRIATE:** No

**SCHEDULING CONSIDERATIONS:**

**TIME TO COMPLETE ENVIRONMENTAL:** 12 months

**TIME TO COMPLETE PRELIM. RD/RW PLANS:** 12 months

**TIME TO COMPLETE 404 PERMIT:** 12 months

**TIME TO COMPLETE FINAL CONSTR. PLANS:** 9 months

**TIME TO BUY RIGHTS-OF-WAY:** 18 months

**OTHER PROJECTS IN THE AREA:** EDS-545(17), EDS-545(18),  
EDS-545(44), EDS 545(48),  
EDS 545(50), NH-043-1(55),  
EDS-545(8), EDS-545(7)

**LOCAL GOVERNMENT COMMITMENTS:** Emanuel County will be requested to  
fund all reimbursable utility  
relocations.

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**MISCELLANEOUS**


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**TRAFFIC CONTROL DURING CONSTRUCTION:** All construction will be done under traffic.

**LEVEL OF ENVIRONMENTAL ANALYSIS:** Categorical Exclusion *ANTICIPATED*

**UNDERGROUND STORAGE TANKS:** None

**HAZARDOUS WASTE SITES:** None

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**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 SUPERELEV RATES	( )	(X)	( )
SUBST HORIZONTAL CLEARANCE	( )	(X)	( )
SUBST SPEED DESIGN	( )	(X)	( )
SUBST VERTICAL CLEARANCE	( )	(X)	( )
SUBST BRIDGE WIDTH	( )	(X)	( )
SUBST BR STRUCT CAPACITY	( )	(X)	( )

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**ALTERNATIVES CONSIDERED**


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- A. Construct the additional lanes to the east of the existing alignment and retain the existing pavement where it meets current design criteria.
- B. Construct the additional lanes to the west of the existing alignment from the Swainsboro Bypass to CR 271 (Mixon Road) and then transition the proposed widening to the east of the existing alignment to CR 382 (Injunction Road). Retain the existing pavement where it meets current design criteria.
- C. No Build.
- 

**ESTIMATED COST**

<b>CONSTRUCTION:</b>	\$3,333,820	<b>RIGHT-OF-WAY:</b>	\$480,000
<b>E &amp; C (10%):</b>	425,000	<b>ACQUIRED BY:</b>	DOT
<b>INFLATION:</b> (3 yrs @ 5% per yr)	<u>920,000</u>	<b>UTILITIES:</b>	LGPA to be submitted
<b>TOTAL CONS'T COST:</b>	\$4,678,820		

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**COMMENTS**


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The district recommends Alternate "B" due to the lower right of way cost (See attached right of way estimate). The construction cost would be the same for Alternate "A" or Alternate "B".

**ATTACHMENTS:** Cost Estimates, Typical Section, Traffic Data, Pavement Design, Accident Data, Team Meeting Minutes, Right of Way Cost Breakdown Sheet, Utility Cost Estimate

**PREPARED BY:** George Brewer, District Design Engineer

ITEM DESCRIPTION  
 222630STP-038-1(40) EMANUEL SR 4/US 1 SOUTH OF SWAINSBOCK

TOTAL LENGTH OF PROJECT - 2.04 MILES  
 ROADWAY

ITEM	DESCRIPTION	UNITS	WT. AVG.	QUANTITY	COST
150-1000	TRAFFIC CONTROL - NH-038-1(40)	LUMP		100000	\$100000.00
153-1200	FIELD ENGINEERS OFFICE TP 2	EA		35000	\$35000.00
201-1500	CLEARING AND GRUBBING - NH-038-1(40)	LUMP		250000	\$250000.00
205-0001	UNCLASS EXCAV	CY		4	\$600000.00
310-1201	GR AGGR SUBBASE CRS, INCL MATL	TN		18	\$306000.00
318-3000	AGGR SUPP CRS	TN		16	\$80000.00
402-1812	RECYCLED ASPH CONC LEVELLING, INCL BITUM MATL & H LIME	TN		40	\$60000.00
402-3112	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MA	TN		40	\$280000.00
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MA	TN		40	\$560000.00
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	TN		40	\$320000.00
4-1000	BITUM TRAC COAT	GL		1	\$6000.00
4-6222	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	LF		10	\$43000.00
446-3000	PVMMNT REINF FABRIC, SELF ADHESIVE	LF		3	\$31050.00
456-2003	INDENTATION RUMBLE STRIPS, 3 FT WIDTH	MI		420	\$2058.00
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF		30	\$75000.00
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF		35	\$5250.00
550-1300	STORM DRAIN PIPE, 30 IN, H 1-10	LF		50	\$5000.00
550-2150	SIDE DRAIN PIPE, 15 IN, H 1-10	LF		20	\$15000.00
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	LF		21	\$6300.00
550-2240	SIDE DRAIN PIPE, 24 IN, H 1-10	LF		28	\$4200.00
550-3615	SAFETY END SECTION 15 IN, SIDE DRAIN, 6:1 SLOPE	EA		3	\$150.00
550-3618	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	EA		470	\$9400.00
550-3624	SAFETY END SECTION 24 IN, SIDE DRAIN, 6:1 SLOPE	EA		900	\$9000.00
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA		365	\$5110.00
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	EA		450	\$3600.00
550-4236	FLARED END SECTION 36 IN, STORM DRAIN	EA		700	\$1400.00
573-2006	UNDNR PIPE INCL DRAINAGE AGGR, 6 IN	LF		10	\$2000.00
634-1200	RIGHT OF WAY MARKER	EA		100	\$10000.00
668-1100	CATCH BASIN, GP 1	EA		1500	\$45000.00
668-2100	DROP INLET, GP 1	EA		1500	\$52500.00
668-2110	DROP INLET, GP 1, ADDL DEPTH	EA		170	\$3400.00
668-5000	JUNCTION BOX	EA		1320	\$10560.00

Section SUB TOTAL

\*\*\*\*\* EROSION CONTROL \*\*\*\*\*  
 PERMANENT GRASSING  
 AGRICULTURAL LIME  
 FERTILIZER MIXED GRADE  
 FERTILIZER NITROGEN CONTENT  
 PERMANENT SOIL RETINE MAT  
 BITUMINOUS TRTD ROVING, WTRWYS

Section SUB TOTAL

\*\*\*\*\* TEMPORARY EROSION CONTROL \*\*\*\*\*  
 TEMP GRASSING  
 TEMP MULCH  
 CONST, MAINT & REM BALED STRAW EROSION CK  
 MAINT OF SILT FENCE, TP A  
 MAINT OF SILT FENCE, TP C  
 MAINT OF BALED STRAW EROSION CK  
 WATER QUALITY MONITORING  
 WATER QUALITY SAMPLING  
 TEMPORARY SILT FENCE, TP A  
 TEMPORARY SILT FENCE, TP C  
 EROSION CONTROL MATS

UNITS	WT. AVG.	QUANTITY	COST
LBS		33	\$15840.00
TONS		750	\$37500.00
LF		3	\$12000.00
LF		1.5	\$3000.00
LF		2.1	\$4200.00
LF		1.3	\$2600.00
EA		2685	\$10740.00
EA		170	\$1360.00
EA		8	\$9360.00
EA		2.34	\$20000.00
LF		5	\$4000.00
SQ YD		3	\$13200.00
EA		16	\$129800.00

Section SUB TOTAL

TRAFFIC SIGNS AND MARKINGS  
 THERMOPLASTIC PVMT MARKING, ARROW, TP 2

UNITS	WT. AVG.	QUANTITY	COST
EA		77.13	\$1234.00

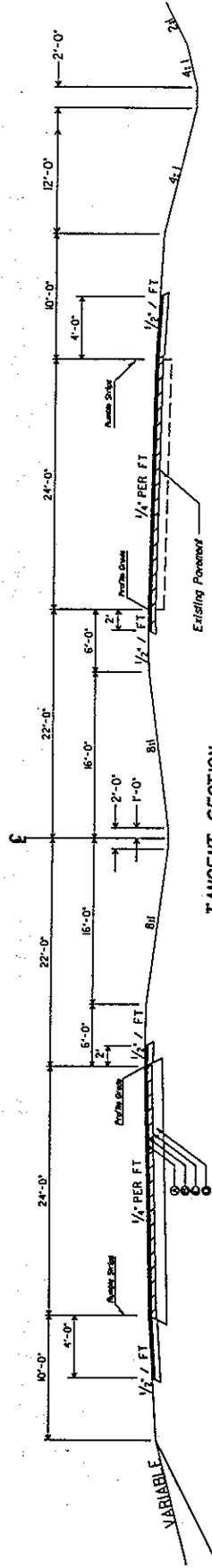
653-0170 THERMOPLASTIC PVMT MARKING, ARROW, TP 7  
 653-0210 THERMOPLASTIC PVMT MARKING, WORD, TP 1  
 653-1501 THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE  
 653-1502 THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW  
 653-1704 THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE  
 653-3501 THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE  
 653-6004 THERMOPLASTIC TRAF STRIPPING, WHITE  
 653-6006 THERMOPLASTIC TRAF STRIPPING, YELLOW  
 654-1001 RAISED PVMT MARKERS TP 1  
 654-1003 RAISED PVMT MARKERS TP 3

100-0001 INFLATION (5% PER YR FOR 5 YRS)  
 100-0002 E&C (10%)

INFLATION & E&C

EA	80.06	12	\$960.72
EA	81.81	8	\$654.41
LF	0.3	30000	\$9000.00
LF	0.3	30000	\$9000.00
LF	4.46	200	\$892.00
GLF	0.4	26000	\$10400.00
SY	2.9	5000	\$14500.00
SY	2.7	5000	\$13500.00
EA	4.22	85	\$358.70
EA	3.74	500	\$1870.00
Section SUB TOTAL			\$62369.91
LUMP	920000	LUMP	\$920000.00
LUMP	425000	LUMP	\$425000.00
Section SUB TOTAL			\$1345000.00
Total Project Cost			\$4678817.91

STATE	PROJECT NUMBER	SHEET NUMBER
GA.		10/15
	DATE	
	BY	
	CHECKED	
	DATE	



SWAINSBORO BYPASS TO MIXON ROAD/CR 471

NOT TO SCALE

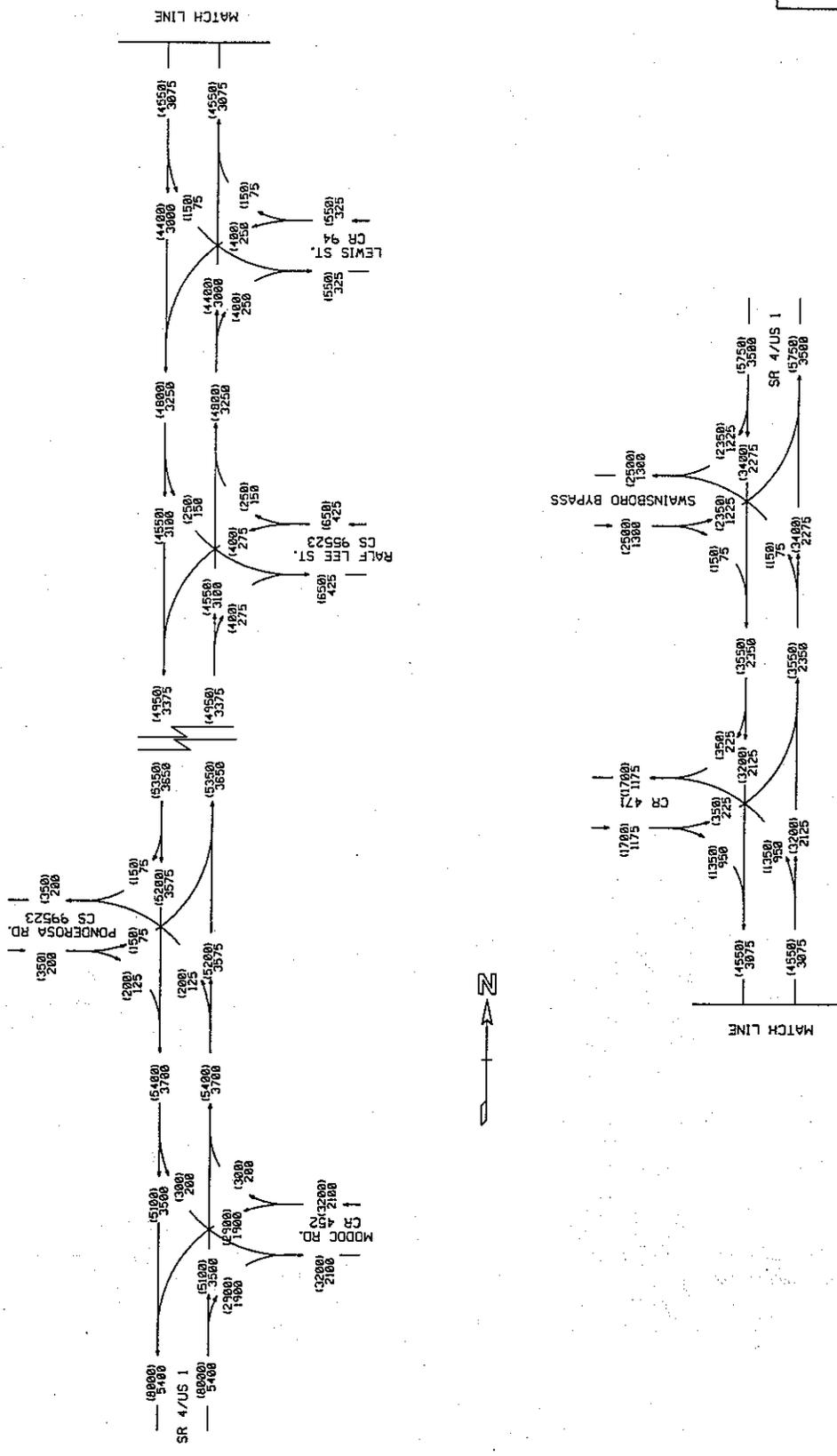
STATE OF GEORGIA  
DEPARTMENT OF TRANSPORTATION  
SR 4 / US 1 WIDENING  
TYPICAL SECTIONS





GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF ENVIRONMENT/LOCATION

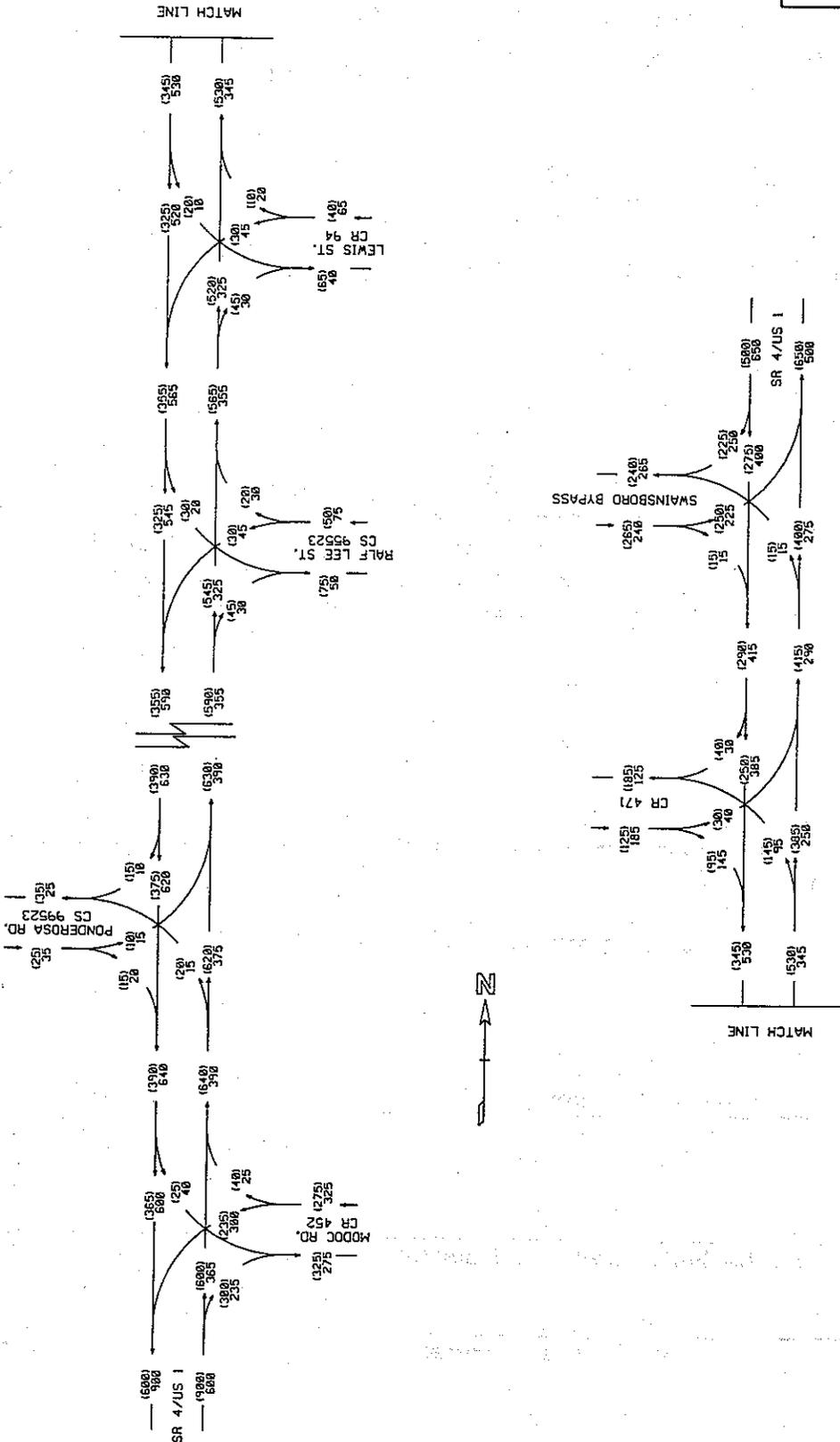
SHEET 1 OF 2



NH-043-(155)  
P.I.# 222620  
EMANUEL COUNTY  
SR 4/US 1  
2009 ADT = 000  
2029 ADT = (000)  
24 HR T = 10%  
S.U. = 4%  
COMB. = 6%  
ROL  
10/7/00

GEORGIA DEPARTMENT OF TRANSPORTATION  
OFFICE OF ENVIRONMENT/LOCATION

SHEET 2 OF 2



FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: NH-038-1(40)

County: EMANUEL

P.I. no.: 222630

Description: SR 4/US1 SOUTH OF SWAINSBORO

**Traffic Data** (NOTE: AADTs are one-way)

24-hour Truck Percentage: 10.00%

AADT initial year of design period: 4,350 vpd (2009)

AADT final year of design period: 6,400 vpd (2029)

Mean AADT (one-way): 5,375 vpd

**Design Loading**

Mean AADT	LDF	Trucks	18-K ESAL	Total Daily Loads
5,375 *	0.80 *	0.100 *	0.95	= 409

Total predicted design period loading = 409 \* 20 \* 365 = 2,985,700

**Design Data**

Terminal Serviceability Index: 2.50

Soil Support: 3.50

Regional Factor: 1.40

**PROPOSED FLEXIBLE PAVEMENT STRUCTURE**

Material	Thickness mm	Thickness (in.)	Structural Coefficient	Structural Value
12.5 mm Superpave	40	(1.57)	0.0173	0.69
19 mm Superpave	50	(1.97)	0.0173	0.86
25 mm Superpave	24	(0.94)	0.0173	0.42
	76	(2.99)	0.0118	0.90
Graded Aggregate Base	200	(7.87)	0.0063	1.26

Required SN = 4.61

Proposed SN = 4.13

>>> Proposed pavement is 10.4% Underdesign <<<

Remarks:

Prepared by George M. Brewer, District Design Engineer  
October 29, 2000  
Date

Recommended State Materials & Research Engineer Date

Approved District Engineer Date



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

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**INTERDEPARTMENT CORRESPONDENCE**

FILE NH-038-1(40) Emanuel County  
P.I. No. 222630

OFFICE Tennille

DATE March 27, 2001

FROM George M. Brewer, District Design Engineer

TO Files

SUBJECT **CONCEPT TEAM MEETING MINUTES**

A Concept Team Meeting was held March 27, 2001 on the above-mentioned project. The following were in attendance:

George Brewer, District Design Engineer  
Dane Murray, Altamaha EMC  
Helen Center, Chamber of Commerce  
Rodney Beckworth, Altamaha EMC  
Debbie Pennington, District Planning & Programming Engineer  
Roger Price, District Traffic Engineer  
David Griffith, District Preconstruction Engineer  
Floyd Potter, District Design Squad Leader  
Jamie Lindsey, Utility Engineer  
Thomas R. Johnson, Right-of-Way  
Bonnie McMakin, Area Engineer  
Jimmy Hobby, District Utilities Engineer  
Don Flanders, Handi-House

I read the draft concept report and we all reviewed the layouts showing the proposed project and following comments were raised:

1. Don Flanders who owns the Handi-House facility near the end of the project explained that if the project is built as proposed, his business will be severely impacted and he was therefore requesting that curb & gutter be used to minimize the amount of required right-of-way at his property. He was told that we would investigate the possibility of changing the speed design from 55 mph to 45 mph from Gary Road to the end of the project to allow curb & gutter to be used.

Concept Team Meeting Minutes

NH-038-1(40) Emanuel

P.I. No. 222630

Page 2

2. Jimmy Hobby stated that there are no reimbursable utilities on the project.
3. The representatives from Altamaha EMC stated that they were planning to ask for help in relocating their facilities.
4. Debbie Pennington requested that the number of required right-of-way parcels be corrected in datatrieve.
5. Bonnie McMakin stated that there is existing concrete pavement on SR 4 which has been overlaid and requested that pavement fabric be included in the contract to minimize future cracking.

If any further assistance is needed, please advise.

GMB

**NH-038-1 (40) EMANUEL COUNTY**

Right of Way Estimate

February 28, 2001

**ALTERNATE "A"**

Improvements, damages, and incidental expenses \$506,000.00

This alternate assumes that the following improvements will be taken:

Ga. Equipment's Office Building

Raymond Johnson

Howard Thompson

Terry Quick (house, mobile home and vacant commercial building)

Handi House Mfg. Co. Office Building

Signs and Billboards

This alternate also considers possible damages to the following property owners:

Dye's/Georgia Farm and Equipment

Nell Bell

Gladys Mills

Handi House Mfg. Co. (partial loss of ramp)

Donald Flanders

Land (20.57 acres X \$3,500/acre) \$72,000.00

**TOTAL \$578,000.00**

**ALTERNATE "B"**

Improvements and damages \$406,000.00

This alternate assumes that the following improvements will be taken:

Delmas Scott residence

Terry Quick (house, mobile home and vacant commercial building)

Handi House Mfg. Co. Office Building

Signs and Billboards

This alternate also considers possible damages to the following property owners:

Handi House Mfg. Co. (partial loss of ramp)

Donald Flanders

Land (21.09 acres X \$3,500/acre) \$73,815.00

**TOTAL \$479,815.00**

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE NH-038-1 (40) – Emanuel County  
P.I. No. 222630

OFFICE Tennille - Utilities

DATE February 10, 2001

*JFH*  
FROM James F. Hobby, Jr., District Utilities Engineer

TO David Griffith, District Preconstruction Engineer  
Attention: George Brewer

SUBJECT Utility Cost Estimate – State Route 4 (US 1) – From Swainsboro South Bypass To Existing Of Curb And Gutter Section Near Swainsboro High School

A Utility Cost Estimate has been completed for the subject location. This estimate was prepared using proposed concept layouts provided to this office by George Brewer and an on-site inspection by James F. Hobby, Jr., District Utilities Engineer. Additional information was provided by Alvin Wells, City of Swainsboro, Dane Murray, Altamaha Electric Membership Corporation and Warren Geitgey, BellSouth Telecommunications, Inc.

**POWER**

*Altamaha Electric Membership Corporation*

Altamaha EMC has a three phase distribution line the entire length of this project. The line is almost exclusively on the east side of State Route 4 (US 1) and is within the existing right of way. Therefore there should be no eligible reimbursement for Altamaha's facilities.

**CABLE TELEVISION**

*Northland Cable Television*

Northland Cable Television has facilities underbuilt on Altamaha Electric Membership's pole line. These facilities are on the existing right of way and should not be eligible for reimbursement.

**TELEPHONE**

*BellSouth Telecommunications, Inc.*

BellSouth Telecommunications, Inc. has buried facilities (copper and fiber cable) the entire length of this project. These facilities are located on both the east and west side of State Route 4 (US 1) within the existing right of way and should not be eligible for reimbursement. BellSouth has a remote terminal located in the northwest quadrant of the intersection of State Route 4 (US 1) and Mixon Road. Warren Geitgey, BellSouth Telecommunications, Inc. advised that he could find no evidence of BellSouth having an easement for this location. Therefore, this facility should not be eligible for reimbursement.

Page Two

Utility Cost Estimate – NH-038-1 (40) – Emanuel County- P.I. No. 222630

There should be no eligible utility relocation cost for this project for either alternate "A" or "B".

Please be advised that this is an estimate and may be revised when project plans are developed.

If you should have questions, please contact me at 478-552-4637.

JFH

cc: Jeff Baker

Herman Griffin

# NOTICE OF LOCATION AND DESIGN APPROVAL

## NH-038-1(40) EMANUEL COUNTY P. I. NUMBER 222630

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of the above project.

The date of location approval was MAY 29, 2001  
Date of Approval

This project proposes to widen and reconstruct SR 4/US 1 Business from the Swainsboro Bypass to County Road 382 (Injunction Road). The proposed typical section will consist of 2-12' lanes in each direction throughout the project with a 44' depressed median and 10' grass shoulders from the Swainsboro Bypass to County Road 471 (Mixon Road). A 14' flush median with curb & gutter and sidewalk will be constructed from County Road 471 (Mixon Road) to County Road 382 (Injunction Road).

Drawings of the proposed project are on file and are available for inspection at the Georgia Department of Transportation, 801 Fourth Street, Tennille, GA, telephone (912)552-4629.

Any written request in reference to this Notice should include the Project and PI numbers as noted at the top of this Notice and may be referred to:

DAVID O. GRIFFITH  
PRECONSTRUCTION ENGINEER  
P.O. BOX 8  
TENNILLE, GA 31089  
(912)552-4629

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

*District 2 - Design Office*

Project Number: NH-038-1(40)

County: Emanuel

P. I. Number: 222630

Federal Route Number: 1 Business

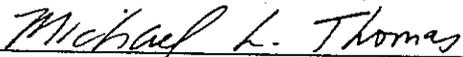
State Route Number: 4 Business

Recommendation for approval:

DATE 4/19/01

  
Project Manager

DATE 4/19/01

  
Office Head/District Engineer *DOB.*

The 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 \_\_\_\_\_

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

DATE \_\_\_\_\_

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

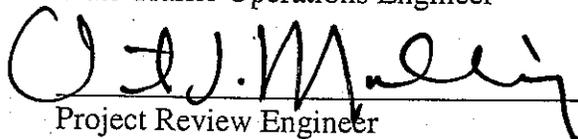
DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE 5/1/01

  
Project Review Engineer

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

*District 2 - Design Office*

Project Number: NH-038-1(40)

County: Emanuel

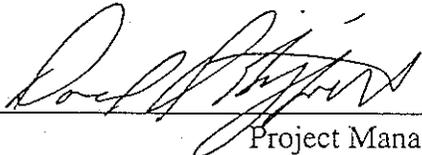
P. I. Number: 222630

Federal Route Number: 1 Business

State Route Number: 4 Business

Recommendation for approval:

DATE 4/19/01

  
\_\_\_\_\_  
Project Manager

DATE 4/19/01

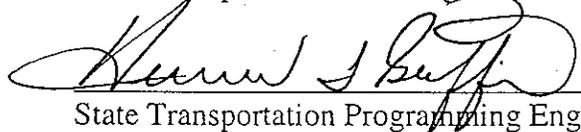
  
\_\_\_\_\_  
Office Head/District Engineer *DOB*

The 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 \_\_\_\_\_

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

DATE 4/24/01

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

FILE: P.I. No. 222630

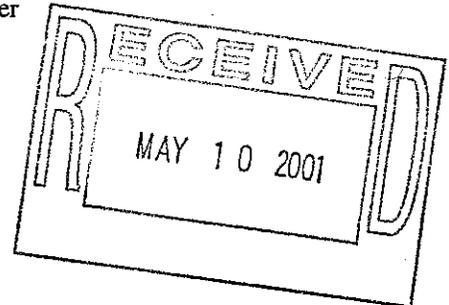
OFFICE: Environment/Location

DATE: May 8, 2001

FROM: *HDK*  
Harvey D. Keeper, State Environmental/Location Engineer

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

SUBJECT: **PROJECT CONCEPT REPORT**  
NH-038-1(40), EMANUEL COUNTY



The above subject concept report has been reviewed. Page 9 indicates that the level of environmental analysis is a Categorical Exclusion but should read Categorical Exclusion anticipated. Page 8 says that a Public Hearing is required, but Categorical Exclusions do not require public hearings. Concept report should state a Public Hearing or PIM will need to be held, if this is the case, and state the reason.

If you have any questions, please let me know.

HDK/rtt

Attachment

cc: David Mulling  
George Brewer

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

*District 2 - Design Office*

Project Number: NH-038-1(40)

County: Emanuel

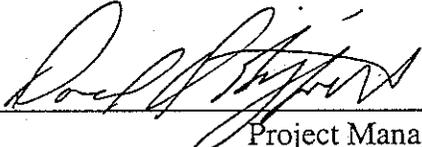
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Federal Route Number: 1 Business

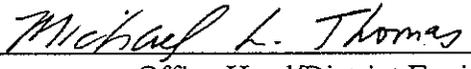
State Route Number: 4 Business

Recommendation for approval:

DATE 4/19/01

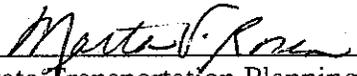
  
\_\_\_\_\_  
Project Manager

DATE 4/19/01

  
\_\_\_\_\_  
Office Head/District Engineer *D.O.B.*

The 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 5/14/01

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

*District 2 - Design Office*

Project Number: NH-038-1(40)

County: Emanuel

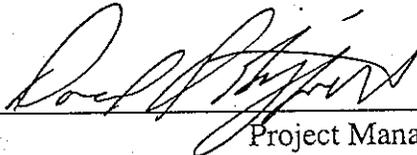
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Federal Route Number: 1 Business

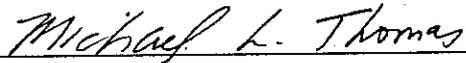
State Route Number: 4 Business

Recommendation for approval:

DATE 4/19/01

  
Project Manager

DATE 4/19/01

  
Office Head/District Engineer

The 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 \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE 4/27/01

  
State Traffic Operations Engineer

DATE \_\_\_\_\_

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

Department of Transportation  
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE

File: NH-038-1(40)/Emanuel County  
P.I. No. 222630

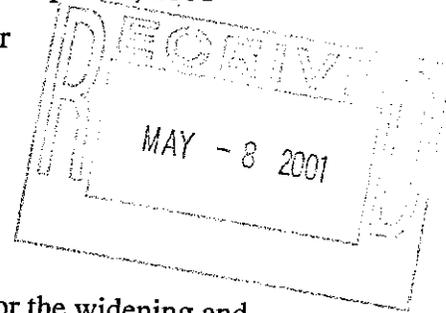
Office: Traffic Operations  
Atlanta, Georgia

Date: April 27, 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 above referenced concept report for the widening and reconstruction of SR 4/US 1 Business from the Swainsboro Bypass to the existing 5-lane section at Injunction Road. The project length is 2 miles.

SR 4 is currently a 2-lane roadway with 12-foot lanes. The concept proposes to widen SR 4 to a 4-lane roadway with a 44-foot depressed median from the Swainsboro Bypass to Mixon Road (CR 471). This section of roadway will have 10-foot shoulders (4-foot paved) and a design speed of 55 mph.

The proposed typical section from Mixon Road (CR 471) to Injunction Road (CR 382) is 4 12-foot lanes with a 14-foot flush median. This section will include sidewalks with curb and gutter and a design speed of 45 mph.

We believe this concept will improve safety and traffic operations within this area, therefore find this report satisfactory for approval.

MGW/BM

Attachment (signature page)

Cc: Harvey Keepler, Environmental Location Office  
Mike Thomas, District Engineer-Tennille  
Attention: George Brewer, District Design Engineer  
Attention: Roger Price, District Traffic Engineer  
David Mulling, Engineering Services, w/ attachment  
Marta Rosen, Planning Office  
Chuck Hasty, TMC  
General Files

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

*District 2 - Design Office*

Project Number: NH-038-1(40)

County: Emanuel

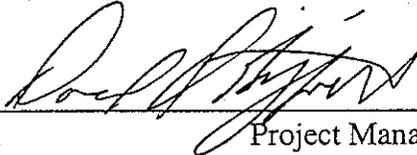
P. I. Number: 222630

Federal Route Number: 1 Business

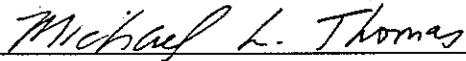
State Route Number: 4 Business

Recommendation for approval:

DATE 4/19/01

  
\_\_\_\_\_  
Project Manager

DATE 4/19/01

  
\_\_\_\_\_  
Office Head/District Engineer

The 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).

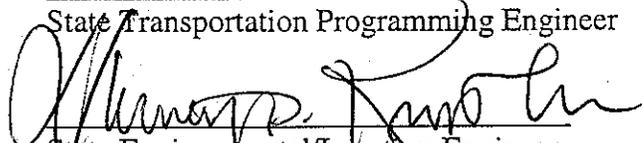
DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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

DATE 05/08/01

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

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