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DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(44) Morgan County
P. I. No. 222570

OFFICE Preconstruction

DATE January 10, 2001

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:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Marion Waters
Marta Rosen
Jimmy Chambers (ATTN: Ted Cashin)
Mike Thomas

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: EDS-441(44)
P.I. No.: 222570
Morgan County

OFFICE: Environment/Location

DATE: December 7, 2000

RECEIVED
DEC - 8 2000

Harvey D. Keepler / DKP

FROM: Harvey D. Keepler, State Environment/Location Engineer

TO: Tom Turner, P.E., Director of Preconstruction

SUBJECT: **Revised Project Concept Report** – Widening & Reconstruction of US 441/SR 24

Approved Concept

Project EDS-441(44) is the proposed improvement to the existing US441/SR24. This project proposes to widen the existing roadway from 2 and 3 lanes to 4 with a 44 foot grassed median and a 20 foot raised median. The project begins at the Putnam-Morgan County line and extends north 8.6 miles to Industrial Park Road (CR225). At its beginning, the project holds the existing pavement left, widening the right side. Just past Halls Lane (CR126), the concept continues to widen on the right side holding the existing R/W on the left side, to avoid a historic boundary. The project keeps the same concept until Hill Top Road (CR204), where the alignment changes to the left side and holds existing R/W right to avoid the "Tucker family graves", a historic monument. Approximately 2200' south of Pierce Dairy Road (CR121), the concept begins transitioning to a 20' raised median and ties into the existing 5 lane section. The project ends at Industrial Park Road (CR225).

Revised Concept

It is recommended that the northern termini be revised from Industrial Park Road (CR225) to approximately 250 feet north of Pierce Dairy Road (CR121), approximately 1,000 feet before the intersection with I-20. This shift removes the I-20 intersection, which is to be designed as a separate project. The total project length changes from 8.6 miles to 8.1 miles.

It is recommended that the typical section be changed from a 20 foot raised median to a 14 foot flush median approximately 2400' south of Pierce Dairy Road (CR121). This concept continues to the end of the project.

Estimated Cost:	Proposed (2000) 8.1 miles	Approved (1997) 8.6 miles	Prog. Date
Construction (incl.E&C + infl.)	$ 16,867,000	$ 13,725,000	LR
Right-of-way	$ 4,796,500	$ 1,150,000	2004
Utilities	To be requested	$ 711,000	

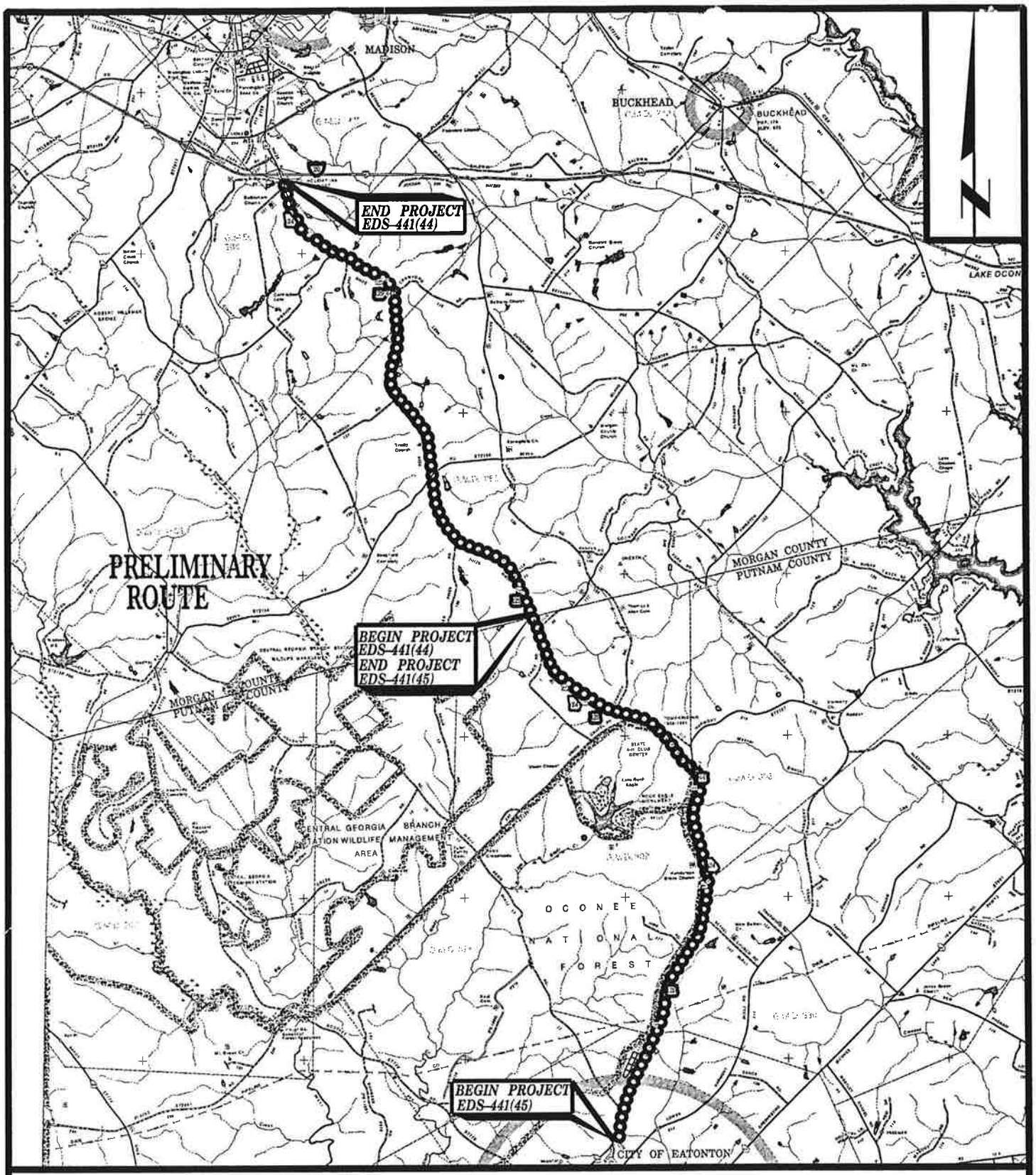
Recommendation: It is recommended that the proposed revision to the concept be approved for implementation.

Concur: _____
Tom Turner, P.E.
Director of Preconstruction

Approve: _____
Frank L. Danchetz, P.E.
Chief Engineer

HDK/DRP

Attachments: Sketch Map
Construction Cost Estimate



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SCALE IN MILES

LOCATION

STRIPMAP

EDS-441(45)(44)
S.R. 24 IMPROVEMENTS
PUTNAM /MORGAN COUNTIES
P.I.# 222580 & 222570

SOURCE: GENERAL HIGHWAY MAP, PUTNAMMORGAN CO., GEORGIA
PREPARED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION, 1994

PRELIMINARY COST ESTIMATE

Office of Environment/Location

December 7, 2000

County(s) Morgan

PI Number 222570 **Project Number** EDS-441(44)

Project Name Widening & Reconstruction of US 441/SR 24 **Project Length** 8.1 **Miles**

Project Description

This project is the widening and reconstruction of US 441/SR 24 from the Putnam-Morgan County line to Industrial Park Road/CR 225.

Existing Roadway

2 and 3 x 12 ft. lanes with open ditch drainage

Comments

TRAFFIC:

Current Design Year 2001 **Daily Volume (AADT)** 23,800

Future Design Year 2021 **Daily Volume (AADT)** 40,450

[X] **Concept Estimate** [ ] **Feasibility Estimate**

Typical Section(s) Used in Estimate	Typical Section Length	
Rural New Location: 4-Lanes with 44 ft Divided Median	6.6	Miles
Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	1.0	Miles
Rural Widening: 2 To 4-Lanes with 14 ft Flush Median	.5	Miles
		Miles
		Miles
		Miles

Prepared By Dave Peters

Typical Section

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

Typical Section Length 6.6 **Miles** **Right-of-Way Width** 250 **Feet**

GRADING AND DRAINAGE

	QUANTITY		UNIT COST	TOTAL
1. EARTHWORK				
a. Unclassified Excavation Soil	280,000	CY	2.50	700,000
b. Unclassified Excavation Rock	28000	CY	10.00	280,000
c. Borrow Excavation		CY	3.72	
2. MINOR DRAINAGE	6.6	MI	101,000	667,000
GRADING AND DRAINAGE SUBTOTAL				$1,647,000

BASE AND PAVING

	THICKNESS AND SPREAD RATE	QUANTITY		UNIT COST	TOTAL
1. GRADED AGGREGATE BASE	12"	142,180	TN	13.05	1,855,000
2. ASPHALT PAVING					
a. Asph Conc 9.5 mm Superpave	1 1/2" (165 LB/SY)	19,166	TN	34.55	662,000
b. Asph Conc 19 mm Superpave	3" (330 LB/SY)	38,333	TN	34.54	1,324,000
c. Asph Conc 25 mm Superpave	4" (440 LB/SY)	40,888	TN	34.62	1,416,000
d. Bituminous Tack Coat		22,082	GL	0.82	18,000
3. CONCRETE PAVING					
a. Curb and Gutter		0	LF	9.39	0
b. Miscellaneous		0	MI	42,000	0
4. OTHER PAVING					528,000
BASE AND PAVING SUBTOTAL					$5,803,000

LUMP ITEMS

	QUANTITY		UNIT COST	TOTAL
1. TRAFFIC CONTROL	6.6	MI	41,000	271,000
2. CLEARING AND GRUBBING	200	AC	6,000	1,200,000
3. LANDSCAPING	6.6	MI	80,002	528,000
4. EROSION CONTROL	6.6	MI	97,000	640,000
5. SIGNING/STRIPING	6.6	MI	19,321	128,000
6. OTHER	6.6	MI	96,000	634,000
LUMP ITEM SUBTOTAL				$3,401,000

MISCELLANEOUS

	QUANTITY		UNIT COST	TOTAL
1. GUARDRAIL		LF	10.11	0
a. GUARDRAIL ANCHORS		EA	435.59	0
2. DETOURS		MI	300,000.00	0
MISCELLANEOUS SUBTOTAL				$0

SPECIAL FEATURES

Side Road tie-ins	$ 908,000

Typical Section

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

Typical Section Length 1.0 **Miles** **Right-of-Way Width** 250 **Feet**

GRADING AND DRAINAGE

	QUANTITY		UNIT COST	TOTAL
1. EARTHWORK				
a. Unclassified Excavation Soil	52,000	CY	2.50	130,000
b. Unclassified Excavation Rock	5000	CY	10.00	50,000
c. Borrow Excavation		CY	3.72	
2. MINOR DRAINAGE	1.0	MI	100,927	101,000
GRADING AND DRAINAGE SUBTOTAL				$281,000

BASE AND PAVING

	THICKNESS AND SPREAD RATE	QUANTITY		UNIT COST	TOTAL
1. GRADED AGGREGATE BASE	12"	10,771	TN	13.05	141,000
2. ASPHALT PAVING					
a. Asph Conc 9.5 mm Superpave	1 1/2" (165 LB/SY)	2,904	TN	34.55	100,000
b. Asph Conc 19 mm Superpave	3" (330 LB/SY)	5,808	TN	34.54	201,000
c. Asph Conc 25 mm Superpave	4" (440 LB/SY)	3,098	TN	34.62	107,000
d. Bituminous Tack Coat		2,651	GL	0.82	2,000
3. CONCRETE PAVING					
a. Curb and Gutter		0	LF	9.39	0
b. Miscellaneous		0	MI	28,410	0
4. OTHER PAVING					55,000
BASE AND PAVING SUBTOTAL					$606,000

LUMP ITEMS

	QUANTITY		UNIT COST	TOTAL
1. TRAFFIC CONTROL	1.0	MI	88,000	88,000
2. CLEARING AND GRUBBING	30	AC	6,000	182,000
3. LANDSCAPING	1.0	MI	40,527	41,000
4. EROSION CONTROL	1.0	MI	99,000	99,000
5. SIGNING/STRIPING	1.0	MI	17,594	18,000
6. OTHER	1.0	MI	110,500	111,000
LUMP ITEM SUBTOTAL				$539,000

Typical Section

Rural Widening: 2 To 4-Lanes with 14 ft Flush Median

Typical Section Length .5 **Miles** **Right-of-Way Width** 150 **Feet**

GRADING AND DRAINAGE

	QUANTITY		UNIT COST	TOTAL
1. EARTHWORK				
a. Unclassified Excavation Soil	20,000	CY	2.50	50,000
b. Unclassified Excavation Rock	2000	CY	10.00	20,000
c. Borrow Excavation		CY	3.72	
2. MINOR DRAINAGE	.5	MI	60,363	30,000
GRADING AND DRAINAGE SUBTOTAL				$100,000

BASE AND PAVING

	THICKNESS AND SPREAD RATE	QUANTITY		UNIT COST	TOTAL
1. GRADED AGGREGATE BASE	12"	8,342	TN	13.05	109,000
2. ASPHALT PAVING					
a. Asph Conc 9.5 mm Superpave	1 1/2" (165 LB/SY)	1,694	TN	34.55	59,000
b. Asph Conc 19 mm Superpave	3" (330 LB/SY)	3,388	TN	34.54	117,000
c. Asph Conc 25 mm Superpave	4" (440 LB/SY)	2,452	TN	34.62	85,000
d. Bituminous Tack Coat		1,691	GL	0.82	1,000
3. CONCRETE PAVING					
a. Curb and Gutter		0	LF	9.39	0
b. Miscellaneous		5	MI	8,824	44,000
4. OTHER PAVING					42,000
BASE AND PAVING SUBTOTAL					$457,000

LUMP ITEMS

	QUANTITY		UNIT COST	TOTAL
1. TRAFFIC CONTROL	.5	MI	59,304	30,000
2. CLEARING AND GRUBBING	9	AC	6,000	55,000
3. LANDSCAPING	.5	MI	18,472	9,000
4. EROSION CONTROL	.5	MI	66,394	33,000
5. SIGNING/STRIPING	.5	MI	27,666	14,000
6. OTHER	.5	MI	49,624	25,000
LUMP ITEM SUBTOTAL				$166,000

ESTIMATE SUMMARY

Typical Section	Section Cost (per mile)
1. Rural New Location: 4-Lanes with 44 ft Divided Median	$1,644,000
2. Rural Widening: 2 To 4-Lanes with 44 ft Divided Median	$1,426,000
3. Rural Widening: 2 To 4-Lanes with 14 ft Flush Median	$1,446,000

PROJECT COST

A. MAJOR STRUCTURES	
B. GRADING AND DRAINAGE	$2,028,000
C. BASE AND PAVING	$6,866,000
D. LUMP ITEMS	$4,106,000
E. MISCELLANEOUS	
F. SPECIAL FEATURES	$908,000
SUBTOTAL CONSTRUCTION COST	$13,908,000
E. & C. (10%)	$1,391,000
INFLATION 2 yrs @ 5 % per yr	$1,568,148
GRAND TOTAL CONSTRUCTION COST	$16,867,000

PROJECT NUMBER/COUNTY: EDS-441 (44) MORGAN

P. I. NUMBER: 222570

This project concept is contained in the Transportation Improvement Program (TIP) and/or in the State Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the TIP and/or the STIP.

Martin F. Rose

STATE TRANSPORTATION PLANNING ADMINISTRATOR

DATE: 12/18/00