G.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(28) Rabun County
P.I. No. 122090

OFFICE Preconstruction

DATE FEbruary 4, 1992

FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL - US 441/IMPROVEMENTS

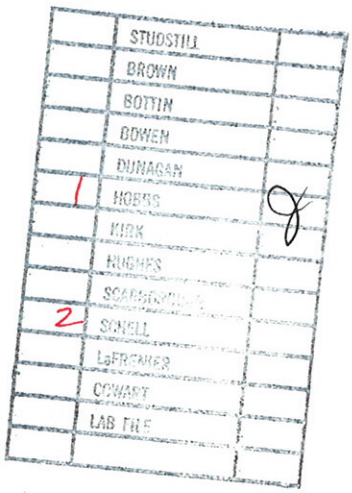
Attached for your files is the approval for subject project.

CWH/se

Attachment

DISTRIBUTION:

John Lively
Robert E. Humphrey
David Studstill
Herman Griffin
Roland Hinners
Darrell Elwell
Winn Guthrie
Kirby Hamil
Hugh Tyner



D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(28) Rabun County
P.I. No. 122090

OFFICE Preconstruction

DATE January 29, 1992

FROM Hoyt J. Lively, Director of Preconstruction

TO Wayne Shackelford, Commissioner

SUBJECT US 441/IMPROVEMENTS - PROJECT CONCEPT REPORT

This project is the widening of a 7.4 mile section of SR 15/US 441 to provide a multilane facility from the Clayton North City Limits northerly to the North Carolina State Line. The existing road has variable typical sections with 3 lanes rural; 4 lanes urban; 4 lanes rural; 5 lanes rural (under construction); back to 4 lanes urban and 3 lane rural with limits of each section described in the concept report. Posted speeds are 55 MPH outside Clayton, Mountain City and Dillard and 45 MPH inside the above cities. The bridge at Little Tennessee River is being constructed to a curb-to-curb width of 82' to accommodate a 5 lane rural section now under construction under Project MAFR-055-2(26). There is also a bridge at Betty Creek in Dillard with dimensions of 52'x120' with a sufficiency rating of 74.2. Base year and design year traffic is 9,200 - 18,500 VPD (1996) and 14,800 - 30,000 VPD (2016).

The proposed project will widen the existing road, including the 5 lane now under construction, to have 4-12' lanes (2 each direction) with a 20' raised median. A rural section will be used with 10' shoulders (4' paved) from Clayton N. City Limits to Mountain City S. City Limits; from .6 mile inside Mountain City N. City Limits to Dillard S. City Limits and from Dillard N. City Limits to the end of project at the North Carolina State Line. An urban section will be used through Mountain City and Dillard. Widening will be symmetrical and non-symmetrical appropriately to minimize property impacts. Although the concept report proposed an 88' c. to c. bridge at Little Tennessee River, the 82' c. to c. width now under construction will be retained with a design variance being required. The bridge at Betty Creek will be widened to 88' c. to c. to accommodate the rural section as described above. From beginning of project to Mountain City N. City Limits, and thru Dillard, the design speed will be 45 MPH with the remaining portion of the project having a 55 MPH design speed. Traffic will be maintained on existing road during construction. Environmental considerations are: (1) displacement of 4 residences and 9 businesses; (2) COE 404 with 3.0(±) acres of wetlands; (3) eight possible UST sites; (4) a public hearing will be held. An alternate was considered using a flush median but was eliminated due to design year high volume traffic of 30,000 VPD.

EDS-441(28) Rabun County

The estimated cost of the project is:

	PROPOSED	APPROVED	PROG. DATE
Constr(Infl&E/C)	$10,851,000	$6,169,000	11/94
Right-of-way	$ 3,236,000	$1,112,000	
Utilities	LGPA*	LGPA*	

*LGPA on hold for construction

I recommend that we approve this project concept report for implementation and proceed to a public hearing.

HJL/WLP/se

Attachment

CONCUR: G. C. Lewis
G. C. Lewis, State Highway Engineer

APPROVED: Wayne Shackelford
Wayne Shackelford, Commissioner

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
JAN 23 1992

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441 (28) Rabun County
P.I. No. 122090
US 441/SR 15 Improvements 7.4 Miles

OFFICE Atlanta, Georgia

DATE January 23, 1992

FROM Robert E. Humphrey, Project Review Engineer REH

TO Hoyt J. Lively, Jr., Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

We have reviewed the attached Concept Report for this Major project.

We have received signed cover sheets from the following offices:

Bridge Design

District Engineer

This report is satisfactory for approval.

The estimated costs of this project are as follows:

Construction	$8,968,000
Inflation (5% per year) x 2 yrs.	896,800
E & C (10%)	986,480
Preliminary Engineering (5%)	448,400
Right of Way	3,236,000
Utilities	LGPA

BDM/jmf

Attachments

c: David Studstill

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441 (28)
Rabun County
P.I. No. 122090

OFFICE Atlanta, Ga.

DATE January 27, 1992

FROM Ron Colvin, P.E., State Traffic & Safety Engineer

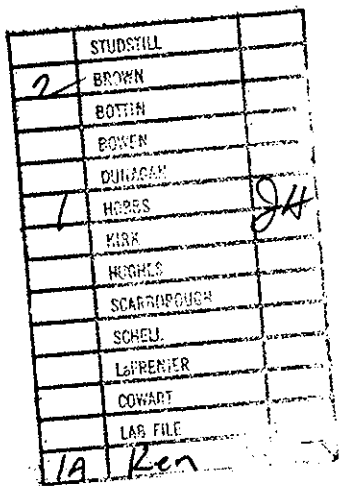
TO Robert E. Humphrey, P.E., Project Review Engineer

SUBJECT **Project Concept Report Review**

We have reviewed the concept report on the above project for the proposed widening of S.R. 15/U.S. 441 from Clayton to the North Carolina state line. The existing three and four lane sections will be widened to four lanes with a 20 ft. raised median. We believe this concept will improve safety and operational capacity along this roadway. In addressing the proposal to lower the existing speed limit between Clayton and Mountain City from 55 MPH. to 45 MPH., we believe the low accident rates in this area would not indicate a need for lowering the speed limit. We, therefore, recommend requesting a design variance for the areas that are below a 55 MPH. speed design rather than the reduction in the speed limit for this entire section of roadway.

With this, we find this report satisfactory for approval.

RC:CKE:lw
Attachment (signature page)
cc: David Studstill; Hugh Tyner; Wendell Hester



D.O.T. 66

Ken

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441 (28) Rabun County
P.I. No. 122090
US 441/SR 15 Improvements 7.4 Miles

OFFICE Atlanta, Georgia

DATE January 23, 1992

FROM Robert E. Humphrey, Project Review Engineer REH Bon

TO Hoyt J. Lively, Jr., Director of Preconstruction

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E & C (10%)	986,480
Preliminary Engineering (5%)	448,400
Right of Way	3,236,000
Utilities	LGPA

BDM/jmf

Attachments

c: David Studstill

	STUDSTILL	
	BROWN	
	BOTTIN	
	BOWEN	
	DURAGAN	
1	HOBBS	✓
	KIRK	✓
	HUGHES	
	SCARBOROUGH	
2	SCHELL	
	WILSON	
	COWART	
	LAB FILE	

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS 441 (28), Rabun County
P.I. No. 122090

OFFICE Gainesville

DATE January 15, 1992

FROM Hugh L. Tyner, P.E., District Engineer

TO Robert Humphrey, Project Review Engineer, Atlanta

SUBJECT Concept Report - US 441 Improvements in Rabun County

This is to advise this office has reviewed the proposed concept report to widen US 441/SR 15 from the Clayton North City Limits to the North Carolina State Line to a 4-lane divided roadway with a 20' raised median. The proposed widening to meet a 45 mile per hour speed design and will shift from side to side to minimize right of way and construction costs.

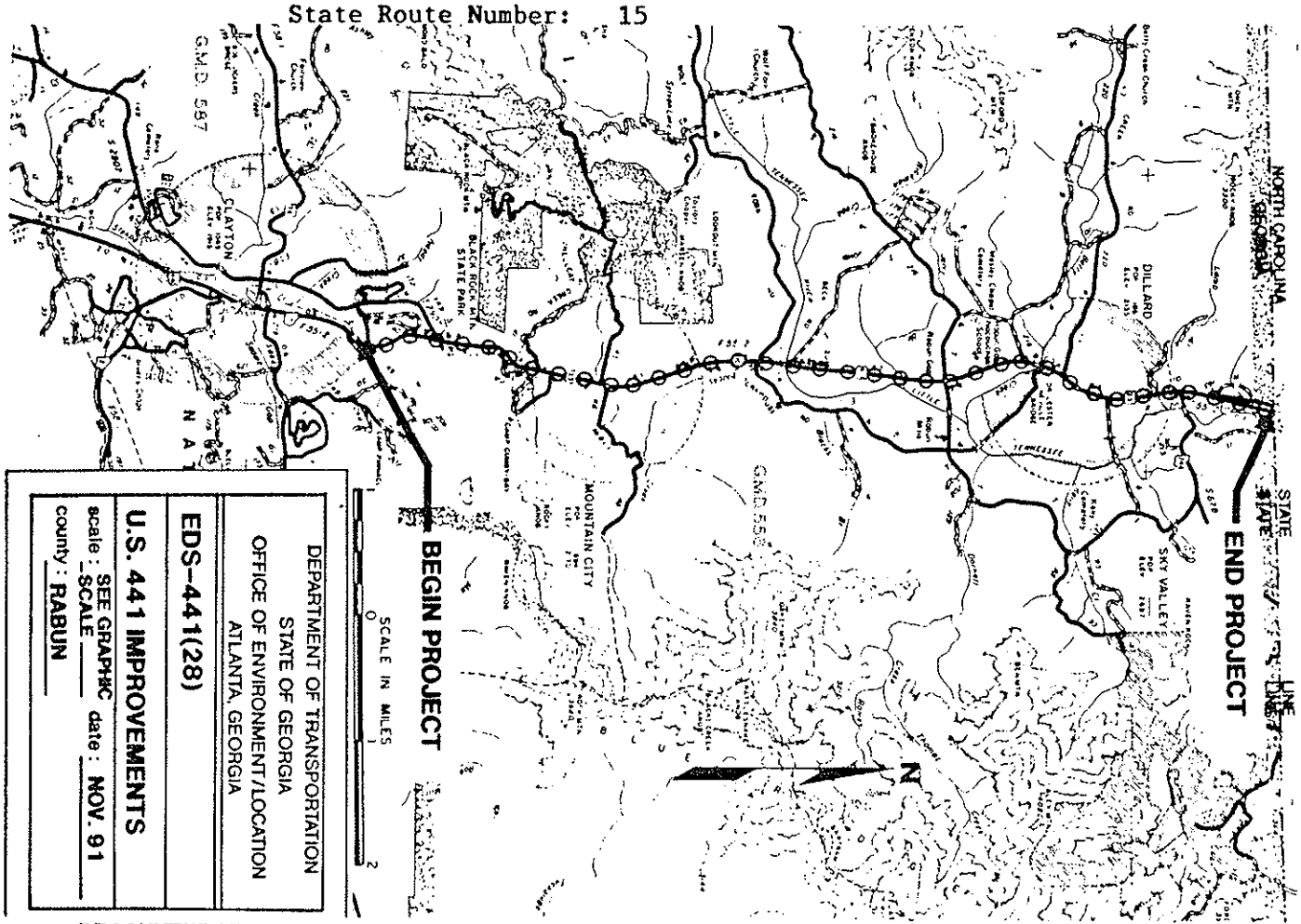
With the exception of the symmetrical widening through Dillard, this office concurs in this concept. A symmetrical widening through Dillard will have severe impacts on the entire business section. Although less severe, this will also be the situation in widening through Mountain City. You might want to do a feasibility study considering right of way cost and construction cost to determine the most cost-effective method (left side, right side, symmetrical widening) to widen through both cities. Otherwise, we recommend this report for approval.

HLT:jm
Attachment

OFFICE OF ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT

Project Number: EDS-441(28)
County: Rabun
P.I. Number: 122090
Federal Route Number: F 55 - 2
State Route Number: 15



RECOMMENDATION FOR APPROVAL:

12/18/91
DATE

STATE ENVIRONMENTAL/LOCATION ENGINEER

DATE

STATE ROAD AND AIRPORT DESIGN ENGINEER

DATE

STATE TRAFFIC AND SAFETY ENGINEER

DATE

STATE BRIDGE DESIGN ENGINEER

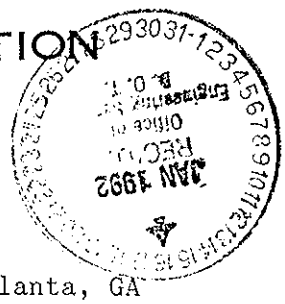
1-15-92
DATE

DISTRICT ENGINEER/GAINESVILLE

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE EDS-441(28) RABUN

OFFICE Atlanta, GA

DATE January 13, 1992

FROM Paul V. Liles, Jr., State Bridge Engineer

TO Robert Humphrey, Project Review Engineer, Engineering Services

SUBJECT CONCEPT REPORT

The attached concept report covers US 441 from the City of Clayton to the North Carolina State line. It also mentions that the existing bridge over the Little Tennessee River is currently 64 ft. wide and is to be widened to 88 ft. Please note that we currently have a project under construction in the area of the Little Tennessee River that was let in October, 1990. This earlier project is part of the EDS system and is in the process of widening the bridge to 82 ft. Please resolve this discrepancy.

PVL:jym

attachments

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(28), Rabun County
P.I. Nos. 122090

OFFICE Environment/Location

DATE DECEMBER 23, 1991 ~~August 16, 1991~~

DES

FROM David E. Studstill, P.E., State Environmental/Location Engineer

TO Robert Humphrey, Project Review Engineer

SUBJECT Concept Report - U.S. 441 Improvements in Rabun County

In accordance with the Plan Development Process, the concept report for the above project is attached for your review and processing.

DES/KET

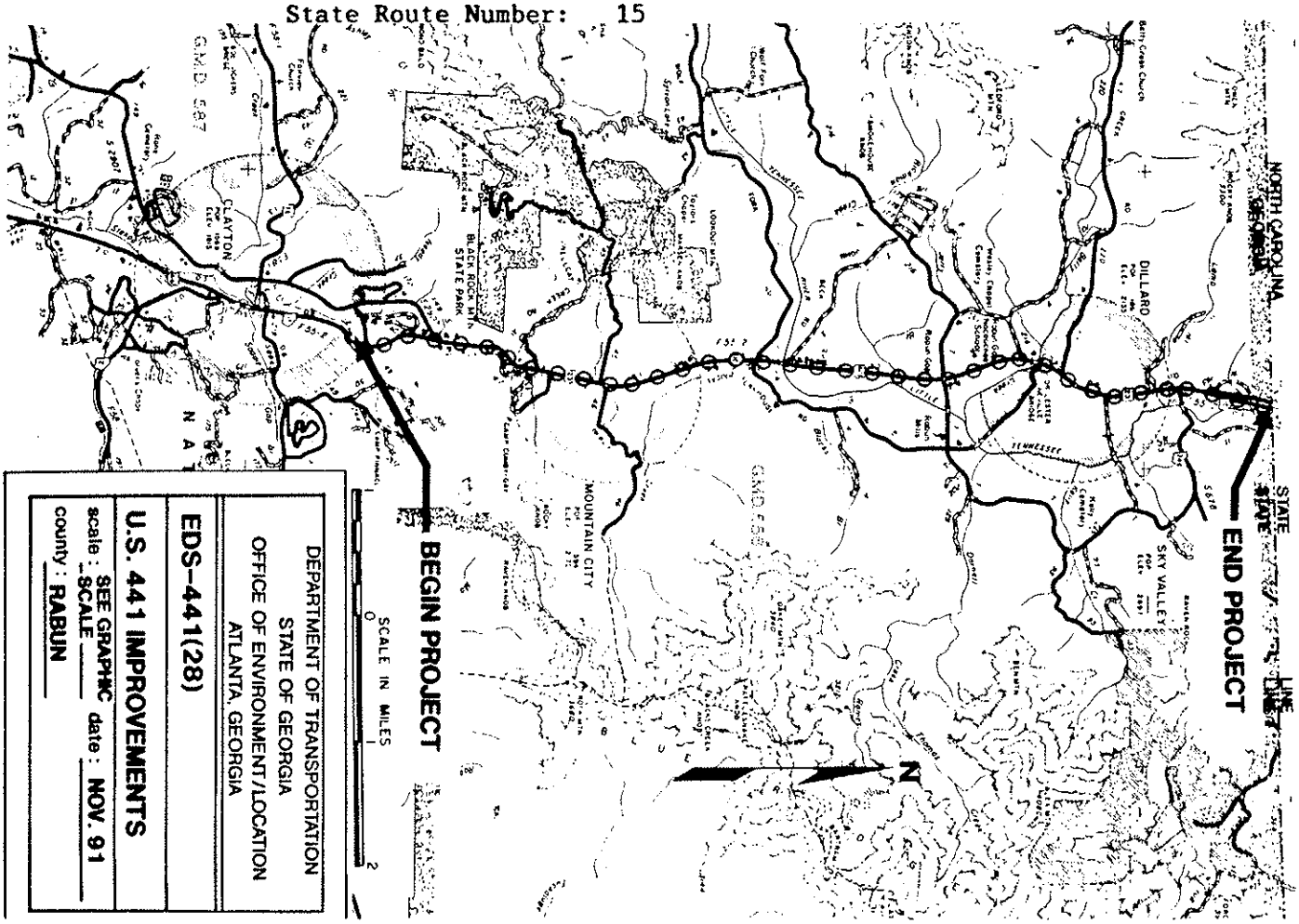
Attachment

cc: C. Wayne Hutto
Roland Hinners
Ronald Colvin
Paul Liles
Hugh Tyner/Gainesville Distrtict

OFFICE OF ENVIRONMENT/LOCATION

PROJECT CONCEPT REPORT

Project Number: EDS-441(28)
County: Rabun
P.I. Number: 122090
Federal Route Number: F 55 - 2
State Route Number: 15



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ENVIRONMENT/LOCATION
ATLANTA, GEORGIA

EDS-441(28)

U.S. 441 IMPROVEMENTS

scale : SEE GRAPHIC SCALE date : NOV. 91

county : RABUN

RECOMMENDATION FOR APPROVAL:

DATE 12/18/91 — STATE ENVIRONMENTAL/LOCATION ENGINEER

DATE — STATE ROAD AND AIRPORT DESIGN ENGINEER

DATE — STATE TRAFFIC AND SAFETY ENGINEER

DATE — STATE BRIDGE DESIGN ENGINEER

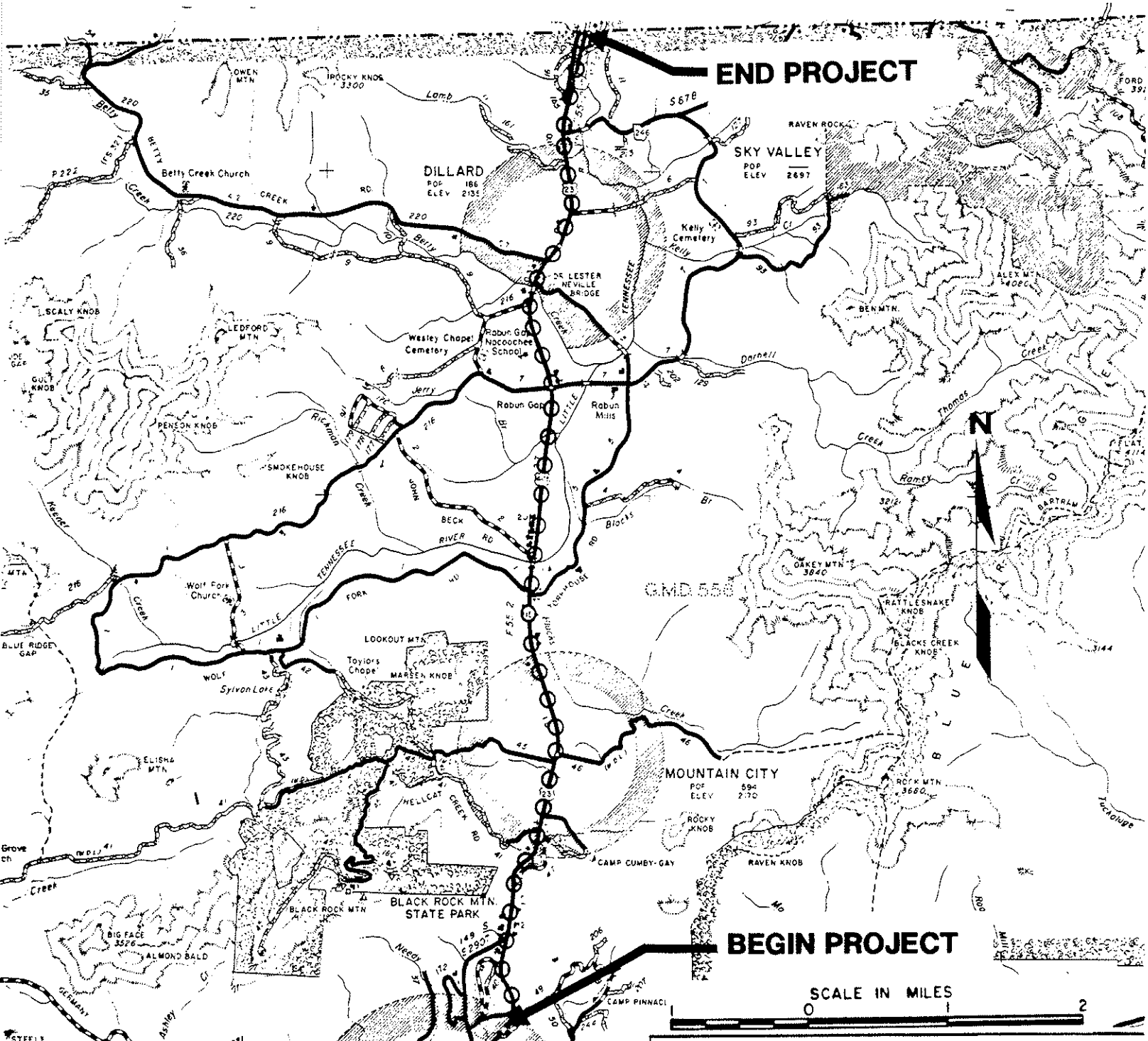
DATE — DISTRICT ENGINEER/GAINESVILLE

EDS-441(28), RABUN COUNTY
U.S. 441 IMPROVEMENTS
PROJECT DESCRIPTION

Project EDS-441(28), Rabun County is proposed to improve U.S. 441/S.R. 15, from C.S. 500/Clayburn Rd., just inside the Clayton north city limits, northward to the North Carolina state line. U.S. 441 is planned to be widened to have four lanes with a 20 ft. raised median throughout the limits of the project. From the beginning of the project to a point, approximately 0.5 mile north of Clayton, U.S. 441 would be widened on the east side with open ditch drainage on a minimum R/W of 150 feet. At that point, the widening would shift and U.S. 441 would be widened on the west side to the south city limits of Mountain City. From the city limits to Johnson Ave., northward approximately one mile, the widening would shift back to the east side with curb and gutter on a minimum R/W of 95 ft. At Johnson Ave., the proposed widening would become symmetrical with open ditch drainage on a minimum R/W of 134 ft., northward to the south city limits of Dillard. From that point to C.R. 6/Greenwood Rd., U.S. 441 would be widened symmetrically with curb and gutter on a minimum R/W of 100 ft., then shift to west side widening with open ditches on 144 ft. minimum R/W to the end of the project.

The speed limit inside the city limits of Clayton, Mountain City, and Dillard is posted at 45 MPH. However, the section of roadway between Clayton and Mountain City has a posted speed limit of 55 MPH with a vertical and horizontal alignment that is substandard for a 55 MPH speed design. It is recommended that the design speed between the two towns be 45 MPH in order to retain the existing pavement. This will require reducing the speed limit for the 1.1 mile section from 55 MPH to 45 MPH. The proposed speed design for this project would then be 45 MPH inside the cities of Clayton, Mountain City, and Dillard and 55 MPH outside those cities, except for the 1.1 mile stretch between Clayton and Mountain City where the proposed speed design is 45 MPH. Access would be by permit. The total length of this project is 7.4 miles.

U.S. 441 IMPROVEMENTS



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF ENVIRONMENT/LOCATION
ATLANTA, GEORGIA

EDS-441(28)

U.S. 441 IMPROVEMENTS

scale : SEE GRAPHIC SCALE date : NOV. 91

county : RABUN

PROJECT CONCEPT REPORT

DATE: DECEMBER 03, 1991

PROJECT NUMBER: EDS-441(28) **COUNTY:** RABUN

PROJECT NAME: U.S. 441 IMPROVEMENTS

P.I. NUMBER: 122090 **U.S. ROUTE NO:** 441 **STATE ROUTE NO:** 15

LOCATION

FROM C.S. 500/CLAYBURN RD., JUST INSIDE THE NORTH CITY LIMITS OF CLAYTON, NORTHWARD TO THE NORTH CAROLINA STATE LINE. LENGTH = 7.4 MILES

TRAFFIC

CURRENT		PROJECTED	
YEAR	AADT	YEAR	AADT
1996	9200 - 18,500	2016	14,800 - 30,000

PDP CLASSIFICATION: MAJOR; CONSTRUCTION ALONG EXISTING ROADWAY

FUNCTIONAL CLASSIFICATION: RURAL AND URBAN ARTERIAL

EXISTING TYPICAL SECTION

[1]FROM CLAYTON TO MTN. CITY: 3 LANES W/OPEN DITCHES AND VARIABLE 4'-8' GRASSED SHOULDERS ON VARIABLE 105' - 270' R/W; [2]FROM THE SOUTH CITY LIMITS OF MTN. CITY TO JOHNSON AVE., APPROX. 0.6 MI. INSIDE THE NORTH CITY LIMITS OF MTN. CITY: 4 LANES W/CURB & GUTTER ON 70' R/W; [3]FROM JOHNSON AVE. TO THE CITY OF DILLARD: 4 LANES W/OPEN DITCHES AND VARIABLE 4'-8' GRASSED SHOULDERS ON VARIABLE 124'-175' R/W; APPROX. 40% OF THIS SECTION IS CURRENTLY UNDER CONSTRUCTION TO BE WIDENED TO 5 LANES WITH OPEN DITCHES, WITHIN THE EXISTING R/W; [4]FROM THE SOUTH CITY LIMITS OF DILLARD TO C.R. 6/GREENWOOD RD.: 4 LANES W/CURB & GUTTER ON 80' R/W; [5]FROM C.R. 6/GREENWOOD RD. TO THE NORTH CAROLINA STATE LINE: 3 LANES W/OPEN DITCHES AND VARIABLE 4'-8' GRASSED SHOULDERS ON VARIABLE 112'-145' R/W.

POSTED SPEED	MAX EXIST DEGREE OF CURVE	MAX EXIST GRADE
55 MPH(OUTSIDE CLAYTON, MTN. CTY., DILLARD)	7°00'	5.7%
45 MPH (INSIDE CLAYTON, MTN. CTY., DILLARD)	4°00'	5.7%

PROJECT CONCEPT REPORT

PROJECT NUMBER: EDS-441(28), RABUN COUNTY

EXISTING MAJOR STRUCTURES

P. RTG.	S. RTG	FEATURES INTERSECTED	LENGTH	HORIZ. CLRNCE
00000	79.6	LITTLE TENNESSEE RIVER	92.0′	64.0′
01516	74.2	BETTY CREEK	120.0′	51.7′

PROJECT NEED: U.S. 441 IS THE PRIMARY NORTH-SOUTH CORRIDOR IN NORTHEAST GEORGIA AND IT IS A MAJOR TOURIST ROUTE THROUGH THE GREAT SMOKEY AND BLUE RIDGE MOUNTAINS. THE PROPOSED WIDENING AND CONSTRUCTION OF A MEDIAN WOULD ELIMINATE CONGESTION AND ENHANCE THE TRAFFIC FLOW, WHILE IMPROVING THE OPERATIONAL CHARACTERISTICS AND SAFETY ALONG U.S. 441.

PROPOSED TYPICAL SECTION

(1) 4 LANES WITH A 20 FT. RAISED MEDIAN AND OPEN DITCH DRAINAGE ON A MINIMUM R/W THAT WOULD VARY FROM 134 FT. TO 150 FT.: FROM CLAYTON TO THE MTN. CITY S. CITY LIMITS; FROM JOHNSON AVE., APPROX. 0.6 MI. INSIDE THE MTN. CITY N. CITY LIMITS, TO THE DILLARD S. CITY LIMITS; FROM C.R. 6/GREENWOOD RD., APPROX. 0.5 MI. INSIDE THE DILLARD N. CITY LIMITS, TO THE N.C. STATE LINE. **(2)** 4 LANES WITH A 20 FT. RAISED MEDIAN AND CURB & GUTTER ON A MINIMUM R/W THAT WOULD VARY FROM 95 FT. TO 100 FT.: FROM THE MTN. CITY S. CITY LIMITS TO JOHNSON AVE.; FROM THE DILLARD S. CITY LIMITS TO C.R. 6/GREENWOOD RD.

DESIGN SPEED	MAX. CURVE	MAX. GRADE
45 MPH: FROM CLAYTON TO THE NORTH CITY LIMITS OF MTN. CITY AND THROUGH THE TOWN OF DILLARD.	**ALLOWABLE:** 9° 30′ **PROPOSED:** 7° 00′	**ALLOWABLE:** 6.5% **PROPOSED:** 5.7%
55 MPH: FROM THE MTN. CTY. N. CITY LIMITS TO THE DILLARD S. CITY LIMITS AND FROM THE DILLARD N. CITY LIMITS TO THE N.C. STATE LINE.	**ALLOWABLE:** 6° 00′ **PROPOSED:** 4° 00′	**ALLOWABLE:** 4.5% **PROPOSED:** 3.5%

MAJOR STRUCTURES: **(1)** WIDEN THE EXISTING BRIDGE OVER LITTLE TENNESSEE RIVER; **(2)** WIDEN THE EXISTING BRIDGE OVER BETTY CREEK. EACH STRUCTURE IS PROPOSED TO HAVE A HORIZONTAL CLEARANCE (FACE OF BARRIER TO FACE OF BARRIER) OF 88.0′.

TYPE ACCESS: BY PERMIT ALONG EXISTING ROADWAY

TRAFFIC CONTROL DURING CONSTRUCTION: TRAFFIC WOULD BE MAINTAINED ON EXISTING ROADS.

PROJECT CONCEPT REPORT

PROJECT NUMBER: EDS-441(28), RABUN COUNTY

ESTIMATED COST:

CONSTRUCTION: $ 8,968,000

E&C (10%): 897,000

INFLATION: 1,009,000

2 YEARS AT 5% PER YEAR

TOTAL CONST. COST: $ 10,874,000

RIGHT-OF-WAY: $ 3,236,000

ACQUIRED BY: GA D.O.T.

UTILITIES: LGPA TO BE REQUESTED

ADJUSTED BY: NOT KNOWN AT THIS TIME

DISPLACEMENTS: 9-BUSINESSES, 4-RESIDENCES

LEVEL OF ENVIRONMENTAL ANALYSIS: ENVIRONMENTAL ASSESSMENT

LEVEL OF PUBLIC INVOLVEMENT: PUBLIC HEARING

TIME SAVING PROCEDURES APPROPRIATE: NO

DESIGN VARIATIONS REQUIRED: SINCE THE SPEED LIMIT IS POSTED AS 45 MPH IN THE TOWNS OF CLAYTON AND MTN. CITY, IT IS RECOMMENDED THAT THE POSTED SPEED LIMIT BETWEEN CLAYTON AND MTN. CITY BE LOWERED FROM 55 MPH TO 45 MPH IN ORDER TO RETAIN THE EXISTING VERTICAL AND HORIZONTAL ALIGNMENT OF THAT 1.1 MILE STRETCH OF ROADWAY.

OTHER PROJECTS IN AREA: EDS-441(27), RABUN COUNTY; FR-055-2(26), RABUN COUNTY; PPL-15(151), RABUN COUNTY; R-2103, MACON COUNTY, NORTH CAROLINA

CONCEPT TEAM MEETING DATE: OCTOBER 1, 1991

PERMITS REQUIRED: COE 404; APPROX. 3.0 ACRES OF WETLANDS

UNDERGROUND STORAGE TANKS: THERE ARE 8 POSSIBLE U.S.T. SITES LOCATED ALONG THIS PROJECT

HAZARDOUS WASTE SITES: NONE KNOWN AT THIS TIME

OTHER ALTERNATES CONSIDERED: A FLUSH MEDIAN TYPICAL WAS STUDIED, BUT RULED OUT BECAUSE PROJECTED TRAFFIC VOLUMES OVER 20,000 ADT.

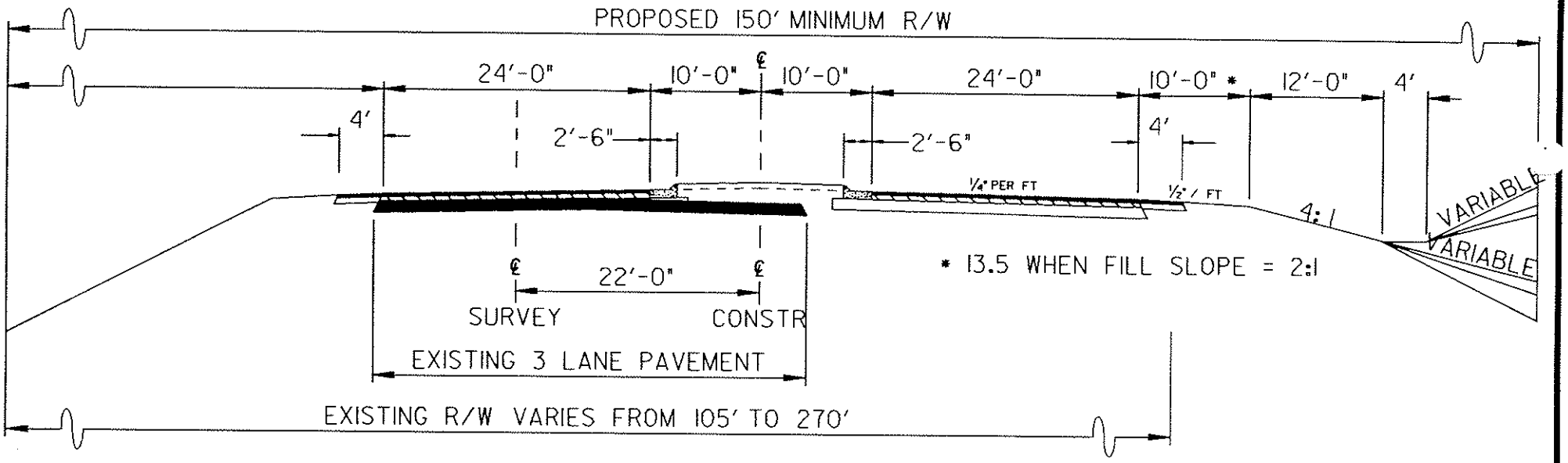
COMMENTS:

FOR A DETAILED PROJECT DESCRIPTION, SEE ATTACHED PROJECT DESCRIPTION.

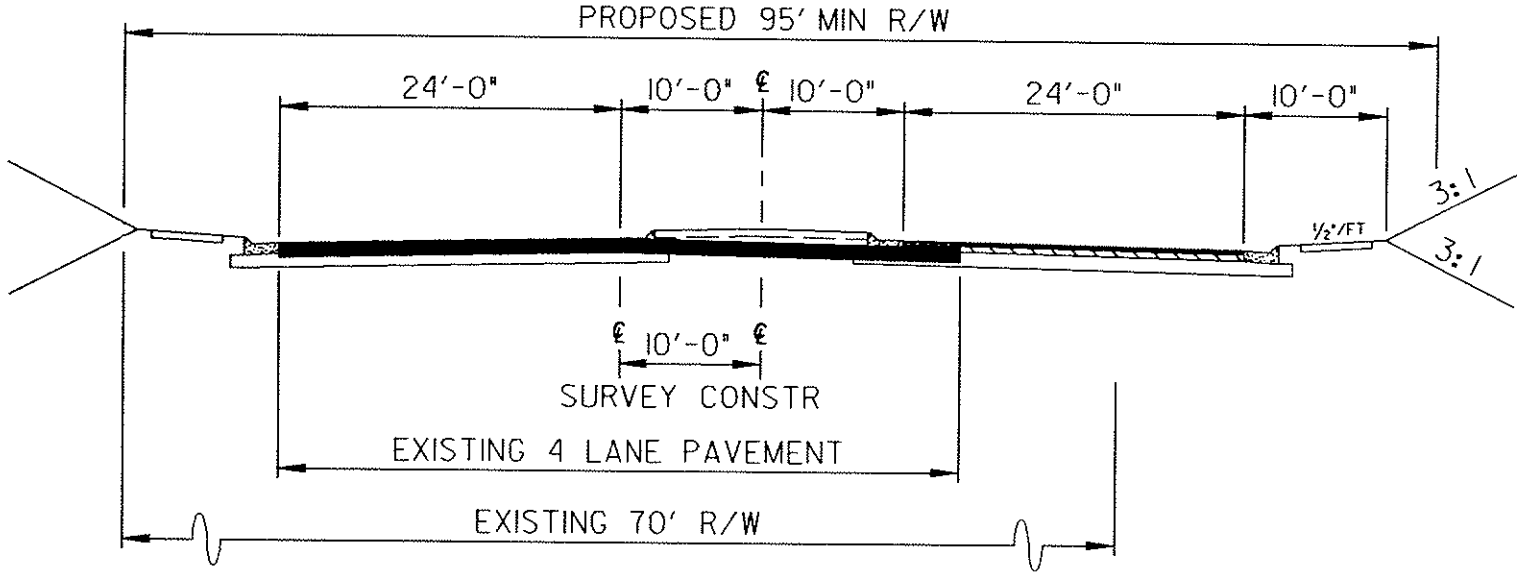
ATTACHMENTS: TYPICAL SECTIONS

COST ESTIMATE

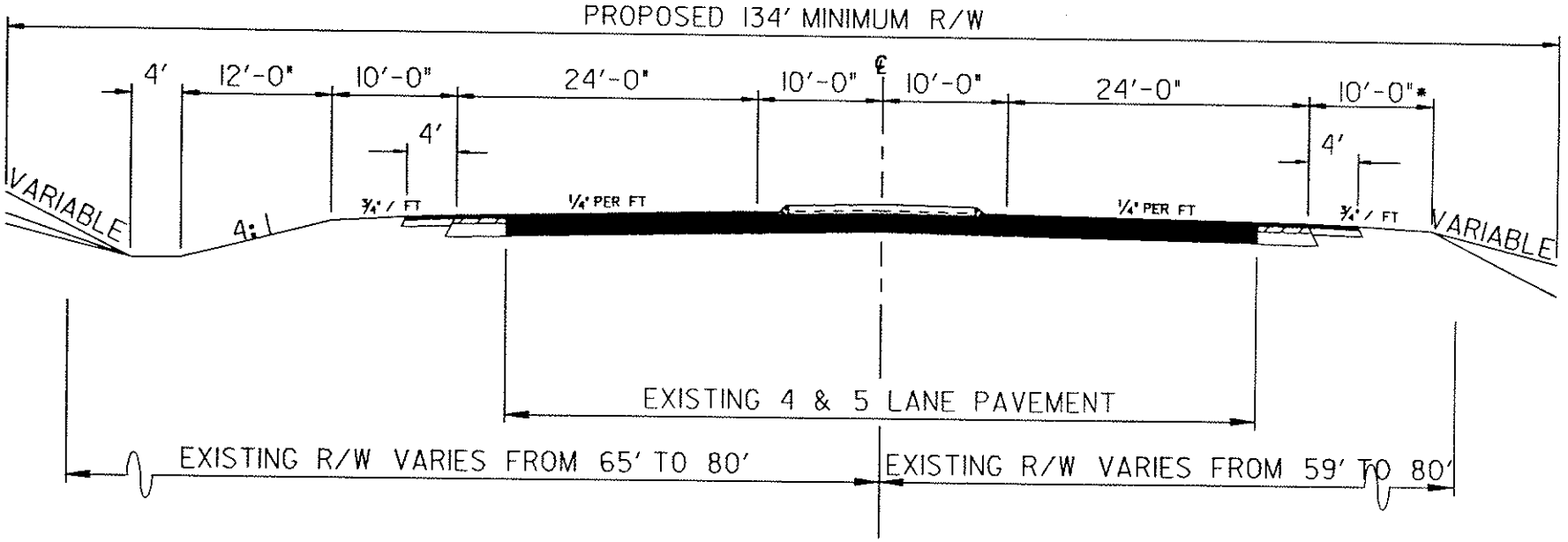
CONCEPT TEAM MEETING MINUTES



TYPICAL CROSS SECTION, #1
EDS-441(28), RABUN COUNTY
FROM C.S. 500/CLAYBORN RD
TO THE SOUTH CITY LIMITS OF MOUNTAIN CITY

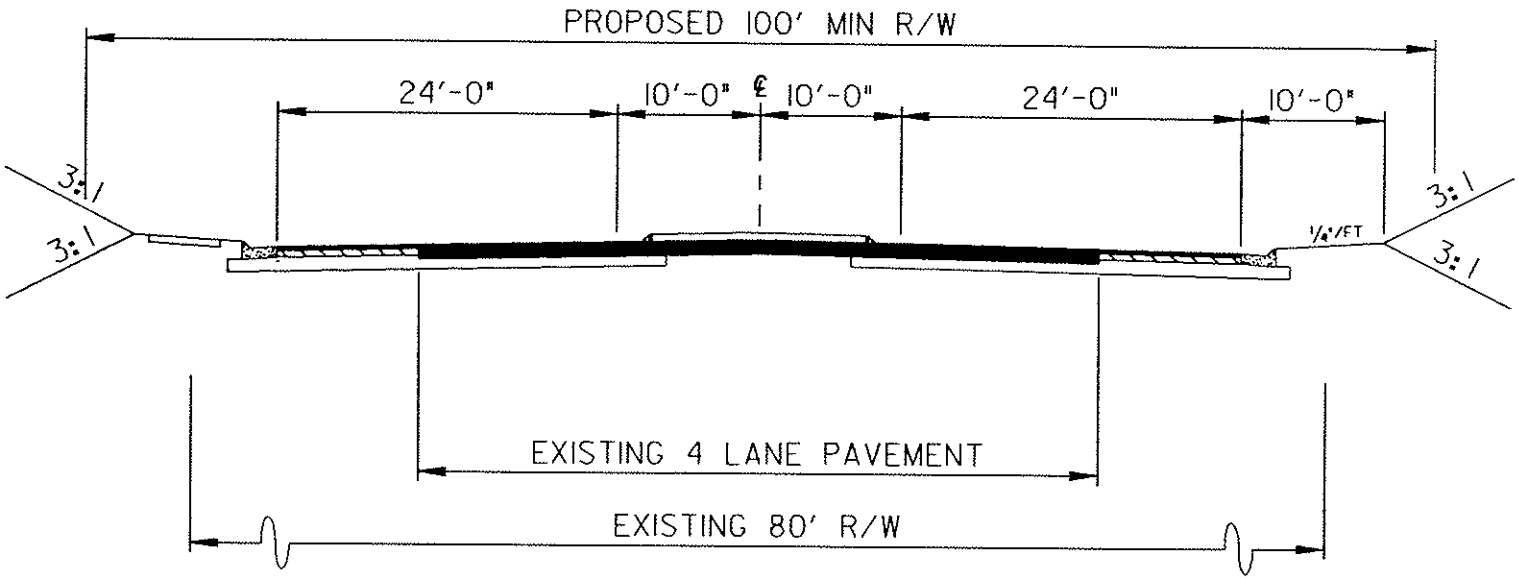


TYPICAL CROSS SECTION, #2
EDS-441(28), RABUN COUNTY
FROM THE SOUTH CITY LIMITS OF MOUNTAIN CITY
TO JOHNSON AVE., JUST INSIDE THE NORTH CITY LIMTS OF MOUNTAIN CITY

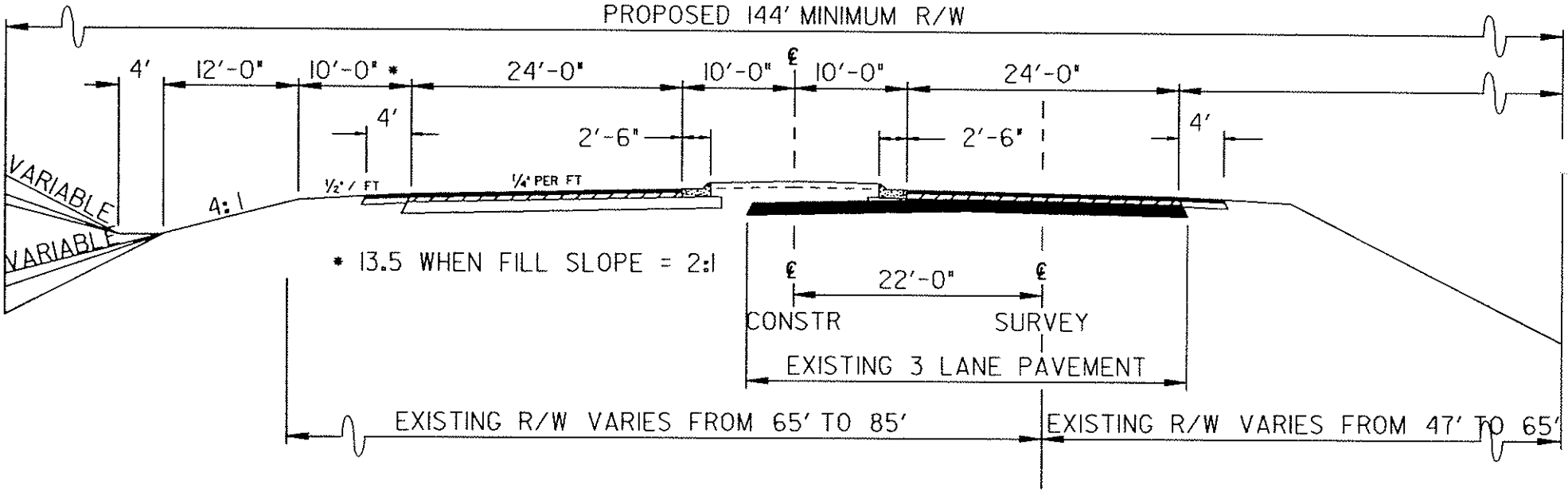


* 13.5 WHEN FILL SLOPE = 2:1

TYPICAL CROSS SECTION, #3
EDS-441(28), RABUN COUNTY
FROM JOHNSON AVE., JUST INSIDE THE NORTH CITY LIMITS OF MOUNTAIN CITY
TO THE SOUTH CITY LIMITS OF DILLARD



TYPICAL CROSS SECTION, #4
EDS-44I(28), RABUN COUNTY
FROM THE SOUTH CITY LIMITS OF DILLARD
TO C.R. 6 /GREENWOOD RD



TYPICAL CROSS SECTION, #5
EDS-441(28), RABUN COUNTY
FROM C.R. 6/GREENWOOD RD
TO THE N.C. STATE LINE

PRELIMINARY COST ESTIMATE

DATE NOVEMBER 22, 1991

PROJECT NO. EDS-441(28), RABUN

P.I. NO. 122090

PROJECT DESCRIPTION U.S. 441 IMPROVEMENTS: FROM CLAYTON TO THE N.C. STATE LINE IN RABUN COUNTY.

TOTAL LENGTH - 7.4 MILES

PROPOSED CONCEPT 4 LANES W/20 FT. RAISED MEDIAN; URBAN AND RURAL TYPICAL SECTIONS

EXISTING ROADWAY (IF APPLICABLE) VARIES FROM 3 LNS. RURAL TO 5 LNS. URBAN AND RURAL

TRAFFIC: EXISTING 1996 ADT VARIES 9200 - 18,500 DESIGN 2016 ADT VARIES 14,800 - 30,000

( ) PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT ( ) DURING PROJECT DEVELOPMENT

PROJECT COSTS

A.	**RIGHT OF WAY**	
	1. PROPERTY (LAND AND EASEMENTS)	$ 660,000
	2. DISPLACEMENTS	$ 1,200,000
	4 - RESIDENCES; 9 - BUSINESSES	
	3. OTHER COSTS	$ 1,376,000
	SUBTOTAL	**$ 3,236,000**
B.	**REIMBURSABLE UTILITIES**	
	1. RAILROAD	$
	2. TRANSMISSION LINES	$
	3. SERVICES	$
	SUBTOTAL	$ LGPA TO BE REQUESTED
C.	**MAJOR STRUCTURES**	
	1. WALLS	$
	2. BRIDGE STREAM CROSSINGS	$ 555,000
	WIDEN BRIDGES OVER LITTLE TENNESSEE RIVER AND BETTY CREEK	
	3. BRIDGE OVER/UNDERPASS	$
	4. BOX CULVERTS	$
	SUBTOTAL	**$ 555,000**

D.	**GRADING AND DRAINAGE**	
	1. EARTHWORK	$ 637,000
	261,000 CY U.E.; 29,000 CY ROCK	
	2. DRAINAGE	
	a. CROSS DRAIN PIPES (EXCL. BOX CULVERTS)	$
	THIS ITEM IS INCLUDED IN LONGITUDINAL SYSTEM	
	b. CURB AND GUTTER	$ 758,000
	c. LONGITUDINAL SYSTEM (INCL. CATCH BASINS)	$ 406,000
	SUBTOTAL	**$ 1,801,000**
E.	**BASE AND PAVING**	
	1. AGGREGATE BASE	$ 782,000
	74,273 T - 10.00 IN.	
	2. ASPHALT PAVING	$ 3,081,000
	110,840 T - 1.50 IN. "E"; 2.50 IN. "B"; 8.00 IN. ASPHALTIC CONCRETE BASE	
	3. CONCRETE PAVING	$ 611,000
	2386 CY - MEDIAN PAVEMENT OVER 1.22 MI. OF EXISTING 5 LANES	
	4. OTHER	$ 384,000
	SUBTOTAL	**$ 4,858,000**
F.	**LUMP ITEMS**	
	1. TRAFFIC CONTROL	$ 192,000
	2. CLEARING AND GRUBBING	$ 488,000
	103 ACRES	
	3. LANDSCAPING	$ 161,000
	4. EROSION CONTROL	$ 190,000
	5. DETOURS (INCL. TEMP. BRIDGES)	$
	SUBTOTAL	**$ 1,031,000**
G.	**MISCELLANEOUS**	
	1. LIGHTING	$
	2. SIGNING - STRIPING	$ 259,000
	3. GUARDRAIL	$ 57,000
	4. OTHER	$ 407,000
	SUBTOTAL	$ 723,000
H.	**SPECIAL FEATURES**	$ - 0 -

ESTIMATE SUMMARY

A.	RIGHT OF WAY	$ 3,236,000
B.	REIMBURSABLE UTILITIES	$ _____ (LGPA TO BE REQUESTED)

CONSTRUCTION COST SUMMARY

C.	MAJOR STRUCTURES	$ 555,000
D.	GRADING AND DRAINAGE	$ 1,801,000
E.	BASE AND PAVING	$ 4,858,000
F.	LUMP ITEMS	$ 1,031,000
G.	MISCELLANEOUS	$ 723,000
H.	SPECIAL FEATURES	$ - 0 -

	SUBTOTAL CONSTRUCTION COST	$ 8,968,000
	E & C (10%)	$ 897,000
	INFLATION (5% PER YEAR)	$ 1,009,000 (2 YEARS)
	TOTAL CONSTRUCTION COST	$ 10,874,000

GRAND TOTAL PROJECT COST $ 14,110,000

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE EDS-441(28), Rabun County
P.I. No. 122090

OFFICE Environment/Location

DATE November 22, 1991

FROM KET
Kenneth E. Thompson, T.E. III

TO Distribution Below

SUBJECT **CONCEPT TEAM MEETING MINUTES** - U.S. 441/S.R. 15 Improvements

A concept team meeting for the proposed U.S. 441 Improvement project, from the city of Clayton to the North Carolina state line, was held October 1, 1991 at the aerial lab conference room. Those in attendance were as follows: N.C. York, City of Clayton; C.R. Pennington, Mayor of Dillard; Sue B. Pennington, City of Dillard; Richard Godfrey, Johnny B. Ramey and Jim Bleckley of the Rabun County Board of Commissioners; Lyn Cash, Georgia Power Company; Richard Marchman, Rabun Cablevision; John Bishop and Jim Graybeal of Road Design; Ken Estes, Traffic & Safety; Guy Gaskin, Planning; Robert Sammons, Right-of-Way; Charles Whitworth of the Gainesville District Office; Jerry Hobbs, Bascombe Hughes, Harvey Keepler, Jack Burnside and myself of Environment/Location.

Project EDS-441(28), Rabun County is proposed to improve U.S. 441/S.R. 15, from C.S. 500/Clayburn Rd., just inside the Clayton north city limits, northward to the North Carolina state line. U.S. 441 is planned to be widened to have four lanes with a 20 ft. raised median throughout the limits of the project. From the beginning of the project to the south city limits of Mountain City, U.S. 441 would be widened on the west side with open ditch drainage on a minimum R/W of 150 feet. At that point, the widening would shift and U.S. 441 would be widened on the east side with curb and gutter on a minimum R/W of 95 ft. to Johnson Ave., approximately 0.6 miles inside the north city limits of Mountain City. At Johnson Ave., the proposed widening would become symmetrical with open ditch drainage on a minimum R/W of 134 ft. to the south city limits of Dillard. From that point to C.R. 6/Greenwood Rd., U.S. 441 would be widened symmetrically with curb and gutter on a minimum R/W of 100 ft., then shift to west side widening with open ditches on 144 ft. minimum R/W to the end of the project.

The speed limit inside the city limits of Clayton, Mountain City, and Dillard is posted at 45 MPH. However, the section of roadway between Clayton and Mountain City has a posted speed limit of 55 MPH with a vertical and horizontal alignment that is substandard for a 55 MPH speed design. Since this section is only 1.1 miles long, it is recommended that the posted speed limit between the two towns is decreased to 45 MPH to retain the existing pavement. Therefore, the speed design for this project is 45 MPH inside the cities of Clayton, Mountain City, and Dillard and 55 MPH outside those cities, except for the 1.1 mile stretch between Clayton and Mountain City where the speed design is 45 MPH. Access would be by permit. The total length of this project is 7.4 miles.

(Cont'd)

The project was reviewed and the following comments and recommendations were made:

Local Officials

A. Through the town of Dillard, look at one side widening instead of symmetrical widening.

B. Because Mountain City and Dillard are tourist towns, a flush median is preferred over a raised median through those towns.

C. Additional median crossovers are needed at C.R. 2/John Beck Docking Rd. (a lot of traffic to and from the Haynes Mfg. Co.), and in front of the meat packing company, approximately 0.25 miles north of C.R. 2.

Road Design

A. If project becomes federal-aid, there could be problems with the curb and gutter in the median.

B. Research and analyze accident data for the last 3 years to determine if a flush median could possibly be used through Mountain City and Dillard.

Utilities

A. Widening on the east side of U.S. 441 through Mountain City and Dillard, as proposed, would have the least impact on existing utilities.

B. The City of Clayton is replacing a water line from John Beck Docking Rd. northward approximately 1400 ft. If it is placed on the west side of U.S. 441, outside the existing R/W, relocation should not be required when the road is widened.

Gainesville District

A. Because of the amount of cut that would be necessary on the west side, look at widening on the east side at the beginning of the project.

B. There is already a bi-state agreement with North Carolina, which has a project in their program to improve U.S. 441, northward from the Georgia state line.

Schedule

A. Due to all the new construction along U.S. 441, in this area, mapping photography for this project will be flown again this winter.

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