

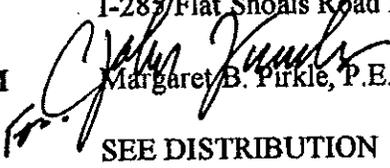
ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-285-1(354) DeKalb County **OFFICE** Preconstruction
P. I. No. 713290
I-285/Flat Shoals Road Interchange **DATE** March 24, 2004

FROM  Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

David Mulling
Harvey Keepler
Jerry Hobbs
Percy Middlebrooks
Michael Henry
Phillip Allen
Joe Palladi (file copy)
Brent Story
Buddy Gratton
BOARD MEMBER
FHWA

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

NOV 13 2003

INTERDEPARTMENT CORRESPONDENCE

FILE IM-NH-285-1(354) Dekalb County OFFICE Atlanta, Georgia
Flat Shoals Road @ I-285 Interchange
P.I. No. 713290 DATE November 12, 2003
FROM *Brent A. Story* msa
Brent A. Story, P. E., State Consultant Design Engineer
TO Meg Pirkle, 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 validation process revealed that due to heavy traffic volumes exiting I-285 onto the eastbound ramp and heavy southbound traffic along Flat Shoals Road in the PM peak hour, there could be a significant problem with backing traffic onto I-285 from the eastbound I-285 exit ramp to Flat Shoals Road in the 2026 design year. To alleviate this problem this office recommends that the approved concept be revised to extend the southbound third lane on Flat Shoals Road, currently proposed to be dropped south of the eastbound ramp terminal, through the intersection of Clifton Springs Road. The extension of the third lane would allow for better traffic progression along Flat Shoals Road and along the eastbound exit ramp.

Also, this office recommends that the proposed typical section along Panthersville Road be changed from a four-lane urban section to a five-lane urban section that has a 14 foot two-way left turn lane and to extend the work along Panthersville Road to its intersection with Clifton Springs Road. This would allow the bridge over I-285 to be stage constructed along the current alignment and minimize the impacts to a new apartment complex that was not present during the original concept development. It is also needed to provide for separate storage for turning vehicles and enhance pedestrian access by connecting new sidewalks to existing sidewalks.

It is also recommended that the typical section along I-285 be revised from a rural interstate type section with open ditches to an urban interstate type section with a paved shoulder, concrete side barrier, and a closed drainage system located along the areas of the retaining and abutment walls.

The cost of the project has been increased due to the following:

1. Increased base, paving and drainage costs.
2. Increased bridge and wall costs.
3. Increased costs due to inflation based on the current let date.

MAR 4 2004

Meg Pirkle
November 12, 2003
Page Two

These cost increases were due mainly to:

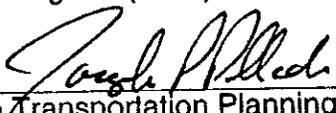
1. Increase in the span length of bridges resulting from future horizontal clearance requirements on I-285.
2. Increase in the project length along Flat Shoals Road and Panthersville Road.
3. Utilization of full depth concrete pavement for the ramps.
4. Underestimated length of retaining walls in the original concept report.

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

^{JDW}
BAS: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: 2/20/04



State Transportation Planning Administrator

cc: David Mulling
Harvey Keepler
Phillip Allen
Joe Palladi
Percy Middlebrooks
Buddy Gratton
Paul Liles

REVISED PROJECT CONCEPT REPORT

Need and Purpose: See attached Need and Purpose.

Project location: The project extends along Flat Shoals Rd. (SR155) from a point south of the Clifton Springs Road intersection (MP 7.05) to a point north of the Panthersville Road/Fairlake Drive intersection (MP 8.06). On I-285, the project extends from a point west of the Panthersville Road Bridge over I-285 (MP 48.81) to a point east of the I-285 bridge over Shoal Creek (MP 47.86).

Description of the approved concept: This roadway project consists of the improvement of the I-285/ Flat Shoals Road Interchange in Dekalb County to a compressed diamond configuration. The proposed concept recommends the construction of a new bridge over I-285 on Flat Shoals Road to provide three through lanes in each direction and for dual left turn lanes onto both entrance ramps. In addition, the report recommends widening and lengthening the exit ramps between I-285 and Flat Shoals Road to provide dual left-turn lanes and dual right-turn lanes onto Flat Shoals Road. The report recommends widening the entrance ramps to three lanes at Flat Shoals Road tapering back to one lane before tying into I-285. The report also recommends widening Flat Shoals Road to provide for a raised median and additional turn lanes and replacement of the bridge on Panthersville Road over I-285.

PDP Classification: Major X Minor _____

Federal Oversight: Full Oversight (X), Exempt(), State Funded(), or Other ()

Functional Classification: Urban Minor Arterial (Flat Shoals Road)
Urban Interstate (I-285)
Urban Minor Arterial (Panthersville Road.)

U. S. Route Number(s): State Route Number(s): S.R. 155

Traffic (AADT) as shown in the approved concept:

Flat Shoals Rd		
South of I-285	Current Year: (2006) 30,565	Design Year: (2026) 45,985
North of I-285	Current Year: (2006) 40,075	Design Year: (2026) 59,580
I-285		
East of Flat Shoals Road	Current Year: (2006) 147,210	Design Year: (2026) 214,135
West of Flat Shoals Road	Current Year: (2006) 140,805	Design Year: (2026) 212,000

Proposed features to be revised:

1. Extend the proposed southbound third through lane along Flat Shoals Road from south of Flat Shoals Bridge through the intersection at Clifton Springs Road.
2. Revise the typical section on Panthersville Road from a four lane urban section to a five lane urban section with a 14 foot center two-way left turn lane (TWLTL). Curb and gutter will be constructed at a width to allow for a future 20 foot raised median.
3. Revise the shoulder along I-285 in the area of the proposed retaining walls from a rural interstate type shoulder and ditch to an urban interstate type shoulder with a closed drainage system.
4. Revise the ramp typical sections to utilize concrete pavement on all new ramps in lieu of asphalt.

Describe the revised feature(s) to be approved: The extension of the southbound third through lane to a point beyond the intersection of Clifton Springs Road is needed to improve storage capacity and traffic progression along Flat Shoals Road and to alleviate a potential back-up problem with traffic backing out onto I-285 in the future. This segment is projected to be heavily congested due high traffic volumes. The extension of the southbound through lane would reduce the congestion on the eastbound I-285 exit ramp onto Flat Shoals Road and allow for improved traffic flow for the extreme heavy southbound PM traffic movement. A free flow right turn lane from the eastbound exit ramp to southbound Flat Shoals Road is recommended for the future and will be considered in the revised design.

A new apartment complex was recently constructed which conflicts with the current concept of relocating Panthersville Road to the east and maintaining four lanes of traffic during construction. The revised five lane (TWLTL) concept addresses the need for storage and refuge for turning vehicles as well as allows staged construction for the bridge over I-285 along its current alignment. By stage constructing the Panthersville Road bridge, it would minimize impacts to the new apartment complex as well as minimize impacts to the historic property south of the apartment complex. The 14 foot wide center two-way left turn lane would provide safer access to Georgia Regional Hospital, GBI Headquarters, and apartment complexes that are currently located along Panthersville Road.

The approved concept report called for a rural ditch with full clear zone requirements along I-285 in all areas including those areas in front of the proposed retaining walls and bridge abutments. The revised concept calls for an urban interstate type paved shoulder (14 ft.) with a concrete side barrier located along the face of the retaining walls and bridge abutment walls. An interstate type closed drainage system will also be utilized in lieu of a rural ditch section throughout the areas of the retaining and abutment walls. This change will reduce the length of the Flat Shoals Road bridge and Panthersville Road bridge and reduce right of way impacts along I-285.

The original concept called for full depth asphalt pavement for the new ramps. The revised concept calls for full depth concrete pavement for the ramps and the ramp terminal areas along Flat Shoals Road.

Updated traffic data (AADT):

Flat Shoals Road		
South of I-285	Current Year: (2006) 30,565	Design Year: (2026) 41,168
North of I-285	Current Year: (2006) 30,980	Design Year: (2026) 41,725
I-285		
East of Flat Shoals Road	Current Year: (2006) 147,210	Design Year: (2026) 214,135
West of Flat Shoals Road	Current Year: (2006) 140,805	Design Year: (2026) 212,000

Programmed/Schedule:

P.E. 2004 R/W: 2005 Construction: 2007

Revised cost estimates:

- | | |
|---|--------------|
| 1. Construction cost including inflation and E&C, | \$21,751,809 |
| 2. Right-of-way, and | \$7,120,760 |
| 3. Utilities | \$189,000 |

Is the project located in a Non-attainment area? Yes No.

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

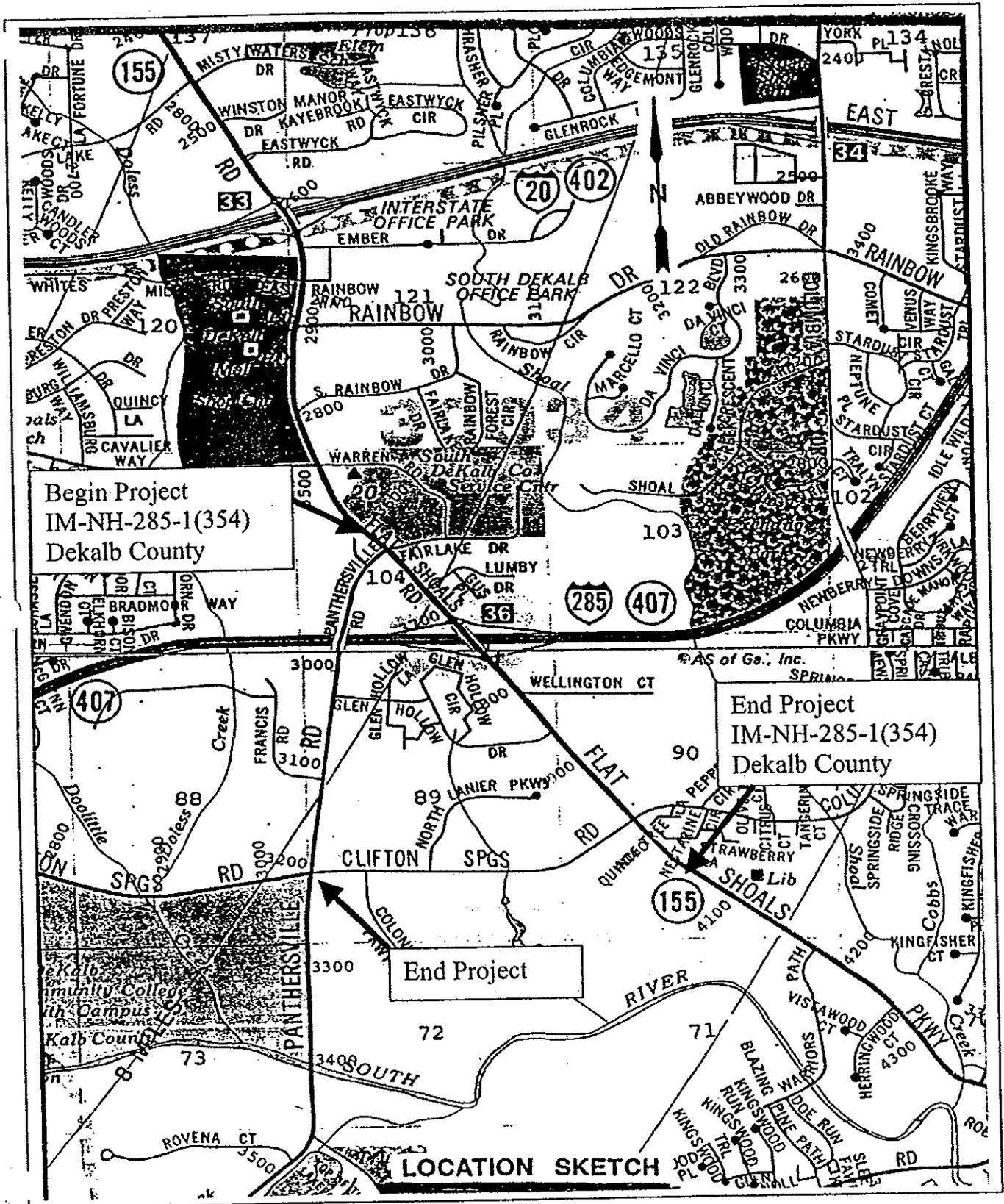
Attachments:

1. Sketch Map
2. Typical Sections
3. Need and Purpose Statement
4. Cost Estimate
5. Conforming plan's network schematics showing thru lanes, (Note: This attachment is required for non-attainment areas only.), and

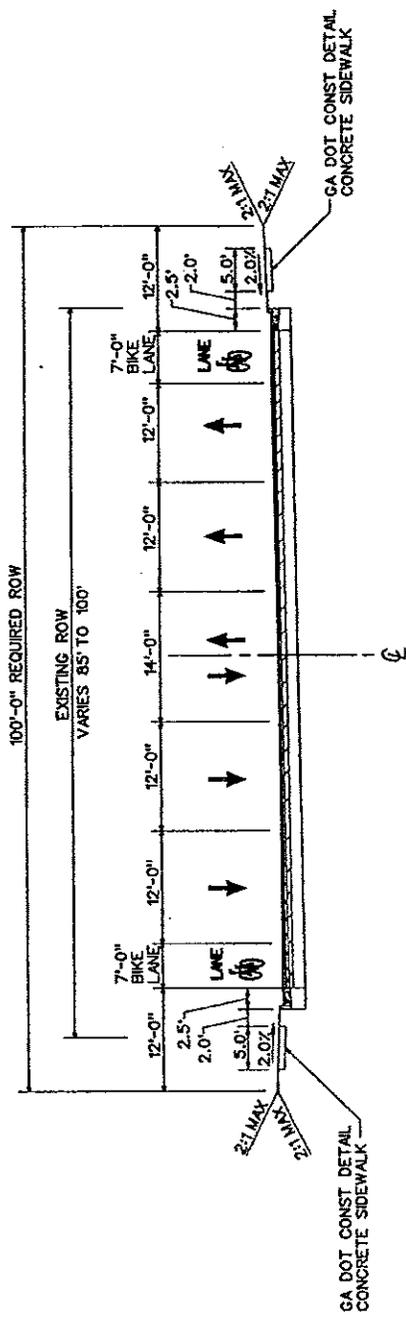
Concur: *Thomas R. Quinn*
Director of Preconstruction

Approve: *Walter Elroy*
Sr. Division Administrator, FHWA

Approve: *Paul W. Walsh*
Chief Engineer



TYPICAL SECTION - PANTHERSVILLE ROAD
 (ACCOMMODATES A FUTURE 20' RAISED MEDIAN SECTION)
 SHEET NO. 05-01
 PROJECT NO. 100-11234
 DATE: 10/15/10
 DRAWN BY: J. SMITH
 CHECKED BY: M. JONES
 SCALE: AS SHOWN
 PROJECT: ROADWAY
 COUNTY: DEKALB
 CITY: ATLANTA
 STATE: GEORGIA
 FEDERAL AID DISTRICT: 13
 FEDERAL PROJECT NO.: 100-11234



TYPICAL SECTION - PANTHERSVILLE ROAD
 (ACCOMMODATES A FUTURE 20' RAISED MEDIAN SECTION)

STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF CONSULTANT DESIGN TYPICAL SECTION	REVISION DATES																			
	<table border="1"> <tr><td> </td><td> </td></tr> </table>																			
<p> THE LPA GROUP TRANSPORTATION CONSULTANTS 3000 CHICKENHEAD DRIVE SUITE 100 ATLANTA, GA 30328 </p>	PROJECT NO. 05-																			

NEED AND PURPOSE STATEMENT

Need and Purpose: The proposed project would reconstruct and rehabilitate the interchange at I-285 and SR 155/ Flat Shoals Road. The existing interchange is incurring operational problems due to growth in traffic caused by commercial developments, tractor-trailer trucks turning in the interchange area and through work trips. The land use in the corridor is made up of commercial, industrial park and residential development. This project was first identified in year 1992 for improvement, and approved by the S.H.I.P. committee in 1993 to go forward with submitting it through the planning process to have it placed in the Atlanta Regional Transportation Improvement Program.

The need for the project is to improve traffic safety and operations in the I-285 interchange area and improve peak period traffic flows. The combination of excellent commercial services, employment opportunities and transportation access between I-285 and I-20 has generated traffic demand well above the capacity of Flat Shoals Road and its interchange with I-285. Current average daily traffic on Flat Shoals Road is over 30,000 vehicles per day north and south of I-285, while traffic on I-285 approaching the interchange from both directions averages over 214,000 per day. The project will promote energy conservation through efficient movement of traffic that would otherwise be idled or delayed without the interchange improvements.

The purpose of this project is to correct roadway deficiency, improve traffic safety and operations, serve the transportation demand generated by the increase in traffic, and improve the safety of the roadway and interchange.

The project (DK AR 206) is included in the approved State Transportation Improvement Program (FY 2003-2005) and the Transportation Improvement Program (FY 2003-2005) of the adopted 2025 Atlanta Regional Transportation Plan

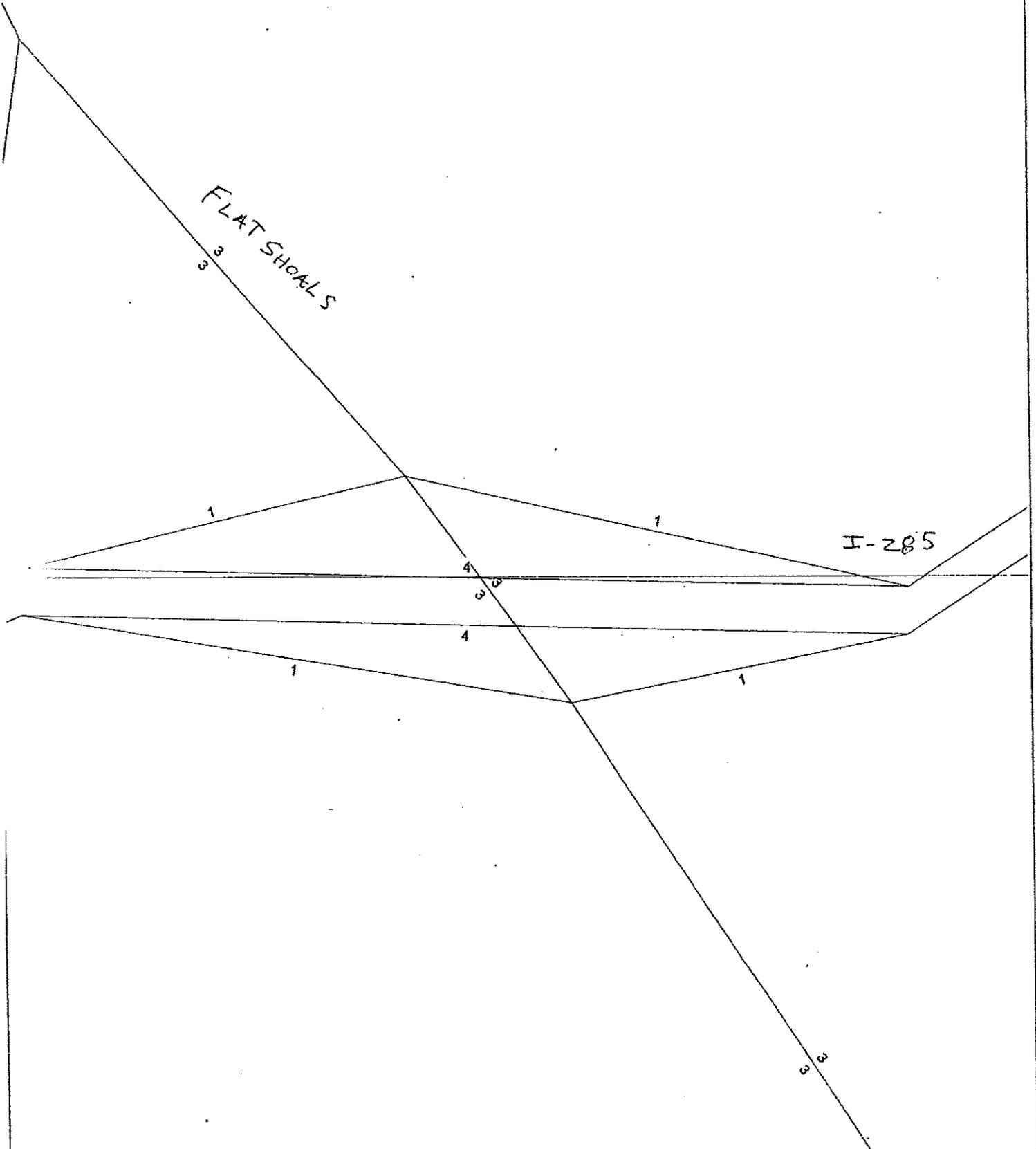
PROJECT COST		
A. RIGHT-OF-WAY:		
1. PROPERTY (LAND & EASEMENT)		\$2,113,312
2. DISPLACEMENTS; RES: 0, BUS: 6, M.H.: 0		\$1,700,000
3. OTHER COST (DAMAGES, ADM. / COURT, INFL., ETC.)		\$3,307,448
	SUBTOTAL: A	\$7,120,760
B. REIMBURSABLE UTILITIES:		
1. SERVICES		\$189,000
	SUBTOTAL: B	\$189,000
C. CONSTRUCTION:		
1. MAJOR STRUCTURES:		
a. 311' x 155' New Bridge (\$65 / sq. ft.)		\$3,133,325
b. 130' x 50' Addition to Shoal Creek Bridge (\$70 / sq. ft.)		\$455,000
a. 360' x 95' New Panthersville Road Bridge (\$65 / sq. ft.)		\$2,223,000
	SUBTOTAL: C-1	\$5,811,325
2. GRADING AND DRAINAGE:		
a. EARTHWORK - Unclassified 180,000 cu. yds. (\$5 / cu. yd)		\$900,000
b. DRAINAGE - 1.5 miles (\$250,000 / mile)		\$375,000
	SUBTOTAL: C-2	\$1,275,000
3. BASE AND PAVING:		
a. 12" GR AGGR BASE CRS - (90,000 SY @ \$12 / SY)		\$1,080,000
b. ASPHALT PAVING:		
1. Asph Conc, 4" superpave base (13900 tons x \$38)		\$528,200
2. Asph Conc, 2" superpave binder (15600 tons x \$42)		\$655,200
3. Asph Conc, 1 1/2" superpave surface (8600 tons x \$42)		\$361,200
	SUBTOTAL: C-3.b	\$1,544,600
c. BITUMINOUS TACK COAT - (5500 gal x \$1)		\$5,500

	d. Milling, Asph Conc, 1 1/2" (15000 SY x \$1.60)	\$24,000
	e. Portland Cement Concrete, 10 " (31000 SY x \$51)	\$1,581,000
	SUBTOTAL: C-3	\$4,235,000
	4. LUMP ITEMS:	
	a. TRAFFIC CONTROL	\$300,000
	b. CLEARING AND GRUBBING	\$400,000
	c. GRASSING	\$20,000
	d. EROSION CONTROL	\$125,000
	e. SIGNALS	
	1. Flat Shoals @ Eastbound I-285 Ramp	\$60,000
	2. Flat Shoals @ Westbound I-285 Ramp	\$60,000
	SUBTOTAL: C-4.e	\$120,000
	f. NOISE WALLS (\$15/SF)	\$90,000
	SUBTOTAL: C-4	\$1,055,000
	5. MISCELLANEOUS:	
	a. SIGNING & STRIPING	\$170,000
	b. FIELD OFFICE	\$55,000
	c. CONCRETE CURB AND GUTTER - 20,000 ft (\$11 / ft)	\$220,000
	d. GUARDRAIL	\$45,000
	e. RETAINING WALL 1200' x 12' (\$45/SF)	\$648,000
	(adjacent to EB entrance ramp)	
	RETAINING WALL 2500' x 12' (\$45/SF)	\$1,350,000
	(adjacent to EB exit ramp)	
	RETAINING WALL 1600' x 12' (\$45/SF)	\$864,000
	(adjacent to WB entrance ramp)	
	RETAINING WALL 1000' x 12' (\$45/SF)	\$540,000
	(adjacent to WB exit ramp)	
	SUBTOTAL: C-5	\$3,892,000
	* TBD = "To Be Determined"	

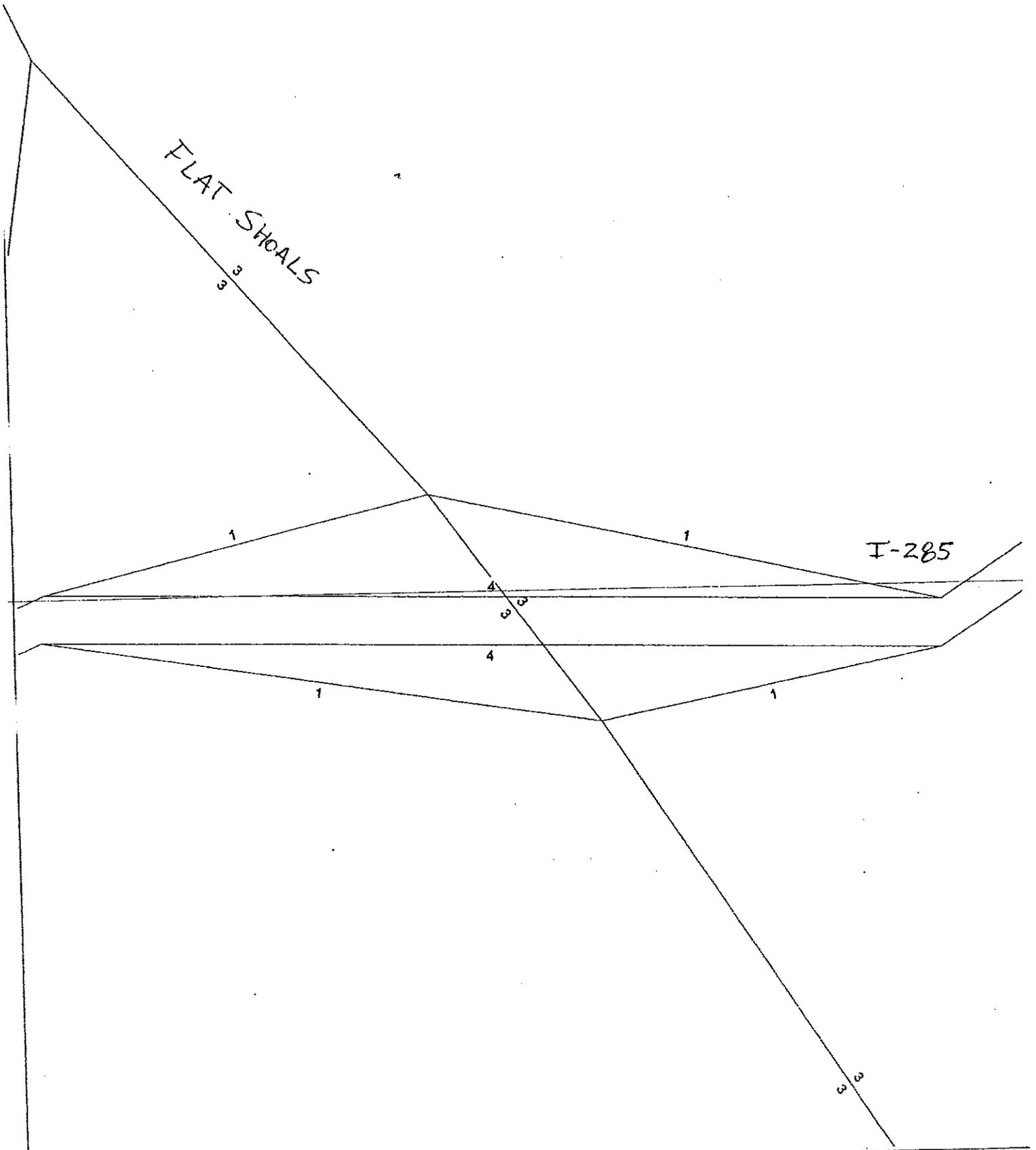
ESTIMATED COST			
CONSTRUCTION:	\$16,268,425	RIGHT-OF-WAY:	\$7,120,760
INFLATION (5%, 4yrs):	\$3,505,947	ACQUIRED BY:	GDOT

E & C (10%):	\$1,977,437	UTILITIES:	\$189,000
		ADJUSTED BY:	Dekalb County
TOTAL CONSTRUCTION COST:	\$21,751,809		

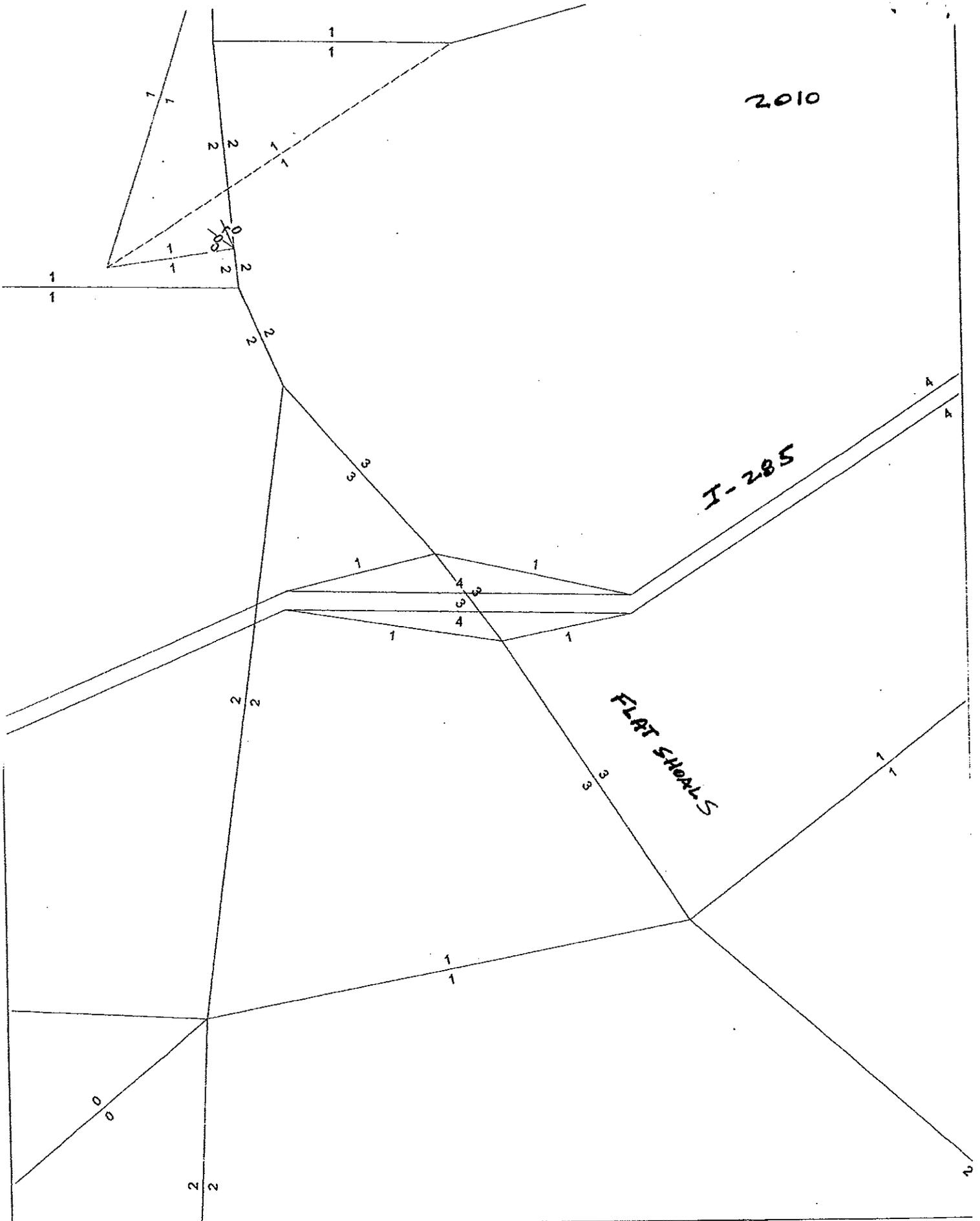
2010



2025



2010



**Addendum to Approved Ecology Assessment
(02/27/07)**

**PROJECT # IM-NH-285-1(354), DEKALB COUNTY
PI# 713290**

INTERSTATE 285/ FLAT SHOALS ROAD INTERCHANGE IMPROVEMENTS

Project Description

This proposed project consists of improvements to the I-285/Flat Shoals Road Interchange in DeKalb County. The currently approved concept report recommends the construction of a new bridge over I-285 to provide for dual left turn lanes onto both on-ramps. In addition, it is recommended that the off-ramps between I-285 and Flat Shoals Road be widened to provide dual left-turn lanes and dual right-turn lanes. The on-ramps at Flat Shoals Road would be widened to three lanes, but would taper back to one lane before tying into I-285. Flat Shoals Road would be widened to provide for a raised median and additional turn lanes. Panthersville Road would be widened and sidewalks and a bike lane would be added.

The replacement of the existing bridge on Panthersville Road over I-285 would be required due to insufficient vertical and horizontal clearance that would occur as a result of the proposed new entrance and exit ramps on I-285. The I-285 Bridge over Shoal Creek would be widened to accommodate the widened/lengthened on and off ramps.

The project length is approximately 1.14 miles along Flat Shoals Road, 0.85 miles along Panthersville Road, and 1.57 miles along I-285. The total Right of Way (ROW) for the project is approximately 8.41 acres.

Wetland Impact and Mitigation Calculations

Impacts as reported in the Ecology Report and the Categorical Exclusion were calculated based upon linear footage of impacted streams within ROW limits. Due to a refinement of the construction design, the stream impacts have been re-calculated based on construction limits (cut-fill limits). Based on these revisions, there would be 900 linear feet of stream channelized, 88 linear feet of stream diverted through culverts, 176 linear feet of bank armor placed in streams, as a result of the proposed project. These impacts would require 4,482.00 stream mitigation credits as shown on the attached March 2004 Standard Operating Procedure Worksheet for calculating stream mitigation requirements. The Department is proposing to mitigate project impacts by purchasing or debiting credits from a USACE approved mitigation bank that serves the project area.