

D.O.T. 66

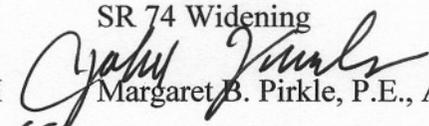
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 322355-, Fayette County
STP-209-1(2)
SR 74 Widening

OFFICE Preconstruction

DATE January 12, 2006

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

TO  SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

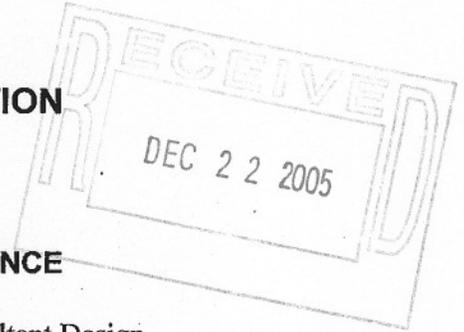
MBP/cj

Attachment

DISTRIBUTION:

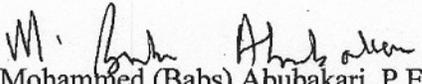
Brian Summers
Harvey Keeper
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Babs Abubakari
Thomas Howell
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA



INTERDEPARTMENTAL CORRESPONDENCE

FILE STP-209-1(2), Fayette County **OFFICE** Consultant Design
P.I. No. 322355
SR 74 from SR 85 NW to South of Crosstown
DATE December 22, 2005

FROM 
Mohammed (Babs) Abubakari, P.E., State Consultant Design Engineer

TO Meg Pirkle, P.E. Assistant Director of Preconstruction

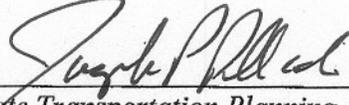
SUBJECT Revised Project Concept Report

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

The Concept Report requires revision in order to modify the typical section to comply with the design of a desirable facility, from a 4-lane with a 20-foot raised median to a 4-lane roadway with a 24-foot raised median, as described in the January 7, 2003 Design Guidance memo from Frank Danchez, Chief Engineer. The revised typical section is found to have little to no additional impacts and therefore is preferred.

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 12/22/05



State Transportation Planning Administrator

MBA:VCP

Attachments

Distribution: Brian Summers, Project Review Engineer
Harvey Keepler, State Environmental/Location Engineer
Keith Golden, Traffic Safety and Design Engineer
Joseph Palladi, State Planning Administrator
Jamie Simpson, Office of Financial Management Administrator
Thomas B. Howell, District 3 Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
OFFICE OF CONSULTANT DESIGN

REVISED PROJECT CONCEPT REPORT

SR 74 widening and improvements from SR 85 to Cooper Circle
STP-209-1(2), P.I. No. 322355
Fayette County

Need and Purpose:

Peachtree City, a planned development community in Fayette County, is emerging as one of the fastest growing areas in the county. State Route 74 is a major north-south corridor through the western portion of Peachtree City. State Route 74 provides access to I-85 from west Fayette County. Existing Traffic volumes (1995) range from 7,500 to 8,700 VPD. Projected traffic volumes (2018) range from 17,000 to 22,500 VPD.

Improvements are needed to improve the capacity and safety of this facility. The proposed projects will enhance the safety and the mobility for the users of State Route 74 and are part of local plans and objectives.

Project location: This roadway project consists of the widening and reconstruction of S.R. 74 from S.R. 85 extending northwesterly to Cooper Circle, approximately 2.98 km (1.85 miles) south of Crosstown Drive. This project is located entirely in Fayette County.

Description of the approved concept: The approved Project Concept Report recommends widening from the existing 2-lane roadway to a 4-lane roadway with a 6.10m (20 ft.) raised median. (see Attachment 1 for a Project Location Map)

PDP Classification: Major Minor _____

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

Functional Classification: Urban Principal Arterial

U. S. Route Number(s): N/A

State Route Number(s): 74

Traffic (AADT) as shown in the approved concept:

Current Year: 14,500 (1998) Design Year: 23,200 (2018)

Proposed features to be revised:

- The current typical section provides a 4-lane roadway with a 20 ft. raised median. The current project termini begins at SR 85 and ends at Cooper Circle.

Describe the revised feature(s) to be approved:

- The proposed typical section will be a 4-lane roadway with a revised median width of 24 ft from SR 85 to Cooper Circle. This is the desirable typical section for this facility according to current Department guidelines. The revised typical section is found to have little to no additional impacts and therefore is preferred.
- The termini at the eastern project limit is being moved farther east to include the realignment of Padgett Road intersection 280 feet south so that a single 4-way intersection will be created by SR 74/SR 85/Padgett Road. This realignment will impact approximately 1250 linear feet of Padgett Road, a two lane rural local road. The revised project length will be approximately 17,200 LF or 3.25 miles.

Updated traffic data (AADT):

Current Year: **17,500 (2006)** Design Year: **29,000 (2026)**

Programmed/Schedule:

P.E. 1996 R/W: 2006 Construction: 2007

Revised cost estimates: (See Attachment 3 for detailed cost estimate)

1. Construction cost including inflation and E&C: \$13.6 million
2. Right-of-way: \$11.6 million
3. Utilities: LGPA

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

The conforming plan's model provides two lanes in each direction on S.R. 74. This is consistent with the proposed widening and improvements of this project to S.R. 74. (See Attachment 2; Conforming plan's network schematic.)

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

Attachments:

1. Project Location Map,
2. Conforming plan's network schematics showing thru lanes, (Note: This attachment is required for non-attainment areas only.), and
3. Cost Estimate

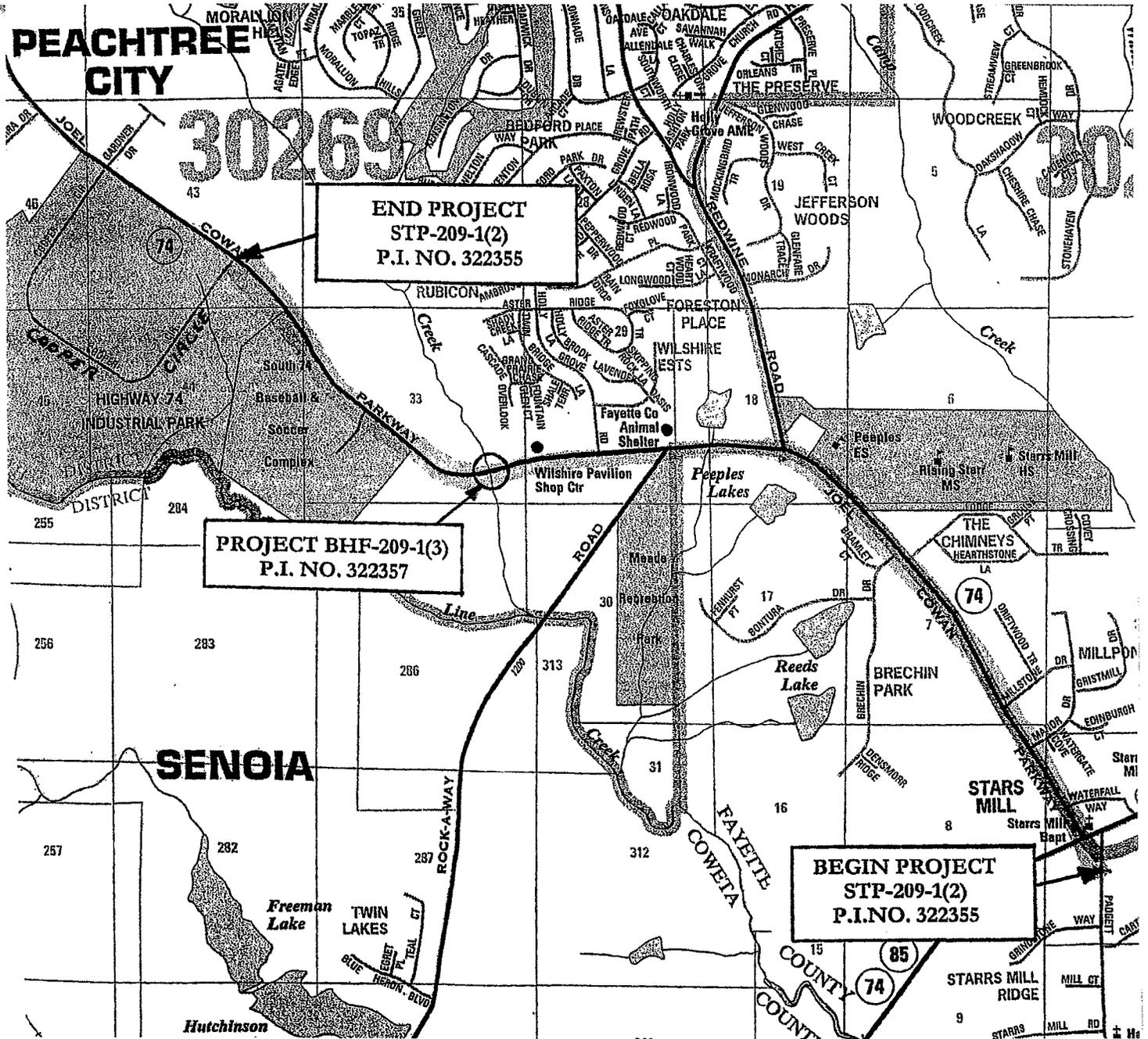
Concur: 

Director of Preconstruction

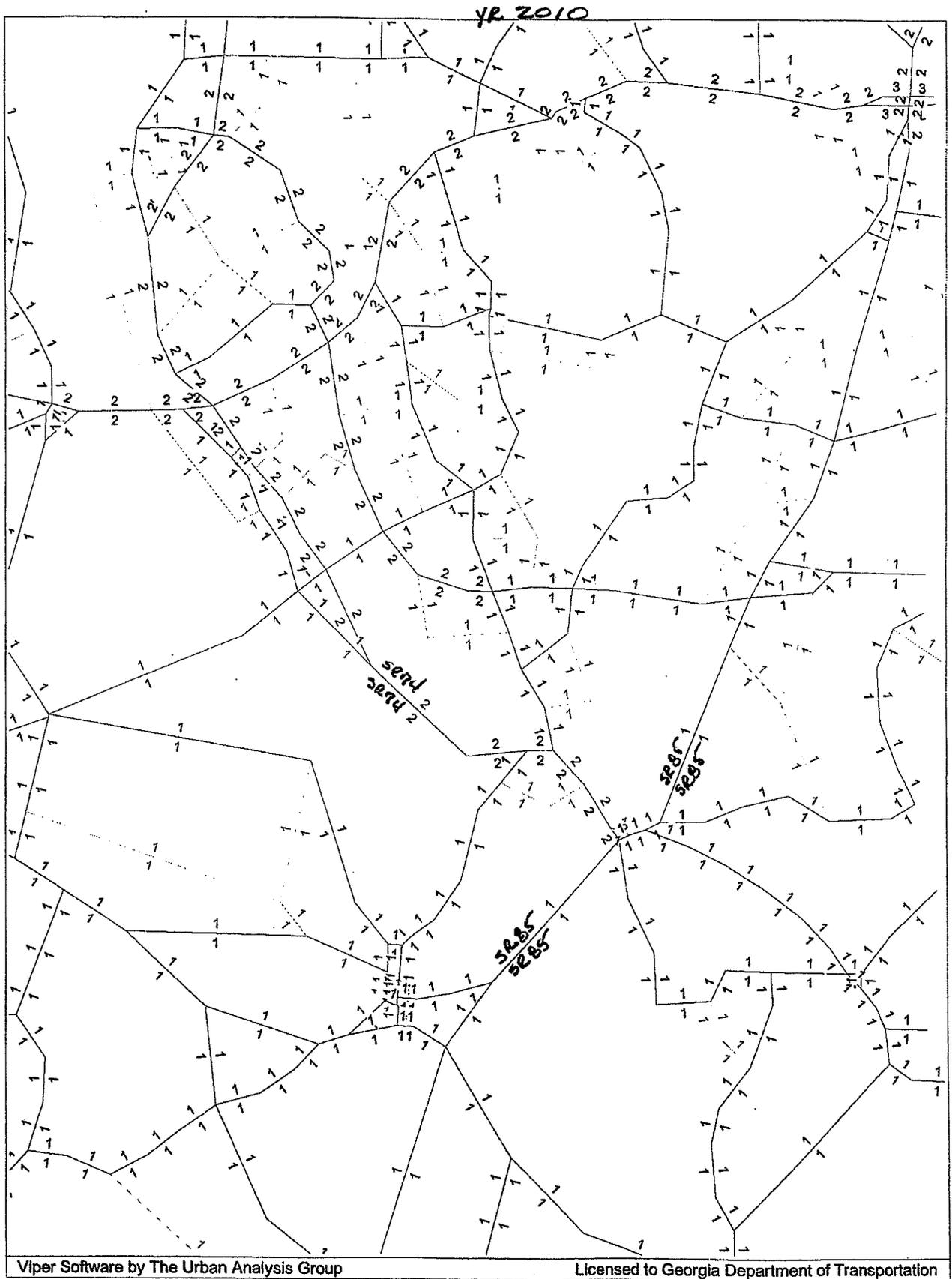
Approve: 

Chief Engineer

PROJECT LOCATION MAP



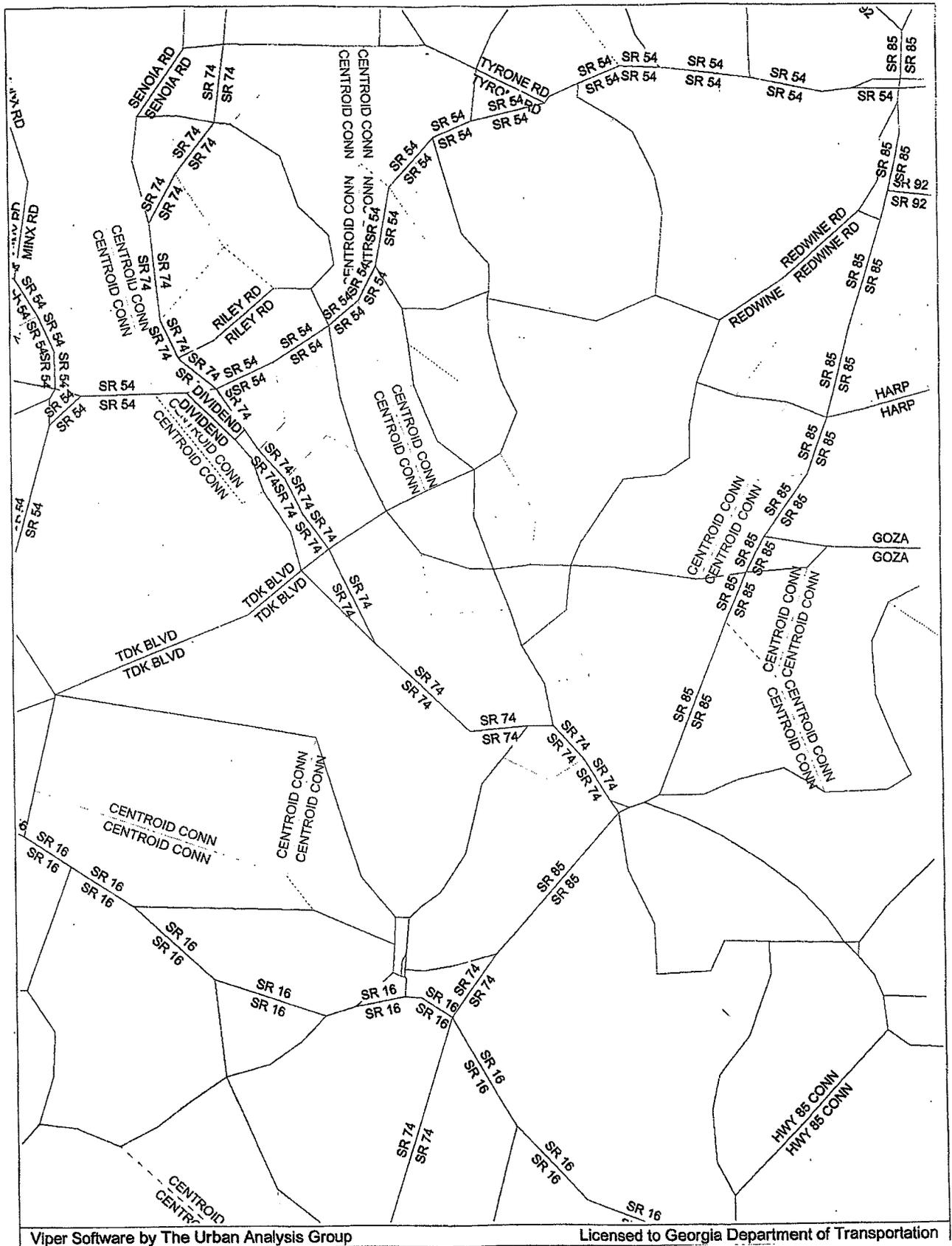
Attachment 2: Atlanta Regional Commission (ARC)'s Conforming Plan Network Schematic
Revised Project Concept Report
Project STP-209-1(2); P.I. No. 322355
Fayette County



Viper Software by The Urban Analysis Group

Licensed to Georgia Department of Transportation

Attachment 2: Atlanta Regional Commission (ARC)'s Conforming Plan Network Schematic
Revised Project Concept Report
Project STP-209-1(2); P.I. No. 322355
Fayette County



COST ESTIMATE
SR 74 From SR 85 to Cooper Circle

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: STP-209-1(2)

COUNTY: Fayette

DATE: December 19, 2005

ESTIMATED LETTING DATE: 2007

PREPARED BY: MULKEY ENGINEERS & CONSULTANTS

PROJECT LENGTH: 3.3 Miles

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

PROJECT COST			
A. RIGHT-OF-WAY*:			
1. PROPERTY (LAND)			\$ 6,000,800
2. DISPLACEMENTS; RES: 2, BUS: 1			\$ 355,000
3. RELOCATION			\$ 71,700
4. CONSEQUENTIAL DAMAGES			\$ 71,700
5. OTHER COST (ADM./COST, INFLATION)			\$ 5,096,800
*Totals shown are from the original concept cost estimate and have been adjusted for inflation.			
SUBTOTAL: A			\$ 11,596,000
B. UTILITIES*:			
1. REIMBURSABLE UTILITIES - SERVICES			
a. 20" water line on private esmt.		\$837,300	
b. Georgia Utility - Sewer		\$107,300	
c. Coweta-Fayette E.M.C		\$114,000	
d. Georgia Power may have prior rights.			
2. NON-REIMBURSABLE UTILITIES			
a. Atlanta Gas		\$980,600	
b. Coweta-Fayette E.M.C		\$333,900	
c. Telephone		\$113,533	
*Totals shown are from the original concept cost estimate and have been adjusted for inflation			
SUBTOTAL: B			LGPA
C. CONSTRUCTION:			
1. MAJOR STRUCTURES			
a. Bridge*		30590 SF @ \$75	\$ 2,294,250
b. Box culvert			
1. Bar reinforcing steel		17537 LBS @ \$1	\$ 17,537
2. Class "A" concrete		153 CY @ \$550	\$ 84,150
*This price does not include any provision for the P'tree City multi-use cart path			
SUBTOTAL: C-1,b			\$ 101,687
SUBTOTAL: C-1			\$ 2,395,937
2. DRAINAGE			
a. Storm drain pipe 18"		5816 LF @ \$30	\$ 174,480
b. Storm drain pipe 24"		333 LF @ \$35	\$ 11,655
c. Storm drain pipe 36"		178 LF @ \$50	\$ 8,900
d. Safety end section 18"		44 EA @ \$650	\$ 28,600
e. Safety end section 24"		3 EA @ \$930	\$ 2,790
f. Safety end section 36"		1 EA @ \$1570	\$ 1,570
g. Catch basins		48 EA @ \$1670	\$ 80,160
h. Drop inlets		3 EA @ \$2265	\$ 6,795

COST ESTIMATE
SR 74 From SR 85 to Cooper Circle

i. Concrete spillway, type 1	2	EA @ \$1800	\$	3,600
j. Concrete spillway, type 3	2	EA @ \$1625		3,250
SUBTOTAL: C-2			\$	321,800
3. BASE AND PAVING:				
a. Graded Aggregate Base	85100	TN @ \$20	\$	1,702,000
b. Asphalt paving				
1. Asphaltic Concrete Leveling	1200	TN @ \$60	\$	72,000
2. 12.5 mm Superpave	14500	TN @ \$60	\$	870,000
3. 19 mm Superpave	12500	TN @ \$60	\$	750,000
4. 25 mm Superpave	42800	TN @ \$60	\$	2,568,000
SUBTOTAL: C-3.b			\$	4,260,000
c. Bituminous tack coat	11800	GL @ \$1.1	\$	12,980
d. Rumble strips	6.5	GLM @ \$725	\$	4,713
e. Concrete paving				
1. Concrete curb and gutter type 7	29900	LF @ \$12.5	\$	373,750
2. Concrete curb and gutter type 2	8400	LF @ \$16	\$	134,400
3. Concrete median paving, 4"	3100	SY @ \$25	\$	77,500
4. 30' reinforced concrete approach slab	650	SY @ \$140	\$	91,000
5. Concrete valley gutter 8"	200	SY @ \$40	\$	8,000
SUBTOTAL: C-3.e			\$	684,650
SUBTOTAL: C-3			\$	6,664,343
4. EROSION CONTROL				
a. Silt Fence				
1. Type C	51897	LF @ \$3.1	\$	160,881
2. Maintenance type C	23800	LF @ \$1.5	\$	35,700
SUBTOTAL: C-4.a			\$	196,581
b. Silt Control Gate				
1. Type 3	10	EA @ \$500	\$	5,000
2. Type 4	51	EA @ \$150	\$	7,650
3. Maintenance of silt control gate type 3	10	EA @ \$150	\$	1,500
4. Maintenance of silt control gate type 4	51	EA @ \$50	\$	2,550
SUBTOTAL: C-4.b			\$	16,700
c. Stone-dumped rip rap type 3, 24 in	930	SY @ \$50	\$	46,500
d. Plastic filter fabric	930	SY @ \$4.5	\$	4,185
e. Grassing				
1. Permanent Grassing	54	AC @ \$800	\$	43,200
2. Liquid lime	135	GL @ \$22	\$	2,970
3. Agricultural lime	162	TN @ \$60	\$	9,720
4. Fertilizer nitrogen content	48	LB @ \$1.8	\$	86
5. Fertilizer mixed grade	30	TN @ \$270	\$	8,100
6. Temporary Grassing	27	AC @ \$520	\$	14,040
SUBTOTAL: C-4.e			\$	78,116
f. Water quality inspections	24	MO @ \$850		20,400
g. Water quality monitoring and sampling	2	EA @ \$870		1,740
h. Temporary slope drain pipe	300	LF @ \$12.75		3,825
i. Permanent soil reinforcing mat	5000	SY @ \$4.4		22,000
j. Sediment Basins	8	EA @ \$7700		61,600
k. Maintenance of sediment basins	8	EA @ \$1000		8,000
l. Construction exit	8	EA @ \$1300		10,400
m. Maintenance of construction exit	8	EA @ \$400		3,200

COST ESTIMATE
SR 74 From SR 85 to Cooper Circle

SUBTOTAL: C-4		\$ 473,247
5. LUMP ITEMS		
a. Grading Complete		\$ 1,025,300
b. Clearing and grubbing		\$ 200,000
c. Removal of existing bridge		\$ 52,560
d. Traffic control*		\$ 225,000
e. Traffic signals		\$ 225,000
*Traffic Control total may vary once preliminary and final plans proceed.		
SUBTOTAL: C-5		\$ 1,727,860
6. MISCELLANEOUS:		
a. Lighting		
b. Signing and marking		
1. Changeable message sign, portable	1 EA @ \$25000	\$ 25,000
2. Solid traffic stripe, 5", white	30820 LF @ \$0.3	\$ 9,246
3. Solid traffic stripe 5", yellow	30820 LF @ \$0.3	\$ 9,246
4. Skip traffic stripe, 5", white	34320 LF @ \$0.2	\$ 6,864
5. Thermoplastic pavement marking, arrow, type 1	50 EA @ \$55	\$ 2,750
6. Thermoplastic pavement marking, arrow, type 2	50 EA @ \$55	\$ 2,750
7. Pavement marking words	100 EA @ \$100	\$ 10,000
8. Misc. signing and marking		\$ 15,000
SUBTOTAL: C-6.b		\$ 80,856
c. Guardrail		
1. W Beam	1650 LF @ \$15	\$ 24,750
2. Anchors type 1	5 EA @ \$550	\$ 2,750
3. Anchors type 12	5 EA @ \$1800	\$ 9,000
SUBTOTAL: C-6.c		\$ 36,500
d. Precast concrete barrier	500 LF @ \$30	\$ 15,000
e. Field engineer's office type 3	1 EA @ \$60000	\$ 60,000
SUBTOTAL: C-6		\$ 192,356
SUMMARY		
A. RIGHT-OF-WAY		\$ 11,596,000
B. REIMBURSABLE UTILITIES		\$ LGPA
C. CONSTRUCTION		
1. MAJOR STRUCTURES		
2. DRAINAGE		
3. BASE AND PAVING		
4. EROSION CONTROL		
5. LUMP ITEMS		
6. MISCELLANEOUS		
SUBTOTAL CONSTRUCTION COST		\$ 11,775,543
INFLATION (5% PER YEAR)		\$ 588,777
NUMBER OF YEARS	1	
E. & C. (10%)		\$ 1,236,432
TOTAL CONSTRUCTION COST		\$ 13,600,752
GRAND TOTAL PROJECT COST		\$ 25,196,752