

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 122015-, Forsyth County **OFFICE** Preconstruction
STP-012-1(81)
SR 306 from SR 400 to East of SR 369
And Bridge at Baldrige Creek **DATE** March 21, 2007

FROM *Genetha Rice-Singleton*
Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Angela Alexander (file copy)
Babs Abubakar
Russell McMurry
BOARD MEMBER

Description of revised features to be approved:

The purpose of this concept report revision is to revise the Need and Purpose Statement, shorten the limits of this project, change the speed design and the typical section.

The original project concept began at CR 148/State Barn Road west of the SR 400 interchange and widened to 4 lanes to just east of SR 369. Since the original concept approval in 1997, the SR 400 interchange with SR 306 has been reconstructed, with the roadway and the bridge widened to accommodate the extra lanes and median from CR 148 west of SR 400 to the shopping center driveways east of SR 400. The revised project begins at the SR 400 northbound ramps and extends to east of SR 369/Browns Bridge Road for a total project length of 1.40 miles.

The current posted speed limit for SR 306 is 55 mph, with the proposed design speed in the approved concept report being 55 mph. This design speed does not match the type of development that is increasingly attracted to this area. This area is building up with residential development and all of the supporting businesses including grocery and fast food establishments. In addition to the development, pedestrian traffic is on the increase along the corridor. With a 45 mph design speed it would be possible to use curb and gutter on the outside shoulder as well as a continuous sidewalk throughout the corridor. Also at 45 mph, it would be possible to retain more existing pavement and reduce the number of displacements on the corridor.

The typical section for SR 306 that is proposed in the approved concept report is a 4-lane roadway divided by a 20 foot raised median with rural shoulders. Due to the urban nature of this project, and the development, both residential and commercial, in the area, it is proposed that the typical section be revised to be a 4-lane roadway divided by a 24 foot raised median with 16 foot urban shoulders that include a 5 foot sidewalk. This urban typical section is made possible by the reduction of the design speed to 45 mph.

The proposed typical section for SR 369 in the approved concept report includes a 4-lane roadway divided by a 44 foot depressed median with rural shoulders. Due to the urban nature of this project and the development, both residential and commercial, in the area, it is proposed that the typical section be revised to be a 4-lane roadway divided by a 24 foot raised median with 16 foot urban shoulders that include a 5 foot sidewalk in the area near SR 306.

Project STP-012-1(106) is the widening and reconstruction of SR 369 that includes the reconstruction of the SR 306/SR 369 intersection. In order to achieve the maximum benefit of reconstructing SR 306, it is recommended that all four legs of the SR 306/SR 369 intersection be reconstructed under project STP-012-1(81).

The change in typical section and design speed would affect the right-of-way limits by reducing the footprint of the project. These changes would also allow the Baldrige Creek culvert to remain in place instead of replacing sparing the Department the cost of replacing a culvert that is in good condition.

REVISED PROJECT CONCEPT REPORT

Need and Purpose: (From approved Concept Report)

The northern section of Forsyth County is experiencing rapid suburbanization comparable to recent development in north Fulton County. This section of SR 306 connects SR 400 to this rapidly growing northeast corner of the county which is served by both SR 306 and SR 369. Residential development is fueled by newly constructed water lines in both the SR 306 and SR 369 corridors. This development has generated dramatic increases in traffic, changing SR 306 and SR 369 from a lightly traveled rural arterial to a suburban arterial. The rapid growth in traffic volumes cannot be safely and adequately served by the existing two-lane facility.

Project location:

The approved concept would widen existing SR 306 from CR 148/State Barn Road (MP 4.56) just west of SR 400 to CR 149/Martin Road (MP 6.43) just east of SR 369 in unincorporated Forsyth County. The project is 1.80 miles in length.

Description of approved concept:

The concept would improve the existing 2-lane section to a rural 4-lane divided highway with a 20-foot raised median. These improvements would also include the widening of the bridge over SR 400 and the replacement of the Baldrige Creek double 9' X 9' box culvert. This culvert would need to be replaced based on the necessary amount of additional fill over the structure.

PDP Classification: Major Minor

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

Functional Classification: Rural Minor Arterial

U.S. Route Numbers(s): N/A **State Route Number(s):** SR 306

Traffic (AADT) as shown in the approved concept:

Current Year (1998): 15,200 Design Year: (2018): 28,700

Proposed features to be revised:

- Typical Section
- Project Termini
- Changes in R/W limits which may affect analyses of:
 - Historic Resources
 - Endangered Species
 - Air Quality
 - Noise Studies

Updated Traffic (AADT)

Current Year (2012): 33,940

Design Year (2032): 54,030

Programmed Schedule:

P.E.: 1992

R/W: 2010

Construction: 2014

Revised Cost Estimates:

- | | |
|------------------------------------|-----------------|
| 1. Construction cost including E&C | \$10,677,865.00 |
| 2. Right-of-way | \$30,958,000.00 |
| 3. Utilities | \$ 534,100.00 |

Is the project in a Non-attainment area?

Yes. The proposed project concept contains the same lane configuration as the modeled project but the project limits will change. The original concept started construction west of the SR 400 Bridge and included bridge reconstruction. Since the time that this concept was prepared, the bridge has been widened to include two through lanes in each direction as well as a median. The revised concept starts a 4-lane, raised median urban shoulder typical section at the ramp terminal. This project is currently scheduled for construction in 2014.

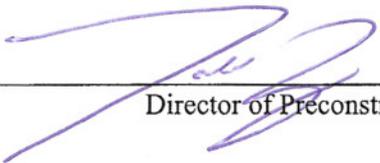
Recommendation:

It is recommended that the above described revisions be incorporated into the previously approved concept to update the Need and Purpose Statement, update the project limits and change the design speed and typical sections. This route will be a more pedestrian friendly corridor that is cost effective and will better meet the future needs of this rapidly developing residential/retail area.

Attachments:

1. Location Map,
2. Cost Estimate,
3. Typical Section,
4. Conforming plan's network schematics showing thru lanes
5. Need and Purpose Statement

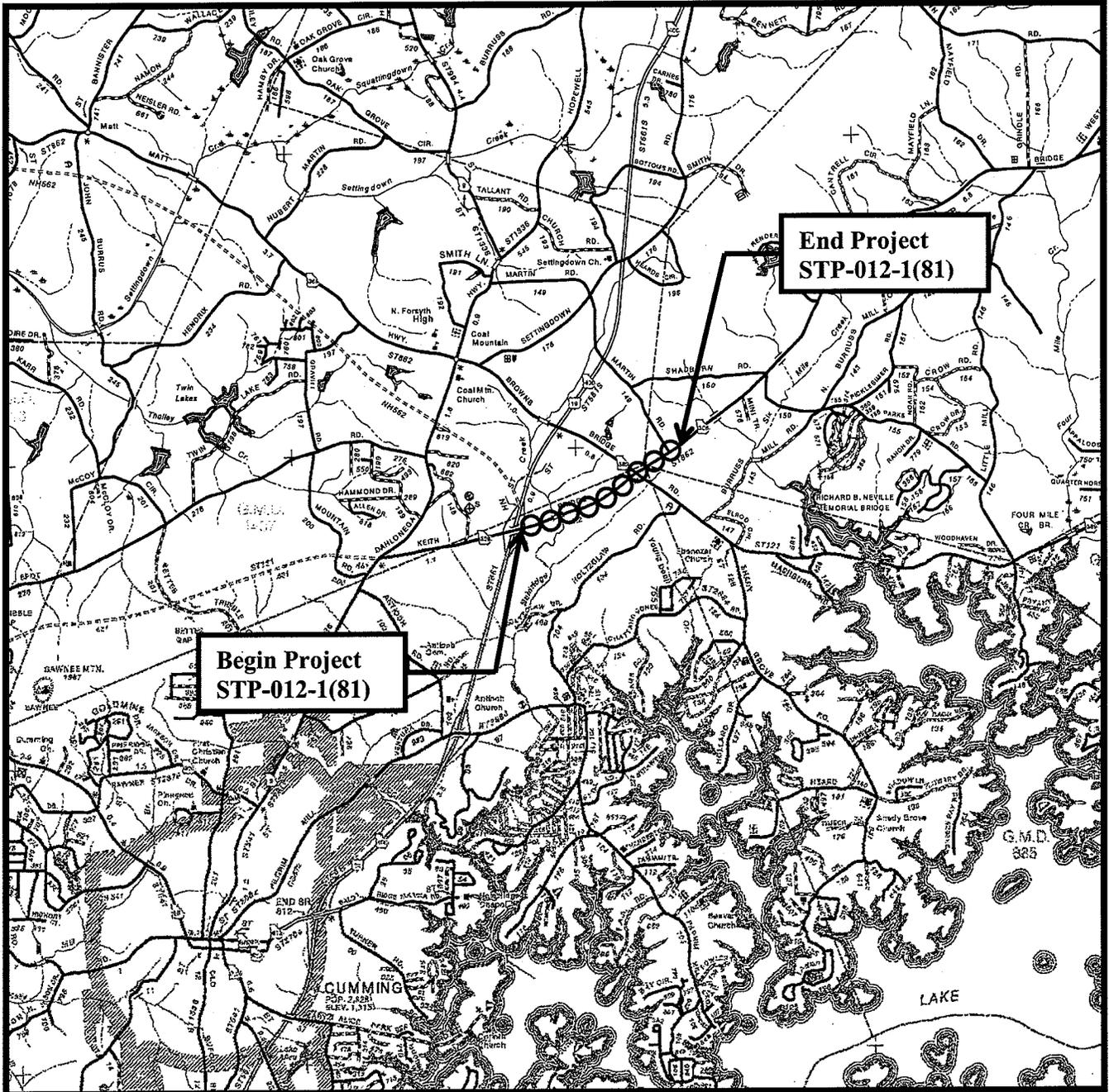
Concur: _____


Director of Preconstruction

Approve: _____


Chief Engineer

Location Sketch



Estimate Report for file "122015 4 Lane"

Section Roadway Items					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	250000.00	TRAFFIC CONTROL - STP-012-1(81)	250000.00
153-1300	1	EA	75833.87	FIELD ENGINEERS OFFICE TP 3	75833.87
201-1500	1	LS	300000.00	CLEARING & GRUBBING - STP-012-1(81)	300000.00
208-0100	109056	CY	12.00	IN PLACE EMBANKMENT	1308672.00
310-1101	25278	TN	24.32	GR AGGR BASE CRS, INCL MATL	614760.96
318-3000	50	TN	25.23	AGGR SURF CRS	1261.50
402-1812	3926	TN	85.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	333710.00
402-3112	8943	TN	85.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	760155.00
402-3121	11179	TN	85.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	950215.00
402-3130	3354	TN	85.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	285090.00
413-1000	70356	GL	2.05	BITUM TACK COAT	144229.80
441-0016	897	SY	42.09	DRIVEWAY CONCRETE, 6 IN TK	37754.73
441-0050	100	SY	71.74	CONC SLOPE DRAIN	7174.00
441-0104	10560	SY	62.64	CONC SIDEWALK, 4 IN	661478.40
441-0204	222	SY	36.13	PLAIN CONC DITCH PAVING, 4 IN	8020.86
441-0303	4	EA	1931.65	CONC SPILLWAY, TP 3	7726.60
441-0746	13477	SY	54.00	CONCRETE MEDIAN, 5 1/2 IN	727758.00
441-0754	100	SY	46.58	CONCRETE MEDIAN, 7 1/2 IN	4658.00
441-4020	317	SY	39.90	CONC VALLEY GUTTER, 6 IN	12648.30
441-5002	9504	LF	31.10	CONCRETE HEADER CURB, 6 IN, TP 2	295574.40
441-6222	21008	LF	31.57	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	663222.56
446-1002	1900	LF	3.54	PVMT REINF FABRIC STRIPS, TP 2, INCL BITUM BINDER	6726.00
500-3101	35	CY	701.17	CLASS A CONCRETE	24540.95
500-9999	100	CY	207.20	CLASS B CONC, BASE OR PVMT WIDENING	20720.00
511-1000	3239	LB	1.00	BAR REINF STEEL	3239.00
550-1180	1901	LF	46.90	STORM DRAIN PIPE, 18 IN, H 1-10	89156.90
550-1240	238	LF	58.56	STORM DRAIN PIPE, 24 IN, H 1-10	13937.28
550-3318	27	EA	794.17	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	21442.59
550-3324	2	EA	1144.18	SAFETY END SECTION 24 IN, STORM DRAIN, 4:1 SLOPE	2288.36
550-4218	2	EA	460.59	FLARED END SECTION 18 IN, STORM DRAIN	921.18
550-4224	2	EA	844.88	FLARED END SECTION 24 IN, STORM DRAIN	1689.76
622-1033	1000	LF	39.56	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	39560.00
634-1200	38	EA	111.30	RIGHT OF WAY MARKERS	4229.40
641-1100	11827	LF	56.49	GUARDRAIL, TP T	668107.23
641-1200	2957	LF	17.11	GUARDRAIL, TP W	50594.27
641-5001	4	EA	613.61	GUARDRAIL ANCHORAGE, TP 1	2454.44
641-5012	4	EA	1753.33	GUARDRAIL ANCHORAGE, TP 12	7013.32
668-1100	19	EA	2220.65	CATCH BASIN, GP 1	42192.35
668-2100	5	EA	2327.98	DROP INLET, GP 1	11639.90
Section Sub Total:					\$8,460,396.91

Section Erosion Control (Temporary)					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	12	AC	571.95	TEMPORARY GRASSING	6863.40
163-0240	245	TN	291.39	MULCH	71390.55
163-0300	6	EA	2388.13	CONSTRUCTION EXIT	14328.78
163-0501	1	EA	1131.20	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	1131.20
163-0503	6	EA	582.61	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	3495.66
163-0520	370	LF	15.66	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	5794.20
163-0530	14784	LF	4.10	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	60614.40
163-0531	4	EA	8652.35	CONSTRUCT AND REMOVE SEDIMENT BASIN,	34609.40

TP 1, STA NO -					
163-0550	38	EA	355.81	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	13520.78
165-0010	11828	LF	1.61	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	19043.08
165-0030	2957	LF	2.05	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	6061.85
165-0060	16	EA	1339.31	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	21428.96
165-0070	7392	LF	3.64	MAINTENANCE OF BALED STRAW EROSION CHECK	26906.88
165-0085	1	EA	369.73	MAINTENANCE OF SILT CONTROL GATE, TP 1	369.73
165-0087	6	EA	251.61	MAINTENANCE OF SILT CONTROL GATE, TP 3	1509.66
165-0101	6	EA	605.07	MAINTENANCE OF CONSTRUCTION EXIT	3630.42
165-0105	38	EA	149.66	MAINTENANCE OF INLET SEDIMENT TRAP	5687.08
167-1000	2	EA	1271.25	WATER QUALITY MONITORING AND SAMPLING	2542.50
167-1500	18	MO	977.26	WATER QUALITY INSPECTIONS	17590.68
171-0010	23655	LF	2.46	TEMPORARY SILT FENCE, TYPE A	58191.30
171-0030	5914	LF	4.09	TEMPORARY SILT FENCE, TYPE C	24188.26
				Section Sub Total:	\$398,898.77

Section Erosion Control (Permanent)					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2024	200	SY	50.73	STN DUMPED RIP RAP, TP 1, 24 IN	10146.00
603-7000	200	SY	5.07	PLASTIC FILTER FABRIC	1014.00
700-6910	24	AC	1021.10	PERMANENT GRASSING	24506.40
700-7000	72	TN	68.67	AGRICULTURAL LIME	4944.24
700-7010	90	GL	22.38	LIQUID LIME	2014.20
700-8000	17	TN	320.49	FERTILIZER MIXED GRADE	5448.33
700-8100	1783	LB	3.08	FERTILIZER NITROGEN CONTENT	5491.64
710-9000	580	SY	5.14	PERMANENT SOIL REINFORCING MAT	2981.20
715-2100	580	SY	2.75	BITUMINOUS TREATED ROVING, SLOPES	1595.00
716-2000	4356	SY	1.68	EROSION CONTROL MATS, SLOPES	7318.08
				Section Sub Total:	\$65,459.09

Section Bridge Culvert BaldRidge Creek DBL 9 x 9					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
207-0203	111	CY	56.96	FOUND BK FILL MATL, TP II	6322.56
500-3101	376	CY	701.17	CLASS A CONCRETE	263639.92
511-1000	39885	LB	1.00	BAR REINF STEEL	39885.00
603-2024	80	SY	50.73	STN DUMPED RIP RAP, TP 1, 24 IN	4058.40
603-7000	80	SY	5.07	PLASTIC FILTER FABRIC	405.60
610-9099	1	LS	6046.82	REM WINGWALLS & PARAPETS, STA -	6046.82
				Section Sub Total:	\$320,358.30

Section Signing and Marking					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	100	SF	17.97	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	1797.00
636-1031	150	SF	21.10	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	3165.00
636-2070	600	LF	10.74	GALV STEEL POSTS, TP 7	6444.00
636-2080	75	LF	12.27	GALV STEEL POSTS, TP 8	920.25
653-0120	10	EA	79.49	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	794.90
653-0210	1	EA	120.30	THERMOPLASTIC PVMT MARKING, WORD, TP 1	120.30
653-0260	1	EA	156.76	THERMOPLASTIC PVMT MARKING, WORD, TP 6	156.76
653-1501	29568	LF	0.86	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	25428.48
653-1502	21741	LF	0.84	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	18262.44
653-1704	495	LF	4.97	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	2460.15
653-1804	880	LF	1.74	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	1531.20

653-3501	14784	GLF	0.53	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	7835.52
653-6004	460	SY	3.79	THERMOPLASTIC TRAF STRIPING, WHITE	1743.40
653-6006	640	SY	3.69	THERMOPLASTIC TRAF STRIPING, YELLOW	2361.60
654-1001	370	EA	4.56	RAISED PVMT MARKERS TP 1	1687.20
654-1003	185	EA	4.37	RAISED PVMT MARKERS TP 3	808.45
Section Sub Total:					\$75,516.65

Section Signal #1					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
615-1200	425	LF	25.16	DIRECTIONAL BORE - 3 in	10693.00
636-1029	500	SF	23.17	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	11585.00
639-2001	1000	LF	2.56	STEEL WIRE STRAND CABLE, 1/4 IN	2560.00
639-3004	10	EA	9697.72	STEEL STRAIN POLE, TP IV	96977.20
647-1000	1	LS	30000.00	TRAFFIC SIGNAL INSTALLATION NO - 1	30000.00
647-1000	1	LS	44640.82	TRAFFIC SIGNAL INSTALLATION NO - 2	44640.82
647-1000	1	LS	44640.82	TRAFFIC SIGNAL INSTALLATION NO - 3	44640.82
647-2150	2	EA	2180.41	PULL BOX, PB-5	4360.82
682-6120	950	LF	20.64	CONDUIT, RIGID, 2 IN	19608.00
682-6233	3175	LF	9.38	CONDUIT, NONMETL, TP 3, 2 IN	29781.50
935-1113	2600	LF	2.62	OUTSIDE PLANT FIBER OPTIC CABLE, LOOSE TUBE, SINGLE MODE, 24 FIBER	6812.00
935-1511	3800	LF	5.37	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, SINGLE MODE, 6 FIBER	20406.00
935-1521	1050	LF	3.30	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, MULTI MODE, 6 FIBER	3465.00
935-3401	1	EA	1080.18	FIBER OPTIC CLOSURE, FDC (RACK MOUNTED), 6 FIBER	1080.18
935-3501	11	EA	430.65	FIBER OPTIC CLOSURE, FDC (WALL MOUNTED), 6 FIBER	4737.15
935-4010	84	EA	38.57	FIBER OPTIC SPLICE, FUSION	3239.88
935-5050	12	EA	79.81	FIBER OPTIC PATCH CORD, SM	957.72
935-6562	26	EA	1652.87	EXTERNAL TRANSCEIVER, DROP AND REPEAT, 1310 SINGLE MODE, (SIGNAL JOBS)	42974.62
939-2305	5	EA	1600.00	FIELD SWITCH, TYPE C	8000.00
Section Sub Total:					\$386,519.71

Total Estimated Cost: \$9,707,149.43

Subtotal Construction Cost	\$9,707,149.43
E&C Rate 10.0 %	\$970,714.94
Inflation Rate 0.0 % @ 0.0 Years	\$0.00
<hr/>	
Total Construction Cost	\$10,677,864.37
Right Of Way	\$30,958,000.00
ReImb. Utilities	\$534,100.00
<hr/>	
Grand Total Project Cost	\$42,169,964.37

Department of Transportation State of Georgia

Interdepartmental Correspondence

FILE Preliminary R/W Cost Estimate **OFFICE** R/W
DATE December 11, 2006

FROM Phil Copeland, Right of Way Administrator

TO Mickie McJunkin, Wilbur Smith Associates

SUBJECT Preliminary Right of Way Cost Estimate
Project: STP-012-1(18)Forsyth
P.I. No.: 122015
Description: SR 306 from SR 369

Per your request, we have reviewed the Preliminary Right of Way Cost Estimate on the above referenced project.

Please note the Cost Estimate does conform to our current guidelines.

If you have any questions, please contact Jerry Milligan at District 7 Right of Way Office at (770) 986-1541.

PC:GAM

Attachments

Cc: Wes Brock, Chief of Appraisal & Review
File

Preliminary Right of Way Cost Estimate

Date: December 3, 2006
Project: STP-012-1(18) **P.I. Number:** 122015
Existing/Required R/W: Varies/Varies **No. Parcels:** 59
Project Termini: SR 306 From S\$ 400 East for SR 369
Project Description: Widening

Land:
Commercial
 Required R/W 7.68 Ac X \$400,000/Ac = \$ 3,072,000
 Required R/W 4 Ac X \$300,000/Ac = \$1,200,000
 Total \$ **4,272,000**

Improvements:
 6 Commercial Buildings , 1 home, curbing, paving, signs, light fixtures, fencing, trade fixtures and site improvements
 \$ **2,251,000**

Relocation:
 13 Commercial Displaces @ \$ 25,000 / parcel
 \$ 325,000
 \$ **325,000**

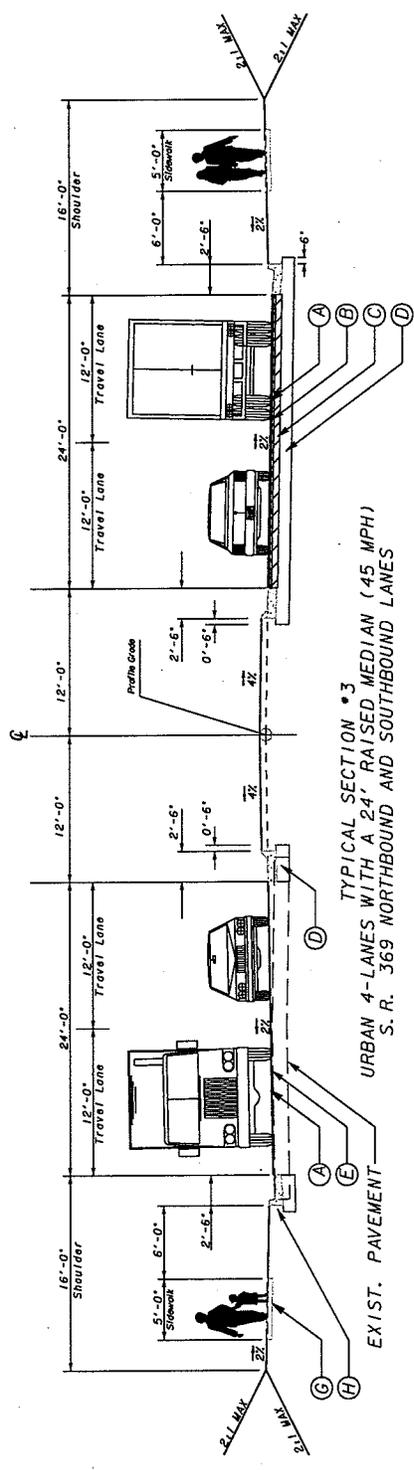
Damages:
 Consequential - 3 Parcels \$ 1,828,400
 Cost To Cure - 15 Parcels \$ 240,000
 \$ **2,068,400**
 \$ **8,916,400**

Net Cost \$ 8,916,400
 Scheduling Contingency 55 % \$ 4,904,020
 Adm/Court Cost 60 % \$ 8,292,252
 Inflation Factor 40 % \$ 8,845,068
 \$30,957,740

Total Cost \$ 30,958,000

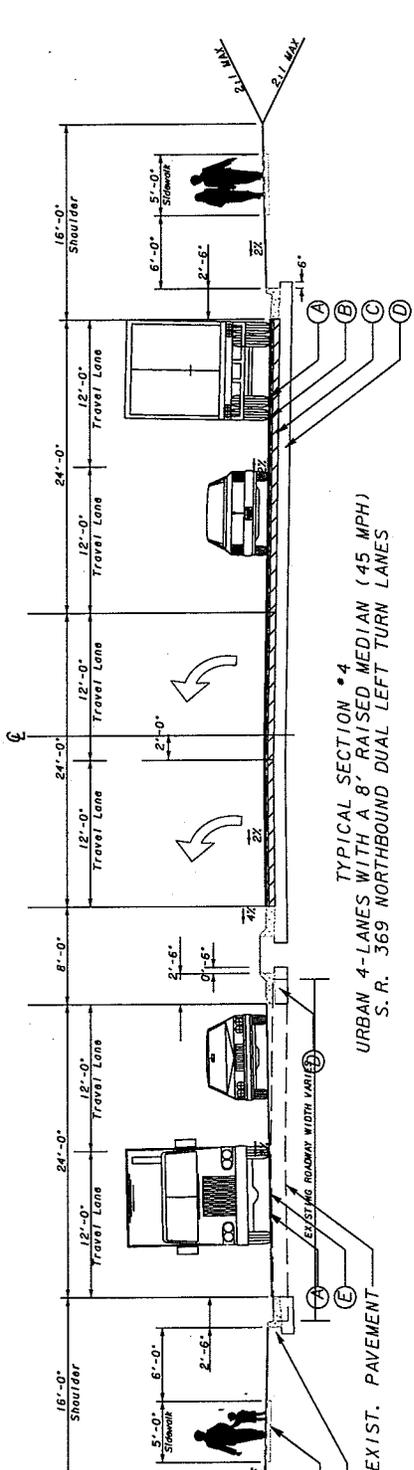
Prepared By : Mickie McJunkin
 Mickie McJunkin
 Wilbur Smith Associates

Approved : Jerry Milligan
 Jerry Milligan
 GDOT R/W



TYPICAL SECTION #3
 URBAN 4-LANES WITH A 24' RAISED MEDIAN (45 MPH)
 S. R. 369 NORTHBOUND AND SOUTHBOUND LANES

- REQUIRED PAVEMENT
- (A) ASPHALTIC CONCRETE 12.5 mm SUPERPAVE, 165 LBS./SQ. YD.
 - (B) ASPHALTIC CONCRETE 19.0 mm SUPERPAVE, 220 LBS./SQ. YD.
 - (C) ASPHALTIC CONCRETE 25.0 mm SUPERPAVE, 280 LBS./SQ. YD.
 - (D) GRADED AGGREGATE BASE 12"
 - (E) ASPHALTIC CONCRETE LEVELING, AS REQ'D
 - (G) CONC. SIDEWALK 4" THICK
 - (H) 8" X30" CONC. CURB & GUTTER, GA. STD. 9032b, TYPE 2



TYPICAL SECTION #4
 URBAN 4-LANES WITH AN 8' RAISED MEDIAN (45 MPH)
 S. R. 369 NORTHBOUND DUAL LEFT TURN LANES

PLANS PREPARED BY: **FR** Florence & Hutchison, Inc. CONSULTING ENGINEERS 1000 W. BIRCHWOOD DR. LAWRENCE, GA. 30046

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: CONSULTANT DESIGN
	TYPICAL SECTIONS
	SR 369
	FORSYTH COUNTY

DATE: 11/15/11 11:58 AM

**Georgia Department of Transportation
Project STP-012-1(81), Forsyth County, P.I. No. 122015**

SR 306 from SR 400 to East of SR 369 & Bridge at Baldrige Creek

NEED AND PURPOSE

The proposed project is located along SR 306 from SR 400 to the Martin Road intersection, just east of SR 369, in the northern section of Forsyth County, Georgia (see Figure 1, Project Location). This area of Forsyth County is experiencing rapid suburbanization, and SR 306 is classified as a rural minor arterial, but serves as a major arterial route from SR 400 to the rapidly growing northeast corner of the County. The widening of SR 306 from a 2-lane section to a 4-lane section was originally approved in 1997 as part of the reconstruction of the SR 400/SR 306 interchange. The original concept began at CR 148 (State Barn Road) and extended to just east of SR 369. Since the approval of the original concept, the SR 400/SR 306 interchange has been reconstructed, which included the widening of SR 306 from CR 148 to just east of SR 400.

The need for widening SR 306 from SR 400 to just east of SR 369 (1.4 miles) still exist as this segment of the roadway will be operating above capacity at the scheduled time of construction, year 2012. The 2012 projected AADT is 33,940 vpd, and the 2032 projected AADT is 54,030 vpd. A traffic analysis was conducted along the project area to determine the impacts of the projected traffic volumes on the operating conditions of the roadway, and is summarized in Table 1. The findings of the traffic analysis concludes that the peak AM westbound and peak PM eastbound traffic along this segment of SR 306 will be operating at a LOS E and F, respectively, by the year 2012. In addition, the intersection of SR 306/SR 369 is currently operating at an LOS E during peak AM hours, and is projected to be operating at an LOS F during peak AM and PM hours by 2012. The failure of this intersection is largely due to the left turning movement from SR 369 to SR 306 and the volume of through traffic along each direction of SR 369.

The proposed project is also needed to improve the safety of the existing roadway, as approximately 303 accidents were reported between milepost 5.15 and 6.33 from January 2000 through December 2004. A review of the statewide accident data provided by the Georgia Department of Transportation concludes that there were 72,178 accidents reported between 2001 and 2004 along rural minor arterial routes. This results in approximately 210 accidents per 100 million vehicular miles. In comparison, between 2000 and 2004, the project area included 85 million vehicular miles and 303 accidents, which results in an accident rate of 356 vehicles per 100 million vehicular miles. Therefore, the accident rate along the project area is 41% greater than the statewide accident rate for rural minor arterials. In addition, the majority of the reported accidents were rear-end (56%) or angle (32%) collisions, which indicates traffic congestion and unsafe turning conditions.

The purpose of the project is to improve the efficiency and safety of SR 306 by increasing the capacity of the roadway, which will improve traffic flow and reduce vehicular conflicts. The proposed project will provide four 12-foot travel lanes, a 24-foot raised median, curb and gutter, and a 5-foot sidewalk. In addition, dual left turn lanes will be provided along SR 369 northbound to improve the efficiency of the SR 306/SR 369 intersection. The improvements will also require the extension/replacement of the existing double 9'x9' box culvert along Baldrige Creek. The additional two travel lanes will increase the capacity of the roadway and will allow the facility to operate at an LOS D or better during peak hours until the year 2030. The roadway will continue to operate at an LOS of D or better during off-peak hours through 2032

(i.e. design year). The roadway will have a design speed of 45 mph and require approximately 150 feet of right-of-way. It has also been determined that the proposed project is not located within any State or County bicycle and pedestrian plans. The County has a planned multi-use path east of SR 369, but does not include the proposed project area. The proposed project does include sidewalks, which will provide safe pedestrian travel within the project corridor.

Table 1. Summary of the LOS along SR-306 and at the intersection with SR 369.

	Year	Traffic Volumes (vph)	LOS for Existing Conditions	LOS for Proposed Conditions
SR 306 – AM WB	2006	990	C	NA
SR 306 – PM EB	2006	751	C	NA
SR 306/SR 369				
AM	2006	2836	E	NA
AM NW Lt.	2006	511	E	NA
PM	2006	2711	D	NA
PM EB Rt.	2006	287	B	NA
SR 306 – AM WB	2012	1035	E	B
SR 306 – PM EB	2012	939	F	C
SR 306/SR 369	2012			
AM	2012	4072	F	C
AM NW Lt.	2012	626	F	C
PM	2012	4068	F	C
PM EB Rt.	2012	777	F	A
SR 306 – AM WB	2032	2082	F	E
SR 306 – PM EB	2032	2082	F	E
SR 306/SR 369	2032			
AM	2032	6888	F	F
AM NW Lt.	2032	1112	F	F
PM	2032	6889	F	F
PM EB Rt.	2032	1237	F	F

The project termini are logical as the western terminus will begin at the existing 4-lane section of SR 306 near the SR 400 interchange, and continue through, and improve, the SR 306/SR 369 intersection. The traffic analysis demonstrates that the majority of the traffic along this segment of SR 306 is generated from SR 369. The 2006 hourly volumes along SR 306 increase by as much as 56% between the eastern terminus and the western terminus. Therefore, it is logical that the proposed improvements would continue eastward through the intersection and terminate as traffic volumes no longer warrant immediate improvements.

There are two other GDOT projects located in the vicinity of the proposed project. STP-012-1(106), PI No. 122014 includes the widening/reconstruction of SR 369 from SR 306 to the Hall County line. STP-0001-00(037), PI No. 0001037, includes the widening/reconstruction of SR 369 from SR 9 to SR 306, including the interchange at SR 400. To achieve the maximum benefit of reconstructing SR 306, it is recommended that all four legs of the SR 306/SR 369 intersection be reconstructed under STP-012-1(81).