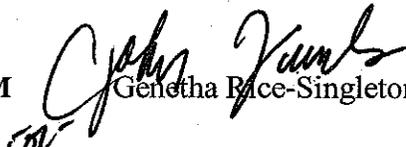


DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006295, Cobb County **OFFICE** Preconstruction
CSNHS-0006-00(295)
I-285 at South Cobb Drive **DATE** October 31, 2007

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO *for* SEE DISTRIBUTION

SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Angela Alexander
Bryant Poole
FHWA
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: CSNHS-0006-00(295), Cobb County
P.I. No.: 0006295
I-285 at South Cobb Drive
KG/DDc/BA

OFFICE: Traffic Operations

DATE: June 4, 2007 JUN 25 2007

FROM: Keith Golden, P.E., State Traffic Operations Engineer

TO: Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT: Revised 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.

The concept is being revised to incorporate modifications to the project termini and the Northbound I-285 on-ramp typical section. Originally, the proposed improvements along South Cobb Drive started at Highlands Parkway and ended at the Northbound I-285 on-ramp. The Georgia Department of Transportation Chief Engineer revised the project limits to begin at the exit ramp from Southbound I-285 and end at the Northbound I-285 on-ramp. The ramp typical section was initially designed as two 12-foot travel lanes with curb & gutter. The new typical will include two 12-foot travel lanes with curb & gutter on the inside and a 14' paved shoulder on the outside bordered by concrete side barrier. The change was necessitated by the widening of the ramp into high fill slopes along the outside shoulder of the ramp.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 6/23/07

Angela L. Alexander
State Transportation Planning Administrator

cc:

- Brian Summers, State project Review Engineer
- Jamie Simpson, State Financial Management Administrator
- Harvey Keepler, State Environmental/Location Engineer
- Paul Liles, State Bridge Design Engineer
- Angela Alexander, State Transportation Planning Administrator
- Wayne Fedora, Federal Highway Administration

REVISED PROJECT CONCEPT REPORT

Need and Purpose:

The purpose of this project is to improve the safety and operation of SR 280/South Cobb Drive with the intersections of Highlands Parkway, Oak Drive/Turon Parkway and I-285 ramps.

Accident history shows a total of 125 accidents from January 2001 through December 2001. There were 31 accidents at the Highlands Parkway intersection with no single type or vehicle direction being prevalent. At the Oak Drive intersection, 6 of the 8 accidents were angle type. There were 61 accidents reported at the I-285 southbound off-ramp and with primarily rear-end accidents and 25 accidents at the I-285 northbound off-ramp with 6 being rear-end accidents.

The most current vehicle volumes for SR 280/South Cobb Drive are for the year 2001 with AADT of 51,186.

All of the intersections along this section of South Cobb Drive are experiencing an unacceptable Level of Service (LOS E or below) during the AM and PM peak periods. These delays contribute to queues that extend through the intersections and add to the congestion in this area.

It is recommended that the existing guardrail be extended on each quadrant of the bridge over I-285, install pedestrian signals and crosswalks, provide dual right turn lanes at Highlands Parkway, construct a raised concrete median from Highlands Parkway to I-285 with a median break and new signal at Oak Drive and provide dual left turn lanes from southbound South Cobb Drive to the northbound on-ramp at I-285. In addition, it is recommended to improve the right turn movements at the southbound on and off-ramps by increasing the radii at each radius return, widen free flow right turn and to widen the northbound on-ramp to receive the dual left turn from southbound South Cobb Drive.

These actions will improve the pedestrian facilities and overall safety along this corridor. The recommended improvements will improve traffic operations by reducing queue lengths and the intersections are expected to have an improved Level of Service (LOS).

Project Location:

This project is located in Cobb County, 4.5 miles SE of the City of Smyrna, Georgia. The project begins just north of Highlands Parkway (MP 1.12) and ends just south of I-285 (MP 0.73). The project is approximately 0.39 miles in length.

Description of the Approved Concept:

The proposed geometric, signal and safety improvements will satisfy the need and purpose by reducing the operational deficiencies and number of accidents at the intersections along this section of South Cobb Drive.

Safety improvements included with this project consist of upgrading the guardrail and end treatments at the I-285 interchange and installation of pedestrian crosswalks and signal phases at

the Oak Street and I-285 interchange. Dual right turn lanes will be provided at Highlands Parkway. A concrete median will be constructed from Highlands Parkway to I-285. The radii will be increased for the turn movements at the southbound on and off-ramps. The northbound on-ramp will be widened to accommodate the dual left turn from southbound South Cobb Drive.

PDP Classification: Major _____ Minor X

Federal Oversight Full Oversight () , Exempt () , SF () , Other ()

Functional Classification: Minor Urban Arterial Street

U.S. Route Number(s): M9000 **State Route Number(s):** SR 280

Traffic (AADT) as shown in the approved concept:

Current Year: (2001): 51,186 *Design Year:* Not shown

Proposed Features to be Revised:

- Project Termini

The project termini along South Cobb Drive have been revised. Originally, the proposed improvements started at Highlands Parkway and ended at the northbound I-285 on-ramp. The new project limits will begin at the exit ramp from southbound I-285 and end at the northbound I-285 on-ramp.

- Typical Section

The proposed typical section for the I-285 northbound ramp will also change. The ramp was initially designed as two 12-foot travel lanes with curb & gutter. The new typical will include two 12-foot travel lanes with curb & gutter on the inside and a 14' paved shoulder on the outside bordered by concrete side barrier.

Describe the Revised Features to be Approved:

1. Project Termini from the southbound I-285 exit ramp to the northbound I-285 on-ramp
2. 14' paved outside shoulder on the ramp bordered by concrete side barrier

Updated Traffic Data (AADT):

Current Year: (2010): 61,171 *Design Year:* (2030): 90,895

Programmed/Schedule:

P.E.: 2003 *R/W:* None *Construction:* 2008
VE Study Required Yes () No ()

Revised Cost Estimates:

1. Construction cost including E&C,
2. Right-of-way, and
3. Utilities

~~\$1,865,312~~ ^{\$}1,669,217
~~\$0~~ - 0 -
~~\$0~~ 25,000

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

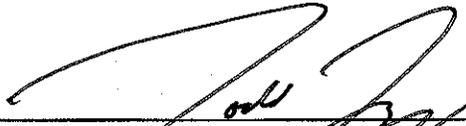
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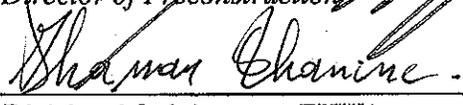
A comparison between the proposed concept and the conforming plan's model description is not necessary since the project is an operational improvement and not a capacity one.

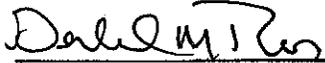
Recommendations: Recommend that the proposed revision to the concept be approved for implementation.

Attachments:

1. Project Location Map
2. Cost Estimate
3. Typical Section

Concur: 
 Director of Preconstruction

Approve: 
 Division Administrator, FHWA

Approve: 
 Chief Engineer

Estimate Report for file "006295 Concept"

Section ROADWAY ITEMS						
Item Number	Quantity	Units	Unit Price	Item Description	Cost	
150-1000	1	LS	250000.00	TRAFFIC CONTROL -	250000.00	
210-0100	1	LS	200000.00	GRADING COMPLETE -	200000.00	
310-5120	1500	SY	20.00	GR AGGR BASE CRS, 12 INCH, INCL MATL	30000.00	
402-1812	100	TN	100.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	10000.00	
402-3113	900	TN	110.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	99000.00	
402-3190	500	TN	110.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	55000.00	
413-1000	80	GL	2.08	BITUM TACK COAT	166.40	
430-0620	1500	SY	70.00	PLAIN PC CONC PVMT, CL HES CONC, 12 INCH THK	105000.00	
432-5010	8000	SY	2.26	MILL ASPH CONC PVMT, VARIABLE DEPTH	18080.00	
441-0104	600	SY	40.00	CONC SIDEWALK, 4 IN	24000.00	
441-0204	170	SY	35.00	PLAIN CONC DITCH PAVING, 4 IN	5950.00	
441-0748	250	SY	45.00	CONCRETE MEDIAN, 6 IN	11250.00	
441-6222	200	LF	20.00	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	4000.00	
500-9999	10	CY	150.00	CLASS B CONC, BASE OR PVMT WIDENING	1500.00	
550-1180	300	LF	50.00	STORM DRAIN PIPE, 18 IN, H 1-10	15000.00	
550-4218	1	EA	690.00	FLARED END SECTION 18 IN, STORM DRAIN	690.00	
621-4020	80	LF	256.35	CONCRETE SIDE BARRIER, TYPE 2	20508.00	
621-4021	120	LF	425.77	CONCRETE SIDE BARRIER, TYPE 2A	51092.40	
621-4022	100	LF	479.41	CONCRETE SIDE BARRIER, TYPE 2B	47941.00	
621-4060	120	LF	339.60	CONCRETE SIDE BARRIER, TYPE 6	40752.00	
621-4061	300	LF	453.82	CONCRETE SIDE BARRIER, TYPE 6A	136146.00	
641-1100	240	LF	53.27	GUARDRAIL, TP T	12784.80	
641-1200	90	LF	18.24	GUARDRAIL, TP W	1641.60	
641-5001	2	EA	647.31	GUARDRAIL ANCHORAGE, TP 1	1294.62	
641-5012	2	EA	1815.35	GUARDRAIL ANCHORAGE, TP 12	3630.70	
668-2100	4	EA	4500.00	DROP INLET, GP 1	18000.00	
Section Sub Total:					\$1,163,427.52	

Section PERMANENT EROSION CONTROL						
Item Number	Quantity	Units	Unit Price	Item Description	Cost	
700-6910	2	AC	987.28	PERMANENT GRASSING	1974.56	
700-7000	5	TN	61.37	AGRICULTURAL LIME	306.85	
700-7010	4	GL	20.24	LIQUID LIME	80.96	
700-8000	1	TN	350.95	FERTILIZER MIXED GRADE	350.95	
700-8100	80	LB	2.25	FERTILIZER NITROGEN CONTENT	180.00	
Section Sub Total:					\$2,893.32	

Section TEMPORARY EROSION CONTROL						
Item Number	Quantity	Units	Unit Price	Item Description	Cost	
163-0240	100	TN	180.48	MULCH	18048.00	
163-0300	2	EA	2465.64	CONSTRUCTION EXIT	4931.28	
163-0501	1	EA	856.85	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	856.85	
163-0550	10	EA	315.68	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	3156.80	
165-0030	500	LF	1.91	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	955.00	
165-0085	1	EA	256.48	MAINTENANCE OF SILT CONTROL GATE, TP 1	256.48	
165-0101	2	EA	659.48	MAINTENANCE OF CONSTRUCTION EXIT	1318.96	
165-0105	10	EA	113.33	MAINTENANCE OF INLET SEDIMENT TRAP	1133.30	
167-1000	2	EA	1352.63	WATER QUALITY MONITORING AND SAMPLING	2705.26	
167-1500	12	MO	1051.37	WATER QUALITY INSPECTIONS	12616.44	
171-0030	1000	LF	4.11	TEMPORARY SILT FENCE, TYPE C	4110.00	
Section Sub Total:					\$50,088.37	

Section SIGNING & MARKING						
Item Number	Quantity	Units	Unit Price	Item Description	Cost	
636-1020	110	SF	14.70	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	1617.00	
				HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING,		

636-1029	40	SF	16.52	TP 3	660.80
636-1033	100	SF	19.34	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	1934.00
636-1041	50	SF	30.43	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	1521.50
636-2070	400	LF	8.25	GALV STEEL POSTS, TP 7	3300.00
636-2080	200	LF	11.12	GALV STEEL POSTS, TP 8	2224.00
636-2090	50	LF	8.48	GALV STEEL POSTS, TP 9	424.00
653-0110	10	EA	69.57	THERMOPLASTIC PVMT MARKING, ARROW, TP 1	695.70
653-0120	2	EA	70.45	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	140.90
653-1501	4000	LF	0.63	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	2520.00
653-1502	4000	LF	0.63	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	2520.00
653-1704	100	LF	5.33	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	533.00
653-3501	3000	GLF	0.54	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	1620.00
653-6004	500	SY	2.70	THERMOPLASTIC TRAF STRIPING, WHITE	1350.00
Section Sub Total:					\$21,060.90

Section TRAFFIC SIGNAL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
647-1000	1	LS	280000.00	TRAFFIC SIGNAL INSTALLATION NO -	280000.00
Section Sub Total:					\$280,000.00

Total Estimated Cost: \$1,517,470.11

Subtotal Construction Cost \$1,517,470.11

E&C Rate 10 % \$151,747.01

Inflation Rate 5 % @ 2 Years ~~\$171,094.75~~ *del*

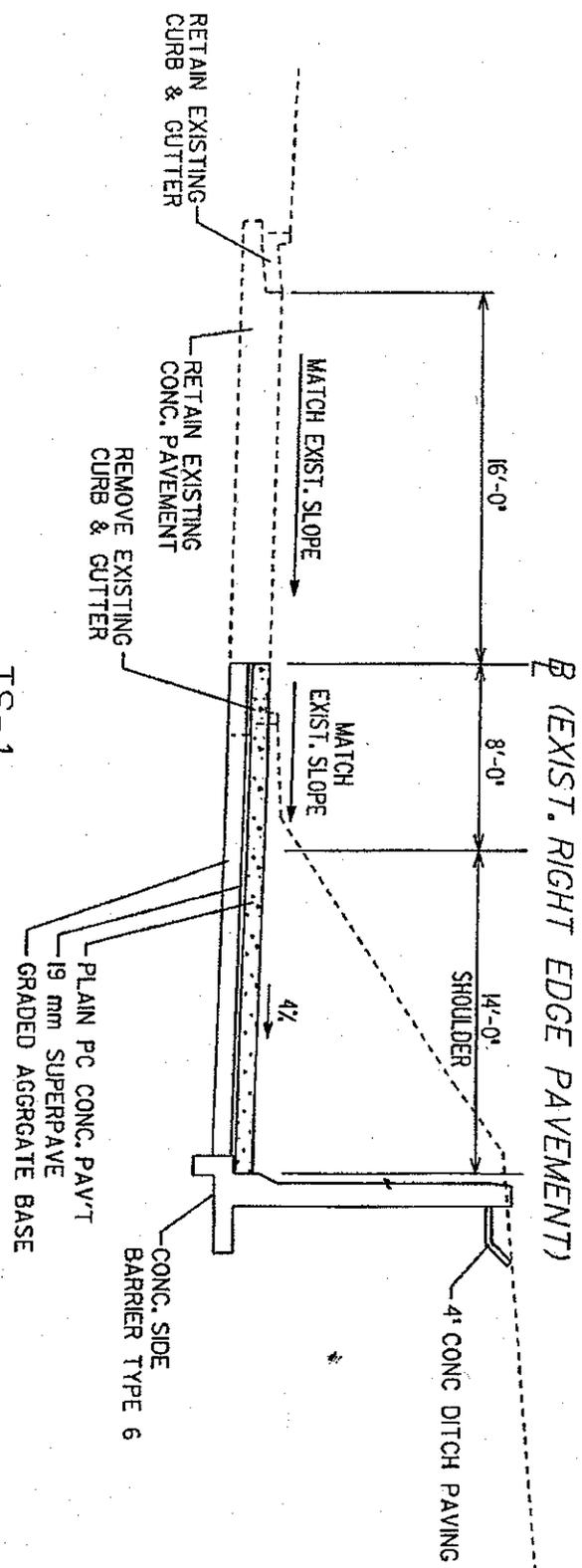
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Total Construction Cost ~~\$1,840,311.88~~ *\$1,669,217*

Right Of Way \$0.00

ReImb. Utilities \$25,000.00

Grand Total Project Cost ~~\$1,865,311.88~~

del 6/26/07 *1,694,217*



TS-1
 NORTHBOUND ON-RAMP
 WIDENING
 STA. 00+00.00 TO STA. 00+00.00
 W. T. S.

PBS&J	REVISION DATES	
	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN TYPICAL SECTIONS	SR 280 / SOUTH COBB DRIVE NORTHBOUND ON-RAMP
	DATE	BY
	5-01	