ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 350850-, 0008635, Muscogee County
CSSTP-8042-00(006) & CSSTP-0008-00(635)
Schatulga Road/Eastern Connector
from Buena Vista Road to SR 22/Macon Road

OFFICE Preconstruction

DATE September 8, 2008

FROM 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.

Attachment

DISTRIBUTION:

Brian summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Thomas Howell
David Millen
Angela Alexander
Paul Liles
Ben Buchan
BOARD MEMBER

RECEIVED
AUG - 4 2008
PRECONSTRUCTION

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE: STP00-8042-00(006) & CSSTP-0008-00(635)
P. I. No. 350850 & 0008635 MUSCOGEE COUNTY
Schatulga Road/Eastern Connector
From Buena Vista Road to SR 22/Macon Road

OFFICE: Urban Design

DATE: July 30, 2008

James B. Buchan

FROM: James B. Buchan, P.E., State Urban Design Engineer
TO: Genetha Rice-Singleton, 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 revised concept report proposes to revise project limits. The City of Columbus requested the project be split into separate phases. Project CSSTP-0008-00(635), PI 0008635, was created as per the City's request to the Department. The project limits for STP00-8042-00(006) is from Buena Vista Road to Chattsworth Road. The project limits for CSSTP-0008-00(635) is from Chattsworth Road to SR 22/Macon Road.

The concept is also being revised in response to the Value Engineering Study. The VE study implementation items are to remove the bicycle lane from the typical section and reduce the raised median from 44' to 28'. The typical sections are revised in this report to address the approved VE recommendations.

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

DATE 8/1/08 Angela S. Alexander
Angela Alexander, State Transportation Planning Administrator

JBB:WNO

Distribution:

Brian Summers, Engineering Services
Glenn Bowman, Office of Environment and Location
Keith Golden, Office of Traffic Operations
Angela Alexander, Office of Planning
Jamie Simpson, Office of Financial Management
Thomas Howell, District 3 Engineer
Paul Liles, Office of Bridge Design

REVISED PROJECT CONCEPT REPORT

Eastern Connector from Buena Vista to Macon Road/SR 22
Project Numbers: STP00-8042-00(006), CSSTP-0008-00(635)
County: Muscogee
P. I. Numbers: 350850, 0008635

Need and Purpose: See Attached Need and Purpose Statement

Project location: This project is located in central Muscogee County, beginning just north of the Buena Vista Road/Schatulga Road intersection and ending at Macon Road/SR 22/US 80. The project length is 5.7 miles and is located entirely within the city limits of Columbus.

Description of the approved concept:

PDP Classification: Full Oversight ( ), Exempt(X), SF( ), Other ( )

Functional Classification: Rural Principal Arterial

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

Traffic (AADT) as shown in the approved concept:
Current Year: 7500 (1998) Design Year: 12650 (2018)

Proposed features to be revised:

Project Location –

- From just north of the Buena Vista Road/Schatulga Road intersection and ending at Macon Road/SR 22/US 80. The project length is 5.7 miles.

Design Speed –

- Eastern Connector– 55 mph

Superelevation –

- Eastern Connector – $e_{max} = 6\%$

Typical Section –

- From Buena Vista Road to 1100' south of Forrest Road: 5-lane urban section w/ 14' flush median with curb and gutter, 18' shoulders (12' shoulders in the vicinity of Green Acres Cemetery entrance) , 4' bike lanes, and 5' sidewalks.
- From 1100' south of Forrest Road to Chattsworth Road: 4-lane urban section with curb and gutter, 18' shoulders, 4' bike lanes, 5' sidewalks, and a 44' raised grass median with curb and gutter.
- From Chattsworth Road to Macon Road (US 80): 4-lane urban section with curb and gutter, 18' shoulders, 4' bike lanes, 5' sidewalks, and a 20' raised grass median with curb and gutter.

Note: The original concept was revised on 4/21/03. That Revision recommended an urban roadway for the mainline, at the request of the City of Columbus. However, the speed design and superelevation was not changed at that time to correspond with the new section. This Concept Revision will correct that inconsistency.

Describe the revised feature(s) to be approved:

Project Location –

- The original concept is being split into two projects: 1) From just north of the Buena Vista Road/Schatulga Road intersection and ending 900' south of Chattsworth Road. The project length is 4.97 miles; 2) From 900' south of Chattsworth Road to Macon Road/SR 22/US 80. The project length is 0.85 miles. This section has a new project number CSSTP-0008-00(635) Muscogee County, PI 0008635.

Design Speed –

- Eastern Connector – 45 mph

Superelevation –

- Eastern Connector – $e_{max} = 4\%$

Typical Section –

PI # 350850:

- From Buena Vista Road to 1100' south of Forrest Road: 4-lane urban section with curb and gutter, 18' shoulders (12' shoulders in the vicinity of Green Acres Cemetery entrance) , 5' sidewalks, and a 14' center turn lane.
- From 1100' south of Forrest Road to 6100' south of Chattsworth Road: 4-lane urban section with curb and gutter, 18' shoulders, 5' sidewalks, and a 28' raised grass median with curb and gutter.
- From 6100' south of Chattsworth Road to 900' south of Chattsworth Road (has already been constructed under project CSSTP-0006-00(472)): 4-lane urban section with curb and gutter, 18' shoulders, 5' sidewalks, 4' bike lanes, and a 44' raised grass median with curb and gutter. This existing section will be milled, overlaid and restriped as part of this project.

PI # 0008635:

- From 900' south of Chattsworth Road to Macon Road (US 80): 4-lane urban section with curb and gutter, 22' shoulders, 5' sidewalks, and a 20' raised grass median with curb and gutter.

Updated traffic data (AADT):

Current Year: (2009) 11,870
Design Year: (2029) 16,130

Programmed/Schedule:
PI # 350850:

P.E. Local Gov't R/W: Local Gov't Construction: 2012

PI # 0008635:

P.E. Local Gov't R/W: Local Gov't Construction: 2010

Revised cost estimates:

- **STP00-8042-00(006)** ENGINEERING
1. Construction cost including ~~utility costs~~ and contingencies: $23,700,000
2. Right-of-way: $500,000
3. UTILITIES REIMB. - 0 -

- **CSSTP-0008-00(635)** ENGINEERING
1. Construction cost including ~~utility costs~~ and contingencies: $6,300,000
2. Right-of-way: $200,000
3. UTILITIES REIMB. - 0 -

8/4/2008

Is the project located in a Non-attainment area? _____ **Yes** __X__ **No**

Recommendation: It is recommended that the proposed revision to the concept be approved for implementation.

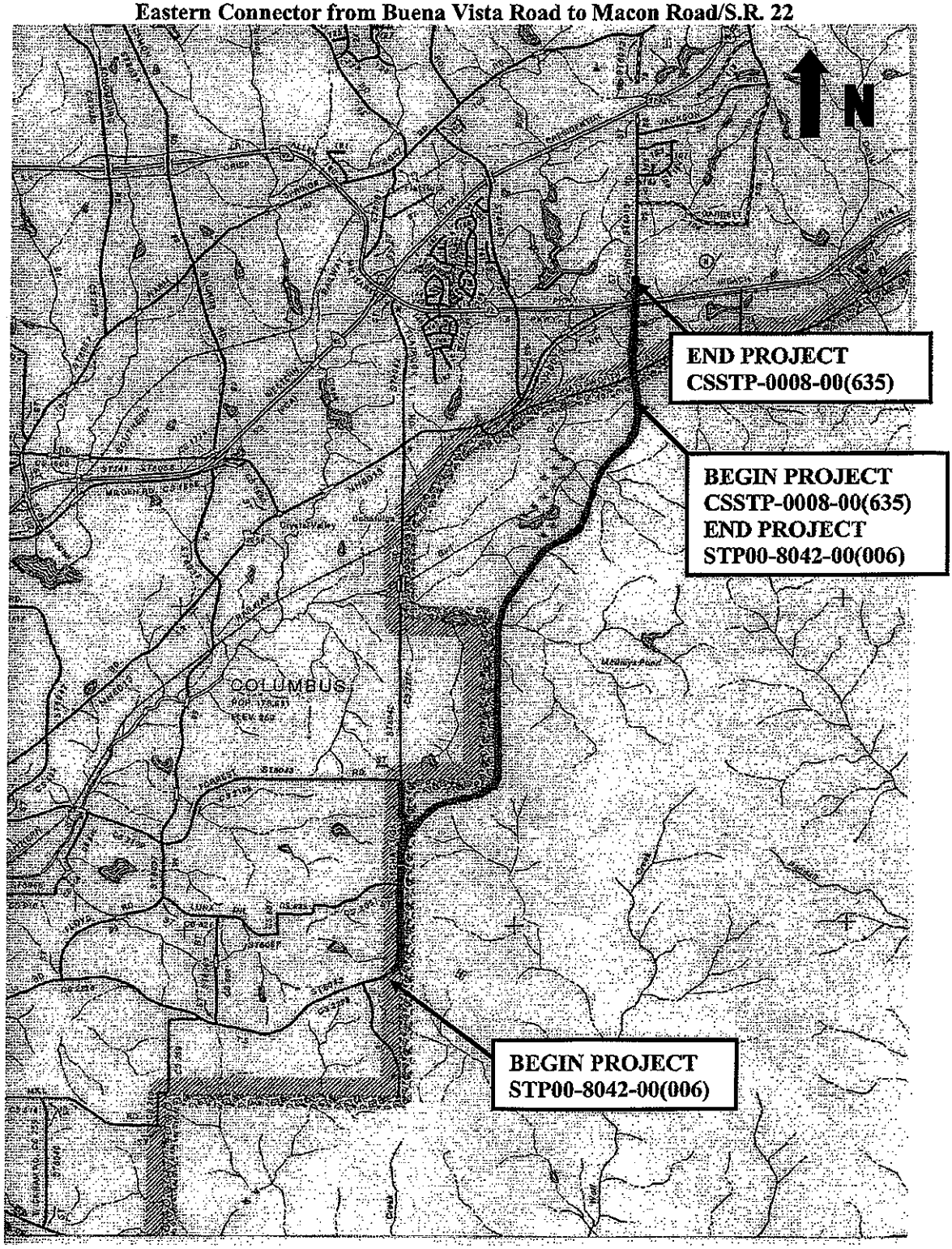
Attachments:
1. Sketch Map
2. Cost Estimate
3. Typical Sections
4. Need and Purpose Statement

Concur: _____ for Director
Director of Preconstruction

Approve: _____
Chief Engineer

PROJECT MAP-Project Nos : STP00-8042-00(006), CSSTP-0008-00(635), Muscogee County, P.I. Nos 350850, 0008635

Eastern Connector from Buena Vista Road to Macon Road/S.R. 22



7/29/2008

SUMMARY

Date: 29-Jul-08
Project# STP00-8042-00(006)
County: Muscogee
Project Description: Eastern Connector from Buena Vista Road to Chattsworth Road
PI# 350850
Alternate:
Estimate For -

	Estimate	COMMENTS
CONSTRUCTION COST (w/o 10% E&C)	$21,333,666.92	SEE ATTACHED CONSTRUCTION COST ESTIMATE
ENGINEERING & INSTPECTION (5%)	$1,066,683.35	
CONSTRUCTION CONTINGENCY (6%)	$1,280,020.02	
UTILITY COST	$0.00	
UTILITY CONTINGENCY (30%)	$0.00	
TOTAL	$23,680,370.29 - use $23,700,000	
RIGHT OF WAY	$500,000	

Prepared by: Alex Stone, P.E.

Estimate Report for file "STP00-8042-00(006)"

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	1000000.00	TRAFFIC CONTROL -	1000000.00
153-1300	1	EA	57024.37	FIELD ENGINEERS OFFICE TP 3	57024.37
201-1500	1	LS	1448145.13	CLEARING & GRUBBING -	1448145.13
205-0001	575781	CY	10.00	UNCLASS EXCAV	5757810.00
206-0002	146212	CY	10.50	BORROW EXCAV, INCL MATL	1535226.00
207-0203	3050	CY	37.32	FOUND BKFILL MATL, TP II	113826.00
310-1101	102500	TN	15.45	GR AGGR BASE CRS, INCL MATL	1583625.00
318-3000	500	TN	16.75	AGGR SURF CRS	8375.00
402-1812	1000	TN	90.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	90000.00
402-3121	26100	TN	90.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	2349000.00
402-3130	11600	TN	90.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	1044000.00
402-3190	15100	TN	90.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	1359000.00
413-1000	23000	GL	2.00	BITUM TACK COAT	46000.00
432-5010	10000	SY	1.64	MILL ASPH CONC PVMT, VARIABLE DEPTH	16400.00
433-1100	440	SY	109.15	REINF CONC APPROACH SLAB, INCL CURB	48026.00
441-0016	217	SY	30.19	DRIVEWAY CONCRETE, 6 IN TK	6551.23
441-0018	135	SY	36.65	DRIVEWAY CONCRETE, 8 IN TK	4947.75
441-0740	600	SY	26.83	CONCRETE MEDIAN, 4 IN	16098.00
441-4020	350	SY	29.50	CONC VALLEY GUTTER, 6 IN	10325.00
441-4030	350	SY	43.19	CONC VALLEY GUTTER, 8 IN	15116.50
441-6222	51000	LF	13.41	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	683910.00
441-6740	32100	LF	11.62	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7	373002.00
500-3101	700	CY	467.31	CLASS A CONCRETE	327117.00
500-3800	20	CY	664.92	CLASS A CONCRETE, INCL REINF STEEL	13298.40
500-9999	550	CY	171.00	CLASS B CONC, BASE OR PVMT WIDENING	94050.00
511-1000	77000	LB	0.74	BAR REINF STEEL	56980.00
550-1180	15000	LF	32.90	STORM DRAIN PIPE, 18 IN, H 1-10	493500.00
550-1240	7300	LF	39.82	STORM DRAIN PIPE, 24 IN, H 1-10	290686.00
550-1300	370	LF	49.83	STORM DRAIN PIPE, 30 IN, H 1-10	18437.10
550-1360	405	LF	61.05	STORM DRAIN PIPE, 36 IN, H 1-10	24725.25
550-1420	233	LF	77.44	STORM DRAIN PIPE, 42 IN, H 1-10	18043.52
550-1480	228	LF	99.01	STORM DRAIN PIPE, 48 IN, H 1-10	22574.28
550-2180	75	LF	24.68	SIDE DRAIN PIPE, 18 IN, H 1-10	1851.00
550-2240	80	LF	29.35	SIDE DRAIN PIPE, 24 IN, H 1-10	2348.00
550-2360	40	LF	45.54	SIDE DRAIN PIPE, 36 IN, H 1-10	1821.60
550-4118	4	EA	294.04	FLARED END SECTION 18 IN, SIDE DRAIN	1176.16
550-4124	4	EA	364.84	FLARED END SECTION 24 IN, SIDE DRAIN	1459.36
550-4136	2	EA	529.84	FLARED END SECTION 36 IN, SIDE DRAIN	1059.68
550-4218	5	EA	492.70	FLARED END SECTION 18 IN, STORM DRAIN	2463.50
550-4224	2	EA	546.05	FLARED END SECTION 24 IN, STORM DRAIN	1092.10
550-4230	1	EA	685.38	FLARED END SECTION 30 IN, STORM DRAIN	685.38
550-4236	4	EA	909.10	FLARED END SECTION 36 IN, STORM DRAIN	3636.40
550-4242	2	EA	1117.89	FLARED END SECTION 42 IN, STORM DRAIN	2235.78
634-1200	33	EA	90.37	RIGHT OF WAY MARKERS	2982.21
641-1200	980	LF	14.12	GUARDRAIL, TP W	13837.60
641-5001	6	EA	491.84	GUARDRAIL ANCHORAGE, TP 1	2951.04
641-5012	6	EA	1581.55	GUARDRAIL ANCHORAGE, TP 12	9489.30
668-1100	171	EA	1820.82	CATCH BASIN, GP 1	311360.22
668-1110	126	LF	194.45	CATCH BASIN, GP 1, ADDL DEPTH	24500.70
668-2100	1	EA	2687.63	DROP INLET, GP 1	2687.63
668-4300	3	EA	1842.45	STORM SEWER MANHOLE, TP 1	5527.35
668-4311	4	LF	222.43	STORM SEWER MANHOLE, TP 1, ADDL DEPTH, CL 1	889.72
668-4312	7	LF	213.26	STORM SEWER MANHOLE, TP 1, ADDL DEPTH, CL 2	1492.82
				Section Sub Total:	**$19,321,367.08**

Section Permanent Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost

603-2180	900	SY	33.47	STN DUMPED RIP RAP, TP 3, 12 IN	30123.00
603-7000	900	SY	4.03	PLASTIC FILTER FABRIC	3627.00
700-6910	50	AC	806.16	PERMANENT GRASSING	40308.00
700-7000	223	TN	58.72	AGRICULTURAL LIME	13094.56
700-7010	187	GL	18.97	LIQUID LIME	3547.39
700-8000	35	TN	268.54	FERTILIZER MIXED GRADE	9398.90
700-8100	5000	LB	1.57	FERTILIZER NITROGEN CONTENT	7850.00
710-9000	14500	SY	4.41	PERMANENT SOIL REINFORCING MAT	63945.00
715-2200	12000	SY	2.00	BITUMINOUS TREATED ROVING, WATERWAYS	24000.00
				Section Sub Total:	**$195,893.85**

Section Signing & Marking

Item Number	Quantity	Units	Unit Price	Item Description	Cost
610-6515	14	EA	62.52	REM HIGHWAY SIGN, STD	875.28
611-5360	1	EA	275.78	RESET HIGHWAY SIGN	275.78
636-1020	310	SF	13.82	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	4284.20
636-1029	135	SF	21.93	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	2960.55
636-1031	705	SF	16.95	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	11949.75
636-1032	20	SF	27.68	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	553.60
636-2070	1350	LF	7.04	GALV STEEL POSTS, TP 7	9504.00
636-2080	510	LF	9.02	GALV STEEL POSTS, TP 8	4600.20
636-2090	750	LF	6.86	GALV STEEL POSTS, TP 9	5145.00
636-3010	13	EA	371.94	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	4835.22
652-0094	7	EA	39.92	PAVEMENT MARKING, SYMBOL, TP 4	279.44
652-0110	7	EA	39.44	PAVEMENT MARKING, ARROW, TP 1	276.08
652-5301	35000	LF	0.16	SOLID TRAF STRIPE, 6 IN, WHITE	5600.00
652-5451	35000	LF	0.14	SOLID TRAFFIC STRIPE, 5 IN, WHITE	4900.00
652-6301	1500	GLF	0.19	SKIP TRAF STRIPE, 6 IN, WHITE	285.00
652-6501	2050	GLF	0.13	SKIP TRAFFIC STRIPE, 5 IN, WHITE	266.50
653-0120	82	EA	60.60	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	4969.20
653-0170	8	EA	78.12	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	624.96
653-0210	2	EA	94.35	THERMOPLASTIC PVMT MARKING, WORD, TP 1	188.70
653-1501	36200	LF	0.28	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	10136.00
653-1502	65000	LF	0.28	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	18200.00
653-1704	310	LF	3.43	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	1063.30
653-1804	2230	LF	1.67	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	3724.10
653-3501	35000	GLF	0.17	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	5950.00
653-6004	5020	SY	2.56	THERMOPLASTIC TRAF STRIPING, WHITE	12851.20
653-6006	970	SY	2.72	THERMOPLASTIC TRAF STRIPING, YELLOW	2638.40
654-1001	425	EA	3.53	RAISED PVMT MARKERS TP 1	1500.25
654-1003	880	EA	3.77	RAISED PVMT MARKERS TP 3	3317.60
657-3054	370	GLF	2.60	PREFORMED PLASTIC SKIP PVMT MKG, 5 IN, WHITE, TP PB	962.00
657-6054	370	LF	3.74	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	1383.80
				Section Sub Total:	**$124,100.11**

Section Bridge

Item Number	Quantity	Units	Unit Price	Item Description	Cost
543-1100	1	LS	1215000.00	CONSTR OF BRIDGE - COMPLETE - TO BOTTOM OF CAP	1215000.00
				Section Sub Total:	**$1,215,000.00**

Section Temporary Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	25	AC	481.40	TEMPORARY GRASSING	12035.00
163-0240	1200	TN	196.00	MULCH	235200.00
163-0300	2	EA	1259.14	CONSTRUCTION EXIT	2518.28
163-0501	5	EA	833.50	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1	4167.50
163-0521	267	EA	167.94	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	44839.98
163-0530	1900	LF	2.76	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	5244.00
163-0550	170	EA	244.96	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	41643.20
165-0010	4500	LF	1.06	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	4770.00
165-0030	5650	LF	1.18	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	6667.00
165-0040	267	EA	70.84	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	18914.28
165-0070	950	LF	1.48	MAINTENANCE OF BALED STRAW EROSION CHECK	1406.00
165-0085	5	EA	332.38	MAINTENANCE OF SILT CONTROL GATE, TP 1	1661.90
165-0101	2	EA	422.50	MAINTENANCE OF CONSTRUCTION EXIT	845.00
165-0105	170	EA	88.82	MAINTENANCE OF INLET SEDIMENT TRAP	15099.40
167-1000	2	EA	1734.57	WATER QUALITY MONITORING AND SAMPLING	3469.14
167-1500	30	MO	853.64	WATER QUALITY INSPECTIONS	25609.20
171-0010	9000	LF	1.87	TEMPORARY SILT FENCE, TYPE A	16830.00
171-0030	11300	LF	3.22	TEMPORARY SILT FENCE, TYPE C	36386.00
				Section Sub Total:	**$477,305.88**

Total Estimated Cost: $21,333,666.92

7/29/2008

SUMMARY

Date: 29-Jul-08
Project# CSSTP-0008-00(635)
County: Muscogee
Project Description: Eastern Connector from Chattsworth Road to US 80/Macon Road
PI# 0008635
Alternate:
Estimate For -

	Estimate	COMMENTS
CONSTRUCTION COST (w/o 10% E&C)	$5,618,972.56	SEE ATTACHED CONSTRUCTION COST ESTIMATE
ENGINEERING & INSTPECTION (5%)	$280,948.63	
CONSTRUCTION CONTINGENCY (6%)	$337,138.35	
UTILITY COST	$0.00	
UTILITY CONTINGENCY (30%)	$0.00	
TOTAL	$6,237,059.54 - use $6,300,000	
RIGHT OF WAY	$200,000	

Prepared by: Alex Stone, P.E.

Estimate Report for file "CSSTP-0008-00(635)"

Section Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	200000.00	TRAFFIC CONTROL -	200000.00
153-1300	1	EA	57024.37	FIELD ENGINEERS OFFICE TP 3	57024.37
201-1500	1	LS	500000.00	CLEARING & GRUBBING -	500000.00
205-0001	59070	CY	10.00	UNCLASS EXCAV	590700.00
206-0002	47640	CY	10.50	BORROW EXCAV, INCL MATL	500220.00
207-0203	450	CY	37.32	FOUND BKFILL MATL, TP II	16794.00
310-1101	26240	TN	15.45	GR AGGR BASE CRS, INCL MATL	405408.00
318-3000	160	TN	16.75	AGGR SURF CRS	2680.00
402-1812	2400	TN	90.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	216000.00
402-3121	9310	TN	90.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	837900.00
402-3130	3940	TN	90.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	354600.00
402-3190	3650	TN	90.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	328500.00
413-1000	5400	GL	2.00	BITUM TACK COAT	10800.00
432-5010	26480	SY	1.64	MILL ASPH CONC PVMT, VARIABLE DEPTH	43427.20
441-0740	510	SY	26.83	CONCRETE MEDIAN, 4 IN	13683.30
441-4020	170	SY	29.50	CONC VALLEY GUTTER, 6 IN	5015.00
441-4030	120	SY	43.19	CONC VALLEY GUTTER, 8 IN	5182.80
441-6222	15270	LF	13.41	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	204770.70
441-6740	17970	LF	11.62	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7	208811.40
446-1002	1000	LF	2.63	PVMT REINF FABRIC STRIPS, TP 2, INCL BITUM BINDER	2630.00
500-3101	1170	CY	467.31	CLASS A CONCRETE	546752.70
500-9999	2	CY	171.00	CLASS B CONC, BASE OR PVMT WIDENING	342.00
511-1000	39670	LB	0.74	BAR REINF STEEL	29355.80
550-1180	2980	LF	32.90	STORM DRAIN PIPE, 18 IN, H 1-10	98042.00
550-1240	350	LF	39.82	STORM DRAIN PIPE, 24 IN, H 1-10	13937.00
550-2180	80	LF	24.68	SIDE DRAIN PIPE, 18 IN, H 1-10	1974.40
550-2240	27	LF	29.35	SIDE DRAIN PIPE, 24 IN, H 1-10	792.45
550-4118	6	EA	294.04	FLARED END SECTION 18 IN, SIDE DRAIN	1764.24
550-4124	2	EA	364.84	FLARED END SECTION 24 IN, SIDE DRAIN	729.68
550-4218	2	EA	492.70	FLARED END SECTION 18 IN, STORM DRAIN	985.40
634-1200	17	EA	90.37	RIGHT OF WAY MARKERS	1536.29
641-1200	230	LF	14.12	GUARDRAIL, TP W	3247.60
641-5001	1	EA	491.84	GUARDRAIL ANCHORAGE, TP 1	491.84
641-5012	1	EA	1581.55	GUARDRAIL ANCHORAGE, TP 12	1581.55
668-1100	34	EA	1820.82	CATCH BASIN, GP 1	61907.88
668-1110	30	LF	194.45	CATCH BASIN, GP 1, ADDL DEPTH	5833.50
668-2100	6	EA	2687.63	DROP INLET, GP 1	16125.78
668-2110	3	LF	248.22	DROP INLET, GP 1, ADDL DEPTH	744.66
				Section Sub Total:	**$5,290,291.54**

Section Permanent Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2180	625	SY	33.47	STN DUMPED RIP RAP, TP 3, 12 IN	20918.75
603-7000	625	SY	4.03	PLASTIC FILTER FABRIC	2518.75
700-6910	15	AC	806.16	PERMANENT GRASSING	12092.40
700-7000	64	TN	58.72	AGRICULTURAL LIME	3758.08
700-7010	53	GL	18.97	LIQUID LIME	1005.41
700-8000	10	TN	268.54	FERTILIZER MIXED GRADE	2685.40
700-8100	1410	LB	1.57	FERTILIZER NITROGEN CONTENT	2213.70
710-9000	500	SY	4.41	PERMANENT SOIL REINFORCING MAT	2205.00
715-2200	700	SY	2.00	BITUMINOUS TREATED ROVING, WATERWAYS	1400.00
				Section Sub Total:	**$48,797.49**

Section Signalization

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1032	56	SF	27.68	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	1550.08

639-4004	4	EA	4391.62	STRAIN POLE, TP IV	17566.48
647-1000	1	LS	42430.91	TRAFFIC SIGNAL INSTALLATION NO -	42430.91
				Section Sub Total:	**$61,547.47**

Section Signing & Marking

Item Number	Quantity	Units	Unit Price	Item Description	Cost
610-6515	7	EA	62.52	REM HIGHWAY SIGN, STD	437.64
611-5360	1	EA	275.78	RESET HIGHWAY SIGN	275.78
636-1020	155	SF	13.82	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	2142.10
636-1029	66	SF	21.93	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	1447.38
636-1031	410	SF	16.95	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	6949.50
636-1032	10	SF	27.68	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING TP 6	276.80
636-2070	870	LF	7.04	GALV STEEL POSTS, TP 7	6124.80
636-2080	254	LF	9.02	GALV STEEL POSTS, TP 8	2291.08
636-2090	374	LF	6.86	GALV STEEL POSTS, TP 9	2565.64
636-3010	7	EA	371.94	GROUND-MOUNTED BREAKAWAY SIGN SUPPORT	2603.58
639-2002	310	LF	2.57	STEEL WIRE STRAND CABLE, 3/8 IN	796.70
639-4003	2	EA	4336.36	STRAIN POLE, TP III	8672.72
652-0094	4	EA	39.92	PAVEMENT MARKING, SYMBOL, TP 4	159.68
652-0100	1	EA	159.65	PAVEMENT MARKING, RR-HWY CROSSING SYMBOL	159.65
652-0110	3	EA	39.44	PAVEMENT MARKING, ARROW, TP 1	118.32
652-5301	17416	LF	0.16	SOLID TRAF STRIPE, 6 IN, WHITE	2786.56
652-5451	17416	LF	0.14	SOLID TRAFFIC STRIPE, 5 IN, WHITE	2438.24
652-6301	747	GLF	0.19	SKIP TRAF STRIPE, 6 IN, WHITE	141.93
652-6501	1022	GLF	0.13	SKIP TRAFFIC STRIPE, 5 IN, WHITE	132.86
653-0100	3	EA	340.69	THERMOPLASTIC PVMT MARKING, RR/HWY CROSSING SYMBOL	1022.07
653-0120	44	EA	60.60	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	2666.40
653-0170	4	EA	78.12	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	312.48
653-0210	2	EA	94.35	THERMOPLASTIC PVMT MARKING, WORD, TP 1	188.70
653-1501	18058	LF	0.28	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	5056.24
653-1502	32307	LF	0.28	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	9045.96
653-1704	155	LF	3.43	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	531.65
653-1804	1115	LF	1.67	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	1862.05
653-3501	17415	GLF	0.17	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	2960.55
653-6004	2506	SY	2.56	THERMOPLASTIC TRAF STRIPING, WHITE	6415.36
653-6006	485	SY	2.72	THERMOPLASTIC TRAF STRIPING, YELLOW	1319.20
654-1001	212	EA	3.53	RAISED PVMT MARKERS TP 1	748.36
654-1003	440	EA	3.77	RAISED PVMT MARKERS TP 3	1658.80
657-3054	184	GLF	2.60	PREFORMED PLASTIC SKIP PVMT MKG, 5 IN, WHITE, TP PB	478.40
657-6054	184	LF	3.74	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	688.16
				Section Sub Total:	**$75,475.34**

Section Temporary Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	8	AC	481.40	TEMPORARY GRASSING	3851.20
163-0240	330	TN	196.00	MULCH	64680.00
163-0300	1	EA	1259.14	CONSTRUCTION EXIT	1259.14
163-0521	86	EA	167.94	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	14442.84
163-0530	150	LF	2.76	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	414.00

163-0550	41	EA	244.96	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	10043.36
165-0010	3100	LF	1.06	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	3286.00
165-0030	1220	LF	1.18	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	1439.60
165-0040	86	EA	70.84	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	6092.24
165-0070	80	LF	1.48	MAINTENANCE OF BALED STRAW EROSION CHECK	118.40
165-0101	1	EA	422.50	MAINTENANCE OF CONSTRUCTION EXIT	422.50
165-0105	41	EA	88.82	MAINTENANCE OF INLET SEDIMENT TRAP	3641.62
167-1000	2	EA	1734.57	WATER QUALITY MONITORING AND SAMPLING	3469.14
167-1500	12	MO	853.64	WATER QUALITY INSPECTIONS	10243.68
171-0010	6100	LF	1.87	TEMPORARY SILT FENCE, TYPE A	11407.00
171-0030	2500	LF	3.22	TEMPORARY SILT FENCE, TYPE C	8050.00
				Section Sub Total:	**$142,860.72**

Total Estimated Cost: $5,618,972.56

STATE	PROJECT NUMBER	SHEET NO.	REVISION
GA.	STP-8042(6)		

PAVEMENT DESIGN

(A) 165 lbs/yd² ASPHALTIC CONCRETE 12.5 mm SUPERPAVE

(B) 220 lbs/yd² ASPHALTIC CONCRETE 19 mm SUPERPAVE

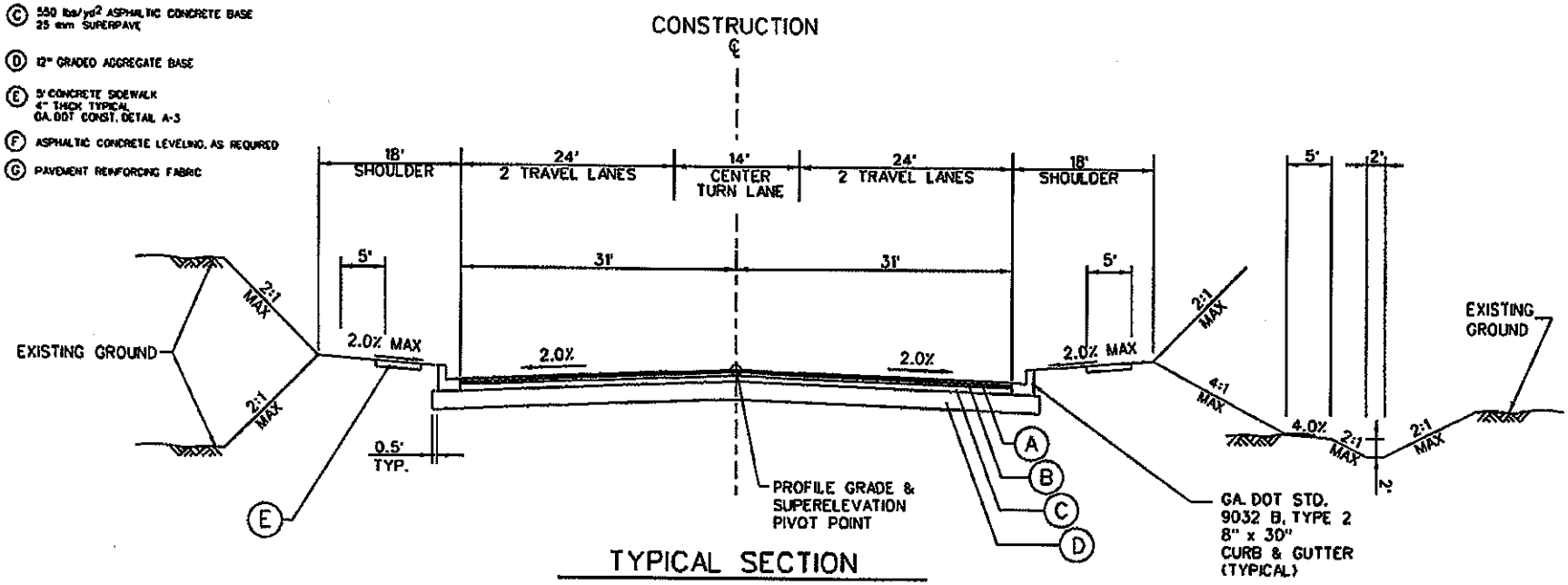
(C) 550 lbs/yd² ASPHALTIC CONCRETE BASE 25 mm SUPERPAVE

(D) 12" GRADED AGGREGATE BASE

(E) 5' CONCRETE SIDEWALK 4" THICK TYPICAL GA. DOT CONST. DETAIL A-3

(F) ASPHALTIC CONCRETE LEVELING, AS REQUIRED

(G) PAVEMENT REINFORCING FABRIC



TYPICAL SECTION

NORMAL CROWN EASTERN CONNECTOR

NOT TO SCALE

JORDAN JONES & GOULDING

GEORGIA DEPARTMENT OF TRANSPORTATION

NOT RELEASED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION OF REVISION

EASTERN CONNECTOR FROM BUENA VISTA ROAD TO MACON ROAD/S.R. 22

TYPICAL SECTIONS

DESIGNED:	CHECKED:	DATE:	SHEET	REV
DRAWN:	JOB NO. 20.0.215	SCALE: N.T.S.		

STATE	PROJECT NUMBER	SHEET NO.	TOTAL
GA.	STP-8042(6)		

PAVEMENT DESIGN

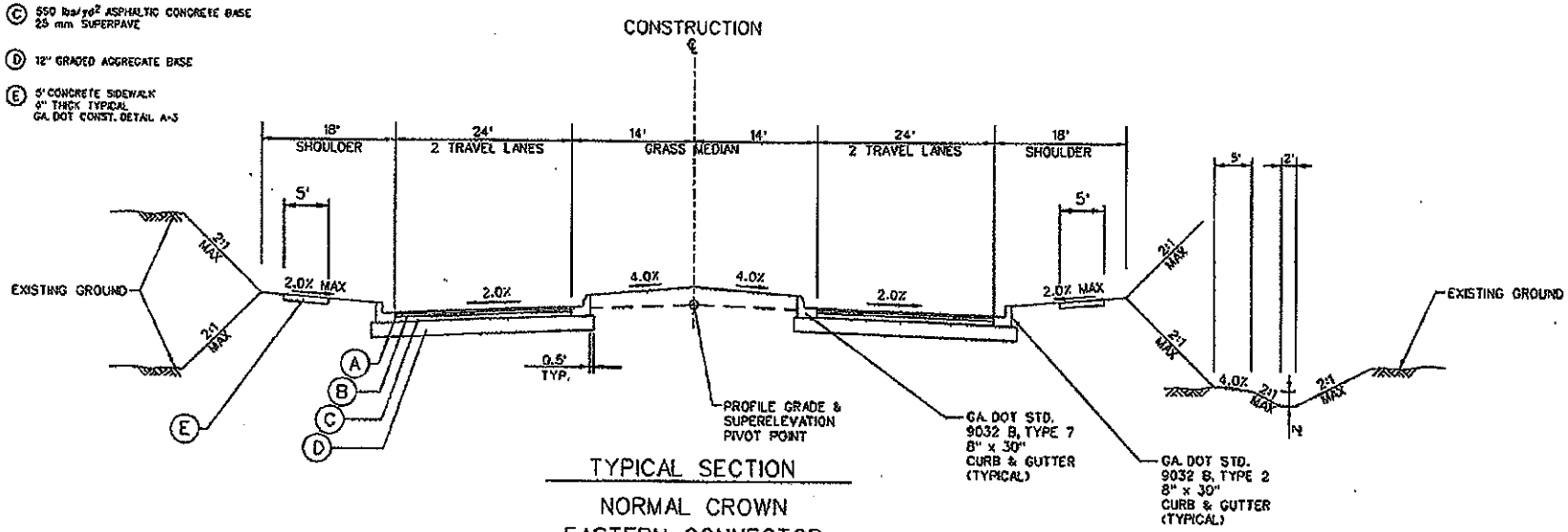
(A) 165 lbs/yd² ASPHALTIC CONCRETE 12.5 mm SUPERPAVE

(B) 220 lbs/yd² ASPHALTIC CONCRETE 19 mm SUPERPAVE

(C) 550 lbs/yd² ASPHALTIC CONCRETE BASE 25 mm SUPERPAVE

(D) 12" GRADED AGGREGATE BASE

(E) 5' CONCRETE SIDEWALK 4" THICK TYPICAL GA. DOT CONST. DETAIL A-3



TYPICAL SECTION

NORMAL CROWN

EASTERN CONNECTOR

NOT TO SCALE

JORDAN JONES & GOULDING

GEORGIA DEPARTMENT OF TRANSPORTATION

NOT RELEASED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION OF REVISION

EASTERN CONNECTOR FROM BUENA VISTA ROAD TO MACON ROAD/S.R. 22

TYPICAL SECTIONS

DESIGNED:	CHECKED:	DATE:		
DRAWN:	JOB NO. 1010.315	SCALE: N.T.S.	SHEET	REV

STATE	PROJECT NUMBER	SHEET NO.	TOTAL
GA.	STP-8042(6)		

PAVEMENT DESIGN

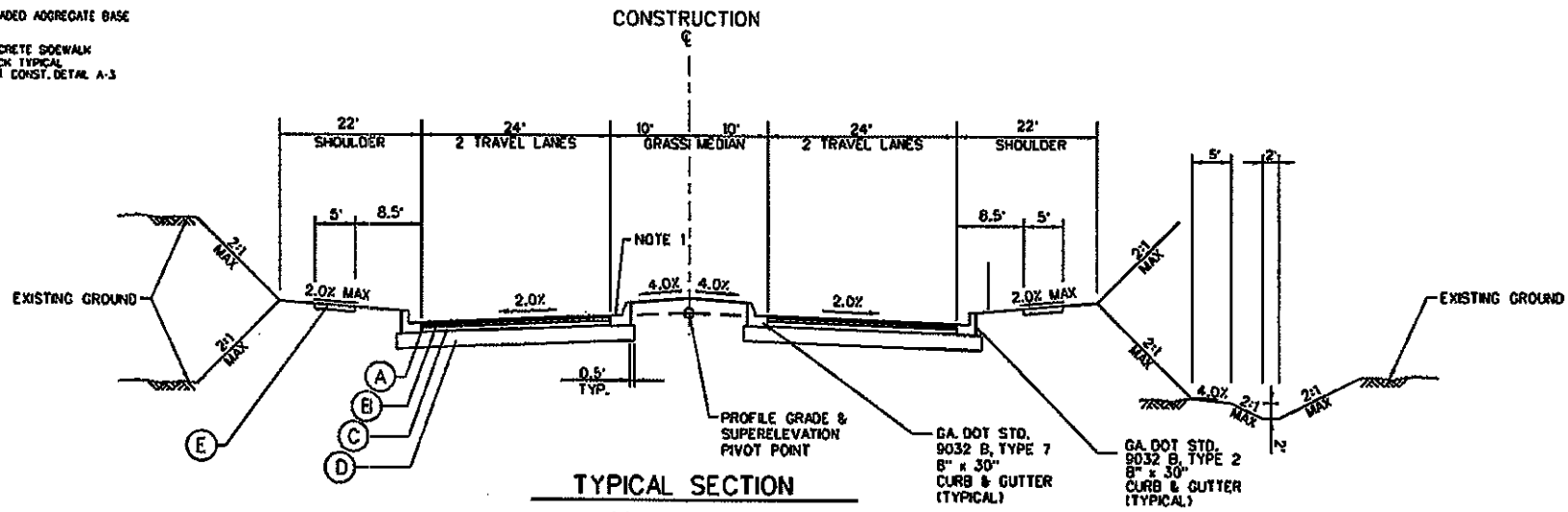
(A) 165 lbs/yd² ASPHALTIC CONCRETE 12.5 mm SUPERPAVE

(B) 220 lbs/yd² ASPHALTIC CONCRETE 19 mm SUPERPAVE

(C) 550 lbs/yd² ASPHALTIC CONCRETE BASE 25 mm SUPERPAVE

(D) 12" GRADED AGGREGATE BASE

(E) 5' CONCRETE SIDEWALK 4" THICK TYPICAL GA. DOT CONST. DETAIL A-3



TYPICAL SECTION

NORMAL CROWN
EASTERN CONNECTOR

NOT TO SCALE

JORDAN JONES & GOULDING

GEORGIA DEPARTMENT OF TRANSPORTATION

NOT RELEASED FOR CONSTRUCTION

NO.	DATE	DESCRIPTION OF REVISION

EASTERN CONNECTOR FROM BUENA VISTA ROAD TO MACON ROAD/S.R. 22

TYPICAL SECTIONS

DESIGNED	CHECKED	DATE	SHEET	REV
DRAWN	JOB NO. 500.LPG	SCALE: N.T.S.	5.06	

NEED AND PURPOSE
STP00-8042-00(006) & CSSTP-0008-00(635), PI #'s 350850 & 0008635
Muscogee County
Eastern Connector from Buena Vista to Macon Road/SR 22

Background

This proposed improvement is located in Muscogee County and is located within the boundaries of the Columbus Phenix City Metropolitan Planning Organization (MPO). The project is found in the MPO's current Transportation Improvement Program listed as TIP No. 91-SR-2003. Previously a revised concept report that moved the location of the project from Schatulga Road to the new location was approved in 2004, but subsequent changes following the concept approval require an updated concept.

Logical Termini

The northern project terminus is located where the Eastern Connector/Lynch Road intersects with Macon Road (US80/SR 22). Macon Road is a four-lane median separated, principle arterial carrying traffic between Muscogee County and Talbot County. By terminating the Eastern Connector into this major roadway corridor, this intersection provides logical termini. The southern project terminus is located where the Eastern Connector aligns with Buena Vista Road. By aligning the Eastern Connector with a four-lane, minor arterial connection to and from I-185 as well as the City of Columbus, this location provides logical termini.

Projects in the Area

Currently, there are two programmed projects in the area of this project.

- STP-8000(8); P.I. No. 350890; Cusseta Road
- STP-8043(5); P.I. No. 350785; Forest Road Widening

Existing and Projected Traffic Conditions

Currently, the primary travel corridors within the project area are Macon Road and Schatulga Road. The existing daily traffic volume on Macon Road east of Schatulga Road is 5,800 vehicles per day and is predicted to increase to 18,100 vehicles per day by 2029 without the construction of Eastern Connector. With the construction of the Eastern Connector, the daily traffic volume on Macon Road would be reduced to 6,100 vehicles. The existing daily traffic volume on Schatulga Road between Forrest Road and Macon Road is 7,200 vehicles per day and is predicted to increase to 14,250 vehicles per day by 2029 without the construction of the Eastern Connector. With the construction of the Eastern Connector, the daily traffic volume on Schatulga Road between Forrest Road and Macon Road would be reduced to 11,900 vehicles per day. As shown in Table 1, all intersections within the study area are expected to operate at acceptable LOS in 2029 with the construction of the Eastern Connector.

Table 1: Summary of Design Year Build (2029) Intersection Capacity Analysis

Intersection	Type of Control	Design Year Build (2029) Conditions (LOS)	
		AM Peak	PM Peak
Forest Road and Schatulga Road	Signalized	15.3 (B)	10.3 (B)
Schatulga Road at Eastern Connector	Signalized	18.6 (C)	9.4 (A)
Chattsworth Road at Eastern Connector	Signalized	10.2 (B)	11.2 (B)
Macon Road at Eastern Connector	Signalized	40.1 (D)	28.5 (C)
Macon Road at Beaver Run Road (US 80)	Signalized	12.3 (B)	12.1 (B)

Crash Information

Table 2 presents the crash data for the roadways surrounding the Eastern Connector for the previous four years of recorded accident data. Between 2003 and 2005, the study roadways generally experienced accident rates lower than or similar to statewide averages. However, in 2006, Macon Road, Lynch Road, and Chattsworth Road, experienced significant increases in accident and injury rates. With traffic volumes and congestion growing on study area roadways, the Eastern Connector is likely to improve accident and injury rates by providing an additional multi-lane facility to accommodate traffic growth within the study area.

Table 2: Eastern Connector – Accident Analysis

Year	Number of Accidents	Number of Injuries	Number of Fatalities	Accident Rate	Injury Rate	Fatality Rate	Statewide Average Accident Rate	Statewide Average Injury Rate	Statewide Average Fatality Rate
Macon Road (SR 22) - From Flat Rock Road to Beaver Ruin Rd (SR 80)									
2003	14	9	0	451	290	0	613	157	1.27
2004	23	3	0	774	101	0	515	130	1.21
2005	17	5	0	567	167	0	573	144	1.68
2006	31	23	1	911	676	29.4	545	133	1.69
Schatulga Road - From Moye Road to Macon Rd (SR 22)									
2003	25	18	0	214	154	0	572	143	1.48
2004	29	13	0	261	117	0	490	123	1.41
2005	41	13	0	322	102	0	534	135	1.56
2006	47	25	1	344	183	7.3	531	132	1.51

Lynch Road - Chattsworth Road to Macon Rd (SR 22)									
2003	7	0	0	804	0	0	502	111	1.31
2004	3	0	0	344	0	0	467	105	1.09
2005	10	2	0	1148	230	0	388	90	0.98
2006	11	5	0	1263	574	0	382	85	1.15
Chattsworth Road - From Macon Rd (SR 22) to Lynch Road									
2003	2	1	0	292	146	0	502	111	1.31
2004	3	1	0	437	146	0	467	105	1.09
2005	2	0	0	292	0	0	388	90	0.98
2006	8	10	0	1166	1458	0	382	85	1.15

Community/Environmental Justice Issues

Title VI of the Civil Rights Act of 1964 and related statutes assure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal financial assistance on the basis of race, color, national origin, age, sex, and disability. EO 12898 *Federal Actions to Address Environmental Justice to Minority Populations and Low Income Populations* requires federal agencies to consider impacts to minority and low income populations as part of environmental analyses to ensure that these populations do not receive a disproportionately high number of adverse human health impacts as a result of a federally funded project. In 1998 FHWA issued a guidance document that established policies and procedures for complying with EO 12898 in relation to federally-funded transportation projects. This guidance defines a "disproportionately high and adverse effect as one that is predominately borne by, suffered by, of that is appreciably more severe or greater in magnitude than the adverse effect that would be suffered by the non-minority population and/or the non-low-income population.

Minority persons are defined as those people belonging to the following groups: Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander and Hispanic or Latino. It is important to note that while the first five groups are defined as races, Hispanic or Latino is defined as an ethnicity by the Office of Management and Budget (OMB 1997) as well as Census 2000. As such, people of this minority group can belong to any racial group but are still considered minorities with respect to Environmental Justice. Low-income persons are defined as those whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines.

The study area was analyzed to see if the project would cause a disproportionately high and adverse effect to minority or low income persons. Although the project are includes several census tracts, the only residential tract affected by the project is 106.04. Table 3 compares the number of minority and low income persons and households in this census

tract with Muscogee County and the State of Georgia. While the study area does comprise a higher percentage of minority persons than the county and state averages, the project does not include any residential displacements. With no residential displacements, this project would not cause a disproportionately high and adverse effect to minority or low income persons. Additionally, since there are only minor residential right-of-way takings required, this project has minimal community impacts.

Table 3: Quantitative EJ Analysis

Group	Affected Project Area – T06.04	Muscogee County	Georgia
Total Population	9,631	186,291	8,186,453
Minority: Race			
White	2,136 (22.2%)	93,936 (50.4%)	5,327,281 (65.1%)
Black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander	7,495 (77.8%)	92,355 (49.6%)	2,859,172 (34.9%)
Minority: Ethnicity			
Hispanic or Latino	452 (4.7%)	8,372 (4.5%)	435,227 (5.3%)
Income			
Low-Income Households	333(10.4%)	10,546(15.1%)	380,240(12.6%)

Source: Census 2000

Need & Purpose

The Eastern Connector project would provide a much-needed multi-lane facility through the proposed Muscogee Technology Park in Columbus-Muscogee County, as well as provide a north-south multi-lane facility between U.S. 80 and Buena Vista Road where no facility currently exists. The purpose of the Eastern Connector would be to improve mobility and accessibility within the Columbus-Muscogee County urbanized area and the Valley Partnership.

The need for the proposed Eastern Connector project is to provide access between U.S. 80 to U.S. 27 and facilitate access and mobility within the proposed Muscogee Technology Park. Improved mobility would also be provided for motorists trying to move through the eastern section of Columbus-Muscogee County into Harris, Marion, and Chattahoochee Counties.

Without the construction of the Eastern Connector, adequate access to and from the proposed industrial park would not be provided. Therefore, the proposed industrial park could not reach its full development potential, thus decreasing the planned economic growth and new jobs the Eastern Connector project would aid in bringing to the area. Additionally, traffic congestion on the roadways within the study area is expected to worsen significantly without the construction of the Eastern Connector. This project

would provide an additional multi-lane roadway between Buena Vista Road and Macon Road (US 80), significantly relieving traffic on the two-lane Schatulga Road as well as Macon Road west of Lynch Road.