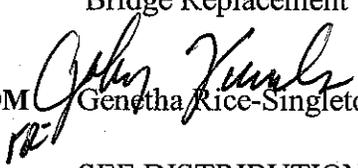


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 331910-, Spalding County **OFFICE** Preconstruction
BRSLB-2083-00(002)
CR 508/Jordon Hill Road over Troublesome Creek-
Bridge Replacement **DATE** May 11, 2009

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:

Ron Wishon
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Thomas Howell
Paul Liles
David Millen
Bill Rountree
William Boyd
BOARD MEMBER

REVISED PROJECT CONCEPT REPORT

Need and Purpose:

Bridge project BRSLB-2083(2) will replace the structurally deficient bridge located on CR 508/Jordan Hill Road over Troublesome Creek. The bridge's sufficiency rating is 19.71. The sufficiency rating, a number from 0 to 100, is a method of evaluating data by calculating four separate factors to obtain a numeric value that is indicative of a bridge's sufficiency to remain in service. The resulting rating would range between zero (0), which represents an entirely insufficient or deficient bridge; and 100, which represents an entirely sufficient bridge. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. Recommended due to an existing structurally deficient and functionally obsolete bridge this project will replace the existing bridge with a structurally adequate bridge. The bridge prioritization ranking is 216 of 258. Embedded in the score is the load capacity of the structure, condition, ability to meet current legal truck weights, and traffic counts.

CR 508/Jordan Hill Road has two (2) 10.5 ft lanes with two (2) 2.3 ft unpaved shoulders. The bridge has a deck width of 25.60 ft, providing insufficient shoulder width on the bridge. The substructure has concrete caps with minor horizontal and vertical cracking, and pile #9 needs a sleeve to connect the two piles at abutment 1. The deck has minor shrinkage and transverse cracking, light scaling, and minor pop outs on panel ends. The super structure has minor bottom hairline transverse cracks.

Other Projects in the Area

- P.I. #331720, BRSLB-2083(1), CR 508 North of SR 16 @ Troublesome Creek, Bridge Replacement Project.
 - This project is a long range project.

This section of CR 508/Jordan Hill Road is classified as a rural major collector. There are no bicycle routes on this section of roadway but there are recommendations to provide wider sidewalks to service an elementary school nearby. This section of CR 508/Jordan Hill Road is designated a school bus route. The 2004 AADT on this roadway was 1,000. Using a 1% growth rate the AADT in 2009 will be 1,100 and 1,500 in 2029. This bridge was constructed in 1958, indicating that it is near the end of its 50 year life span. Providing a new and wider bridge will replace an existing structurally deficient and functionally obsolete bridge and improve access to the area.

Project location:

The approximate project length is 0.208 miles. The project location is in Spalding County, (5) five miles north of Griffin on Jordan Hill Road over Troublesome Creek.

Description of the approved concept:

The approximate project length is 0.208 miles. The project location is in Spalding County, (5) five miles north of Griffin on Jordan Hill Road over Troublesome Creek.

The proposed project calls for the replacement of the existing bridge. The existing bridge is 40 feet long and 25.60 feet wide, providing insufficient shoulder width on the bridge, and has minor bottom hairline transverse cracks. The bridge sufficiency rating is 19.71.

roadway width is 24 feet with 6 feet grassed shoulders. The proposed horizontal and vertical geometrics will be designed to meet 45 mph design.

The north and south ends of the project will tie into existing asphaltic concrete paving.

PDP Classification: Major _____ Minor X

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

Functional Classification: Rural Minor Collector

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

State Route Number(s): N/A

Traffic (AADT) as shown in the approved concept:

Current Year: (2009) 1,100 Design Year: (2029) 1,500

Proposed features to be revised: The approved concept typical section consists of two 12 foot lanes with 6 foot shoulders. The approved concept was revised to a typical consisting of two 12 foot lanes with curb and gutter and sidewalk. We propose the typical to be revised to consist of two 12 foot lanes with 10 foot shoulders. A short section of the typical would have curb and gutter to replace the existing curb and gutter south of the existing bridge. The approved concept also consists of closing the road, removing, and replacing the existing bridge. The approved concept was revised to realign Jordan Hill Road and construct a parallel bridge. We propose to close the road, remove, and replace the existing bridge.

Describe the revised feature(s) to be approved: The proposal to change the typical to 10 foot shoulders instead of curb and gutter with sidewalk is due to coordination with Spalding County officials. The proposal to close and detour Jordan Hill Road is due to cost.

Programmed Schedule:

P.E. 2005

R/W: LOCL

Construction: 2010

Revised cost estimates: Attached

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

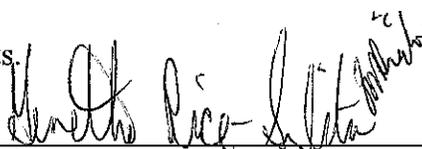
C.R. 508 / Jordan Hill Road is 2 lanes open to through traffic and the limits are 550 feet to the north and 550 feet to the south of the center of Troublesome Creek.

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

Attachments:

1. Sketch Map,
2. Cost Estimate,
3. Other supporting documents.

Concur:



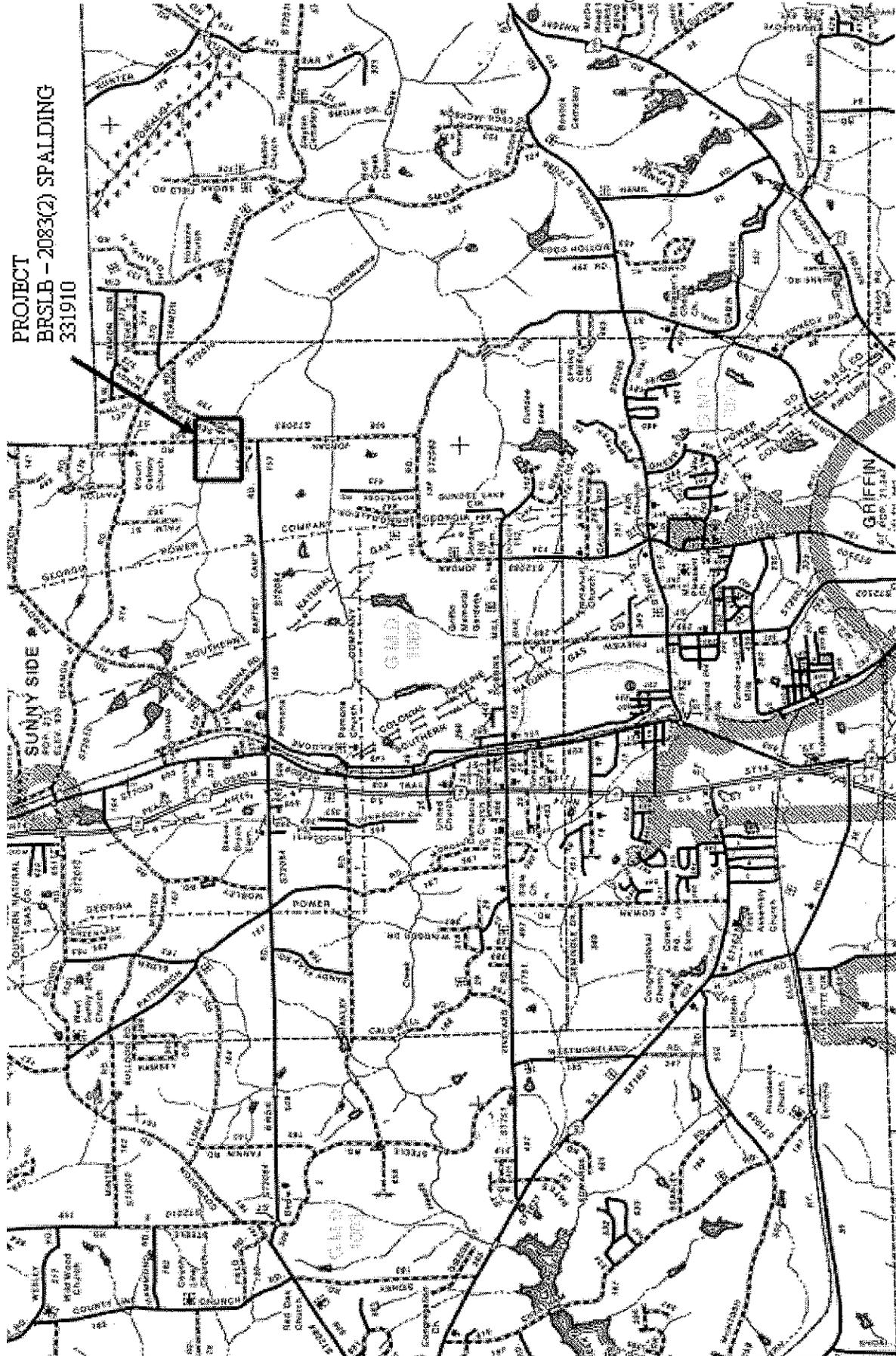
Director of Preconstruction

Approve:

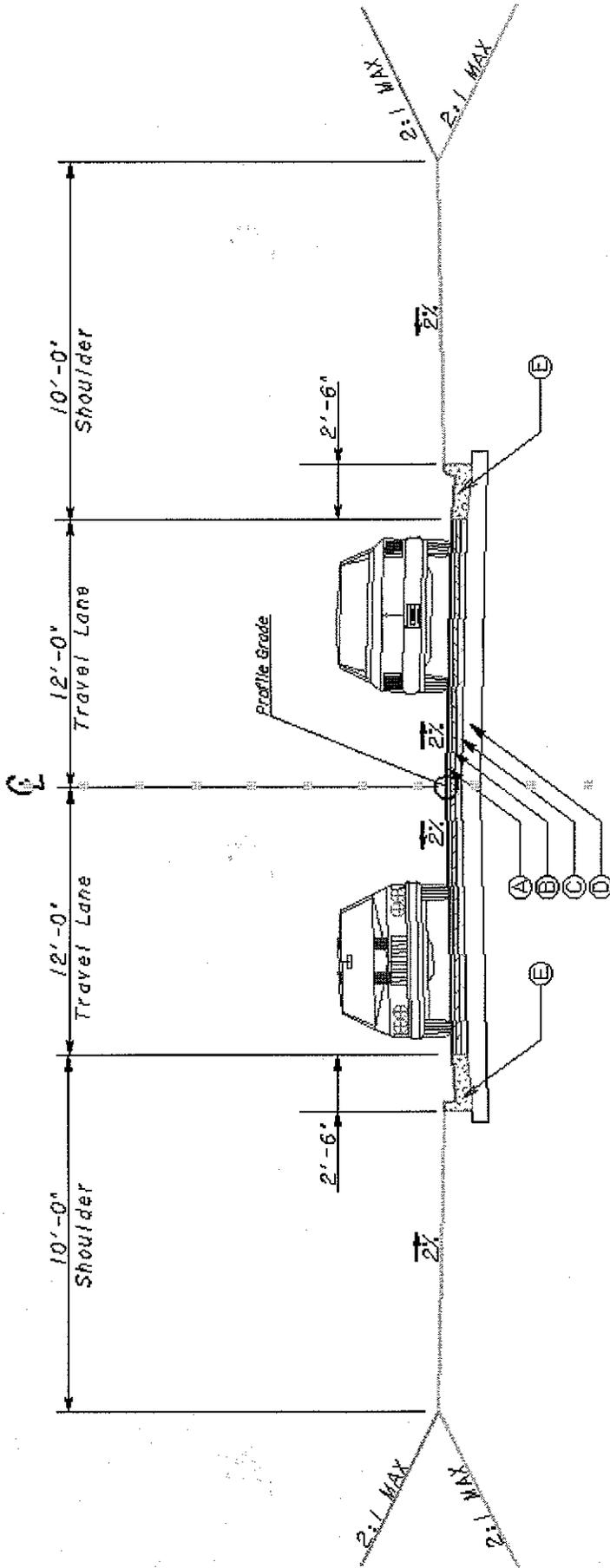


Chief Engineer

PROJECT
BRSLB - 2083(2) SPALDING
331910



TYPICAL SECTION # 1
APPLIES FROM
STA. 106+00 TO 108+00



DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. BRSLB-2083-00(002) Spalding County
Jordan Hill Road Bridge Over Troublesome
Creek Tributary
P.I. No. 331910

OFFICE D3 Design

DATE 4/14/2009

FROM Jack Reed, DDSL

TO Ron Wishon, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Bill Rountree

MNGT LET DATE 4/15/2010

MNGT R/W DATE 5/15/2009

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$1,865,476

DATE 1/6/2009

RIGHT OF WAY \$191,000 LCL

DATE 6/12/2007

UTILITIES \$LCL

DATE Select Date

REVISED COST ESTIMATES

CONSTRUCTION* \$1,392,427.60

RIGHT OF WAY \$191,000 LCL

UTILITIES** \$LCL

* Costs contain 5% Engineering and Inspection and 5% Construction Contingencies and Fuel and Liquid AC Adjustments.

** Costs contain 30% contingency.

REASON FOR COST DECREASE Revised Concept

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$1,157,595.89	(Base Estimate)
Engineering and Inspection:	\$57,879.79	(Base Estimate x 5 %)
Construction Contingency:	\$46,303.84	(Base Estimate x 4 %) (The Construction Contingency is based on the Project Improvement Type in TPro.)
Total Fuel Adjustment	\$ 39,024.68	(From attached worksheet)
Total Liquid AC Adjustment	\$ 91,623.40	(From attached worksheet)
Construction Total:	\$1,392,427.60	
Utility Cost Estimate:	\$LCL	
Utility Contingency:	\$LCL __ %	
Utility Total:	\$LCL	

REIMBURSABLE UTILITY COST

Utility Owner	Reimbursable Costs
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Attachments

c: Genetha Rice - Singleton, Assistant Director of Preconstruction

Angela Whitworth, Financial Management Administrator

Estimate Report for file "331910 Spalding County Existing Alignment"

Section ROADWAY					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	10000.00	TRAFFIC CONTROL - BRSLB-2083-00(002)	10000.00
210-0100	1	LS	115000.00	GRADING COMPLETE - BRSLB-2083-00(002)	115000.00
310-1101	1600	TN	18.55	GR AGGR BASE CRS, INCL MATL	29680.00
318-3000	500	TN	22.59	AGGR SURF CRS	11295.00
402-3100	190	TN	69.26	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE I, GP 1 OR BLEND 1, INCL BITUM MATL & H LIME	13159.40
402-3121	750	TN	61.97	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	46477.50
402-3190	300	TN	65.71	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	19713.00
413-1000	180	GL	2.21	BITUM TACK COAT	397.80
433-1200	220	SY	169.43	REINF CONC APPROACH SLAB, INCL SLOPED EDGE	37274.60
436-1000	330	LF	7.94	ASPHALTIC CONCRETE CURB - 5 IN	2620.20
441-0303	2	EA	1900.72	CONC SPILLWAY, TP 3	3801.44
441-6222	400	LF	15.19	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	6076.00
455-1000	3200	SY	4.37	FILTER FABRIC FOR EMBANKMENT STABILIZATION	13984.00
500-0100	200	SY	4.81	GROOVED CONCRETE	962.00
500-3200	12	CY	448.36	CLASS B CONCRETE	5380.32
500-3800	21	CY	744.34	CLASS A CONCRETE, INCL REINF STEEL	15631.14
511-1000	200	LB	0.87	BAR REINF STEEL	174.00
550-2180	50	LF	30.71	SIDE DRAIN PIPE, 18 IN, H 1-10	1535.50
550-3418	1	EA	646.62	SAFETY END SECTION 18 IN, SIDE DRAIN, 4:1 SLOPE	646.62
550-3618	1	EA	694.54	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	694.54
634-1200	10	EA	102.33	RIGHT OF WAY MARKERS	1023.30
641-1100	84	LF	48.72	GUARDRAIL, TP T	4092.48
641-1200	230	LF	16.80	GUARDRAIL, TP W	3864.00
641-5001	2	EA	647.99	GUARDRAIL ANCHORAGE, TP 1	1295.98
641-5012	2	EA	1814.87	GUARDRAIL ANCHORAGE, TP 12	3629.74
643-8200	200	LF	3.08	BARRIER FENCE (ORANGE), 4 FT	616.00
Section Sub Total:					\$349,024.56

Section TRAFFIC SIGNING AND MARKING					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1033	18	SF	19.70	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	354.60
636-2070	28	LF	8.83	GALV STEEL POSTS, TP 7	247.24
636-5010	12	EA	58.05	DELINEATOR, TP 1	696.60
652-5451	2000	LF	0.18	SOLID TRAFFIC STRIPE, 5 IN, WHITE	360.00
652-5452	2000	LF	0.18	SOLID TRAFFIC STRIPE, 5 IN, YELLOW	360.00
654-1001	20	EA	3.23	RAISED PVMT MARKERS TP 1	64.60
657-1085	300	LF	5.45	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-WHITE), TP PB	1635.00
657-6085	300	LF	5.80	PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	1740.00
Section Sub Total:					\$5,458.04

Section BRIDGE NO. 1					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-0100	373	SY	4.81	GROOVED CONCRETE	1794.13
500-1006	Lump	LS	110000.00	SUPERSTR CONCRETE, CL AA, BR NO - 1 (124)	110000.00
500-2100	231	LF	41.77	CONCRETE BARRIER	9648.87
500-3101	48	CY	278.86	CLASS A CONCRETE	13385.28
507-9001	227	LF	97.94	PSC BEAMS, AASHTO TYPE I, BR NO - 1	22232.38
507-9002	236	LF	118.85	PSC BEAMS, AASHTO TYPE II, BR NO - 1	28048.60
511-1000	5486	LB	0.87	BAR REINF STEEL	4772.82

511-3000	Lump	LS	33000.00	SUPERSTR REINF STEEL, BR NO - 1 (34737)	33000.00
520-2214	185	LF	51.13	PILING, PSC, 14 IN SQ	9459.05
520-2216	295	LF	49.27	PILING, PSC, 16 IN SQ	14534.65
520-3214	1	EA	4931.61	TEST PILE, PSC, 14 IN SQ	4931.61
520-3216	1	EA	4539.10	TEST PILE, PSC, 16 IN SQ	4539.10
520-4214	1	EA	0.84	LOAD TEST, PSC, 14 IN SQ	0.84
520-4216	1	EA	1.01	LOAD TEST, PSC, 16 IN SQ	1.01
540-1102	Lump	LS	370000.00	REMOVAL OF EXISTING BR, BR NO - 1	370000.00
603-2024	826	SY	46.53	STN DUMPED RIP RAP, TP 1, 24 IN	38433.78
603-7000	826	SY	5.30	PLASTIC FILTER FABRIC	4377.80
Section Sub Total:					\$669,159.92

Section PERMANENT EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0240	100	TN	187.05	MULCH	18705.00
603-2182	100	SY	53.63	STN DUMPED RIP RAP, TP 3, 24 IN	5363.00
603-7000	100	SY	5.30	PLASTIC FILTER FABRIC	530.00
700-6910	3	AC	894.09	PERMANENT GRASSING	2682.27
700-7000	30	TN	67.32	AGRICULTURAL LIME	2019.60
700-7010	20	GL	20.46	LIQUID LIME	409.20
700-8000	7	TN	387.15	FERTILIZER MIXED GRADE	2710.05
700-8100	800	LB	2.46	FERTILIZER NITROGEN CONTENT	1968.00
710-9000	1000	SY	4.79	PERMANENT SOIL REINFORCING MAT	4790.00
716-2000	2000	SY	0.89	EROSION CONTROL MATS, SLOPES	1780.00
Section Sub Total:					\$40,957.12

Section TEMPORARY EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	3	AC	483.29	TEMPORARY GRASSING	1449.87
163-0300	2	EA	1499.05	CONSTRUCTION EXIT	2998.10
163-0520	400	LF	15.46	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	6184.00
163-0524	20	EA	210.55	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - STONE PLAIN RIP RAP/SAND BAGS	4211.00
163-0528	3000	LF	4.26	CONSTRUCT AND REMOVE FABRIC CHECK DAM - TYPE C SILT FENCE	12780.00
163-0529	4000	LF	3.71	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	14840.00
163-0550	18	EA	214.96	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	3869.28
165-0010	2000	LF	0.86	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	1720.00
165-0030	1750	LF	0.97	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	1697.50
165-0041	1600	LF	2.37	MAINTENANCE OF CHECK DAMS - ALL TYPES	3792.00
165-0071	2000	LF	0.51	MAINTENANCE OF SEDIMENT BARRIER - BALED STRAW	1020.00
165-0101	2	EA	493.20	MAINTENANCE OF CONSTRUCTION EXIT	986.40
165-0105	18	EA	89.59	MAINTENANCE OF INLET SEDIMENT TRAP	1612.62
167-1000	2	EA	752.60	WATER QUALITY MONITORING AND SAMPLING	1505.20
167-1500	12	MO	871.69	WATER QUALITY INSPECTIONS	10460.28
171-0010	4000	LF	2.66	TEMPORARY SILT FENCE, TYPE A	10640.00
171-0030	3500	LF	3.78	TEMPORARY SILT FENCE, TYPE C	13230.00
Section Sub Total:					\$92,996.25

Total Estimated Cost: \$1,157,595.89

Special Provision, Section 109-Measurement and Payment
FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)

ENTER FPL DIESEL	2.19
ENTER FPM DIESEL	4.928

ENTER FPL UNLEADED	1.926
ENTER FPM UNLEADED	4.3335

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)		0.29		0.15		
Excavations paid as specified by Sections 206 (CUBIC YARD)		0.29		0.15		
GAB paid as specified by the ton under Section 310 (TON)		0.29		0.24		
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)	1240.000	2.90	3596.00	0.71	880.40	
PCC Pavement paid as specified by the square yard under Section 430 (SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __Concrete (CY) Section 500	48.00	278.86	13.3853	8.00	107.08	1.50	20.08	Class A
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500	1.00	110,000.00	110.0000	8.00	880.00	1.50	165.00	Lump Sum Item
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500	231.00	41.77	9.6489	8.00	77.19	1.50	14.47	

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Stru Steel <u>Plan Quantity</u> (LB) Section 501				8.00		1.50		
Stru Steel <u>Plan Quantity</u> (LB) Section 501				8.00		1.50		
PSC Beams____(LF) Section 507	227.00	97.94	22.2324	8.00	177.86	1.50	33.35	Type 1
PSC Beams____(LF) Section 507	236.00	118.85	28.0486	8.00	224.39	1.50	42.07	Type 2
PSC Beams____(LF) Section 507				8.00		1.50		
Stru Reinf <u>Plan Quantity</u> (LB) Section 511	1.00	33,000.00	33.0000	8.00	264.00	1.50	49.50	Lump sum item
Stru Reinf <u>Plan Quantity</u> (LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511	5486.00	0.87	4.7728	8.00	38.18	1.50	7.16	
Piling____inch (LF) Section 520	185.00	51.13	9.4591	8.00	75.67	1.50	14.19	14"
Piling____inch (LF) Section 520	295.00	49.27	14.5347	8.00	116.28	1.50	21.80	16"
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Piling____inch (LF) Section 520				8.00		1.50		
Drilled Caisson____(LF) Section 524				8.00		1.50		
Drilled Caisson____(LF) Section 524				8.00		1.50		
Drilled Caisson____(LF) Section 524				8.00		1.50		
Pile Encasement____(LF) Section 547				8.00		1.50		
Pile Encasement____(LF) Section 547				8.00		1.50		
SUM QF DIESEL=				5556.65	SUM QF UNLEADED=		1248.02	
DIESEL PRICE ADJUSTMENT(\$)					\$13,994.43			
UNLEADED PRICE ADJUSTMENT(\$)					\$2,764.24			

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

<http://www.dot.ca.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

ENTER APL

ENTER APM

MISSING APL OR APM **MISSING APL OR APM**

Use this side for Asphalt Emulsion Only		
L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)
TMT =		<input style="width: 100%;" type="text"/>
REMARKS:		

Use this side for Asphalt Cement Only		
L.I.N.	TYPE	TACK (GALLONS)
TMT =		<input style="width: 100%;" type="text"/>
REMARKS:		

MONTHLY PRICE ADJUSTMENT(\$) **MISSING APL OR APM**

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)	
DIESEL PRICE ADJUSTMENT(\$)	<u>\$13,994.43</u>
UNLEADED PRICE ADJUSTMENT(\$)	<u>\$2,764.24</u>
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	<u>\$329.35</u>
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	<u>\$26,412.00</u>
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	<u>MISSING APL OR APM</u>

REMARKS:	
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TOTAL ADJUSTMENTS **\$43,500.02**