

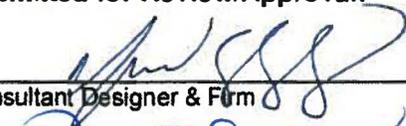
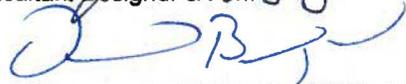
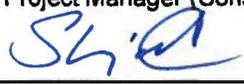
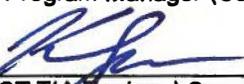
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
TIA PROJECT CONCEPT REPORT



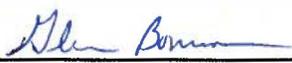
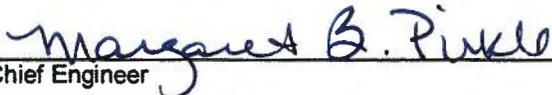
Project Type: Parallel Bridge P.I. Number: 0012578
GDOT District: 3 & 4 Counties: Sumter & Crisp
Federal Route Number: 280 State Route Number: 30
Project Number: RC08-000012

This project proposes to construct a parallel bridge at US 280/SR 30 over Lake Blackshear that includes tie-ins to the existing roadway to the east and west. The project length is approximately 5700 feet.

Submitted for Review/Approval:

 _____ Consultant Designer & Firm	<u>OCT 5, 2015</u> DATE
 _____ TIA Project Manager (Consultant)	<u>10/5/15</u> DATE
 _____ TIA Program Manager (Consultant)	<u>10/7/15</u> DATE
 _____ GDOT TIA Regional Coordinator	<u>10/22/15</u> DATE
 _____ State TIA Administrator	<u>10/23/2015</u> DATE

Approval:

Concur:  _____ Director of Engineering	<u>10/27/2015</u> DATE
Approve:  _____ Chief Engineer	<u>10.28.15</u> DATE

PROJECT LOCATION



Figure 1 – Project Location Map

**PI No. 0012578 – Sumter & Crisp Counties
US 280/SR 30 over Lake Blackshear Parallel Bridge Project**

PLANNING & BACKGROUND DATA

Project Description: This project will construct a new parallel bridge south of the existing bridge, over Lake Blackshear. The proposed pavement will tie into the existing pavement over a minimal distance from the ends of the proposed bridge. The existing bridge has 41 spans and is 2243' X 40' with a sufficiency rating of 87. The proposed bridge will be 2244' X 39'-3" and will consist of 41 AASHTO Type II spans. This project was originally part of the GRIP corridor and it ties to project PI 422470, east of Lake Blackshear.

Other projects in the area:

Georgia Department of Transportation (GDOT) projects planned in the proposed project vicinity.

- PI 322770 - Widening and reconstruction of US 280/SR 30 from CS 311/Lamar Road to CS 500/Ferguson Street, east of Americus, Sumter County
- PI 322775 - Widening and reconstruction of US 280/SR 30 from CS 500/Ferguson Street to Lake Blackshear, east of Americus, Sumter County

Office of TIA project planned in the proposed project vicinity.

- PI 422470 - Widening and reconstruction of US 280/SR 30 from Lake Blackshear to SR 300 Connector west of Cordele, Crisp County

TIA Regional Commission: River Valley RC

Congressional District(s): 2

Federal Oversight: Full Oversight Exempt State Funded Other - TIA

Projected Traffic: ADT

Current Year (2013): 4,000 Open Year (2018): 4,700 Design Year (2038): 8,400
Traffic Projections Performed by: H&L (2013 ADT by GDOT)

Functional Classification (Mainline): Rural Principal Arterial

Complete Streets - Bicycle, Pedestrian, and/or Transit Warrants:

Warrants met: None Bicycle Pedestrian Transit

Is this a 3R (Resurfacing, Restoration, & Rehabilitation) Project: No Yes

DESIGN AND STRUCTURAL

Description of Proposed Project: This project is part of the Governor's Road Improvement Program (GRIP). This project will tie to two adjacent projects which are also part of GRIP. Project PI 322775 will construct four lanes from Ferguson Street to just west of the Lake Blackshear Bridge in Sumter County and Project PI 422470 will construct four lanes from just east of the Lake Blackshear Bridge to SR 300 Connector in Crisp County. PI0012578 is planned to be constructed before TIA project PI 422470 and will construct a parallel bridge over Lake

Blackshear. Temporary tie-ins will be constructed into the existing roadway that will be reconstructed once the adjacent projects are built. This project will construct the rock embankment needed in the lake for the two future adjacent projects to the east and west. The proposed bridge will have adequate shoulder and the Type S Barrier on the south side to accommodate bikes once the adjacent projects are completed. The total project length is approximately 1 mile long with a 2,244 foot long proposed bridge. The existing bridge deck will be evaluated for rehabilitation to eliminate the bumpy and uneven riding surface if the rehabilitation construction cost can be accomplished within the current available project funding.

Major Structures:

Structure ID	Existing	Proposed
261-0017-0	US 280/SR 30 Bridge over Lake Blackshear, Sufficiency Rating: 84.40 (as of 02/24/2015)	Parallel Bridge over Lake Blackshear - 2,244 feet long

Mainline Design Features: US 280/SR 30 – Rural Principal Arterial

Feature	Existing	Proposed
Typical Section		
- Number of Lanes	2 Lanes	2 lanes on each bridge striped for one
- Lane Width(s)	12'-0"	12'-0"
- Median Width & Type	N/A	N/A
- Outside Shoulder	4'-0" Paved 10'-0" Overall	2'-0" Paved (6'-6" Future), 10'-0" Overall
- Outside Shoulder Slope	Varies	6% / 2% - 2' paved typically matches road slope.
Posted Speed	55 mph	55 mph
Design Speed	N/A	55 mph
Min Horizontal Curve Radius	N/A	1060'
Maximum Superelevation Rate	N/A	6%
Maximum Grade	5%	5%
Access Control	Permitted/Full	Permitted/Full
Design Vehicle	N/A	WB-62
Pavement Type	Asphalt	Asphalt

Major Interchanges/Intersections: N/A

Lighting required: No Yes

Off-site Detours Anticipated: No Undetermined Yes

Transportation Management Plan [TMP] Required: No Yes

If Yes: Project classified as: Non-Significant Significant

TMP Components Anticipated: TTC TO PI

Design Exceptions to FHWA/AASHTO controlling criteria anticipated: No

Design Variances to GDOT Standard Criteria anticipated: No

VE Study Anticipated: No Yes Completed – Date:

UTILITY AND PROPERTY

Temporary State Route Needed: No Yes Undetermined

Railroad Involvement: N/A

Utility Involvements:

1. Crisp County Waterworks (CCWW): CCWW has an existing 8” DIP water line attached to the existing bridge, suspended with pipe hangers on the south side of the bridge. Based on record information, the line transitions to PVC pipe on either side of the bridge. CCWW also has a meter vault located on the west end of the existing bridge on the south shoulder where water is delivered to Sumter County.
2. Citizens Cable/TV: Citizens has two existing fiber-optic lines in a 4” DIP conduit on the south side of the bridge suspended from the same pipe hanger system as the 8” DIP water line. There are 96 pair and a 24 pair fiber optic cable present in the conduit.
3. The Georgia 811 Utilities Protection Center (811) and the below utilities have been contacted regarding potential facilities in the project footprint. The following utilities confirmed they do not have facilities in the project footprint.
 - a. GA Power-Transmission
 - b. GA Power-Distribution
 - c. Sumter EMC
 - d. AT&T/Bellsouth
 - e. Georgia Transmission Corporation
 - f. Tower Cloud
4. Mediacom and Crisp County Power Commission have been contacted but it has not been confirmed whether they have facilities present or not.

Utilities verified within the area include:

- o Citizens Cable – Cable
- o Crisp County Water Works – Water

SUE Required: No Yes Undetermined

Public Interest Determination Policy and Procedure recommended (Utilities)? No Yes

Right-of-Way (ROW): Existing width: Varies 100’ to 300’ Proposed width: Varies 110’ to 300’

Required Right-of-Way anticipated: No Yes Undetermined

Easements anticipated: None Temporary Permanent
 Utility Other

Anticipated total number of impacted parcels:		3		
Displacements anticipated:	Businesses:	0		
	Residences:	0		
	Other:	0		
	Total Displacements:	0		

Location and Design Approval: Not Required Required

CONTEXT SENSITIVE SOLUTIONS

Rock embankment placed in lake for future adjacent projects to reduce coordination for impacts to the lake.

ENVIRONMENTAL AND PERMITS

Anticipated Environmental Document:

GEPA: **NEPA:** CE PCE

MS4 Compliance – Is the project located in an MS4 area? No Yes

Environmental Permits, Variances, Commitments, and Coordination anticipated:

- Section 404 CWA Individual Permit, Stream Buffer Variance, Federal Energy Regulatory Commission (FERC) permit.
- A Coast Guard Bridge permit will not be required for this project since the site is outside of the USCG jurisdiction.

Is a PAR required? No Yes Completed – Date:

KHM *10/22/15 PER DNR*

Air Quality:

Is the project located in a PM 2.5 Non-attainment area? No Yes
Is the project located in an Ozone Non-attainment area? No Yes
Carbon Monoxide hotspot analysis: Required Not Required TBD

NEPA/GEPA Comments & Information: A GEPA Type B with special studies in accordance with the GDOT EPM is anticipated. Coordination with USACE will be required for impacts to wetlands and streams while GADNR coordination will be required for potential for impacts to state protected species. No noise or air impacts anticipated. Coordination with Georgia State Parks will also be required for any impacts associated with Georgia Veterans State Park. Field survey and documentation for history and archaeology will be required prior to completion of GEPA document.

Major stakeholders: Crisp County Power Commission, Georgia State Parks.

CONSTRUCTION

Issues potentially affecting constructability/construction schedule: Poor and erratic subsurface conditions for bridge foundation

Early completion incentives recommended for consideration: No Yes

COORDINATION, ACTIVITIES, RESPONSIBILITIES, AND COSTS

Initial Concept Meeting: N/A

Concept Meeting: N/A

Other coordination to date:

Project Kick-off Meeting with Team/TIA – 12/10/2014

GA Veterans State Park meeting – 1/7/2015

Crisp County Power Commission meeting – 1/7/2015

Meeting concerning FERC (Federal Energy Regulatory Commission) Permit – 1/29/2015

Jurisdictional Determination from USACE – 2/2/2015

Interagency Meeting Minutes – 2/11/2015

Meeting to discuss subsurface conditions – 2/20/2015

Team Status Meeting – 3/27/2015

USCG Coordination – 8/31/2015

Project Activity	Party Responsible for Performing Task(s)
Concept Development	Heath & Lineback Engineers
Design	Heath & Lineback Engineers
Right-of-Way Acquisition	GADOT/TIA
Utility Relocation	GDOT
Letting to Contract	GDOT
Construction Supervision	GDOT
Providing Material Pits	Construction Contractor
Providing Detours	N/A
Environmental Studies, Documents, & Permits	Heath & Lineback Engineers Edwards-Pitman Environmentalist
Environmental Mitigation	GDOT/TIA
Construction Inspection & Materials Testing	GDOT/TIA

Project Cost Estimate and Funding Responsibilities:

	Breakdown of PE	Breakdown of ROW	Breakdown of Reimbursable Utility	Breakdown of CST ²	Total Cost
Funded By	TIA	TIA	N/A	TIA	
TIA Current Programmed Budget	-	-	-	-	\$30,000,000
Engineers Estimated Amount	\$1,330,194.60	\$123,691.00	\$145,675.00	\$21,297,506.65	
Contingency/TIA Management Budget	\$345,936.86	\$156,824.74	\$0.00	\$5,647,238.40	
Total Estimated Cost	\$1,676,131.46	\$280,515.74	\$145,675.00	\$26,944,745.05	\$29,047,067.25

- NOTES:**
1. All Phases include TIA Management Costs and calculated Project/Program Risk contingencies which are included in the **Contingency Budget** line item.
 2. Construction Phase includes Construction, 3% CEI, Env. Mitigation (assumes 18 wetland mitigation credits at \$8,000 a credit, based on preliminary impacts and costs, as determined during project development) and Liquid AC Cost Adjustment (as applicable).
 3. Engineer's Estimated Amount line item populated by Engineer/Consultant.

ALTERNATIVES DISCUSSION

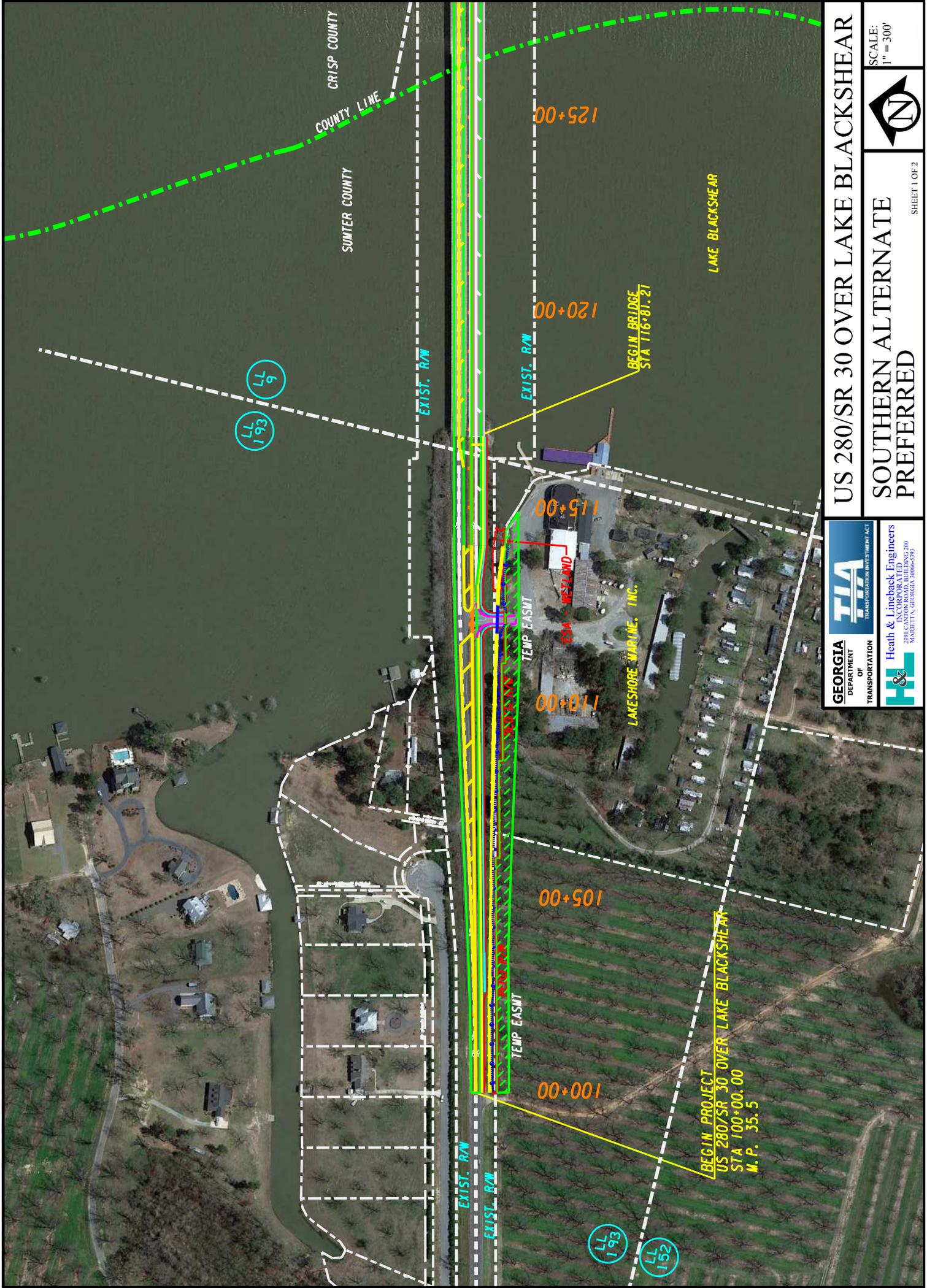
Preferred – Southern Alternative: Bridge Construction/Widening to the South			
Estimated Property Impacts:	3	Estimated Total Cost:	\$29,047,068
Estimated ROW Cost:	\$280,516	Estimated CST Time:	24 Months
Rationale: <i>This alternative provides the most cost effective solution with the least environmental and property impacts. It has the lowest mitigation cost and the lowest right of way cost between the two alternates studied. This alternative utilizes the existing rock embankment from a previous roadbed on the south, which reduces the amount of rock fill required in the lake.</i>			

Northern Alternative: Bridge Construction/Widening to the North			
Estimated Property Impacts:	10	Estimated Total Cost:	\$33,534,767
Estimated ROW Cost:	\$945,686	Estimated CST Time:	24 Months
Rationale: <i>This alternative was not selected because of the higher cost of the project and significantly higher environmental and property impacts. The shift to the North would require a longer distance to tie back into the existing roadway, as compared to the Preferred Southern Alternative. In addition, this alternative would require the reconstruction of the subdivision access road and cul-de-sac in the northwest corner of the project.</i>			

Comments/Additional Information: None

LIST OF ATTACHMENTS/SUPPORTING DATA

1. Concept Layouts
2. Typical Sections
3. Cost Estimates
4. Traffic projections
5. Meeting Minutes



US 280/SR 30 OVER LAKE BLACKSHEAR
SOUTHERN ALTERNATE
PREFERRED

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

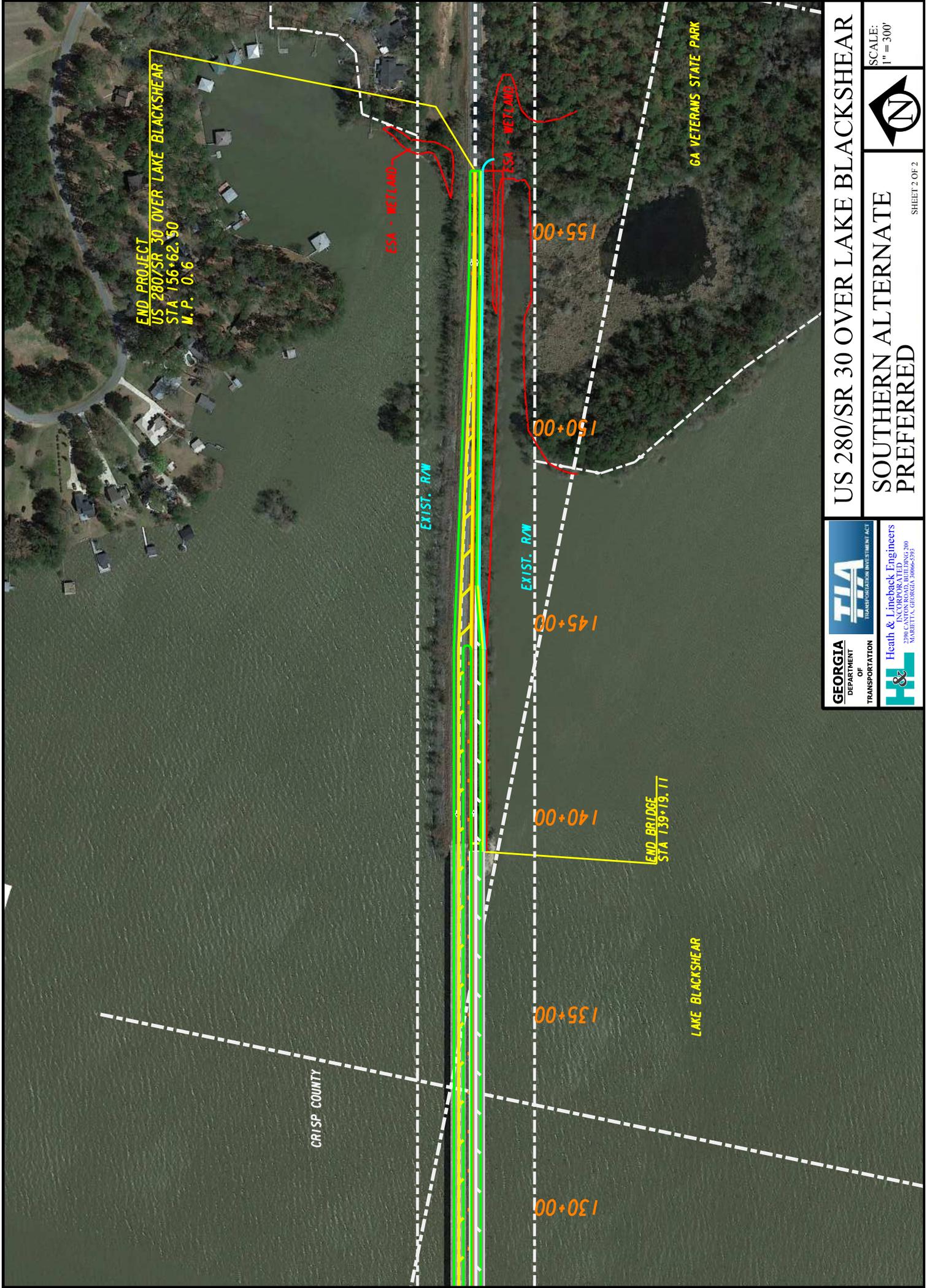
TIA
 TRANSPORTATION INVESTMENT ACT

Heath & Lineback Engineers
 INCORPORATED
 2306 CANTON ROAD, BUILDING 200
 WARRENTON, OREGON 97146-5935



SCALE:
 1" = 300'

SHEET 1 OF 2



END PROJECT
 US 280/SR 30 OVER LAKE BLACKSHEAR
 STA 156+62.90
 M.P. 0.6

ESA - WETLAND

ESA - WETLAND

EXIST. R/W

EXIST. R/W

GA VETERANS STATE PARK

LAKE BLACKSHEAR

CRISP COUNTY

130+00

135+00

140+00

145+00

150+00

155+00

END BRIDGE
 STA 139+19.11

US 280/SR 30 OVER LAKE BLACKSHEAR
SOUTHERN ALTERNATE
PREFERRED

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

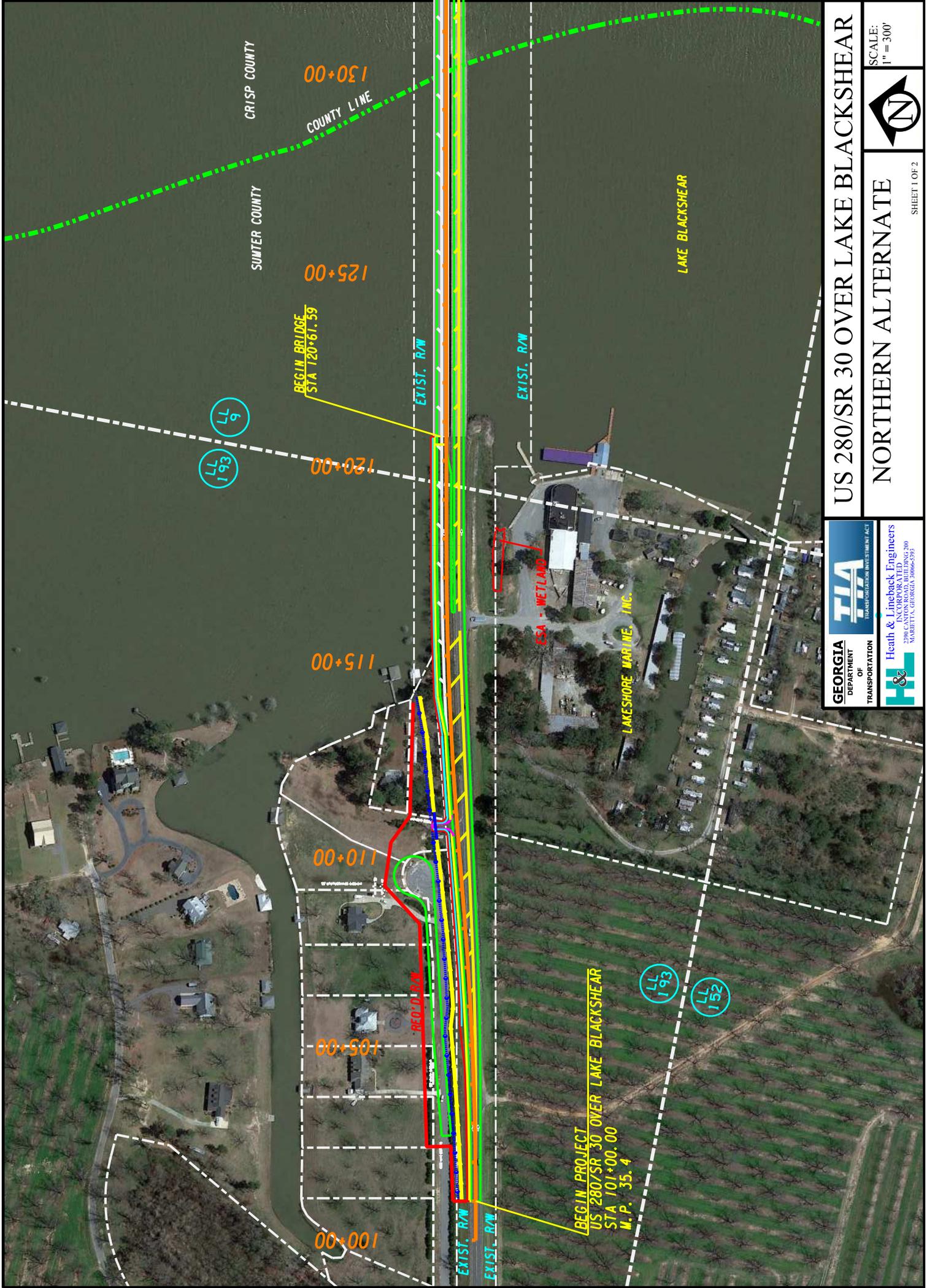
TIA
 TRANSPORTATION INVESTMENT ACT

H & L
 Heath & Lineback Engineers
 INCORPORATED
 2306 CANTON ROAD, BUILDING 200
 WARHETTA, GEORGIA 30066-2935



SCALE:
1" = 300'

SHEET 2 OF 2



BEGIN PROJECT
 US 280/SR 30 OVER LAKE BLACKSHEAR
 STA 101+00.00
 M.P. 35.4

00+001

00+501

00+011

00+115

00+120

00+125

00+130

LL 193

LL 9

LL 193

LL 152

BEGIN BRIDGE
 STA 120+67.59

EXIST. R/W

EXIST. R/W

SUMTER COUNTY

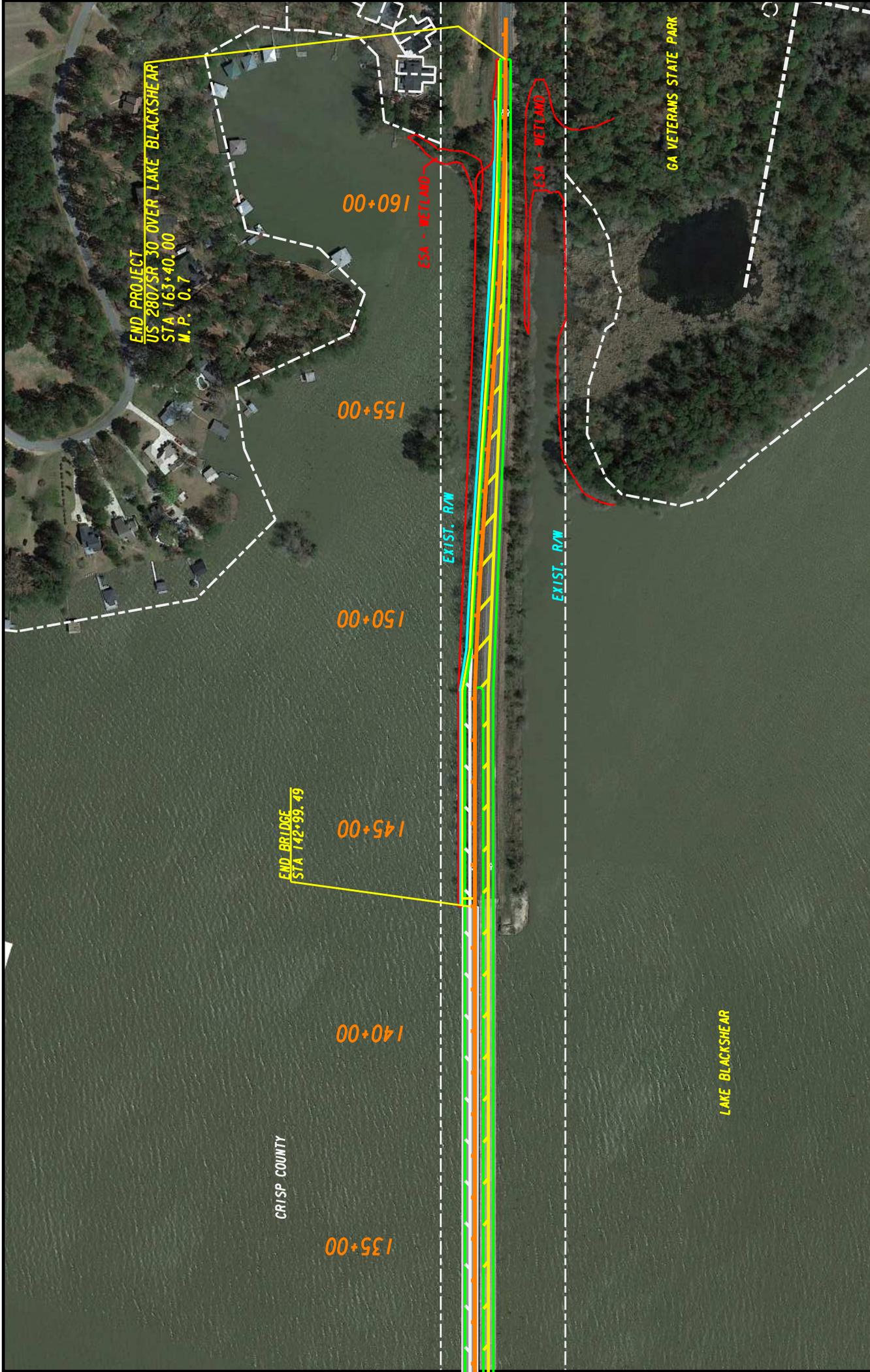
CRISP COUNTY

COUNTY LINE

LAKE BLACKSHEAR

ESA - WETLAND
 LAKESHORE MARINE, INC.

<p>GEORGIA DEPARTMENT OF TRANSPORTATION</p>	<p>TIA TRANSPORTATION INVESTMENT ACT</p>	<p>US 280/SR 30 OVER LAKE BLACKSHEAR</p>	
		<p>NORTHERN ALTERNATE</p>	
<p>Health & Lineback Engineers INCORPORATED 2306 CANTON ROAD, BUILDING 200 WARRENTON, OREGON 97146-5935</p>			<p>SCALE: 1" = 300'</p>
			<p>SHEET 1 OF 2</p>



END PROJECT
 US 280/SR 30 OVER LAKE BLACKSHEAR
 STA 163+40.00
 M.P. 0.7

END BRIDGE
 STA 142+99.49

135+00
 140+00
 145+00
 150+00
 155+00
 160+00

EXIST. R/W

EXIST. R/W

ESA - WETLAND

ESA - WETLAND

CRISP COUNTY

LAKE BLACKSHEAR

GA VETERANS STATE PARK

US 280/SR 30 OVER LAKE BLACKSHEAR
NORTHERN ALTERNATE

GEORGIA
 DEPARTMENT
 OF
 TRANSPORTATION

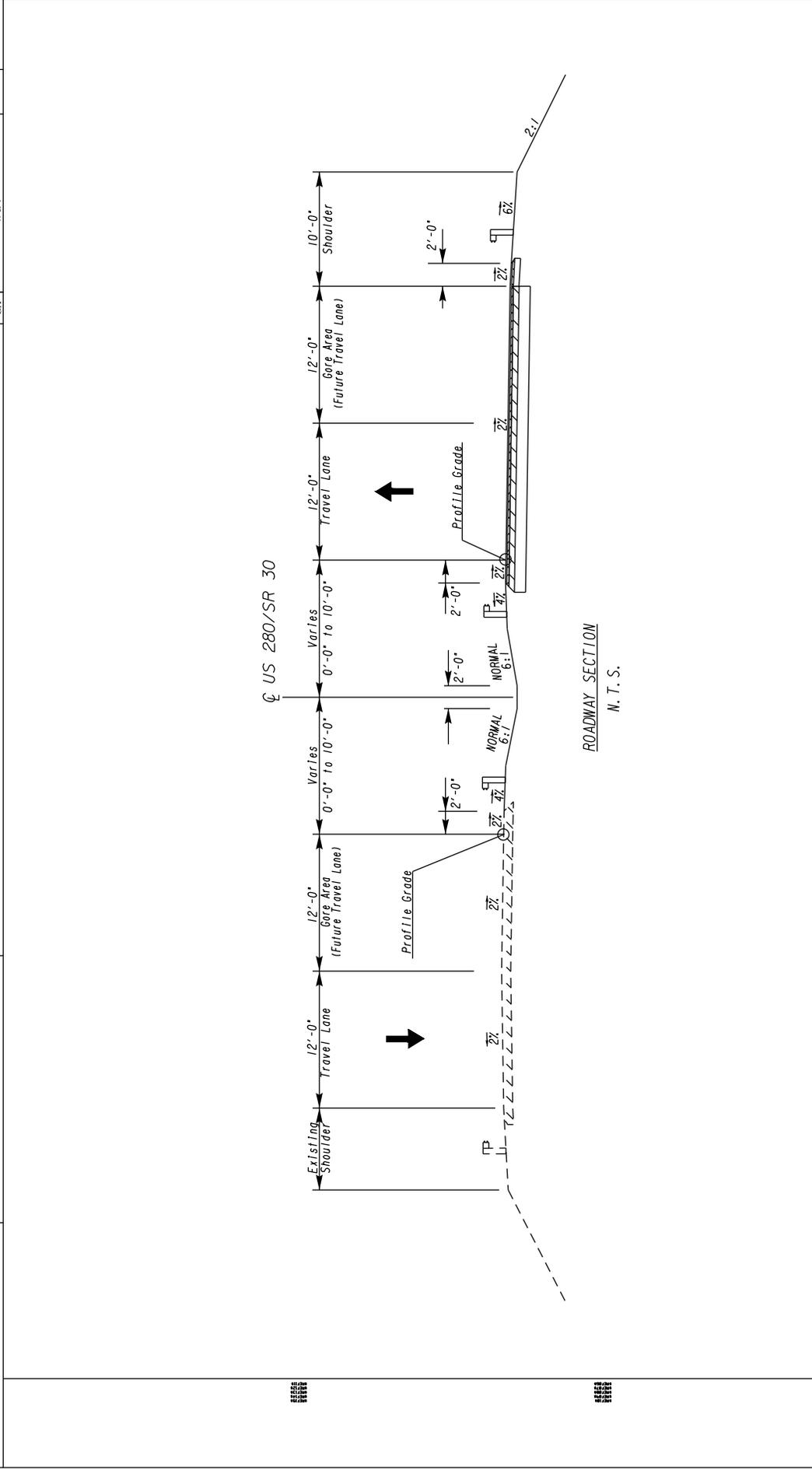
TIA
 TRANSPORTATION INVESTMENT ACT

Heath & Lineback Engineers
 INCORPORATED
 2306 CANTON ROAD, BUILDING 200
 WARRENTON, GEORGIA 30066-9595

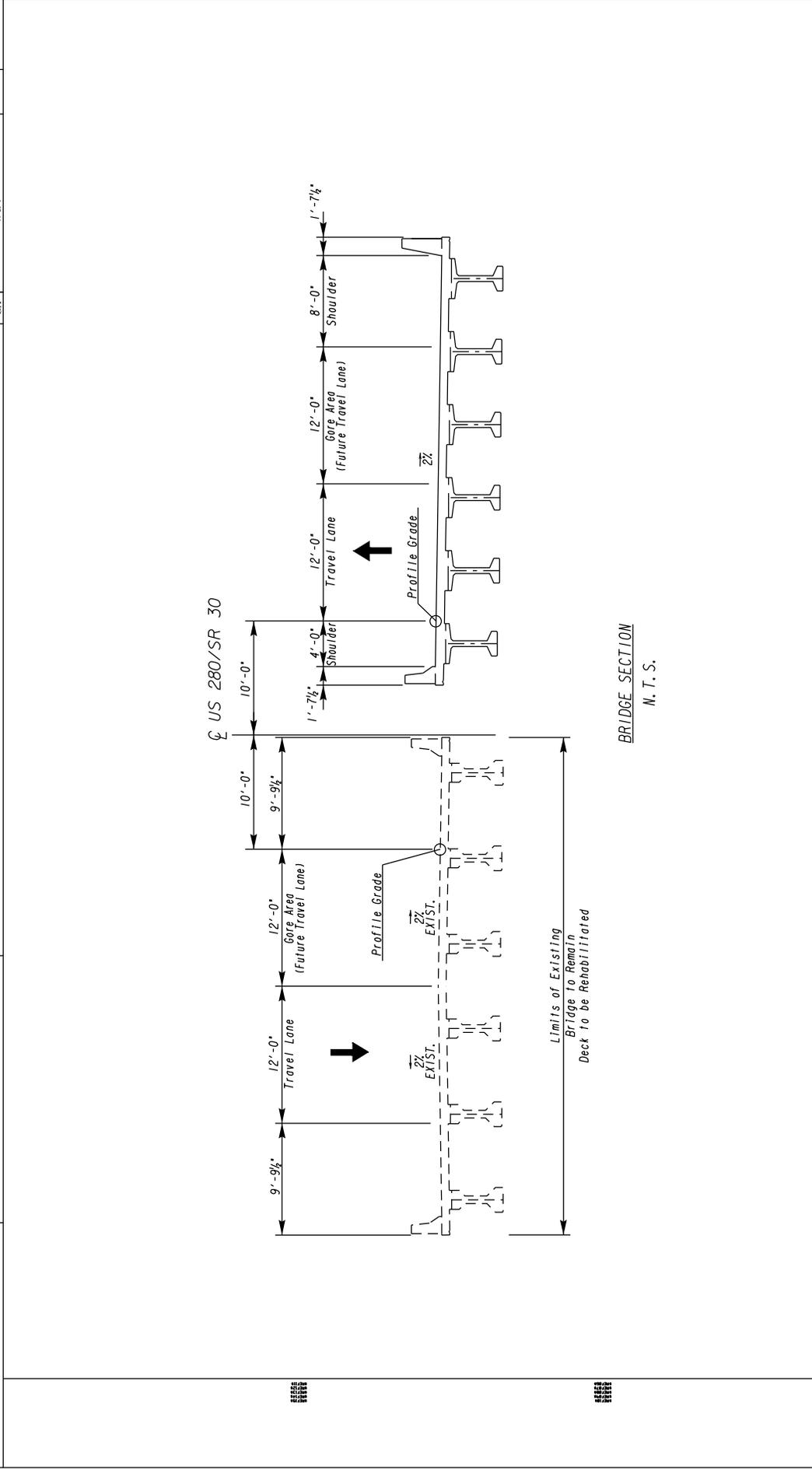


SCALE:
 1" = 300'

SHEET 2 OF 2



 GEORGIA DEPARTMENT OF TRANSPORTATION	 TIA TRANSPORTATION INVESTMENT FACILITY	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF T. I. A. TYPICAL SECTIONS	REVISION DATES
			HEALTH & LINEBACK ENGINEERS INCORPORATED 2000 W. WASHINGTON AVENUE SUITE 100 ATLANTA, GEORGIA 30336-2000
DRAWING NO. 5-001		US 280/SR 30 OVER LAKE BLACKSHEAR	



STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF T. I. A.
TYPICAL SECTIONS

REVISION DATES

US 280/SR 30 OVER LAKE BLACKSHEAR

DRAWING NO. 5-001

GEORGIA DEPARTMENT OF TRANSPORTATION
TIA TRANSPORTATION INVESTMENT FUND
Heath & Lineback Engineers INCORPORATED
2000 W. WINDY HILL ROAD
KEMPERVILLE, GEORGIA 30143-2000

COMP. BY MC DATE 8/4/2015

CHKD. BY RLF/WD DATE 8/18/2015

PROJECT US 280/SR 30 over Lake Blackshear



Heath & Lineback Engineers
INCORPORATED

SHEET 1 OF 4

JOB NO. 2014.021

STRUCTURE Southern Alternate

Concept Quantity Totals:

SOUTHERN ALTERNATE - PREFERRED

	<u>Calculated Costs</u>	<u>Contingency/TIA Mangement Cost</u>	<u>Total Cost</u>
Roadway Estimate:	\$3,985,912		
Bridge Estimate:	\$13,940,789		
Engineering and Inspection (3%)	\$537,802		
Liquid AC Cost Adjustment (15%)	\$2,689,006		
Mitigation Cost Estimate:	\$144,000		
Construction Estimate Total:	\$21,297,507	\$5,647,238	\$26,944,745
Right of Way Estimate:	\$123,691	\$156,825	\$280,516
Utility Relocation Estimate:	\$145,675	\$0	\$145,675
P & E:	\$1,330,195	\$345,937	\$1,676,132
Total Project Cost:	\$23,041,068	-	\$29,047,068

COMP. BY MC DATE 8/4/2015
 CHKD. BY RLF/WD DATE 8/18/2015
 PROJECT US 280/SR 30 over Lake Blackshear



Heath & Lineback Engineers
 INCORPORATED

SHEET 2 OF 4
 JOB NO. 2014.021
 STRUCTURE Southern Alternate

Concept Quantity Totals: SOUTHERN ALTERNATE - PREFERRED

Description:	Unit Totals:	Unit	Price Per Unit	TOTAL COST:
SECTION: PAVEMENT				
Pavement (Existing)				
US 280 East = 41870.0 ft ²	=	4652 SY		
US 280 West = 40365.0 ft ²	=	4485 SY		
Total Overlay Area = Total Existing Area	=	9137 SY		
Pavement (Proposed)				
US 280 East = 38615 ft ²	=	4291 SY	(Includes Shoulders)	
US 280 West = 38175 ft ²	=	4242 SY	(Includes Shoulders)	
Total Full Depth Area = Total Proposed Area	=	8532 SY		
310-5100 GR AGGR BASE CRS, 10 INCH, INCL MATL (150 #/cf)	=	8532 SY	\$ 16.31	\$ 139,164.01
402-1812 RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME (Overlay Existing at Tie-in)	=	1005 TNS	\$ 73.23	\$ 73,598.36
402-3121 RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 #/SY)	=	1877 TNS	\$ 66.83	\$ 125,438.88
402-3130 RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 #/SY)	=	1458 TNS	\$ 72.81	\$ 106,131.82
402-3190 RECYCLED ASPH CONC 19 MM (220 #/SY)	=	1005 TNS	\$ 71.47	\$ 71,838.75
413-1000 BITUM TACK COAT (.035 GAL/SY)	=	1535 GAL	\$ 2.71	\$ 4,163.73
432-0206 MILL ASPH CONC PVM, 1 1/2 IN DEPTH	=	9137 SY	\$ 2.24	\$ 20,467.38
SECTION: ROADWAY				
150-1000 TRAFFIC CONTROL	=	1 LS	\$50,000.00	\$ 50,000.00
201-1500 CLEARING & GRUBBING	=	1 LS	\$20,000.00	\$ 20,000.00
456-2012 INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	=	1 GLM	\$ 1,262.12	\$ 1,262.12
634-1200 RIGHT OF WAY MARKERS	=	9 EA	\$ 106.93	\$ 962.33
641-1200 GUARDRAIL, TP W	=	4000 LF	\$ 16.89	\$ 67,574.61
641-1100 GUARDRAIL, TP T	=	96 LF	\$ 42.14	\$ 4,045.80
641-5001 GUARDRAIL ANCHORAGE, TP 1	=	4 EA	\$ 863.96	\$ 3,455.86
641-5012 GUARDRAIL ANCHORAGE, TP 12	=	4 EA	\$ 2,094.65	\$ 8,378.61
620-0100 TEMPORARY BARRIER, METHOD NO. 1	=	3400 LF	\$ 24.50	\$ 83,292.82
648-1350 IMPACT ATTENUATOR UNIT, TYPE P -	=	2 EA	\$ 15,134.20	\$ 30,268.40
SECTION: EARTHWORK				
FILL: (MINUS ROCK EMBANKMENT)	=	43610 CY	\$ 6.00	\$ 261,660.00
CUT:	=	3540 CY	\$ 6.00	\$ 21,240.00
208-0200 REMOVAL OF EARTH FROM LAKE BED FOR ROCK EMBANKMENT INSTALLATION	=	9370 CY	\$ 10.00	\$ 93,700.00
603-7000 ROCK EMBANKMENT	=	35240 CY	\$ 43.42	\$ 1,530,120.80
603-7000 PLASTIC FILTER FABRIC	=	4890 SY	\$ 3.93	\$ 19,212.59
SECTION: DRAINAGE				
436-1000 ASPHALTIC CONCRETE CURB -	=	4096 LF	\$ 8.00	\$ 32,754.16
441-0303 CONC SPILLWAY, TP 3	=	8 EA	\$ 1,675.08	\$ 13,400.62
550-1180 STORM DRAIN PIPE, 18 IN, H 1-10	=	240 EA	\$ 33.91	\$ 8,139.46
550-1240 STORM DRAIN PIPE, 24 IN, H 1-10	=	230 LF	\$ 41.70	\$ 9,591.30
550-4218 FLARED END SECTION 18 IN, STORM DRAIN	=	2 EA	\$ 584.88	\$ 1,169.75
550-3524 SAFETY END SECTION 24 IN, STORM DRAIN, 6:1 SLOPE	=	2 EA	\$ 810.50	\$ 1,621.00
500-3200 CLASS B CONCRETE	=	3 CY	\$ 383.78	\$ 1,151.34
576-1010 SLOPE DRAIN PIPE, 10 IN	=	683 LF	\$ 29.27	\$ 19,992.51
668-2100 DROP INLET, GP 1	=	6 EA	\$ 1,947.03	\$ 11,682.16
668-4300 STORM SEWER MANHOLE, TP 1	=	2 EA	\$ 1,920.03	\$ 3,840.06
SECTION: SIGNING AND MARKING				
636-1033 TP 1 SIGN W/ 9 REFLECTIVE SHEETING (ASSMUE 10 SIGNS @ 30 X 30)	=	63 SF	\$ 17.61	\$ 1,100.45
636-2070 GALV STEEL POSTS, TP 7 (ASSMUE 10 SIGNS @ 12.5 LF)	=	125 LF	\$ 6.36	\$ 795.00
5" WHITE STRIPE STA: 10000 TO 11681.00 (x2)				
5" WHITE STRIPE STA: 13920 TO 15662.50 (x2)				
653-1501 THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	=	6286 LF	\$ 0.47	\$ 2,985.81
5" YELLOW STRIPE STA: 10000 TO 11681.00 (x2)				
5" YELLOW STRIPE STA: 13920 TO 15662.50 (x2)				
653-1502 THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	=	1050 LF	\$ 0.51	\$ 538.74
WHITE STRIPE STA: 10300 TO 11681.00 (12' Wide)				
WHITE STRIPE STA: 13920 TO 15500.00 (12' Wide)				
653-6004 THERMOPLASTIC TRAF STRIPING, WHITE	=	1358 SY	\$ 3.94	\$ 5,355.67
YELLOW STRIPE STA: 10300 TO 11681.00 (12' Wide)				
YELLOW STRIPE STA: 13920 TO 15500.00 (12' Wide)				
653-6006 THERMOPLASTIC TRAF STRIPING, YELLOW	=	4436 SY	\$ 4.09	\$ 18,158.19
654-1003 RAISED PVMT MARKERS TP 3	=	304 EA	\$ 4.21	\$ 1,280.79
656-0050 REMOVE EXIST SOLID TRAF STRIPE, 5 IN, PAINT	=	4500 LF	\$ 0.56	\$ 2,520.00

COMP. BY MC DATE 8/4/2015
 CHKD. BY RLF/WD DATE 8/18/2015
 PROJECT US 280/SR 30 over Lake Blackshear



Heath & Lineback Engineers
 INCORPORATED

SHEET 3 OF 4
 JOB NO. 2014.021
 STRUCTURE Southern Alternate

Concept Quantity Totals: SOUTHERN ALTERNATE - PREFERRED

Description:		Unit Totals:	Unit	Price Per Unit	TOTAL COST:
657-1085	5" WHITE STRIPE STA: 11681 TO 13920 (x2) PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BK-WT) TP PB 2278.00 LF =	2278	LF	\$ 5.40	\$ 12,307.91
657-6085	5" YELLOW STRIPE STA: 11681 TO 13920 (x2) PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB 2278.00 LF =	2278	LF	\$ 5.28	\$ 12,031.22
657-5001	WHITE STRIPE STA: 11681 TO 13920 (12' Wide) PREFORMED PLASTIC PAVEMENT MARKING, WHITE, TP PB 4974.00 SY =	4974	SY	\$ 20.68	\$ 102,860.84
657-5002	YELLOW STRIPE STA: 11681 TO 13920 (12' Wide) PREFORMED PLASTIC PAVEMENT MARKING, YELLOW, TP PB 5062.00 SY =	5062	SY	\$ 21.37	\$ 108,151.18
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2 =	3	EA	\$ 82.87	\$ 248.60
SECTION: BRIDGE ITEMS					
433-1000	REINF CONC APPROACH SLAB (GA STD 9017P) =	257	SY	\$ 153.91	\$ 39,554.72
500-0100	GROOVED CONCRETE =	257	SY	\$ 5.93	\$ 1,522.97
SECTION: EROSION					
171-0030	SILT FENCE, TP C STA: 10000 TO 11681.00 (*2) SILT FENCE, TP C STA: 13920 TO 15662.50 (*2) SILT FENCE, TP C 6847.00 LF =	6847	LF	\$ 2.75	\$ 18,846.22
165-0030	MAINTENANCE OF SILT FENCE, TP C =	3423.5	LF	\$ 0.54	\$ 1,854.04
DISTURBED AREA: (ASSUME 20 FT LIMITS)					
Measured in Microstation 326700 FT ² = 7.5 AC					
163-0240	PERM. GRASS: 3 TNS/AC 8 AC = 22.5 TNS TEMP. GRASS: 3 TNS/AC * 50% 4 AC = 11.3 TNS DIST. AREAS: 10 TNS/AC 8 AC = 75.0 TNS MULCH 109 TNS =	109	TNS	\$ 129.03	\$ 14,031.58
700-8000	PERM. GRASS: 1200 LB/AC 8 AC = 9000.0 LBS PERM. GRASS: 600 LB/AC 8 AC = 2250.0 LBS TEMP. GRASS: 400 LB/AC 4 AC = 1500.0 LBS FERTILIZER MIXED GRADE 12750 LBS =	6.4	TNS	\$ 547.23	\$ 3,488.60
700-6910	PERMANENT GRASSING (= DISTURBED AREA) =	8	AC	\$ 1,054.90	\$ 7,911.77
163-0232	TEMPORARY GRASSING (= 1/2 DISTURBED AREA) =	4	AC	\$ 423.66	\$ 1,588.71
700-8100	FERTILIZER NITROGEN CONTENT (50 LBS/AC) =	375	LBS	\$ 2.37	\$ 890.09
700-7000	AGRICULTURAL LIME (3 TNS PER ACRE PERM GRASSING AREA) =	23	TNS	\$ 83.86	\$ 1,886.78
603-2180	STN DUMPED RIP RAP, TP 3, 12 IN =	48	SY	\$ 41.10	\$ 1,972.58
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN =	14234	SY	\$ 46.02	\$ 655,112.22
603-7000	PLASTIC FILTER FABRIC =	14282	SY	\$ 3.93	\$ 56,112.89
163-0300	CONSTRUCTION EXITS (ASSUMED) =	2	EA	\$ 1,312.88	\$ 2,625.76
165-0101	MAINTENANCE OF CONSTRUCTION EXIT =	2	EA	\$ 574.91	\$ 1,149.82
163-0520	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN =	350	LF	\$ 13.51	\$ 4,728.68
163-0550	INLET SEDIMENT TRAP =	6	EA	\$ 160.11	\$ 960.68
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP =	6	EA	\$ 34.39	\$ 206.33
163-0527	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS =	65	EA	\$ 273.56	\$ 17,781.26
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES =	975	LF	\$ 1.91	\$ 1,857.73
167-1000	WATER QUALITY MONITORING AND SAMPLING =	2	EA	\$ 245.42	\$ 490.85
167-1500	WATER QUALITY INSPECTIONS =	24	MO	\$ 546.51	\$ 13,116.12
170-1000	FLOATING SILT RETENTION BARRIER =	2125	LF	\$ 11.67	\$ 24,801.69
716-2000	EROSION CONTROL MATS, SLOPES =	5700	SY	\$ 1.01	\$ 5,765.85
Roadway Construction Cost =					\$ 3,985,911.55
BRIDGE:					
BRIDGE CONSTRUCTION =					\$ 13,940,789.00
Bridge Construction Cost =					\$ 13,940,789.00
Engineering and Inspection:					
Assumed Contingency (Based on Roadway & Bridge Totals) 3% =					\$ 537,801.02
Liquid AC Cost Adjustment:					
(Based on Roadway & Bridge Totals) 15% =					\$ 2,689,005.08
MITIGATION COST:					
Wetland/Open Water Mitigation Credits (Based on preliminary field work. Will be finalized upon permit coordination with USACE) =					\$ 144,000.00
Mitigation Cost =					\$ 144,000.00
CONSTRUCTION COST:					
(Roadway+Bridge+Engineering and Inspection+Liquid AC Cost Adjustment+Env. Mitigation) =					\$ 21,297,506.65

COMP. BY MC DATE 8/4/2015

CHKD. BY RLF/WD DATE 8/18/2015

PROJECT US 280/SR 30 over Lake Blackshear



Heath & Lineback Engineers
INCORPORATED

SHEET 1 OF 4

JOB NO. 2014.021

STRUCTURE Northern Alternate

Concept Quantity Totals:

NORTHERN ALTERNATE

	<u>Calculated Costs</u>	<u>Contingency/TIA Mangement Cost</u>	<u>Total Cost</u>
Roadway Estimate:	\$7,164,327		
Bridge Estimate:	\$13,940,789		
Engineering and Inspection (3%)	\$633,154		
Liquid AC Cost Adjustment (15%)	\$3,165,768		
Mitigation Cost Estimate:	\$216,000		
Construction Estimate Total:	\$25,120,036	\$5,647,238	\$30,767,274
Right of Way Estimate:	\$416,992	\$528,694	\$945,686
Utility Relocation Estimate:	\$145,675	\$0	\$145,675
P & E:	\$1,330,195	\$345,937	\$1,676,132
Total Project Cost:	\$27,228,898	-	\$33,534,767



Concept Quantity Totals:

NORTHERN ALTERNATE

Description:				Unit Totals:	Unit	Price Per Unit	TOTAL COST:
SECTION : PAVEMENT							
Pavement (Existing)							
US 280 East =	49504 ft ²	=	5500 SY				
US 280 West =	49311 ft ²	=	5479 SY				
Rose Ln =	10054 ft ²	=	1117 SY				
Total Overlay Area = Total Existing Area			= 12097 SY				
Pavement (Proposed)							
US 280 East =	52653 ft ²	=	5850 SY			(Includes Shoulders)	
US 280 West =	47516 ft ²	=	5280 SY			(Includes Shoulders)	
Rose Ln =	13644 ft ²	=	1516 SY				
Total Full Depth Area = Total Proposed Area			= 12646 SY				
310-5100	GR AGGR BASE CRS, 10 INCH, INCL MATL (150 #/cf)	=	12646 SY	\$ 16.31			\$ 206,259.59
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME (Overlay Existing at Tie-in)	=	1331 TNS	\$ 73.23			\$ 97,435.16
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME (440 #/SF)	=	2782 TNS	\$ 66.83			\$ 185,917.11
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME (165 #/SF)	=	2041 TNS	\$ 72.81			\$ 148,615.91
402-3190	RECYCLED ASPH CONC 19 MM (220 #/SF)	=	1391 TNS	\$ 71.47			\$ 99,424.62
413-1000	BITUM TACK COAT (.035 GAL/SY)	=	2175 GAL	\$ 2.71			\$ 5,896.72
432-0206	MILL ASPH CONC P/VT, 1 1/2 IN DEPTH	=	12097 SY	\$ 2.24			\$ 27,096.28
SECTION : ROADWAY							
150-1000	TRAFFIC CONTROL	=	1 LS	\$50,000.00			\$ 50,000.00
201-1500	CLEARING & GRUBBING	=	1 LS	\$35,000.00			\$ 35,000.00
456-2012	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	=	1 GLM	\$ 1,262.12			\$ 1,262.12
634-1200	RIGHT OF WAY MARKERS	=	20 EA	\$ 106.93			\$ 2,138.51
641-1200	GUARDRAIL, TP W	=	4700 EA	\$ 16.89			\$ 79,400.17
641-1100	GUARDRAIL, TP T	=	96 LF	\$ 42.14			\$ 4,045.80
641-5001	GUARDRAIL ANCHORAGE, TP 1	=	4 EA	\$ 863.96			\$ 3,455.86
641-5012	GUARDRAIL ANCHORAGE, TP 12	=	4 EA	\$ 2,094.65			\$ 8,378.61
620-0100	TEMPORARY BARRIER, METHOD NO. 1	=	3000 LF	\$ 24.50			\$ 73,493.66
648-1350	IMPACT ATTENUATOR UNIT, TYPE P -	=	2 EA	\$ 15,134.20			\$ 30,268.40
SECTION: EARTHWORK							
	FILL (MINUS ROCK EMBANKMENT)	=	84490 CY	\$ 6.00			\$ 506,940.00
	CUT	=	6740 CY	\$ 6.00			\$ 40,440.00
	REMOVAL OF EARTH FROM LAKE BED FOR ROCK EMBANKMENT INSTALLATION	=	20520 CY	\$ 10.00			\$ 205,200.00
208-0200	ROCK EMBANKMENT	=	91020 CY	\$ 43.42			\$ 3,952,088.40
603-7000	PLASTIC FILTER FABRIC	=	5750 SY	\$ 3.93			\$ 22,591.49
SECTION: DRAINAGE							
436-1000	ASPHAL TIC CONCRETE CURB -	=	4796 LF	\$ 8.00			\$ 38,351.79
441-0303	CONC SPILLWAY, TP 3	=	8 EA	\$ 1,675.08			\$ 13,400.62
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	=	740 EA	\$ 33.91			\$ 25,096.67
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	=	230 LF	\$ 41.70			\$ 9,591.30
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	=	2 EA	\$ 584.88			\$ 1,169.75
550-3524	SAFETY END SECTION 24 IN, STORM DRAIN, 6:1 SLOPE	=	2 EA	\$ 810.50			\$ 1,621.00
500-3200	CLASS B CONCRETE	=	3 CY	\$ 383.78			\$ 1,151.34
576-1010	SLOPE DRAIN PIPE, 10 IN	=	800 LF	\$ 29.27			\$ 23,417.28
668-2100	DROP INLET, GP 1	=	6 EA	\$ 1,947.03			\$ 11,682.16
668-4300	STORM SEWER MANHOLE, TP 1	=	2 EA	\$ 1,920.03			\$ 3,840.06
SECTION: SIGNING AND MARKING							
636-1033	TP 1 SIGN W/ 9 REFLECTIVE SHEETING (ASSMUE 10 SIGNS @ 30 X 30)	=	63 SF	\$ 17.61			\$ 1,100.45
636-2070	GALV STEEL POSTS, TP 7 (ASSMUE 10 SIGNS @ 12.5 LF)	=	125 LF	\$ 6.36			\$ 795.00
	5" WHITE STRIPE STA: 10100 TO 12062.00 (x2)						
	5" WHITE STRIPE STA: 14300 TO 16340.00 (x2)						
653-1501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE		7151 LF	\$ 0.47			\$ 3,396.68
	5" YELLOW STRIPE STA: 10100 TO 12062.00 (x2)						
	5" YELLOW STRIPE STA: 14300 TO 16340.00 (x2)						
653-1502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW		975 LF	\$ 0.51			\$ 500.26
	WHITE STRIPE STA: 10400 TO 12062.00 (12' Wide)						
	WHITE STRIPE STA: 14300 TO 16040.00 (12' Wide)						
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE		1659 SY	\$ 3.94			\$ 6,542.75
	YELLOW STRIPE STA: 10400 TO 12062.00 (12' Wide)						
	YELLOW STRIPE STA: 14300 TO 16040.00 (12' Wide)						
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW		7008 SY	\$ 4.09			\$ 28,686.33
654-1003	RAISED P/VT MARKERS TP 3	=	332 EA	\$ 4.21			\$ 1,398.76
656-0050	REMOVE EXIST SOLID TRAF STRIPE, 5 IN, PAINT	=	4500 LF	\$ 0.56			\$ 2,520.00
	5" WHITE STRIPE STA: 12062 TO 14300 (x2)						
657-1085	PREFORMED PLASTIC SOLID P/VT MKG, 8 IN, CONTRAST (BK-WT), TP PB	=	2279 LF	\$ 5.40			\$ 12,313.31

COMP. BY MC DATE 8/4/2015

CHKD. BY RLF/WD DATE 8/18/2015

PROJECT US 280/SR 30 over Lake Blackshear



Heath & Lineback Engineers
INCORPORATED

SHEET 3 OF 4

JOB NO. 2014.021

STRUCTURE Northern Alternate

Concept Quantity Totals:

NORTHERN ALTERNATE

Description:		Unit Totals:	Unit	Price Per Unit	TOTAL COST:
657-6085	5" YELLOW STRIPE STA: 12062 TO 14300 (x2) PREFORMED PLASTIC SOLID PVMT MKG, 8 IN, CONTRAST (BLACK-YELLOW), TP PB	2279	LF	\$ 5.28	\$ 12,036.50
657-5001	WHITE STRIPE STA: 12062 TO 14300 (12' Wide) PREFORMED PLASTIC PAVEMENT MARKING, WHITE, TP PB	3978	SY	\$ 20.68	\$ 82,265.04
657-5002	YELLOW STRIPE STA: 12062 TO 14300 (12' Wide) PREFORMED PLASTIC PAVEMENT MARKING, YELLOW, TP PB	4973	SY	\$ 21.37	\$ 106,249.67
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	3	EA	\$ 82.87	\$ 248.60
SECTION: BRIDGE ITEMS					
433-1000	REINF CONC APPROACH SLAB (GA STD 9017P)	257	SY	\$ 153.91	\$ 39,554.72
500-0100	GROOVED CONCRETE	257	SY	\$ 5.93	\$ 1,522.97
SECTION: EROSION					
171-0030	SILT FENCE, TP C STA: 10100 TO 12062.00 (*2) SILT FENCE, TP C STA: 14300 TO 16340.00 (*2) SILT FENCE, TP C	8004	LF	\$ 2.75	\$ 22,030.84
165-0030	MAINTENANCE OF SILT FENCE, TP C	4002	LF	\$ 0.54	\$ 2,167.33
DISTURBED AREA: (ASSUME 20 FT LIMITS)					
Measured in Microstation		435600	FT^2	=	10 AC
163-0240	PERM. GRASS: 3 TNS/AC 10 AC = 30.0 TNS TEMP. GRASS: 3 TNS/AC * 50% 5 AC = 15.0 TNS DIST. AREAS: 10 TNS/AC 10 AC = 100.0 TNS MULCH	145	TNS	\$ 129.03	\$ 18,708.77
700-8000	PERM. GRASS: 1200 LB/AC 10 AC = 12000.0 LBS PERM. GRASS: 600 LB/AC 10 AC = 3000.0 LBS TEMP. GRASS: 400 LB/AC 5 AC = 2000.0 LBS FERTILIZER MIXED GRADE	9	TNS	\$ 547.23	\$ 4,651.46
700-6910	PERMANENT GRASSING (= DISTURBED AREA)	10	AC	\$ 1,054.90	\$ 10,549.03
163-0232	TEMPORARY GRASSING (= 1/2 DISTURBED AREA)	5	AC	\$ 423.66	\$ 2,118.28
700-8100	FERTILIZER NITROGEN CONTENT (50 LBS/AC)	500	LBS	\$ 2.37	\$ 1,186.79
700-7000	AGRICULTURAL LIME (3 TNS PER ACRE PERM GRASSING AREA)	30	TNS	\$ 83.86	\$ 2,515.71
603-2180	STN DUMPED RIP RAP, TP 3, 12 IN	48	SY	\$ 41.10	\$ 1,972.58
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	16211	SY	\$ 46.02	\$ 746,118.63
603-7000	PLASTIC FILTER FABRIC	16259	SY	\$ 3.93	\$ 63,881.74
163-0300	CONSTRUCTION EXITS (ASSUMED)	2	EA	\$ 1,312.88	\$ 2,625.76
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	2	EA	\$ 574.91	\$ 1,149.82
163-0520	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	455	LF	\$ 13.51	\$ 6,147.28
163-0550	INLET SEDIMENT TRAP	6	EA	\$ 160.11	\$ 960.68
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	6	EA	\$ 34.39	\$ 206.33
163-0527	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS	50	EA	\$ 273.56	\$ 13,677.89
165-0041	MAINTENANCE OF CHECK DAMS - ALL TYPES	750	LF	\$ 1.91	\$ 1,429.02
167-1000	WATER QUALITY MONITORING AND SAMPLING	2	EA	\$ 245.42	\$ 490.85
167-1500	WATER QUALITY INSPECTIONS	24	MO	\$ 546.51	\$ 13,116.12
170-1000	FLOATING SILT RETENTION BARRIER	2550	LF	\$ 11.67	\$ 29,762.03
716-2000	EROSION CONTROL MATS, SLOPES	5000	SY	\$ 1.01	\$ 5,057.77
Roadway Construction Cost =					\$ 7,164,326.16
BRIDGE:					
BRIDGE CONSTRUCTION					\$ 13,940,789.00
Bridge Construction Cost =					\$ 13,940,789.00
Engineering and Inspection:					
Assumed Contingency (Based on Roadway & Bridge Totals) 3%					\$ 633,153.45
Liquid AC Cost Adjustment:					
(Based on Roadway & Bridge Totals) 15%					\$ 3,165,767.27
MITIGATION COST:					
Wetland/Open Water Mitigation Credits (Based on preliminary field work. Will be finalized upon permit coordination with USACE)					\$ 216,000.00
Mitigation Cost =					\$ 216,000.00
CONSTRUCTION COST:					
(Roadway+Bridge+Engineering and Inspection+Liquid AC Cost Adjustment+Env. Mitigation)					\$ 25,120,035.88

COMP. BY MC DATE 8/4/2015
 CHKD. BY RLF/WD DATE 8/18/2015
 PROJECT US 280/SR 30 over Lake Blackshear



Heath & Lineback Engineers
 INCORPORATED

SHEET 4 OF 4
 JOB NO. 2014.021
 STRUCTURE Northern Alternate

Concept Quantity Totals:

NORTHERN ALTERNATE

Description:	Unit Totals:	Unit	Price Per Unit	TOTAL COST:
RIGHT OF WAY:				
GDOT R/W Estimate: =				\$ 416,992.00
				Right of Way Cost = \$ 416,992.00
UTILITY RELOCATION:				
				\$ 145,675.00
				Utility Relocation Cost = \$ 145,675.00
P & E: =	1	LS	\$ 1,330,194.60	\$ 1,330,194.60
				P & E Cost = \$ 1,330,194.60
TOTAL PROJECT COST: =				\$ 27,228,897.48

BRIDGE CONSTRUCTION ESTIMATE - 55 FOOT SPANS ON METAL SHELL PILES

8/18/2015 US 280 over Lake Blackshear P.I. No. 0012578		UNIT	PRICE	QUANTITY	COST
500-0100	GROOVED CONCRETE	SY	\$3	8473	\$25,419
500-1006	SUPERSTR CONCRETE, CL AA, BR NO -	LS	\$1,100	2100	\$2,310,000
500-2100	CONCRETE BARRIER	LF	\$45	4486	\$201,870
500-3101	CLASS A CONCRETE	CY	\$1,000	1100	\$1,100,000
507-9002	PSC BEAM, AASHTO TYPE I I	LF	\$160	11200	\$1,792,000
511-1000	BAR REINF STEEL	LB	\$1.3	185000	\$240,500
511-3000	SUPERSTR REINF STEEL, BR NO -	LS	\$1.0	383000	\$383,000
520-1330	30 INCH MS PILE INCLUDES CONC AND REINFORCEMENT	LF	\$284	25000	\$7,100,000
520-1330	30 INCH MS PILE/NON PRODUCTION FOR PDA TESTING	LF	\$198	1000	\$198,000
520-5000	PILOT HOLES	LF	\$225	1000	\$225,000
523-1100	DYNAMIC PILE TEST	EA	\$2,500	10	\$25,000
540-1102	REMOVAL OF EXISTING BRIDGE (OLD SUBSTRUCTURE)	LS	\$100,000	1	\$100,000
999-9999	PILE POINTS	EA	\$1,200	200	\$240,000
TOTAL BRIDGE CONSTRUCTION COST =					\$13,940,789
BRIDGE CONSTRUCTION COST PER SF =					\$158.35

30" METAL SHELL PILE COST

CONCRETE COST = $(3.14 \times 1.25^2 \times 1/27) \times (300\$/CY)$	55 \$/LF
STEEL SHELL COST $(2 \times 3.14 \times 1.25 \times .75 / 12 \times 490LB/FT \times 0.75\$/LB)$	180 \$/LF
REINF IN MS PILE (ASSUME 10 # 8 BARS) $10 \times 2.67LB/FT \times 0.85\$/LB =$	23 \$/LF
COST FOR 30" PILE FILLED WITH CONCRETE AND STEEL	258 \$/LF
TOTAL COST WITH 10% INCREASE FOR WORKING IN LAKE AND PAINT (PRODUCTION PILES)	284 \$/LF
TOTAL COST WITH 10% INCREASE FOR WORKING IN LAKE (NON PRODUCTION PILES)	198 \$/LF

LENGTH OF MS PILES = 8 TOWER BENTS X 10 + 34 REGULAR BENTS X 5 = 250 X 100 = 25000

PI. 0012578, Lake Blackshear Bridge Project
 Estimate for Cost of Addressing Crisp County Waterworks Water Main Conflicts

Prepared by Columbia Engineering (CES Project 4281.01)

Item	Unit	Quantity	Unit Price	Item price
I. Minimal Relocations to address conflicts with bridge abutments				
8" Water Main - DIP	LF	300	\$85.00	\$25,500.00
Gate Valves	EA	2	\$1,500.00	\$3,000.00
Hydrant Assemblies	EA	2	\$2,500.00	\$5,000.00
			Subtotal	\$33,500.00
			10% Contingency:	\$3,350.00
			Total Section I:	\$36,850.00

Item	Unit	Quantity	Unit Price	Item price
II. Additional Relocation needed to move water main completely out of new pavement				
8" Water Main -DIP	LF	950	\$85.00	\$80,750.00
			10% Contingency:	\$8,075.00
			Total Section II:	\$88,825.00

Total Sections I and II: \$125,675.00

Note:

-This estimate is prepared without input from Crisp County Waterworks (CCWW). When CCWW provides their opinion of impacts and costs, that information will supercede this estimate.

GA POWER UTILITY ESTIMATE

Rudolph Frampton

From: Joe Ussery <JUssery@columbia-engineering.com>
Sent: Wednesday, September 02, 2015 11:24 AM
To: emullis@southernco.com
Cc: Paul Cook; Rudolph Frampton; Masood Shabazaz
Subject: GDOT Project PI0012578 - US280 Bridge over Lake Blackshear - GA Power Distribution Impacts

Mr. Mullis:

Thank you for your time discussing the referenced project's impacts to GA Power's Facilities. To summarize our discussion:

-The project is finalizing the Concept Phase. It's a TIA project, so the budget has to stay within the figures programmed into the TIA bill as it was passed. Therefore, we are looking to review and budget for reimbursable utility costs to the project in the Concept Phase.

-GA Power-Distribution owns the pole at approx. Sta 107+00 that is within the cut limits for the proposed roadside ditch. The pole is located outside existing right-of-way and is within the limits of the required right-of-way acquisition. Therefore, GA Power will have prior rights.

-Budget estimate for reimbursable relocation cost for the pole is \$20,000 per pole.

-We'll review the current cross sections and send PDF's of the drawings to you that show the depth of cut to better evaluate the impact and relocation needed.

-We'll also send you and Sheila Vasser copies of the latest DGN's for the project so Sheila can overlay them with GA Power's mapping files.

Please review the above, comment, revise, add points, etc. as you feel appropriate. Again, thank you for your time.

Joe W. Ussery, III, PE | Project Manager
Columbia Engineering
p: 770.925.0357
f: 770.925.0565
2862 Buford Highway
Suite 200 . Duluth, GA 30096



www.columbia-engineering.com

*****WE HAVE MOVED. PLEASE TAKE NOTE OF OUR NEW ADDRESS*****

Preliminary ROW Cost Estimate



PI No. 0012578

Project Name: US 280 over Lake Blackshear - SOUTHERN ALTERNATE

Date: 10/2/2015

Land and Improvements	Agriculture	Residential	Commercial	Industrial	Notes
Estimate (\$/ac)	\$0	\$0	\$31,400	\$0	Enter Cost / Acre
Fee Simple Area (ac)	0.00	0.00	1.31	0.00	Acreage
Fee Simple Estimate	\$0	\$0	\$41,260	\$0	CALCULATED FIELD
Perm Easement Area (ac)	0.00	0.00	0.00	0.00	Acreage
Perm Easement Factor	0%	50%	50%	0%	Adjust Percentage as Appropriate
Perm Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
Temp Easement Area (ac)	0.00	0.00	0.26	0.00	Enter Acreage
Temp Easement Factor	0%	25%	25%	0%	Adjust Percentage as Appropriate
Temp Easement Estimate	\$0	\$0	\$2,041	\$0	CALCULATED FIELD
City Land Available for Swap (ac)	0.00	0.00	0.00	0.00	Enter Acreage (If required)
City Land Available for Swap Estimate	\$0	\$0	\$0	\$0	Enter Estimated Value (If required)
Proximity Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Consequential Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Cost to Cures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Improvements	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Trade Fixtures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
PROPERTY TYPE TOTALS	\$0	\$0	\$43,301	\$0	CALCULATED FIELD
Land and Improvements Sub Total					CALCULATED FIELD
					\$43,301
Relocation	Quantity	Estimated Cost	Totals		
Residential Tenant (Qty of Tenants)	0	\$30,000	\$0		Adjust Qty / Costs as required
Residential Owner	0	\$50,000	\$0		Adjust Qty / Costs as required
Business Displacement (Qty)	0	\$45,000	\$0		Adjust Qty / Costs as required
Pro Rata Taxes	0	\$1,000	\$0		Adjust Qty / Costs as required
Prop Pin Replacement	0	\$1,250	\$0		Adjust Qty / Costs as required
PROPERTY TYPE TOTALS	0		\$0		CALCULATED FIELD
Relocation Sub Total			\$0		CALCULATED FIELD
Valuation Services	Agriculture	Residential	Commercial	Industrial	
Appraisals (# of Parcels)	0	0	3	0	Adjust Parcels as required
Estimated Fee (per Parcel)	\$0	\$0	\$2,000	\$0	Enter Estimated Fee per Parcel
Total Appraisals	\$0	\$0	\$6,000	\$0	CALCULATED FIELD
Specialty Reports	\$0	\$0	\$750	\$0	Enter Estimated Costs and Provide Notes
Estimated Fees	\$0	\$0	\$0	\$0	Enter Estimated Fees and Provide Notes
PROPERTY TYPE TOTALS	\$0	\$0	\$6,750	\$0	CALCULATED FIELD
Valuation Services Sub Total			\$6,750		CALCULATED FIELD
Legal Services	Parcels	Estimated Fees	Totals		
Meeting with Attorney	3	\$125	\$375		Adjust Parcels / Fees as required (using best judgement)
Preliminary Titles	3	\$200	\$600		Adjust Parcels / Fees as required
Closing and Final Title	3	\$300	\$900		Adjust Parcels / Fees as required
Recording Fees	3	\$50	\$150		Adjust Parcels / Fees as required
Condemnation	1	\$30,000	\$30,000		Adjust Parcels / Fees as required
Legal Services Sub Total			\$32,025		CALCULATED FIELD
Administrative	Parcels	Man Hours/Parcel	Totals		
Pre-Acquisition	3	40	\$6,000		Adjust Parcels / Fees as required
Acquisition	3	100	\$15,000		Adjust Parcels / Fees as required
Administrative Appeals	0	50	\$0		Calculates as 15% of Acq Parcel Count (Adjust if Necessary)
Administrative Sub Total			\$21,000		CALCULATED FIELD
Contingency					
Overall Contingency	20%	\$20,615			Enter Percentage for Contingency (Default = 20%)
Total Estimated Costs				\$123,691	CALCULATED FIELD

Preliminary ROW Cost Estimate



PI No. 0012578

Project Name: US 280 over Lake Blackshear - NORTHERN ALTERNATE

Date: 10/2/2015

Land and Improvements	Agriculture	Residential	Commercial	Industrial	Notes
Estimate (\$/ac)	\$0	\$81,100	\$31,400	\$0	Enter Cost / Acre
Fee Simple Area (ac)	0.00	1.44	2.19	0.00	Acreage
Fee Simple Estimate	\$0	\$116,946	\$68,797	\$0	CALCULATED FIELD
Perm Easement Area (ac)	0.00	0.00	0.00	0.00	Acreage
Perm Easement Factor	0%	50%	50%	0%	Adjust Percentage as Appropriate
Perm Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
Temp Easement Area (ac)	0.00	0.00	0.00	0.00	Enter Acreage
Temp Easement Factor	0%	25%	25%	0%	Adjust Percentage as Appropriate
Temp Easement Estimate	\$0	\$0	\$0	\$0	CALCULATED FIELD
City Land Available for Swap (ac)	0.00	0.00	0.00	0.00	Enter Acreage (If required)
City Land Available for Swap Estimate	\$0	\$0	\$0	\$0	Enter Estimated Value (If required)
Proximity Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Consequential Damages	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Cost to Cures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Improvements	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate
Trade Fixtures	\$0	\$0	\$0	\$0	Enter Fees and Provide Notes as Appropriate

PROPERTY TYPE TOTALS **\$0** **\$116,946** **\$68,797** **\$0** CALCULATED FIELD

**Land and Improvements
Sub Total** **\$185,744** CALCULATED FIELD

Relocation	Quantity	Estimated Cost	Totals	
Residential Tenant (Qty of Tenants)	0	\$30,000	\$0	Adjust Qty / Costs as required
Residential Owner	0	\$50,000	\$0	Adjust Qty / Costs as required
Business Displacement (Qty)	0	\$45,000	\$0	Adjust Qty / Costs as required
Pro Rata Taxes	0	\$1,000	\$0	Adjust Qty / Costs as required
Prop Pin Replacement	0	\$1,250	\$0	Adjust Qty / Costs as required

PROPERTY TYPE TOTALS **0** **\$0** CALCULATED FIELD

Relocation Sub Total **\$0** CALCULATED FIELD

Valuation Services	Agriculture	Residential	Commercial	Industrial	
Appraisals (# of Parcels)	0	8	2	0	Adjust Parcels as required
Estimated Fee (per Parcel)	\$0	\$2,000	\$2,000	\$0	Enter Estimated Fee per Parcel
Total Appraisals	\$0	\$16,000	\$4,000	\$0	CALCULATED FIELD
Specialty Reports	\$0	\$0	\$0	\$0	Enter Estimated Costs and Provide Notes
Estimated Fees	\$0	\$0	\$0	\$0	Enter Estimated Fees and Provide Notes

PROPERTY TYPE TOTALS **\$0** **\$16,000** **\$4,000** **\$0** CALCULATED FIELD

Valuation Services Sub Total **\$20,000** CALCULATED FIELD

Legal Services	Parcels	Estimated Fees	Totals	
Meeting with Attorney	10	\$125	\$1,250	Adjust Parcels / Fees as required (using best judgement)
Preliminary Titles	10	\$200	\$2,000	Adjust Parcels / Fees as required
Closing and Final Title	10	\$300	\$3,000	Adjust Parcels / Fees as required
Recording Fees	10	\$50	\$500	Adjust Parcels / Fees as required
Condemnation	2	\$30,000	\$60,000	Adjust Parcels / Fees as required

Legal Services Sub Total **\$66,750** CALCULATED FIELD

Administrative	Parcels	Man Hours/Parcel	Totals	
Pre-Acquisition	10	40	\$20,000	Adjust Parcels / Fees as required
Acquisition	10	100	\$50,000	Adjust Parcels / Fees as required
Administrative Appeals	2	50	\$5,000	Calculates as 15% of Acq Parcel Count (Adjust if Necessary)

Administrative Sub Total **\$75,000** CALCULATED FIELD

Contingency			
Overall Contingency	20%	\$69,499	Enter Percentage for Contingency (Default = 20%)

Total Estimated Costs **\$416,992** CALCULATED FIELD

TRANSPORTATION INVESTMENT ACT (TIA)

Project Number: RC08-000012

P.I. No.: 0012578

Counties: Crisp and Sumter

US 280/SR 30 over Lake Blackshear

TRAFFIC DATA/PROJECTIONS

Prepared By:



HEATH & LINEBACK ENGINEERS, INC.

PROJECT LOCATION

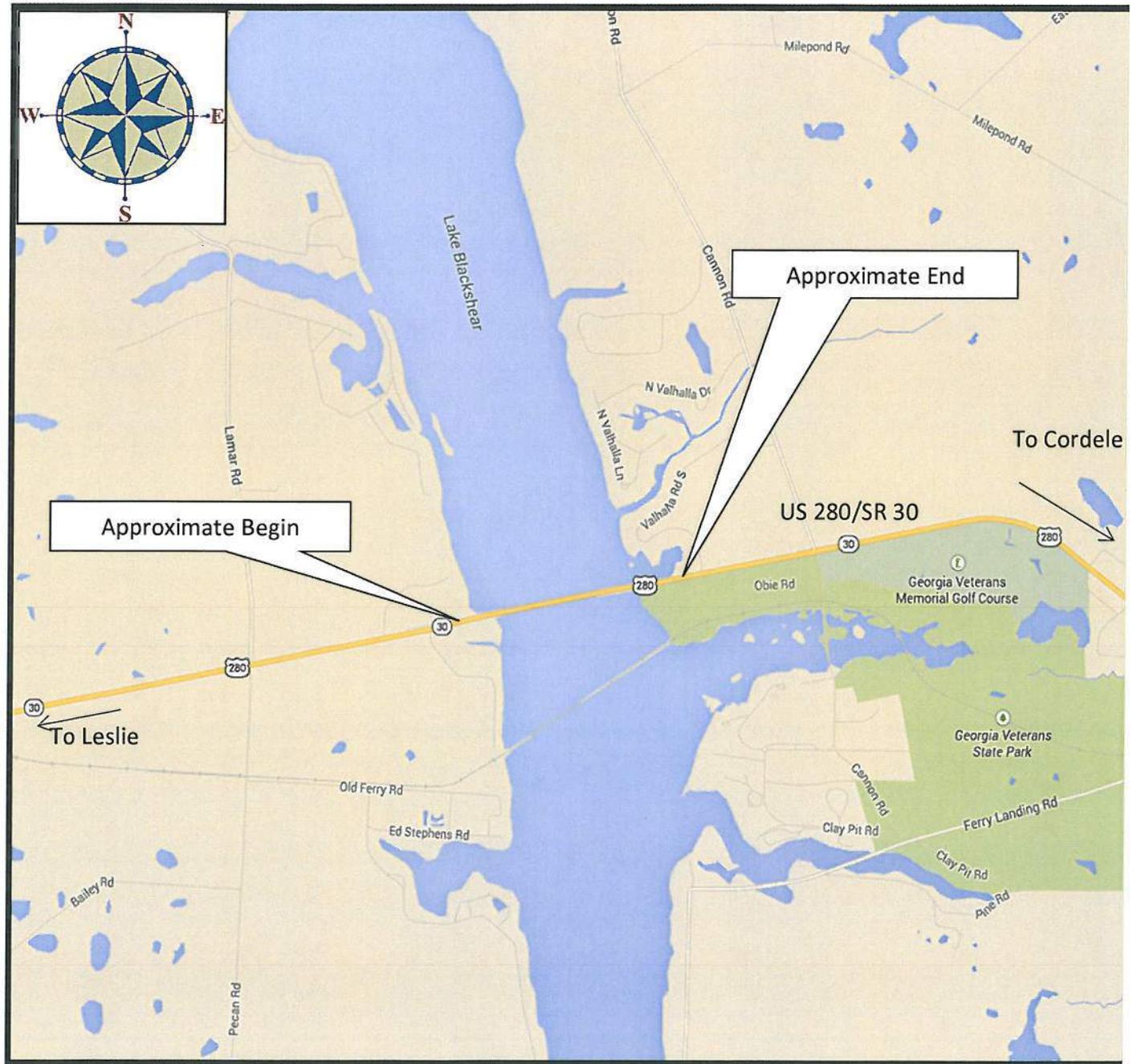


Figure 1 – Project Location Map

**PI No. 0012578 – Sumter & Crisp Counties
US 280 over Lake Blackshear Bridge Construction**

COMP. BY: RLC

DATE: 12/24/14

CHKD. BY: JAH

DATE: 12/24/2014

Description of the proposed project:

This is a TIA project that proposes to construct a parallel bridge for US 280/SR 30 over Lake Blackshear that includes tie-ins back to the existing roadway. This project is part of the Governor's road Improvement Program (GRIP).

Traffic Projection Calculations

All traffic data was obtained from the GADOT Traffic Counts Database. See attached reports. Since the Crisp County traffic counts were higher than the Sumter County traffic counts, the Crisp County Traffic counts were used.

The traffic trend from 1990 to 2007 was used to obtain the average growth rate. Traffic from 2008 was not used since this was the beginning of the recession which affected traffic nationwide. It is anticipate that as the economy recovers, the traffic trend will return to the pre 2008 trends.

1990 ADT = 3,530

2007 ADT = 5,200

Percentage Increase over 17 years = $(5,200 - 3,530) \div 3,530 \times 100 = 47.3\%$

Annual Percentage Increase/Growth Rate = $47.3\% \div 17\text{years} = 2.8\%$ round to 3%

Current Year (2013) ADT = 4,000 obtained from GADOT Traffic Counts

Construction Year (2016) ADT = $(1+0.03)^3 \times 4,000 = 4,370$ round to 4,400

Open Year (2018) ADT = $(1+0.03)^5 \times 4,000 = 4,637$ round to 4,700

Design Year (2038) ADT = $(1+0.03)^{25} \times 4,000 = 8,400$

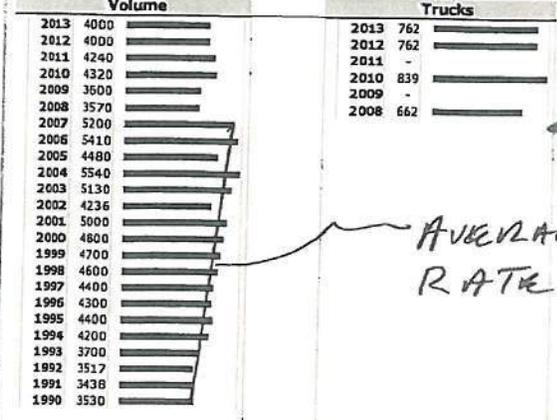
Attachments:

1. GADOT Traffic Counts

COUNTS TAKEN AT EAST END OF BRIDGE

Short Term Station 0810060
 In Crisp County
 Located on 003000
 LRS ID: 0811003000

Referencing Annual Statistics Surveys



SHARP DECLINE IN TRAFFIC DUE TO ECONOMIC RECESSION (FROM 2008)

AVERAGE GROWTH/TREND EXPECTED IN FUTURE AS THE ECONOMY IMPROVES

WORST CASE SCENARIO FOR FUTURE TRAFFIC.

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pct Speed
2013	4000	0.00	762	19.05			
2012	4000	-5.66	762	19.05			
2011	4240	-1.85					
2010	4320	20.00	839	19.42			
2009	3600	0.84					
2008	3570	-31.35	662	18.55			
2007	5200	-3.88					
2006	5410	20.76					
2005	4480	-19.13					
2004	5540	7.99					
2003	5130						

Traffic Counts in Georgia
Help Register

List Counting Stations

County: 081: Crisp [Search]

Route: 30 [Search]

Station ID: [Search]

Study Location: Crisp [More...]

CNT: Crisp

Stations Found: 201

Station ID	Route	Description
081-0347	030000	
SR300: W of Culpepper Rd		
081-w347	null	
LTPP WIM 133020 SB		
0810001	041600	
null		
0810003	069405	
null		
0810005	065605	
null		
0810009	065605	
null		
0810012	065605	
null		
0810014	065605	
null		
0810018	000700	
null		
0810021	000700	
null		
0810023	000700	
null		
0810025	000700	
null		
0810027	000700	
null		
0810029	000700	
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0810030	000700	
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0810032	000700	
null		
0810034	000700	
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0810036	000700	
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0810041	000700	
null		
0810043	000700	
null		
0810045	000700	
null		
0810047	000700	
null		
0810049	000700	
null		
0810052	000700	
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0810054	000700	
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0810055	000700	
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0810056	000700	
null		
0810057	0033CO	
null		
0810058	003300	
null		
0810059	003300	
null		
0810060	003000	
null		
0810061	003000	
null		
0810062	003000	
null		
0810063	003000	
null		
0810064	003000	
null		
0810065	003000	
null		

Relocate Map

Go to: [Address] [Search]

Street Address

City

Layers

Counties

- Portable
- Permanent (Active)
- Permanent (Inactive)
- WIM



Short Term Station 2610096
In Sumter County
 Located on 003000
 LRS ID: 2611003000

Referencing Annual Statistics Surveys

Volume		Trucks	
2013	3330	2013	717
2012	3430	2012	-
2011	3470	2011	764
2010	3480	2010	793
2009	3810	2009	-
2008	3780	2008	761
2007	4070		
2006	3830		
2005	4170		
2004	4080		
2003	3920		
2002	4254		
2001	4200		
2000	4500		
1999	3800		
1998	4000		
1997	4400		
1996	4700		
1995	4000		
1994	3700		
1993	3500		
1992	3202		
1991	3230		
1990	3277		

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pct Speed
2013	3330	-2.92	717	21.54	8.00	57.00	
2012	3430	-1.15					
2011	3470	-0.29	764	22.01			
2010	3480	-8.66	793	22.79			
2009	3810	0.79					
2008	3780	-7.13	761	20.14			
2007	4070	6.27					
2006	3830	-8.15					
2005	4170	2.21					
2004	4080	4.08					
2003	3920						

AGENDA

TIA PROJECT: RC08-000012
PI No. 0012578
Crisp/Sumter Counties
US 280 over Lake Blackshear

COORDINATION MEETING # 1 **12-10-2014**

HLE will provide weekly updates to the team for project commitments and activities. This coordination meeting # 1 serves as our first weekly summary.

1. Team introduction

2. Project Description:

This is a 100% TIA funded project for constructing a parallel bridge at US 280 over Lake Blackshear that includes roadway tie-ins to the existing roadway to the east and west. There are adjacent projects planned to the east and the west that will be considered in selecting the preferred alternate.

3. Critical Milestones – Team/Heath and Lineback Engineers (HLE)

This project will follow the GADOT Letting Schedule.

- Update Schedule to include detailed tasks by: December 12, 2014
- Stakeholder coordination no later than : December 19, 2014
- HLE submit Concept Layout to Edwards Pitman: December 29, 2014
- Concept Report Submittal by: January 30, 2015
- HLE submit Updated plans with construction limits, OBF and silt fence, to Edwards Pitman: February 27, 2015
- Submit 30% plans by: February 27, 2015
- Right of Way plans submittal by: June 26, 2015
- FPR/85% plans by: October 30, 2015
- Corrected FFPR submittal by: December 12, 2015
- Right of Way certification by: January 29, 2016
- Final Plans and Specifications to Construction Bidding by: February 5, 2016
- Bid Date: April 15, 2016

AGENDA

4. Bridge Foundation Investigation and Soil Survey – United Consulting / HLE

- Required Permits: Corps of Engineers and Crisp County Power Commission (Regulated by the Federal Energy Regulatory Commission).

- Schedule:

Begin Field work: January 5, 2015

Preliminary boring data by: February 27, 2015

BFI Report Submittal for approval by: April 17, 2015

Soil Survey Report submittal for approval by: April 17, 2015

BFI Report approval by: May 15, 2015

Soil Survey Report approval by: May 15, 2015

5. Survey/Database Preparation – Columbia Engineering / HLE

- Schedule:

Begin survey field work by: December 15, 2014

Existing Utilities by: January 9, 2015

Property and existing right of way: January 9, 2015

Final Survey Package by: February 27, 2015

Proposed Utilities by: October 30, 2015

6. Environmental Studies – Edwards Pitman Environmental (EPEI) / HLE

Underwater Archaeology may be required – EP to determine if required.

An Aquatic Survey may be required– EP to determine if required. EP will proceed with ecology report without Aquatic survey and add as an addendum later if required.

- Required Permits: Crisp County Power for Federal Energy Regulatory Commission approval for placing fill in the lake. Edwards Pitman to start immediately due to the length of time expected for approval. Also USACE for Individual Permit and EPD for stream buffer variance.

- Schedule:

Environmental screening (to cover beyond project limits to understand the effect on future adjacent projects) by: January 9, 2015

Detailed Environmental Schedule Tasks by: December 12, 2014

Estimated Mitigation Cost by: January 9, 2015

Permits to agencies by: June 30, 2015

AGENDA

Final GEPA Document Approval by: July 16, 2015

All permits approved by: December 31, 2015

7. Miscellaneous Items

HLE to consider an alternate which places the fill in the lake required for the future 4 lane typical. Under this scenario, the future projects will not have to renegotiate with the USACE for placing more fill in the lake. This will also increase the chances of getting the USACE permit approved.

United Consulting to look into the implications of placing rock fill in the lake, to simplify the environmental process as well as construction.

Edwards Pitman suggested ways of expediting schedule. For example: expedited review times of special studies, concurrent review of ecology report and Section 404 Permit, the ability to let the project even if the Section 404 permit is not obtained.

Attendees

Masood Shabazaz, HLE, mshabazaz@heath-lineback.com , 770-424-1668
Rudolph Frampton, HLE, rframpton@heath-lineback.com , 770-424-1668
Shrujal Amin, GADOT-TIA, samin@dot.ga.gov , 404-631-1657
Kelvin Mullins, GADOT, kemullins@dot.ga.gov , 404-631-1675
Paul Cook, Columbia Eng., pcook@columbia-engineering.com , 770-925-0357
Ken Brown, Columbia Eng. kbrown@columbia-engineering.com , 770-925-0357
Joe Ussery, Columbia Eng. jussery@columbia-engineering.com , 770-925-0357
Santanu Sinharoy, United Consulting, ssinharoy@unitedconsulting.com , 770-582-2838
Anry Wijaya, United Consulting, awijaya@unitedconsulting.com , 404-787-8752
Russ Danser, EPEI, rdanser@edwards-pitman.com , 770-333-9484
Susan Thomas, EPEI, sthas@edwards-pitman.com , 770-333-9484
Collin Lane, EPEI, clane@edwards-pitman.com , 770-333-9484

MEETING MINUTES

Meeting Date: 1/7/2015
Attendees: See Attached List of Attendees
Subject: PI No. 0012578, US 280/SR 30 Bridge Reconstruction over Lake Blackshear Agency Coordination Meeting – GADNR and Georgia Veterans Park
Prepared By: Russ Danser, Edwards-Pitman Environmental, Inc.
Susan Thomas, Edwards-Pitman Environmental, Inc.

The purpose of the meeting was to review the proposed project with representatives from the Georgia Department of Natural Resources (GADNR) State Parks Region 3 Office, Georgia Veterans State Park, GADNR Sam Shortline Train, and Coral Hospitality (vendor that operates the facilities within the park).

Russ Danser opened the meeting, and the group introduced themselves and stated their roles in the project. Russ summarized the project background and the purpose of the meeting. Rudolph Frampton presented the two alternatives that were being evaluated for project development. The following topics were discussed:

1. This project is a Transportation Investment Act (TIA) project sponsored by the River Valley Regional Commission. The project is scheduled to be let for construction by the Georgia Department of Transportation (GDOT) in April 2016.
2. The two alternatives include a new location bridge to the north of the existing bridge and a new location bridge to the south of the existing bridge, respectively. Two travel lanes would be provided; one lane in each direction. The existing bridge would not be demolished. Westbound traffic would be maintained on the existing bridge and eastbound traffic would use the new bridge.
3. At this time, constructing the new bridge to the south is the preferred alternative because it could be constructed within the existing US 280 right of way on the east side of the project and minimal right of way would be required on the west end of the project. This would avoid the need to acquire property from the Georgia Veterans Park and would minimize harm to the lake and adjacent wetlands. The northern alternative would require significantly more right of way on both the east and west ends of the project. In addition, the southern alternative would require much less fill to be placed in Lake Blackshear as compared to the northern alternative, primarily because there is an existing roadbed on the south side. As a result, this alternative would cost substantially less (approximately 4 million dollars) than the northern alternative.
4. US 280/SR 30 is a major east-west corridor and is part of the Governor's Road Improvement Program (GRIP). This project ties to GDOT project PI 322775 (federal-aid) on the west and to GDOT project PI 422470 on the east. The design for this project would not preclude the consideration of alternatives for the adjacent projects. The design for the bridge project will accommodate the future widening of US 280 so that the future project will not need to extend additional fill into Lake Blackshear. The project to the east, which would widen US 280 between Lake Blackshear and Cordele, is also a TIA project, and design is anticipated to begin in 2016.
5. The project will require a GEPA environmental document which will be supported by various special studies including ecology, history, archaeology, and aquatic surveys. Russ reviewed the status of each of the studies. The environmental studies, including permitting, are to be completed by January 2016.

6. Collin Lane stated the project will require a Section 404 permit from the US Army Corps of Engineers (USACE). Based on the preliminary impacts to waters of the US, the project will meet the requirements of a Regional Permit (RP), which can be processed more quickly than an Individual Permit (IP). However, the conditions of the RP preclude the placement of fill within or within 2,000 feet of a state park. This would elevate the permit to an IP. Collin plans to request an exemption to this requirement and asked if the state park would consider supporting this request. This issue will be discussed at an upcoming interagency meeting with the USACE in early February.
7. Russ stated he was investigating the use of Land and Water Conservation Funds (LWCF)/6(f) funds within the park. Judd Smith acknowledges that 6(f) had been used in within the park and designated for recreational facilities. The requirements of 6(f) will not apply if the project does not require land from within the boundaries of the park.
8. The park also has a Heritage Preservation Designation, which was implemented through the state legislature.
9. With the exception of the Sam Shortline, Coral Hospitality operates the facilities within the park, including the resort, golf course, campground, and picnic areas.
10. Eric Bentley stated that GADNR's concerns about the project would be related to the acquisition of land from the park or any impacts to the facilities within the park. It appears this project could be constructed without impacting the park. However, there is the potential for the future widening project to impact the park in order to avoid impacting the businesses on the north side of US 280 that are situated close to the existing roadway. The design team reiterated that a southern alternative for the bridge project will not dictate that the future widening occur to the south.
11. Eric requested a set of graphics showing the alternatives. He plans to follow up with Steve Friedman of the GADNR Real Estate Office.
12. Susan asked questions related to the development of Veterans State Park. The information will be used in the Historic Resources Survey. The park is over 50 years of age and will be evaluated for eligibility on the National Register of Historic Places. The park was initially constructed with segregated facilities. The African-American section is located in the current Pioneer Camp area. An original building is still present. Other buildings over 50 years old include two staff residences. There are no known archaeological sites within the boundaries of the park. The golf course was constructed in 1989-90. The Sam Shortline is owned by GDOT and is leased by the Heart of Georgia Regional Commission (HOG).

A list of Attendees with their contact information is attached.

Record of Attendees			
Name	Organization	Phone No.	E-Mail Address
Eric Bentley	GADNR – State Parks Region 3	229.854.0605	Eric.bentley@gadnr.org
Judd Smith	GADNR – State Parks Region 3	229.430.4402	Judd.smith@gadnr.org
Jeb Bell	Georgia Veterans Park	229.276.2372	j.bell@gavetspark.com
Jack McTyre	Georgia Veterans Park	615.584.7236	jmctyre@lakeblackshearresort.com
Bob Johnson	Georgia Veterans Park Resort	229.276.1004	rjohnson@lakeblackshearresort.com
Terry Miller	GADNR – State Parks, Sam Shortline	229.276.0755	Terry.miller@gadnr.org
Matt Calak	Heath and Lineback Engineers	770.424.1668	mcalak@heath-lineback.com
Rudolph Frampton	Heath and Lineback Engineers	770.424.1668	rframpton@heath-lineback.com
Masood Shabazaz	Heath and Lineback Engineers	770.424.1668	mshabazaz@heath-lineback.com
Shrujal Amin	GDOT Office of TIA	404.631.1697	samin@dot.ga.gov
Kelvin Mullins	GDOT Office of TIA	404.631.1675	kemullins@dot.ga.gov
Russ Danser	Edwards-Pitman Environmental, Inc.	770.333.9484	rdanser@edwards-pitman.com
Collin Lane	Edwards-Pitman Environmental, Inc.	770.333.9484	clane@edwards-pitman.com
Susan Thomas	Edwards-Pitman Environmental, Inc.	770.333.9484	sthomas@edwards-pitman.com

MEETING MINUTES

Meeting Date: 1/7/2015
Attendees: See Attached List of Attendees
Subject: PI No. 0012578, US 280/SR 30 Bridge Reconstruction over Lake Blackshear Agency Coordination Meeting – Crisp County Power Commission
Prepared By: Russ Danser, Edwards-Pitman Environmental, Inc.
Susan Thomas, Edwards-Pitman Environmental, Inc.

The purpose of the meeting was to review the proposed project with representatives from the Crisp County Power Commission, which owns and has jurisdiction over Lake Blackshear. Russ Danser opened the meeting, and the group introduced themselves and stated their roles in the project. Russ summarized the project background and the purpose of the meeting. Rudolph Frampton presented the two alternatives that were being evaluated for project development. The following topics were discussed:

1. This project is a Transportation Investment Act (TIA) project sponsored by the River Valley Regional Commission. The project is scheduled to be let for construction by the Georgia Department of Transportation (GDOT) in April 2016.
2. The two alternatives include a new location bridge to the north of the existing bridge and a new location bridge to the south of the existing bridge, respectively. Two travel lanes would be provided; one lane in each direction. The existing bridge would not be demolished. Westbound traffic would be maintained on the existing bridge and eastbound traffic would use the new bridge. The piers of the new bridge will line up horizontally with the existing bridge piers.
3. The original bridge was located south of the existing bridge and was removed 20-25 years ago.
4. At this time, constructing the new bridge to the south is the preferred alternative because it could be constructed within the existing US 280 right of way on the east side of the project and minimal right of way would be required on the west end of the project. This would avoid the need to acquire property from the Georgia Veterans Park and would minimize harm to the lake and adjacent wetlands. The northern alternative would require significantly more right of way on both the east and west ends of the project. In addition, the southern alternative would require much less fill to be placed in Lake Blackshear as compared to the northern alternative, primarily because there is an existing roadbed on the south side. As a result, this alternative would cost substantially less (approximately 4 million dollars) than the northern alternative.
5. US 280/SR 30 is a major east-west corridor and is part of the Governor's Road Improvement Program (GRIP). This project ties to GDOT project PI 322775 (federal-aid) on the west and to GDOT project PI 422470 on the east. The design for this project would not preclude the consideration of alternatives for the adjacent projects. The design for the bridge project will accommodate the future widening of US 280 so that the future project will not need to extend additional fill into Lake Blackshear. The project to the east, which would widen US 280 between Lake Blackshear and Cordele, is also a TIA project, and design is anticipated to begin in 2016.
6. The project will require a GEPA environmental document which will be supported by various special studies including ecology, history, archaeology, and aquatic surveys. Russ reviewed the status of each of the studies. The environmental studies, including permitting, are to be completed by January 2016. The Section 404 permit will be submitted to the US Army Corps of Engineers (USACE) for review in early June 2015.

7. Steve Rentfrow stated that he has coordinated with the Federal Energy Regulatory Commission (FERC) and the Crisp County Power Commission has the authority to issue approval of this project under their existing FERC license. This action may require consultation under the National Environmental Policy Act (NEPA), which would be the responsibility of the Power Commission. Susan stated that the USACE would also have to comply with NEPA for the Section 404 permit; Steve stated that this may be sufficient to demonstrate NEPA compliance. David Moore, an environmental attorney with the firm Smith, Gambrell & Russell in Atlanta, will handle the NEPA consultation for the Power Commission. Steve requested that we contact David to discuss the approval process related to FERC.
8. Steve also stated the current FERC license for Lake Blackshear was renewed in 2008 and extensive environmental studies were conducted to support the action. Steve offered to provide the information to the project team on a CD. The studies focus on the downstream portions of the lake, but there may be information relevant to this project.
9. The Power Commission would prefer the option that would require less fill in the lake, which is the southern alternative. Steve stated that the displacement of water in the lake due to the fill would be considered minimal and is not a concern relative to the purpose of the lake (power supply).
10. Rudolph requested available hydraulic data that could assist with their design. The normal pool level is 237 mean sea level. This level is maintained 22 out of 24 months. Every other year the level is lowered by 3.5 to 4 feet for about 2 to 3 months. The top of the dam is set at 248 feet. There is a 600-foot emergency spillway at 238 feet.
11. The proposed design does not provide for a fishing pier on either the existing bridge or the new bridge. This could be considered only if there was money from an additional source to fund this feature.
12. There are no plans to include lighting on the new bridge.
13. Construction of the project would not be restricted to accommodate the annual fishing tournament in March.
14. The new piers would most likely be hydraulically driven. The lake bottom is composed of limestone, which consists of voids, based on a previous subsurface investigation. The average lake depth is approximately 11 feet. The new piers would be constructed to utilize either steel or concrete piles.
15. Masood presented an option for pier construction that would construct concrete footings above the normal pool elevation, supported on piles and asked if this would pose any issues to boaters. A horizontal clearance of approximately 45 feet between the pier footings would be maintained. The Power Commission would prefer the footings to be elevated above the normal water level so they would be visible to boaters. Boaters maintain an idle speed in this area. This option should not be a problem.
16. Steve requested the alternative plans so that he could share them with the County Commission. The design team will make a decision soon regarding which alternative to move forward with.

A list of attendees with their contact information is attached.

Record of Attendees			
Name	Organization	Phone No.	E-Mail Address
Steve Rentfrow	Crisp County Power Commission	229.273.3811	srentfrow@crispcountypower.com
Marcus Waters	Crisp County Power Commission	229.273.3820	mwaters@crispcountypower.com
Matt Calak	Heath and Lineback Engineers	770.424.1668	mcalak@heath-lineback.com
Rudolph Frampton	Heath and Lineback Engineers	770.424.1668	rframpton@heath-lineback.com
Masood Shabazaz	Heath and Lineback Engineers	770.424.1668	mshabazaz@heath-lineback.com
Shrujal Amin	GDOT Office of TIA	404.631.1697	samin@dot.ga.gov
Kelvin Mullins	GDOT Office of TIA	404.631.1675	kemullins@dot.ga.gov
Russ Danser	Edwards-Pitman Environmental, Inc.	770.333.9484	rdanser@edwards-pitman.com
Collin Lane	Edwards-Pitman Environmental, Inc.	770.333.9484	clane@edwards-pitman.com
Susan Thomas	Edwards-Pitman Environmental, Inc.	770.333.9484	sthomas@edwards-pitman.com



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

FEBRUARY 02 2015



Regulatory Division
SAS-2005-00820

Primary P1 # 0012578
Add'l P1 Nos. 2
NEPA analyst 2
Recipient: D. Chamblin
Copies: OH Asst. OH
NEPA A/H Arch
Eco Hist
ORIGINAL TO GEN. FILES

Ms. Laura Dawood

Georgia Department of Transportation – TIA Environmental
800 West Peachtree Street, NW, 16th Floor
Atlanta, Georgia 30308

Ms. Dawood:

I refer to your letter of January 21, 2015, requesting a Jurisdictional Determination (JD) for your site located along U.S. Highway 280 at Lake Blackshear, on the Crisp/Sumter Counties border, Georgia (Latitude 31.9854, Longitude -83.9294). This project has been assigned number SAS-2005-00820 and it is important that you refer to this number in all communication concerning this matter.

We have completed an expanded preliminary JD for the site pursuant to the March 4, 2009, Public Notice entitled, "Characterization of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers." I have enclosed a "JD Check Sheet" that summarizes the JD, delineation verification and appeals process.

The wetlands/other waters on the subject property may be waters of the United States within the jurisdiction of Section 404 of the Clean Water Act (33 United States Code 1344). The placement of dredged or fill material into any waterways and/or their adjacent wetlands or mechanized land clearing of those wetlands would require prior Department of the Army authorization pursuant to Section 404.

If you intend to sell property that is part of a project that requires Department of the Army Authorization, it may be subject to the Interstate Land Sales Full Disclosure Act. The Property Report required by Housing and Urban Development Regulation must state whether, or not a permit for the development has been applied for, issued or denied by the U.S. Army Corps of Engineers (Part 320.3(h) of Title 33 of the Code of Federal Regulations).

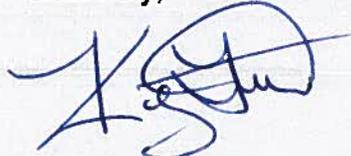
This communication does not convey any property rights, either in real estate or material, or any exclusive privileges. It does not authorize any injury to property, invasion of rights, or any infringement of federal, state or local laws, or regulations. It does not obviate your requirement to obtain state or local assent required by law for the development of this property. If the information you have submitted, and on which the

U.S. Army Corps of Engineers has based its determination is later found to be in error, this decision may be revoked.

Thank you in advance for completing our on-line Customer Survey Form located at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. We value your comments and appreciate your taking the time to complete a survey each time you have interaction with our office.

If you have any questions, please call Mr. William Rutlin, Project Manager, Coastal Branch at 912-652-5893.

Sincerely,



Kelly C. Finch
Chief, Coastal Branch

Enclosures



DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
100 W. OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

REPLY TO
ATTENTION OF:

JURISDICTION DELINEATION CHECK SHEET
CORPS FILE NUMBER: SAS-2005-00820
DATE: February 2, 2015

1. SECTION 1 - PRELIMINARY JURISDICTIONAL DETERMINATIONS

a. JURISDICTIONAL DETERMINATION (JD). A "preliminary JD" form was completed for the site in accordance with the March 4, 2009, Public Notice entitled, "Characterization of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers." The form details whether streams, wetlands and/or other waters present on the site may be subject to the jurisdiction of the U.S. Army Corps of Engineers. In summary, the Corps has determined the following with regard to waters present on the site:

_____ There may be navigable waters of the United States within Rivers and Harbors Act (RHA) jurisdiction present.

_____ There may be waters of the United States within Clean Water Act (CWA) jurisdiction present.

b. DELINEATION VERIFICATION. With regard to the location and extent of potentially jurisdictional areas present on the site, the Corps has made the following determinations:

_____ Wetlands were delineated in accordance with criteria contained in the 1987 "Corps of Engineers Wetland Delineation Manual," as amended by the most recent regional supplements to the manual.

_____ Drawings submitted with a Pre-Construction Notification (or other application) depict the approximate location/boundaries of all potentially jurisdictional waters on the project site. The Corps has verified the accuracy of the depicted boundaries of potentially jurisdictional waters in only the immediate vicinity of waters to be impacted. A complete jurisdictional delineation request, including a jurisdictional waters survey, would be required in order for the Corps to consider final verification of all other jurisdictional boundaries on the project site.

_____ The drawing entitled "_____" dated _____ is an acceptable sketch of the approximate location/boundaries of all the potentially jurisdictional waters in the project area. This sketch can be used for initial real estate planning; projects with temporary impacts to waters; projects involving minor amounts of fill in waters; or work only subject to our jurisdiction pursuant to Section 10 of the RHA of 1899. A complete

jurisdictional delineation request, including a jurisdictional waters survey, would be required in order for the Corps to consider final verification of all other jurisdictional boundaries on the project site.

c. APPEALS OF PRELIMINARY JDs: The preliminary JD is a "non-binding" written indication that there may be waters of the United States on a parcel. Preliminary JDs are advisory in nature and may not be appealed (See 33 Code of Federal Regulations (CFR) 331.2)." If you are not in agreement with this preliminary JD, then you may request an approved JD for your project site or review area.

2. SECTION - EXPANDED PRELIMINARY JDs:

a. EXPANDED PRELIMINARY JD. An "expanded preliminary JD" form was completed for the site in accordance with the March 4, 2009, Public Notice entitled, "Characterization of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers." The form details whether streams, wetlands and/or other waters present on the site may be subject to the jurisdiction of the Corps. In summary, the Corps has determined the following with regard to waters present on the site:

There may be navigable waters of the United States within RHA jurisdiction present.

There may be waters of the United States within CWA jurisdiction present.

b. DELINEATION VERIFICATION. With regard to the location and extent of potentially jurisdictional areas present on the site, the Corps has made the following determinations:

Wetlands were delineated in accordance with criteria contained in the 1987 "Corps of Engineers Wetland Delineation Manual," as amended by the most recent regional supplements to the manual.

The Global Positioning System (GPS) delineation entitled "Figure 5 – State and Federal Waters (Aerial)", undated, is an accurate delineation of the location/boundaries of all the potentially jurisdictional waters on the site. If you have not already done so, I recommend that you place a statement on this delineation to the effect that, **"WETLANDS AND OTHER WATERS SHOWN ON THIS DRAWING ARE POTENTIALLY UNDER THE JURISDICTION OF THE CORPS AS SHOWN IN THE CORPS FILE NUMBER SAS-2005-00820. OWNERS MAY BE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE WATERS WITHOUT PROPER AUTHORIZATION."** This delineation will remain valid for a period of 5 years unless new information warrants revision prior to that date.

_____ The survey entitled "_____", dated _____, and signed by Registered Land Surveyor _____, is an accurate delineation of the location/boundaries of all the potentially jurisdictional waters on the site. If you have not already done so, I recommend that you place a statement on the final surveyed property plat to the effect that, **"WETLANDS AND OTHER WATERS SHOWN ON THIS DRAWING ARE POTENTIALLY UNDER THE JURISDICTION OF THE CORPS AS SHOWN IN THE CORPS FILE NUMBER SAS-2005-00820. OWNERS MAY BE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE WATERS WITHOUT PROPER AUTHORIZATION."** This delineation will remain valid for a period of 5-years unless new information warrants revision prior to that date.

c. APPEALS OF PRELIMINARY JDs: The expanded preliminary JD is a "non-binding" written indication that there may be waters of the United States on a parcel. expanded preliminary JDs are advisory in nature and may not be appealed (See 33 CFR. 331.2)." If you are not in agreement with this expanded preliminary JD, then you may request an approved JD for your project site or review area.

3. SECTION 3 - APPROVED JDs: As defined in Regulatory Guidance Letter 08-02, an approved JD is an official Savannah District determination that jurisdictional "waters of the United States" or "navigable waters of the United States," or both, are either present or absent on a particular site. An approved JD precisely identifies the limits of those waters on the project site determined to be jurisdictional under the CWA and/or the RHA.

a. APPROVED JD. An "approved JD" form was completed for the site pursuant to the June 5, 2007, "US Army Corps of Engineers JD Form Instructional Guidebook." The form details whether streams, wetlands and/or other waters present on the site are subject to the jurisdiction of the Corps. In summary, the Corps has determined the following with regard to waters present on the site:

_____ There are navigable waters of the United States within RHA jurisdiction present.

_____ There are waters of the United States within CWA jurisdiction present.

_____ There are non-jurisdictional waters of the United States located in the project area.

_____ There are no jurisdictional waters of the United States located in the project area.

b. APPROVED DETERMINATION - ISOLATED, NON-JURISDICTIONAL WATERS. If Appendix E of the March 4, 2009, Public Notice entitled, "Characterization

of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers" was submitted, you have requested that the Corps verify the presence of isolated, non-jurisdictional waters located at the project site or within the review area. The completed Appendix E form is available at <http://www.sas.usace.army.mil/Missions/Regulatory/JurisdictionalDetermination/PostedApprovedJDs.aspx>, under the above listed file number. You may also request that a printed copy of the form be mailed to you. This isolated, non-JD will remain valid for a period of 5-years unless new information warrants revision prior to that date. In summary, the Corps has determined the following with regard to isolated, non-jurisdictional waters that are present on the site:

_____ Wetlands were delineated in accordance with criteria contained in the 1987 "Corps of Engineers Wetland Delineation Manual," as amended by the most recent regional supplements to the manual.

_____ There are isolated non-jurisdictional waters present that are not subject to CWA jurisdiction. Specifically, wetland(s) [letter of wetlands here], as identified on the exhibit entitled "_____" is/are isolated, non-jurisdictional wetlands. Department of the Army authorization, pursuant to Section 404 of the Clean Water Act (33 United States Code 1344), is not required for dredge and/or fill activities in these areas.

c. APPROVED DETERMINATION. (other than isolated, non-jurisdictional waters): If Appendix B of the March 4, 2009, Public Notice entitled, "Characterization of Jurisdictional Determinations: Purpose, Application and Documentation Requirements as Defined by the Savannah District, US Army Corps of Engineers" was submitted, you have requested that the Corps verify the presence of jurisdictional waters located at the project site or within the review area. The completed Appendix B form is available at <http://www.sas.usace.army.mil/Missions/Regulatory/JurisdictionalDetermination/PostedApprovedJDs.aspx>, under the above listed file number. You may also request that a printed copy of the form be mailed to you. This JD will remain valid for a period of 5-years unless new information warrants revision prior to that date. In summary, the Corps has determined the following with regard to isolated, non-jurisdictional waters that are present on the site:

_____ Wetlands were delineated in accordance with criteria contained in the 1987 "Corps of Engineers Wetland Delineation Manual," as amended by the most recent regional supplements to the manual.

_____ The Global Positioning System (GPS) delineation entitled "_____", dated _____, is an accurate delineation of all the jurisdictional boundaries on the site. If you have not already done so, I recommend that you place a statement on this delineation to the effect that, "**JURISDICTIONAL**

WETLANDS AND OTHER WATERS SHOWN ON THIS DRAWING ARE UNDER THE JURISDICTION OF THE CORPS AS SHOWN IN THE CORPS FILE NUMBER SAS-2005-00820. OWNERS MAY BE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE JURISDICTIONAL AREAS WITHOUT PROPER AUTHORIZATION. This approved JD will remain valid for a period of 5-years unless new information warrants revision prior to that date.

_____ The survey entitled " _____ ", dated _____, and signed by Registered Land Surveyor _____, is an accurate delineation of all the jurisdictional boundaries on the site. If you have not already done so, I recommend that you place a statement on the final surveyed property plat to the effect that, **"JURISDICTIONAL WETLANDS AND OTHER WATERS SHOWN ON THIS DRAWING ARE UNDER THE JURISDICTION OF THE CORPS AS SHOWN IN CORPS FILE NUMBER SAS-2005-00820. OWNERS MAY BE SUBJECT TO PENALTY BY LAW FOR DISTURBANCE TO THESE JURISDICTIONAL AREAS WITHOUT PROPER AUTHORIZATION."** This approved JD will remain valid for a period of 5-years unless new information warrants revision prior to that date.

d. APPEALS FOR APPROVED JDs: You may request an administrative appeal for any approved geographic JD under the Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Administrative Appeal Options and Process (NAP) and Request for Appeal (RFA) Form.

If you request to appeal this/these determination(s) you must submit a completed RFA form to the South Atlantic Division Office at the following address:

U.S. Army Corps of Engineers, South Atlantic Division
Attention: CESAD-PDS-O, Administrative Appeal Review Officer
60 Forsyth Street, Room 10M15
Atlanta, Georgia 30303-8801

In order for a RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR, part 331.5, and that it has been received by the Division Office within 60 days of the date of this form. It is not necessary to submit an RFA form to the Division Office if you do not object to this JD.

4. SECTION 4 - APPLIES TO ALL OF THE ABOVE.

- U.S. DEPARTMENT OF AGRICULTURE (USDA) PROGRAM PARTICIPANTS. This delineation/determination has been conducted to identify the limits of the Corps CWA jurisdiction for this site. This delineation/determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA

programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Attachments:

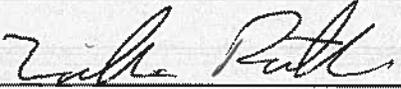
Verified Survey of Jurisdictional Streams, Wetlands and/or Other Waters

Verified GPS Delineation of Jurisdictional Streams, Wetlands and/or Other Waters

Drawing of Approximate Location of Streams, Wetlands and/or Other Waters

Approved JD Form(s)

NAP and RFA Form



William M. Rutlin
Project Manager, Coastal Branch

February 2, 2015
DATE

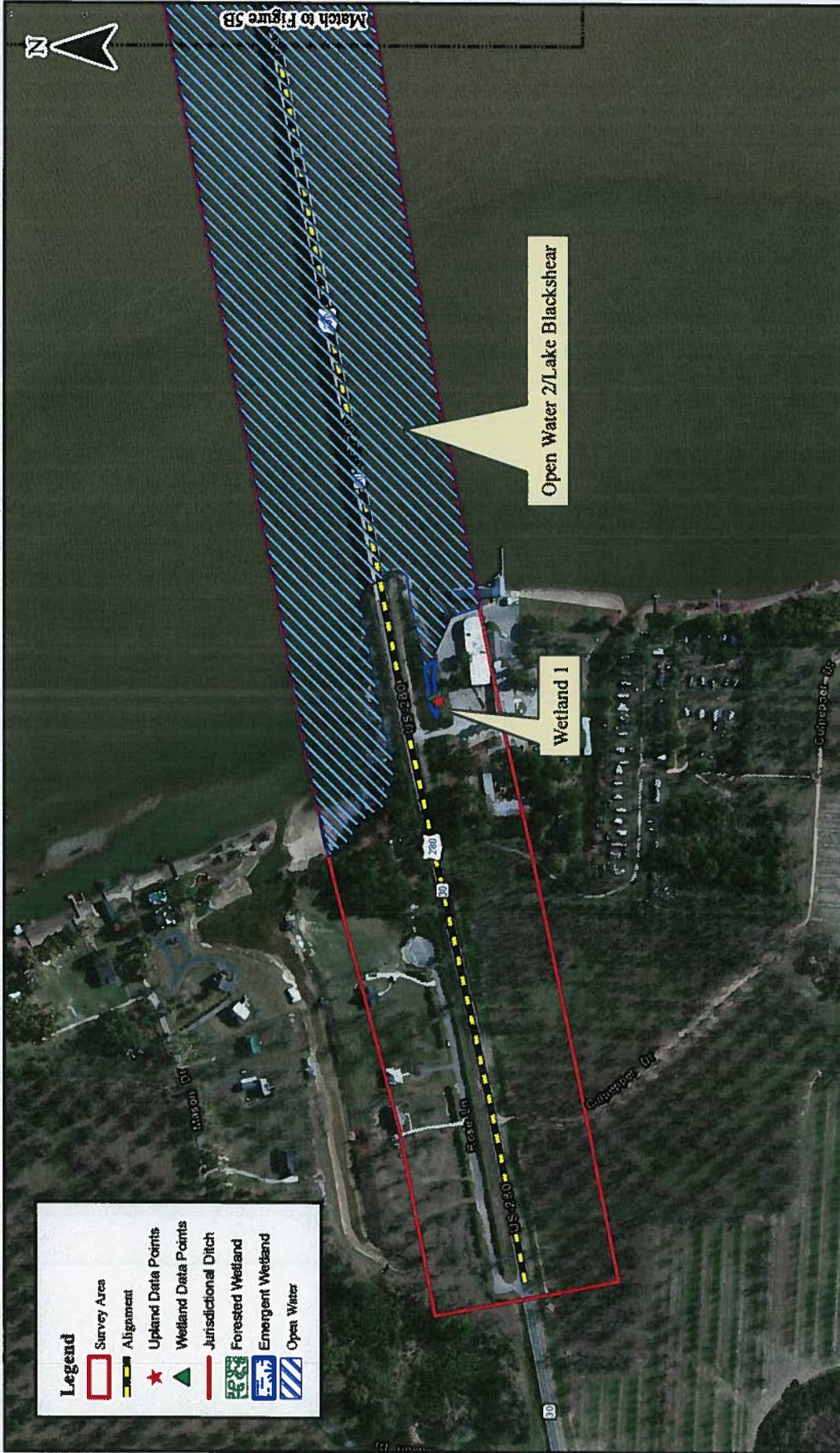
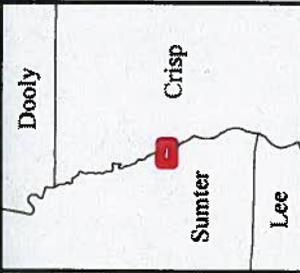


Figure 5A - State and Federal Waters (Aerial)

US 280/SR 30 Bridge over Lake Blackshear
 Crisp and Sumter Counties
 PI No. 0012578



Source: ESRI World Imagery

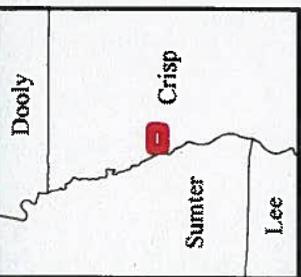
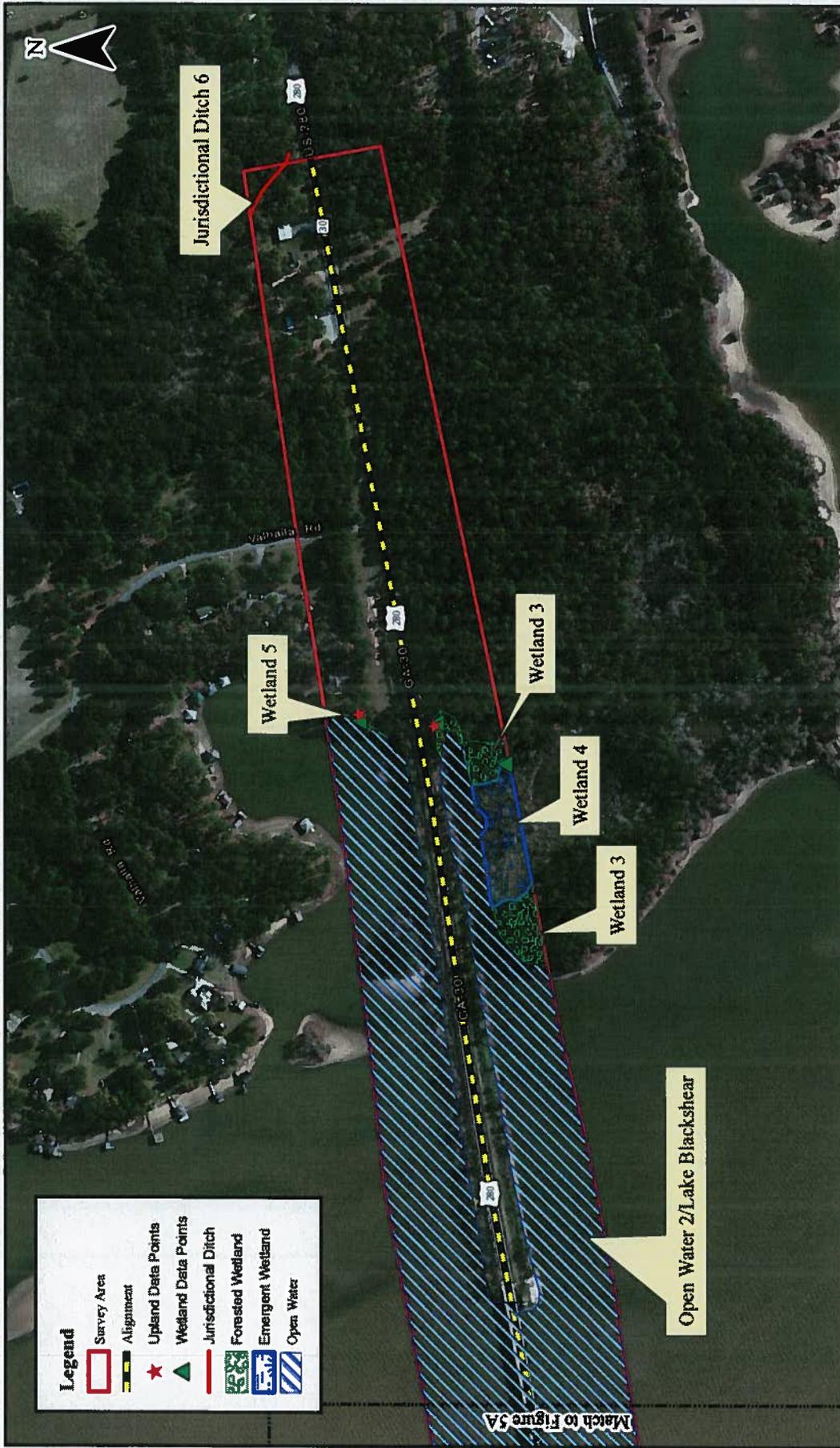
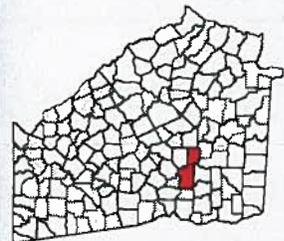


Figure 5B - State and Federal Waters (Aerial)

US 280/SR 30 Bridge over Lake Blackshear
 Crisp and Sumter Counties
 PI No. 0012578



Source: ESRI World Imagery

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Ms. Laura Dawood	File Number: SAS-2005-00820	Date: February 2, 2015
Attached is:		See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
<input type="checkbox"/>	PERMIT DENIAL	C
<input type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION	D
<input checked="" type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 80 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. The division engineer must receive this form within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
Mr. William Rutlin
U.S. Army Corps of Engineers, Savannah District
100 West Oglethorpe Avenue
Savannah, Georgia 31401-3640
912-652-5893

If you only have questions regarding the appeal process you may also contact:
Administrative Appeal Review Officer
CESAD-PDS-O
U.S. Army Corps of Engineers, South Atlantic Division
60 Forsyth Street, Room 10M15
Atlanta, Georgia 30303-8801

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

Signature of appellant or agent.

Date: _____

Telephone number: _____

MEETING MINUTES - FINAL

Meeting Date: 2/11/2015
Attendees: See Attached List of Attendees
Subject: PI No. 0012578, US 280/SR 30 Bridge Reconstruction over Lake Blackshear Interagency Review Team (IRT) Meeting – US Army Corps of Engineers
Prepared By: Russ Danser, Edwards-Pitman Environmental, Inc.
Susan Thomas, Edwards-Pitman Environmental, Inc.

The purpose of the meeting was to review the proposed project with representatives from the US Army Corps of Engineers (USACE) and other agencies participating in the IRT. The list of meeting attendees is attached.

Russ Danser opened the meeting and the group introduced themselves and stated their roles in the project. Russ summarized the project background and the purpose of the meeting. The following topics were discussed:

1. This project is a Transportation Investment Act (TIA) project sponsored by the River Valley Regional Commission. The project is scheduled to be let for construction by the Georgia Department of Transportation (GDOT) in April 2016 and is in Band 2 of the TIA program. Kelvin provided background about when the three bands of TIA would be constructed- Band 1 by Dec. 2015, Band 2 by Dec. 2019, Band 3 by Dec. 2022. Kelvin shared that there are no federal funds on the fully TIA funded projects. These TIA projects were voted on and selected by the locals. The TIA Program is required by law to deliver the projects.
2. The project consists of the construction of a parallel bridge to the existing US 280/SR 30 bridge over Lake Blackshear in Crisp/Sumter Counties. The two alternatives include a new location bridge to the north of the existing bridge and a new location bridge to the south of the existing bridge. Two travel lanes would be provided; one lane in each direction. The existing bridge would not be demolished as part of this project. Westbound traffic would be maintained on the existing bridge and eastbound traffic would use the new bridge. The alternative will be selected prior the submission of the Section 404 permit.
3. Constructing the new bridge to the south is the preferred alternative because it could be constructed within the existing US 280 right of way on the east side of the project and minimal right of way would be required on the west side of the project. In addition, there was a previous bridge located to the south so there is some existing roadbed on the jetty that could be used toward minimizing lake impacts. The southern alternative is an environmental impacts minimization alternative, resulting in less fill in the lake and fewer property impacts, which is a cost savings.
4. The lake is the responsibility of the Crisp County Power Commission (CCPC). As a result, the team is working with CCPC on an amendment to their Federal Energy Regulatory Commission (FERC) Permit.
5. US 280/SR 30 is a major-east west corridor and is part of the Governor's Road Improvement Program (GRIP). This project ties to GDOT project PI 322775 (federal-aid) on the west and to GDOT project PI 422470 (TIA) on the east. The design for this project would not preclude the consideration of alternatives for the adjacent projects. The design for the bridge project will accommodate the future widening of US 280 so that the future project will not need to extend

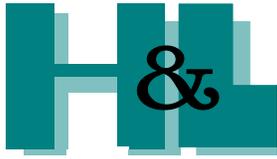
additional fill into Lake Blackshear. The project to the east, which would widen US 280 between Lake Blackshear and Cordele, is also a TIA project, and design is anticipated to begin in 2016.

6. The project would require a Section 404 permit from the US Army Corps of Engineers (USACE) due to impacts to Waters of the US. Based on the preliminary impacts to Waters of the US, the project will meet the requirements of a Regional Permit (RP) 96, which can be processed more quickly than an Individual Permit (IP). However, the conditions of the RP preclude construction within 2,000 feet of a state park. This would elevate the permit to an IP. An exemption to this requirement may be requested from the USACE. The potential impacts exceed thresholds for use of RP 1.
7. A site visit was conducted in January 2015 with the USACE and a JD request was submitted to the USACE on 1/28/15.
8. Aquatic surveys for protected fish and mussels are planned for May 2015.
9. USACE expressed concern that permitting only the bridge project would force the adjacent 4-lane projects to occur, and permitting these projects individually would constitute segmentation and violate NEPA. There does not appear to be an independent Need and Purpose for the bridge project, so the Section 404 permit would need to include an evaluation of all three projects from Americus to Cordele covering approximately 30 miles.
10. The group discussed the rationale for the evaluating the bridge project alone and the bridge project/4-lane widening from the bridge to the existing 4-lane in Cordele. Reasons include a lack of planning basis, funding, and design plans for the federal-aid project to the west (PI 322775). While PI 322775 is designated as a part of the GRIP corridor, the project is not currently listed in the STIP; nor is any funding scheduled in the short term or long range. Also, through the TIA project selection process, the locals have already given this bridge project a priority by placing it in Band 2. Lake Blackshear and surrounding area is a destination for tourists and recreational use and roadway improvements would support the economic development of the area. Also, stopping the widening at the bridge would not force improvements to the west because the traffic projections are not high enough to warrant a four lane roadway. The purpose and need for the projects is not to relieve existing or future congestion, but rather to promote economic development.
11. The group discussed the possibility of including a desktop analysis of potential impacts for both the eastern and western projects and documenting the impacts of the adjacent projects as indirect and cumulative impacts – rather than as direct effects. USACE does not believe the bridge project has independent utility as a stand-alone project and, at the least, needs to be permitted with the TIA project to the east (PI 422470).
12. For the adjacent projects that don't have design information typically included in a permit, USACE stated the following information should be provided in the permit application:
 - a. Alternative analysis - impacts for three alternatives: widening to the north, to the south, and symmetrical between Americus and Cordele;
 - b. Previous field delineations can be used (if they can be found);
 - c. Section 106 and Section 7 clearance for all three projects would be required;
 - d. Mitigation can be purchased in phases as the individual projects are let for construction and the permit would be modified.
 - e. A preliminary Need and Purpose for all three projects can be submitted in advance of the permit application for early input from the agencies.
13. USACE agreed to discuss the various permitting strategies discussed at the meeting to other USACE representatives for their input and will get back to GDOT.

14. The group discussed comments from NOAA regarding anadromous fish (AF) habitat for shad, herring, and eels and the Essential Fish Habitat/Endangered Species Act consultation process (with NOAA). The Lake Blackshear Dam is the upstream limits of the AF habitat. This is downstream of the proposed project. However, NOAA is planning to install a fish passage structure at the dam, which would move the northern limit of the AF habitat to the project area. NOAA will likely comment on the project because the area may be suitable for future AF use. The aquatic survey to be conducted will address the presence of suitable habitat for anadromous fish. The aquatic survey will address only species of concern as provided by USWFS and GADNR. NOAA would be looking for these items in a review: a habitat analysis, consideration of bent spacing and which alternative could accommodate AF, and would like a copy of the fish survey.

A list of Attendees with their contact information is attached.

Record of Attendees			
Name	Organization	Phone No.	E-Mail Address
William Rutlin	USACE	912.652.5893	William.m.rutlin@usace.army.mil
Jaclyn Daly	NOAA	843.818.8219	Jaclyn.daly@noaa.gov
Keith Hanson	Contractor to NOAA-NMFS	843.767.8622	Keith.hanson@noaa.gov
Dewey Richardson	Georgia EPD		
Chris Coppola	USFWS	912.832.8739 ext. 6	Christopher.coppola@fws.gov
Rudolph Frampton	Heath and Lineback Engineers	770.424.1668	rframpton@heath-lineback.com
Laura Dawood	GDOT Office of TIA	404.965.7074	Laura.dawood@aecom.com
Shrujal Amin	GDOT Office of TIA	404.631.1697	samin@dot.ga.gov
Kelvin Mullins	GDOT Office of TIA	404.631.1675	kemullins@dot.ga.gov
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Memo

To: File- 2014021

From: Rudolph Frampton

CC: All attendees

Date: 2-20-15

Re: TIA Project No.: RC08-000012, Crisp/Sumter Counties
P.I. No. 0012578, US 280/SR 30 over Lake Blackshear
MTG TO DISCUSS SUBSURFACE CONCERNS

- Santanu with United explained that the Driller was encountering limerock with voids. In general, the site has a limerock crust of approximately 25 feet below which is a void of up to 20 feet deep, followed by a dense layer at which point the borings were stopped at roughly 65 feet. Driller tried to get past the dense layer but had issues with aquifers and binding of the drill bits. There were also issues with hitting remnants of the previous bridge.
- Eight locations have been drilled to date. Seven of these locations coincide with 55 and 165 foot span arrangements.
- Santanu expressed that he thinks we should look at keeping the piles within the hard layer to avoid having to drive extremely long piles. Masood noted that the piles at the existing bridge were driven to as much as 150 feet deep and that there were a lot of splices required for the PSC piles.
- Masood described noted that 55, 110, 165 and 220 foot spans have been studied. Masood noted that the 110 foot span was not a good option due to the cost of the cofferdams and the fact that we can't use pile bents for this length span..
- Santanu mentioned that the drilled shaft option is too risky, PSC pile has issues with driving tensile stress and that metal shell or steel H-piles are the best for the site. Metal shell piles are expected to be the best option since H-piles will need to be driven deeper.
- Large metal shell piles may not be desirable since they would require a specialized contractor. GADOT has used up to 20" metal shell piles. Santanu noted that the pile capacity for the metal shell pile does not significantly increase with size.
- Masood noted that the initial scope was to drill every other bent, however with field findings, it is not clear as to whether the 55 or 165 foot option is the better option.
- Shrujal noted that if additional funds are needed for geotechnical investigation, it will reduce the available funds for construction.

- Lyn mentioned that it is very difficult to build 74 inch beams over 140 feet and that there are complications with transporting these large beams to the site. These factors drive up the cost of the beam.
- Masood mentioned that there is a risk in estimating the cost since the pile lengths are unknown.
- Masood mentioned a spread footing option and Lyn noted that this would not be a good option unless there is hard rock present.
- Kelvin asked if the bents would line up with the existing bents and the response was yes.
- Santanu showed samples of the rock and muck found in the voids at the site.
- Mathew suggested that a different technique could be used to drill deeper which would require double casing and is very expensive.
- Glen mentioned that we may want to go with an option that is easy to splice, like metal shell or H-pile. This project will either cost more in design or construction.
- Ben noted that if the clearance over the lake is reduced, that will need to be addressed in a public meeting.
- Water depth in the lake is an average of 15 feet deep at the overbanks of the river and 30 feet in the channel.
- Masood asked if we used H-pile if we would need to encase them and if the Department was concerned about corroding of the metal shell piles. Ben responded that we would need to look at the design service life of the various options. He also mentioned an option to wrap the metal shell pile with a polymer wrap.
- The project was initially scoped with LRFD. Ben stated that since there is no federal funding, the project can be designed without LRFD. TIA determines the LRFD requirement on a project by project basis. United to look at the implications of not satisfying LRFD.
- Masood noted that we are drilling concurrently with developing the preliminary layout and that the drillers were on hold.
- Kelvin noted that HLE has to manage the overall cost of the project and that TIA would need a recommendation to address any changes in allocation of funds.
- Kelvin noted that the project let date is in 2019 however TIA wanted to get the design completed early. Due to that, there is time to resolve issues.
- Ben noted that there could be variation within one bent but that pile is paid for by the foot.
- Ben asked if TIA would ever require Federal help if the project goes over. Kelvin responded that TIA would not seek Federal assistance and if the project goes over budget, they would look at other options instead.
- Kelvin mentioned that TIA held back a contingency in addition to the contingency accounted for in HLE's estimate.
- Masood noted that we will not have a good idea on cost until we get a good handle of the bridge layout.
- Ben suggested looking at varying span arrangements with different foundation types.
- Santanu asked Glen if OMAT would accept the existing BFI data as a supplement to the new boring data. Glen responded that having more data available is preferable, since the site is erratic.
- Ben mentioned that if LRFD is not used then there should be consideration for HS 25 loading, however if it becomes impractical, we will need to reconsider. Gary said that we can use HS 25 loading since it will not make a big difference. Ben to let the team know if the HS 25 loading is required.

- Masood asked about the possibility of increasing the number of strands in the standard PSC pile to address the tensile stress issues. Ben noted that GADOT has overdriven piles but the service life is reduced and we do not want to end up with cracked piles. Ian added that the site conditions were the worst for driving PSC piles.
- Bridge office will check their files for as-built plans for the existing bridge to get a better understanding of how deep the piles were driven.
- Ben asked about considering bidding more than one alternate to attract more contractors and thus reduce the construction cost. Ultimately whatever option is selected needs to attract local contractors to keep the cost down.
- Santanu asked if the Bridge Office has reservations to using larger H-piles or metal shell piles. Ben responded that you could design it but it may be difficult to get contractors to build it. Kelvin added that TIA may get pressure if the project cannot be constructed by local contractors but that should not be a factor at arriving at the bent solution.
- Gary noted that at least two borings should be extended to below the hard layer to know the subsurface condition if piles are driven deep.

Actions required:

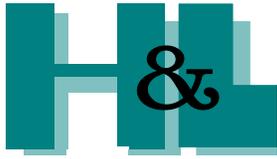
1. OMAT to try to locate As-Built foundation plans for the existing bridge.
2. HLE to determine drilling sequence/plan with Geotechnical sub-consultant and provide TIA Office with a recommendation if a change in allocation of funds is needed.
3. GADOT Bridge Department to specify HS 25 loading if LRFD is not used.

Attendees:

NAME	COMPANY	EMAIL CONTACT
Shrujal Amin	TIA	samin@dot.ga.gov
Kelvin Mullins	TIA	kemullins@dot.ga.gov
Glen Foster (Via teleconference)	GDOT – OMAT	gfoster@dot.ga.gov
Reginald Murph	GDOT – OMAT	rmurph@dot.ga.gov
Ian Rish	GDOT – OMAT	irish@dot.ga.gov
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Lyn Clements	GDOT - Bridge	lclements@dot.ga.gov
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Gary Lineback	HLE	glineback@heath-lineback.com
Rudolph Frampton	HLE	rframpton@heath-lineback.com
Jay Ashtani	United Consulting	jashtiani@unitedconsulting.com

Santanu Sinharoy	United Consulting	ssinharoy@unitedconsulting.com
Matthew Adamson	United Consulting	madamson@unitedconsulting.com
Donnie Lewis	Independence Drilling	Contact United

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Memo

To: File- 2014021

From: Rudolph Frampton

CC: All attendees

Date: 3-27-15

Re: TIA Project No.: RC08-000012, Crisp/Sumter Counties
P.I. No. 0012578, US 280/SR 30 over Lake Blackshear
STATUS MTG TO DISCUSS OUTSTANDING ISSUES

- Shrujal opened the meeting and introduced Dan Bodycomb as the new project manager. All correspondence should go through both Shrujal and Dan for now.
- Rudolph mentioned that the meeting was being held because of issues with the 404 permit that will be requested from the USACE. There was also a minor delay associated with the geotechnical investigation due to challenging subsurface conditions. The field work is complete and the preliminary report was received. By far, the critical delay is associated with the 404 permit issues related to logical termini for the project.
- Rudolph noted that the schedule will require revision once we have a better understand of the 404 permit requirements.
- Russ stated that the environmental studies are on hold until a decision from TIA/GDOT is made whether to expand the scope of the studies for the Section 404 permit and also the depth and detail of the required studies, if required.
- Kelvin acknowledged that the delay is with TIA/GDOT at the moment. They're down to 3 options at this point. Option 1 would be to push back and argue with USACE based on what they are legally allowed to do, and just study the bridge area only. This option would be preferred. Option 2 would be for TIA/GDOT to agree to USACE's request and study the entire corridor from Cordele to Americus and Option 3, would be to just study the area from Cordele to the bridge. For options 2 and 3 we would try to use as much of what we can from the prior environmental studies.
- Kelvin added that the issue has been sent to the legal department and is under review. TIA feels that the outcome of this issue, has much bigger implications than just this project.
- Shrujal asked if any of the environmental studies could progress while the legal process continued.
- Russ noted that the only task that is independent of the 404 decision would be the aquatic survey which could be done when the survey season open on April 30.

- Kelvin noted that if we are required to go from Cordele to Americus, we might be able to use what had been done before without updating the studies.
- Laura asked about the potential number of streams on the future TIA project east of Lake Blackshear.
- Russ noted that there may be additional work related to the streams and that the environmental studies that were done, did not use the current format required by the Corps. At a minimum, the format would have to be updated.
- Russ stated that they have developed a list of questions to ask the USACE if the decision is made to expand the study corridor, which will define the level of study that the USACE will accept for the adjacent projects. This will help outline the scope of this work.
- Susan noted that her understanding is that if a decision was made to do the additional work, TIA would coordinate with USACE to determine the level of work required. Although the Corps indicated that they would accept some of the old data, full Section 106 and Section 7 (protected species) surveys would have to be redone.
- Susan stated they are trying to think of anything to do in the meantime that would not require a lot of rework. The draft Ecology Report, the draft Historic Resources Survey /Assessment of Effects Report, and Archeology Report are ready to be submitted to the TIA office for review. We could send the section 106 documents to TIA for review, but there would be redundant review if the scope of those reports is expanded. The same thing with the Air study that was done. Laura agreed that the best course of action is to wait and not submit the draft reports until a decision regarding the scope of the Section 404 permit is made.
- The FERC coordination cannot proceed since special studies are required under the FERC.
- Kelvin asked if two documents could be prepared simultaneously based on either study corridor, right up to the point of submitting to the USACE. It was agreed that this approach would deplete the resources planned for environmental task within the present scope and would be very costly.
- Collin noted that the aquatic survey of the lake will require a dive crew with baskets, whereas the stream survey is a different kind of survey. The aquatic survey of Lake Blackshear will need to be done regardless and will commence once the survey season opens.
- The question was asked as to how long the legal process is expected to last and Kelvin noted that they had no idea. He added that the legal process could turn into a law suit.
- Santanu briefly explained the findings of the BFI and that moving away from LRFD (Load factor resistance design) to ASD (Allowable stress design) helped. He noted that PSC Pile and Drilled Shaft would not be recommended. Metal Shell pile will be recommended. Oversized 24" metal shell Pile is proposed, which has been used by GDOT on a few projects. Pilot holes were recommended at one bent and avoided at other bents to help reduce costs. Spread footings are given as an alternate from bents 16 through 19.
- Santanu noted that the pile capacities were estimated using a reduced safety factor. He added that although the estimates are less conservative than other GDOT projects, they feel confident that they will have adequate capacity. Santanu noted that they are recommending more field tests to verify the adequacy of the reduced S.F. to give the team the confidence they need to ensure that the piles do have the required capacities and the piles are not being under designed.

- Rudolph asked if sway bracing will be required for the metal shell option and Santanu responded that sway bracing at the pile bents may be required for bents taller than 20 feet.
- Rudolph noted that HLE will take the information provided in the report and determine optimal span arrangement and the total bridge cost.
- Santanu mentioned that a 5' thick block of concrete was drilled through at Bent 17. Possibly an old footing. He recommended that a contingency cost be added for removal of abandoned substructures. This could be a localized issue around bents 16-19. Timber piles from the existing bridge were encountered around bent 25.
- Masood commented that to minimize variations and uncertainties, we may want to minimize the number of bent locations by going with 13 bents, rather than 42. However, in going with less bents and longer 165 foot spans, pile footings are required, which would require cofferdams and a lot more expense to the project. Unless we bring the footings to the water elevation.
- Concerns about visibility of the footings at the water elevation were discussed.
- Masood concurred that the additional width of the footing could be an issue, but reiterated that Crisp County Power was on board with the idea and that there is a significant cost associated with the cofferdam option.
- It was agreed that the option to have the footings at the water level will require additional coordination with Crisp County Power and the GADOT Bridge Office. Lighting of the raised footings should be considered if this option is selected.
- Collin explained that cofferdams and de-watering techniques will need to be accounted for in the permit.
- Laura added that whatever accommodations are made for recreation needs to be documented in the permit application.
- Shrujal expressed concern that with the geotechnical complications, there may not be adequate funds to construct the bridge. Rudolph noted that this is not an issue at this time since all estimates have been coming in within budget, using conservative assumptions.
- Rudolph gave an update on other elements of the project. Survey database has been turned in for approval. Plans have been provided to Columbia for Utility Coordination/reimbursable cost. The Phase I ESA report has been submitted.
- United is recommending a Phase II study due to a repair shop at the boat house.

Actions required:

1. HLE to reach out to Crisp County Power Commission and to GDOT Bridge office about the option to elevate the footings.
2. HLE will take the information provided from the preliminary BFI and determine the optimal span arrangement and footing options.

Attendees:

NAME	COMPANY	EMAIL CONTACT
Shrujal Amin	TIA	samin@dot.ga.gov
Kelvin Mullins	TIA	kemullins@dot.ga.gov
Dan Bodycomb	TIA	dbodycomb@dot.ga.gov
Laura Dawood via Teleconference	TIA	Laura.Dawood@aecom.com
Masood Shabazaz	HLE	mshabazaz@heath-lineback.com
Rudolph Frampton	HLE	rframpton@heath-lineback.com
Matt Calak	HLE	mcalak@heath-lineback.com
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Santanu Sinharoy via teleconference	United Consulting	ssinharoy@unitedconsulting.com
Matthew Adamson	United Consulting	madamson@unitedconsulting.com
Russ Danser	Edwards-Pitman Environmental, Inc.	rdanser@edwards-pitman.com
Susan Thomas	Edwards-Pitman Environmental, Inc.	stthomas@edwards-pitman.com
Collin Lane	Edwards-Pitman Environmental, Inc.	clane@edwards-pitman.com

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Rudolph Frampton

From: Overton, Randall D CIV <Randall.D.Overton@uscg.mil>
Sent: Monday, August 31, 2015 2:29 PM
To: Russ Danser
Cc: D07-DG-D7-DPB
Subject: RE: GDOT Project PI 0012578, Crisp/Sumter County GA - Navigable Waters Info Request (Flint River)

Mr. Danser,

I have reviewed the location map you provided for the proposed construction of a new bridge across Lake Blackshear on US 280. The project area is outside Coast Guard jurisdiction for bridge permitting purposes. A Coast Guard bridge permit will not be required for the proposed project.

Thank you,

Randall Overton
Federal Permit Agent USCG
Bridge Management Specialist
909 SE 1st Ave Suite 432
Miami, FL 33131
(305) 205-0795 Cell
(305) 415-6736 Office

-----Original Message-----

From: Russ Danser [mailto:rdanser@edwards-pitman.com]
Sent: Wednesday, August 19, 2015 8:41 AM
To: Overton, Randall D CIV
Subject: GDOT Project PI 0012578, Crisp/Sumter County GA - Navigable Waters Info Request (Flint River)

Good morning, Mr. Overton.

Thank you for taking my call this morning. Per your request I have attached a project location map. Our proposed project would involve construction of a new bridge on US 280 over Lake Blackshear. It would be located parallel to the existing bridge (approximate latitude 31.9654, longitude -83.9294). Could you please advise on whether this portion of the Flint River is considered navigable? If a Bridge Permit Questionnaire is required for the purposes of this determination, please let me know.

Any information you can provide on this subject is appreciated.

Thank you for giving this request your attention.

Russ Danser, AICP | Senior NEPA Planner

Logo_FBEdwards-Pitman Environmental, Inc.

p. 770.333.9484 (Atlanta) | 803.764.6883 (Columbia)

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