ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 533145, Effingham-Bryan Counties **OFFICE** Preconstruction
BRST-005-5(47)
SR 26/US 80 over Ogeechee River and Overflow **DATE** September 28, 2005

FROM Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keepler
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Paul Liles
Babs Abubakari
Gary Priester
BOARD MEMBER

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 533145, Effingham-Bryan Counties **OFFICE** Preconstruction
BRST-005-5(47)
SR 26/US 80 over Ogeechee River and Overflow **DATE** September 9, 2005

FROM Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

TO David E. Studstill, Jr., P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the replacement of two(2) narrow and structurally deficient bridges on SR 26/US 80 over the Ogeechee River and Overflow, 9.0 miles south of Guyton, Georgia. The existing Ogeechee River Bridge (1344' x 26') was built in 1944 and consists of concrete bents with concrete caps, concrete T-beam superstructure, and concrete deck with a sufficiency rating of 47. The existing Ogeechee River Overflow Bridge (175' x 26') was built in 1944 and has a sufficiency rating of 47. The existing approaches consist of two, 12' lanes with rural shoulders on a variable 175'-300' of existing right-of-way. State Route 26/US 80 is functionally classified as a rural minor arterial. It is part of the National Highway System and is a local school bus route. The base year traffic (2008) on this section of SR 26/US 80 is 8,400 VPD and the 20 year traffic (2028) or design year projected volume is 12,500 VPD. The posted speed and the design speed are 55 MPH.

The construction proposes to replace the existing bridges over the Ogeechee River and Overflow with new 1380' x 44' and 180' x 44', respectively, constructed on new location north of the existing bridges. The relocation of SR 26/US 80 will consist of two, 12' lanes with 10' rural shoulders (6' paved for bike lane). Traffic will be maintained on the existing bridges while the proposed bridges are constructed.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; a public hearing open house is not required; time saving procedures are appropriate.

The estimated costs for this project are:

	PROPOSED	APPROVED	FUNDING	PROG DATE
Construction (includes E&C and inflation)	$6,604,000	$1,100,000	Q10	2009
Right-of-Way	$ 13,000	$ 13,000	Q10	2007
Utilities*	-----	-----		

P. I. No. 533145, Effingham-Bryan
September 9, 2005

*Bryan County signed LGPA for utilities 8-20-99; LGPA sent to Effingham County 8-3-99 and recission letter sent to Bryan and Effingham Counties on 2-25-05.

I recommend this project concept be approved.

MBP:JDQ/cj

Attachment

CONCUR _____
Buddy Gratton, P.E., Director of Preconstruction

APPROVE _____
David E. Studstill, Jr., P.E., Chief Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design
PROJECT CONCEPT REPORT

Project Number: BRST-005-5(47)
Counties: Effingham & Bryan
P. I. Number: 533145

Federal Route Number: 80
State Route Number: 26

DESCRIPTION: SR 26/US 80 over Ogeechee River and Overflow Bridge
Recommendation for approval:

DATE August 18, 2005 — Yun Tang, Project Manager

DATE August 18, 2005 — M. Babs Abubakari, State Consultant Design Engineer

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

DATE 8/18/05 — State Transportation Planning Administrator

DATE _____ — State Office of Financial Management Administrator

DATE _____ — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District 5 Engineer

DATE _____ — State Project Review Engineer

DATE _____ — State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design
PROJECT CONCEPT REPORT

Project Number: BRST-005-5(47)
Counties: Effingham & Bryan
P. I. Number: 533145

Federal Route Number: 80
State Route Number: 26

DESCRIPTION: SR 26/US 80 over Ogeechee River and Overflow Bridge
Recommendation for approval:

DATE August 18, 2005 — Yun Tang, Project Manager

DATE August 18, 2005 — M. Babs Abubakari, State Consultant Design Engineer

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

DATE _____ — State Transportation Planning Administrator

DATE _____ — State Office of Financial Management Administrator

DATE 8.23.05 — State Environmental/Location Engineer

DATE _____ — State Traffic Safety and Design Engineer

DATE _____ — District 5 Engineer

DATE _____ — State Project Review Engineer

DATE _____ — State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **BRST-005-5(47) EFFINGHAM & BRYAN COUNTIES** **OFFICE** Consultant Design
SR 26/US 80 over Ogeechee River and Overflow Bridge
P.I. No. 533145

M. Babs Abubakari

FROM Babs Abubakari, P.E., State Consultant Design Engineer **DATE** August 18, 2005

TO Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

Attached is the original copy of the Final Concept for your further handling and approval in accordance with the Plan Development Process (PDP).

People on the distribution list below should review the Concept Report and send comments and/or signature page to the Preconstruction office within 10 days as per the PDP.

Distribution:

Project Review Engineer
State Environment/ Location Engineer
State Traffic Safety and Design Engineer
State Transportation Planning Administrator
State Transportation Financial Management Administrator
District 5 Engineer
State Bridge Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design
PROJECT CONCEPT REPORT

Project Number: BRST-005-5(47)
Counties: Effingham & Bryan
P. I. Number: 533145

Federal Route Number: 80
State Route Number: 26

DESCRIPTION: SR 26/US 80 over Ogeechee River and Overflow Bridge
Recommendation for approval:

DATE August 18, 2005 — Yun Tang
Project Manager

DATE August 18, 2005 — M. Babs Abubakari
State Consultant Design Engineer

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

DATE_____ _____
State Transportation Planning Administrator

DATE_____ _____
State Office of Financial Management Administrator

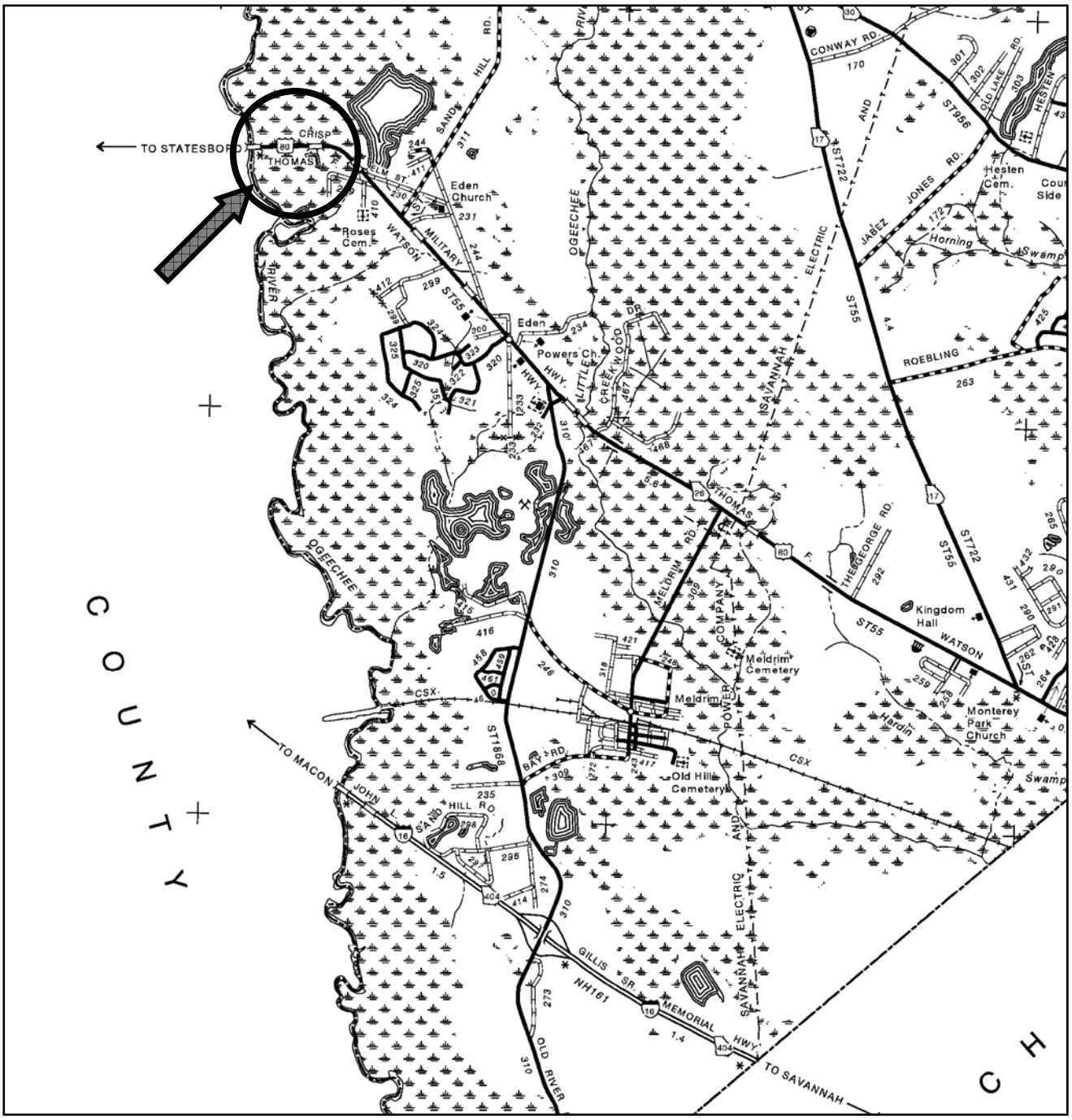
DATE_____ _____
State Environmental/Location Engineer

DATE_____ _____
State Traffic Safety and Design Engineer

DATE_____ _____
District 5 Engineer

DATE_____ _____
State Project Review Engineer

DATE_____ _____
State Bridge and Structural Design Engineer



Scale: 1 inch = 1000 ft

Location Map

Project: BRST-005-5(47) Effingham & Bryan Counties **PI No.:** 533145

Description: SR 26/US 80 over Ogeechee River 9 miles South of Guyton

Need and Purpose: See attached Need & Purpose Statement.

Description of the proposed project: Project BRST-005-5(47) is a bridge replacement project in Effingham & Bryan Counties on SR 26/US 80 over Ogeechee River. The total project length is approximately 6000' feet (1.14 miles). The SR 26/US 80 bridge is at M.P. 0.37. The purpose of this project is to replace two structurally deficient and functionally obsolete bridges on SR 26/US 80. The sufficiency rating of the Ogeechee River Bridge is currently 47.44 and the sufficiency rating of the Overflow Bridge is currently 47.42.

Is the project located in a Non-attainment area? _____Yes ___X___No

PDP Classification: Minor

Project Designation: Full Oversight ( ), Exempt(**X**), State Funded( ), or Other ( )

Functional Classification: Rural Minor Arterial Road

U. S. Route Number(s): 80 **State Route Number(s):** 26

Traffic (AADT):
Current Year: (2008) 8,400 Design Year: (2028) 12,500

Existing design features:

- Typical Section: Two 12 ft travel lanes with variable width grassed rural shoulders
- Posted speed 55mph Maximum degree of curvature: 4° 00'
- Maximum grade: 3.0 %
- Width of right of way: varies from 175' - 300'
- Major structures:
    - **Ogeechee River Bridge** – One span (60' – 90' – 60') beam cantilever unit, 27 - 42' Concrete Spans with a total length of 1344'. The bridge roadway curb-to-curb clear width is 26 ft with a 4' sidewalk on the North side of the bridge and the sufficiency rating is 47.44.
    - **Overflow Bridge** – Five – 35' Concrete Spans with a total length of 175'. The bridge roadway curb-to-curb clear width is 26 ft with a 4' sidewalk on the North side of the bridge and the sufficiency rating is 47.42.
- Major interchanges or intersections along the project: None

Proposed Design Features:

Proposed typical section(s): Two 12'-0" travel lanes, 10'-0" rural shoulders (6' paved for Bike Lane)

Typical section attached.

- Proposed Design Speed Mainline 55 mph
- Proposed Maximum grade Mainline 3.9 %. Maximum grade allowable 6 %.
- Proposed Maximum grade Side Street N/A Maximum grade allowable 6 %.
- Proposed Maximum grade driveway 12 %.
- Proposed Maximum degree of curve 5° 45' Maximum degree allowable 6° 00'.
- Right of way
  - Additional Width Varies from 10' - 75'
  - Easements: Temporary (X), Permanent ( ), Utility ( ), Other ( ).
  - Type of access control: Full ( ), Partial ( ), By Permit (**X**), Other ( ).
  - Number of parcels: 10 Number of displacements: None
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: 0
- Structures:
  - Bridges: The proposed concrete bridges will be 44 ft wide (gutter to gutter), consisting of two 12'-0" travel lanes, and 10'-0" shoulders. Bridge lengths are expected to be approximately 1380 ft for the bridge over the Ogeechee River and 180 ft for the bridge over the Ogeechee River Overflow.
  - Retaining walls: To be determined
- Major intersections and interchanges. None
- Traffic control during construction: The traffic will be maintained on-site during construction. The bridge will be constructed at a permanent offset.
- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	( )	( )	(X)
ROADWAY WIDTH:	( )	( )	(X)
SHOULDER WIDTH:	( )	( )	(X)
VERTICAL GRADES:	( )	( )	(X)
CROSS SLOPES:	( )	( )	(X)
STOPPING SIGHT DISTANCE:	( )	( )	(X)
SUPERELEVATION RATES:	( )	( )	(X)
HORIZONTAL CLEARANCE:	( )	( )	(X)
SPEED DESIGN:	( )	( )	(X)
VERTICAL CLEARANCE:	( )	( )	(X)
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

- Design Variances; None
- Environmental concerns: Nationwide 404 with PCN; Comprehensive Monitoring Plan
- Level of environmental analysis:
    - Are Time Savings Procedures appropriate? Yes (**X**), No ( ),
    - Categorical exclusion anticipated (**X**),
    - Environmental Assessment/Finding of No Significant Impact (FONSI) ( ), or
    - Environmental Impact Statement (EIS) ( ).
- Utility involvement: Overhead electrical transmission, telephone, and cable TV and underground gas and fiber optic utilities primarily on north side of SR 26/US 80. Service utilities crossing to the south side of SR 26/US 80.

Project responsibilities:

- Design, Office of Consultant Design
- Right of Way Acquisition, District 5 Preconstruction (Right of Way Office)
- Relocation of Utilities, District 5 Utility Office, Bell South, City of Claxton, Comcast, and Savannah Electric.
- Letting to contract, General Office (Office of Contract Administration)
- Supervision of construction, District 5 Construction Office
- Providing material pits, District 5 Materials Office
- Providing detours, N/A

Coordination

- Initial Concept Meeting date and brief summary. See attachments.
- Concept meeting dates: June 2, 2005 and August 3, 2005
- P. A. R. meetings, dates and results. None required.
- FEMA, USCG, and/or TVA. FEMA coordination may be required. The Ogeechee River is a FEMA studied river.
- Public involvement. None required
- Local government comments: Bryan Signed Utility Agreement 8-20-99
- Other projects in the area: STP-005-5(28 01) 4.58 km widening of SR 26/US 80 to four lanes.
- Other coordination to date. None

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 12 Months.
- Time to complete preliminary construction plans: 4 Months.
- Time to complete right of way plans: 1 Month.
- Time to complete the Section 404 Permit: 6 Months
- Time to complete final construction plans: 4 Months.
- Time to complete purchase right of way: 9 Months.
- List other major items that will affect the project schedule: N/A

Alternates considered: (1) Build proposed bridges on the existing alignment by closing the road and detouring traffic off-site; (2) Build proposed bridges parallel and offset to the north from the existing alignment, (3) Build proposed bridges parallel and offset to the south from the existing alignment, (4) Build bridge on existing alignment by building a temporary on-site detour, (5) No Build.

Comments:

Comparison Summary of Concepts 1 - 9

Alternate (2) is selected for this concept

Alternate (1) was eliminated due to the excessive length of a suitable off-site detour, Alternate (3) was eliminated due geometry and future widening considerations, Alternate (4) was eliminated due to the cost of building a temporary detour bridge, Alternate (5) was eliminated due to the long term maintenance cost.

Attachments:

1. Concept Meeting Minutes,
2. Preliminary Cost Estimate:
    a. Construction Including E & C,
3. Need and Purpose Statement,
4. Traffic Assignments,
5. Flexible Pavement Design,
6. Bridge Inventory Data Listings,
7. Typical Sections,
8. Concept Plans (for earthwork calculation)
9. Location and Design Notice (On Minor Projects)

CONCEPT MEETING MINUTES
June 2, 2005

CONCEPT MEETING FOR BRIDGE REPLACEMENT WORK ORDERS
SR 26/US 80 over Ogeechee River and Overflow Bridge
Project No.: BRST-005-5(47), Effingham-Bryan Counties
PI No.: 533145

LOCATION: GADOT District 5, Area 5 Office
Savannah, GA

Attendees:
Mark Holmberg – Heath & Lineback Engineers
Scott Jordan – Heath & Lineback Engineers
Tom Franklin – GADOT Consultant
Carol Newsom – GDOT District 5 Location
Yun Tang – GDOT OCD
George Shenk – GDOT District 5 Utility
Donald William – GDOT District 5, Area 5 Engineer – Savannah
Aghdas Ghazi– GDOT District 5, Area 5 Engineer – Statesboro
Jeffery Young – GDOT District 5 Traffic Operations
Brad Saxon – GDOT District 5 Construction
Slade Cole – GDOT District 5, Area 5 Assistant Engineer – Savannah
Jerome Sheffield – GDOT District 5 Construction

Mark Holmberg described the project and a brief overview of the concept report.

District Construction noted that there was not enough for the bridge contractors to work. Sixty ft of temporary easement was discussed to be enough room for the contractor to work.

Right of Way noted that all easements would be permanent except driveway easements.

Environmental noted wetlands on both sides of existing bridge.

Utilities noted overhead utility lines on both sides of existing bridge.

District Construction suggested shifting the new alignment to the north of the existing road instead of to the south side.

The number of parcels was noted to be 9 instead of 10.

The overflow bridge will be 240 ft instead of 180 ft.

District Construction noted that providing materials pits would be the responsibility of the contractor, not District 5 Materials Office.

The decision was made at the meeting to choose Alternate 2 instead of Alternate 3.

CONCEPT MEETING MINUTES
August 3, 2005

SECOND CONCEPT MEETING FOR BRIDGE REPLACEMENT WORK ORDERS
SR 26/US 80 over Ogeechee River and Overflow Bridge
Project No.: BRST-005-5(47), Effingham-Bryan Counties
PI No.: 533145

LOCATION: GADOT District 5, Area 5 Office
Savannah, GA

Attendees: Darrell Tukes – Bell South
Tom Franklin – GADOT Consultant
Yun Tang – GDOT OCD
George Shenk – GDOT District 5 Utility
Randolph Sewell Claxton Natural Gas
Jeffery Young – GDOT District 5 Traffic Operations
Brad Saxon – GDOT District 5 Construction
Michael Gresham – Savannah Electric
Rob Mikell - Comcast
Slade Cole – GDOT District 5, Area 5 Assistant Engineer – Savannah
Jerome Sheffield – GDOT District 5 Construction
Mark Holmberg – Heath & Lineback Engineers

The meeting focused on alignment of the permanent offset. As described in the Concept Report, the most viable alternates are permanent offsets 60' south or 60' north of the existing alignment.

Mark Holmberg described the pros and cons of each alignment:

1. The south alignment will likely require the purchase of one property for temporary construction easement. In addition, gas and electrical service lines must be relocated; however, the utility impacts are fewer compared to the north alignment.
2. The north alignment will require at least 20' additional permanent right-of-way width compared to the south alignment to provide Savannah Electric room to relocate a transmission line outside a 60' wide construction strip. In addition, cranes may be forced to operate in close proximity to this electrical line. The north alignment will also require at least one house to be purchased for right-of-way. In addition, there is a sand pit filled with water that may create environmental permitting problems and require a PCN to place fill in this area.

District Construction noted that the north alignment provided more favorable geometry at the east end of the project. Also, if SR 26/US 80 would be widened to four lanes in the future, widening within the current project limits may be able to be constructed within what would be existing right-of-way.

Mark Holmberg stated the projected 2028 traffic data does not warrant four lanes.

Mark Holmberg asked if the utility companies present had any preference as to the north or south alignment. Claxton Gas said the north alignment would require relocation of the gas main within the project limits which would be a large expenditure for them. Savannah Electric, Bell South and Comcast also indicated additional relocation costs would be required for the north alignment compared to the south alignment. George Shenk thought all utilities were in the right-of-way by permit and must be relocated at the utility companies' expense.

The consensus of GDOT District 5 personnel was the north alignment was preferred because of geometry and possible future widening considerations. H&L will revise the recommend alignment from the south alignment to north alignment and submit the Concept Report for approval.

PRELIMINARY COST ESTIMATE

DATE: September 28, 2005 PREPARED BY: Heath & Lineback Engineers, Inc.

PROJECT NO.: BRST-005-5(47)

P.I. NO.: 533145 LENGTH: 6000 ft. (1.14 miles)

PROJECT DESCRIPTION: Bridge replacements of the SR 26/US 80 over Ogeechee River and Overflow Bridges.

PROPOSED CONCEPT: The proposed typical section consist of two 12'-0" travel lanes with 10'-0" rural shoulders. Traffic will maintained on the existing alignment until the new permanent offset alignment is constructed.

EXISTING ROADWAY: State Route 26/ US Route 80

TRAFFIC: Existing: 8400. ADT (2008) Design: 12500 ADT (2028)

( ) PROGRAMMING PROCESS (X) CONCEPT DEVEL. ( ) DURING PROJ DEVEL.

Estimate Report for file "533145"

Section ROADWAY

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	40000.00	TRAFFIC CONTROL - BRST-005-5(47)	40000.00
210-0100	1	LS	410000.00	GRADING COMPLETE - (68333 CY x $6.00)	410000.00
318-3000	200	TN	15.68	AGGR SURF CRS	3136.00
433-1000	620	SY	146.52	REINF CONC APPROACH SLAB	90842.40
441-0301	4	EA	1642.20	CONC SPILLWAY, TP 1	6568.80
441-0302	4	EA	1480.68	CONC SPILLWAY, TP 2	5922.72
456-2012	2	GLM	813.19	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (CONTINUOUS)	1829.68
500-3101	6	CY	453.12	CLASS A CONCRETE	2718.72
550-2180	450	LF	23.08	SIDE DRAIN PIPE, 18 IN, H 1-10	10386.00
550-3618	6	EA	508.65	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	3051.90
550-4118	6	EA	272.29	FLARED END SECTION 18 IN, SIDE DRAIN	1633.74
576-1018	300	LF	22.74	SLOPE DRAIN PIPE, 18 IN	6822.00
622-1033	500	LF	29.73	PRECAST CONCRETE MEDIAN BARRIER, METHOD 3	14865.00
634-1200	25	EA	84.28	RIGHT OF WAY MARKERS	2107.00
641-1100	166	LF	29.19	GUARDRAIL, TP T	4845.54
641-1200	2550	LF	11.99	GUARDRAIL, TP W	30574.50
641-5001	6	EA	442.71	GUARDRAIL ANCHORAGE, TP 1	2656.26
641-5012	6	EA	1427.91	GUARDRAIL ANCHORAGE, TP 12	8567.46
				Section Sub Total:	**$646,527.72**

Section REQUIRED PAVEMENT

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-1101	13750	TN	13.87	GR AGGR BASE CRS, INCL MATL	190712.50
402-1812	300	TN	39.10	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	11730.00
402-3113	1795	TN	45.28	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	81277.60
402-3121	4502	TN	36.84	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	165853.68
402-3190	2390	TN	39.32	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM	93974.80
413-1000	800	GL	0.95	BITUM TACK COAT	760.00
				Section Sub Total:	**$544,308.58**

Section EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	10	AC	460.72	TEMPORARY GRASSING	4607.20
163-0240	250	TN	189.34	MULCH	47335.00
163-0300	4	EA	1113.37	CONSTRUCTION EXIT	4453.48
163-0520	300	LF	12.16	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	3648.00
163-0530	1000	LF	2.37	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	2370.00
165-0030	3000	LF	1.19	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	3570.00
165-0070	500	LF	1.23	MAINTENANCE OF BALED STRAW EROSION CHECK	615.00
165-0101	2	EA	353.90	MAINTENANCE OF CONSTRUCTION EXIT	707.80
167-0100	24	MO	955.65	WATER QUALITY MONITORING	22935.60
167-0200	2	EA	58.24	WATER QUALITY SAMPLING	116.48
171-0030	6000	LF	3.09	TEMPORARY SILT FENCE, TYPE C	18540.00
603-2180	75	SY	32.53	STN DUMPED RIP RAP, TP 3, 12 IN	2439.75
603-7000	75	SY	3.99	PLASTIC FILTER FABRIC	299.25
700-6910	20	AC	766.98	PERMANENT GRASSING	15339.60
700-7000	60	TN	56.75	AGRICULTURAL LIME	3405.00
700-7010	30	GL	19.29	LIQUID LIME	578.70
700-8000	50	TN	226.17	FERTILIZER MIXED GRADE	11308.50
700-8100	400	LB	1.43	FERTILIZER NITROGEN CONTENT	572.00
715-2200	1500	SY	1.96	BITUMINOUS TREATED ROVING, WATERWAYS	2940.00
716-2000	20000	SY	1.11	EROSION CONTROL MATS, SLOPES	22200.00
				Section Sub Total:	**$167,981.36**

Section TRAFFIC SIGNS & MARKING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	125	SF	13.16	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	1645.00
636-1031	100	SF	17.26	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	1726.00
636-2070	400	LF	6.77	GALV STEEL POSTS, TP 7	2708.00
636-2090	125	LF	7.10	GALV STEEL POSTS, TP 9	887.50

653-1501	10000	LF	0.25	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	2500.00
653-1502	10000	LF	0.23	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	2300.00
654-1002	65	EA	2.90	RAISED PVMT MARKERS TP 2	188.50
657-1054	3000	LF	3.20	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, WHITE, TP PB	9600.00
657-6054	3000	LF	3.41	PREFORMED PLASTIC SOLID PVMT MKG, 5 IN, YELLOW, TP PB	10230.00
				Section Sub Total:	**$31,785.00**

Section BRIDGE NO-1, SR 26/US 80 over Ogeechee River

Item Number	Quantity	Units	Unit Price	Item Description	Cost
000-0000	65205	SF	55.00	1380 X 47.25 REINFORCED CONCRETE BRIDGE	3586275.00
				Section Sub Total:	**$3,586,275.00**

Section BRIGE NO-2 SR26/US 80 over Overflow Bridge

Item Number	Quantity	Units	Unit Price	Item Description	Cost
000-0000	8505	SF	55.00	180 X 47.25 REINFORCED CONCRETE BRIDGE	467775.00
				Section Sub Total:	**$467,775.00**

Total Estimated Cost: $5,444,652.66

Subtotal Construction Cost	**$5,444,652.66**
E&C Rate 10.0 %	$544,465.27
Inflation Rate 5.0 % @ 2.0 Years	$613,884.59
Total Construction Cost	**$6,603,002.51**
Right Of Way	$13,000.00
ReImb. Utilities	$0.00
Grand Total Project Cost	**$6,616,002.51**

Need and Purpose

Project BRST-005-5(47) Effingham County
PI No. 533145
Bridge Replacement

Project Description

Project Number BRST-005-5(47) will replace the structurally deficient bridge located on State Route 26/US 80, over the Ogeechee River, nine miles south of Guyton. The bridge is located in Effingham County. The bridge connects SR 26/US 80 thru traffic over the Ogeechee River (please see location map on page two) from Savannah and Chatham County to the south to Statesboro and Bulloch County to the north and east. The project extends for approximately .4 mile at road inventory milepost .37

Bridge Characteristics

The bridge was constructed in 1944. The bridge sufficiency rating is 47.42. The bridge is being replaced as per DOT policy 2405-1. The Office of Bridge Maintenance has determined that any bridge with a bridge sufficiency rating below 50 should be replaced. This project will replace the existing two-lane bridge with a structurally adequate two-lane bridge.

Route Characteristics

State Route 26/US 80 is functionally classified as a rural minor arterial. SR 26/US 80 has two-way traffic and is a two-lane facility. It is part of the National Highway System and is a local school bus route. It is not a Truck Route, is not part of the Statewide Bicycle Plan and is not a locally designated bikeway or bike route (although the Coastal Georgia Regional Development Center is currently developing a local bicycle plan for Effingham County). The posted speed limit is 55 mph. Sidewalks are not planned for the route. It lies beyond the boundaries of the Chatham Urban Transportation Study (CUTS) in Effingham County.

Traffic Counts

The Average Annual Daily Traffic (AADT) along this section of roadway was 6,850 in 2000 (OEL Traffic Assignment) and 7,300 in 2002 (Bridge Inventory) and projected to be 8,400 in 2008 (OEL) and 10,950 in 2022 (Bridge Inventory) and 12,500 AADT in 2028 (OEL). Truck traffic is estimated at 15% of all traffic (Bridge Inventory).

Conclusion

Replacing this bridge will bring it up to current design and load standards and in doing so will improve the operation and safety of the bridge and roadway.

Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-005-5(47), Effingham County
P.I. # 533145

OFFICE Environment/Location

DATE June 19, 2002

FROM Harvey D. Keepler, State Environment/Location Engineer

TO James B. Buchan, P.E., State Consultant Design Engineer.
Attn. Ted Cashin

SUBJECT Traffic Assignments for S.R. 26/U.S. 80 @ Ogeechee River Overflow 9 Mi S. of Guyton in Effingham County.

We are furnishing estimated traffic assignments for the above project is attached:

2000 AADT = 6850
2008 AADT = 8400
2028 AADT = 12500
K = 9%
D = 60%
T. = 8%
24 HOUR T = 13%
S.U. = 6.5%
COMB. = 6.5%

If you have any questions concerning this information please contact Abby Ebodaghe at (404) 699-4460.

HDK/AFE

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: BRST-005-5(47) **County:** Effingham & Bryan
P.I. no.: 533145
Description: Bridge Replacement over Ogeechee River

Traffic Data (NOTE: AADTs are one-way)
24-hour Truck Percentage: 13.00%
AADT initial year of design period: 5,040 vpd (2008)
AADT final year of design period: 7,500 vpd (2028)
Mean AADT (one-way): 6,270 vpd

Design Loading

Mean AADT		LDF		Trucks		18-K ESAL		Total Daily Loads
6,270	*	1.00	*	0.130	*	1.06	=	865

Total predicted design period loading = 865 * 20 * 365 = 6,314,500

Design Data
Terminal Serviceability Index: 2.50
Soil Support: 4.00
Regional Factor: 1.70

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness Inches	(mm)	Structural Coefficient	Structural Value
12.5 mm Superpave	1.50	(38)	0.44	0.66
19 mm Superpave	2.00	(51)	0.44	0.88
25 mm Superpave	1.00	(25)	0.44	0.44
	3.00	(76)	0.30	0.90
Graded Aggregate Base	12.00	(305)	0.16	1.92

Required SN = 4.97 Proposed SN = 4.80

>>> Proposed pavement is 3.4% Underdesign <<<

Remarks: Heath & Lineback Engineers, Inc.

Prepared by Scott Jordan April 8, 2005
Date

Recommended _____
State Materials & Research Engineer **Date**

Approved _____
State Consultant Design Engineer **Date**

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 029-0006-0 **Bryan** SUFF. RATING 47.44

Location & Geography

*	Structure I.D.No:	029-0006-0	
	200 Bridge Information	06	
*	6A Feature Int:	OGEECHEE RIVER	
*	6B Critical Bridge:	0	
*	7A Route Number Carried:	SR00026	
*	7B Facility Carried:	JENCKS BRIDGE	
*	9 Location:	AT EFFINGHAM CO. LINE	
	2 DOT District:	5	
	207 Year Photo:	2003	
*	91 Inspection Frequency:	24 Date: 10/16/2003	
	92A Fract Crit Insp Freq:	12 Date: 09/27/2004	
	92B Underwater Insp Freq:	60 Date: 11/02/2000	
	92C Other Spc. Insp Freq:	36 Date: 09/05/2002	
*	4 Place Code:	00000	
*	5 Inventory Route (O/U):	1	
	Type:	2	
	Designation:	1	
	Number:	00080	
	Direction:	0	
*	16 Latitude: 32-11.5	MMS Prefix: SR	
*	17 Longitude: 81-25.0	MMS Suffix: 00 MP: 5.79	
	98 Border Bridge:	000 %Shared: 00	
	99 ID Number:	000000000000000	
*	100 STRAHNET:	0	
	12 Base Highway Network:	1	
	13A LRS Inventory Route:	291002600	
	13B Sub Inventory Route:	0	
*	101 Parallel Structure:	N	
*	102 Direction of Traffic:	2	
*	264 Road Inventory Mile Post:	005.78	
*	208 Inspection Area:	05 Initials: EEP	
	Engineer's Initial:	jal	

* Location I.D. No.: 029-00026D-005.79E

*	104 Highway System:	0	
*	26 Functional Classification:	06	
*	204 Federal Route Type:	F No.: 00055	
	105 Federal Lands Highway:	0	
*	110 Truck Route:	0	
	206 School Bus Route:	1	
	217 Benchmark Elevation:	0047.52	
	218 Datum:	2	
*	19 Bypass Length:	16	
*	20 Toll:	3	
*	21 Maintenance:	01	
*	22 Owner:	01	
*	31 Design Load:	2	
	37 Historical Significance:	5	
	205 Congressional District:	12	
	27 Year Constructed:	1944	
	106 Year Reconstructed:	0000	
	33 Bridge Median:	0	
	34 Skew:	00	
	35 Structure Flared:	0	
	38 Navigation Control:	0	
	213 Special Steel Design:	6	
	267 Type of Paint:	2	
*	42 Type of Service on:	5	
		5	
	214 Movable Bridge:	0	
	203 Type Bridge:	I-O-N-O	
	259 Pile Encasement:	3	
*	43 Structure Type Main:	3 02	
	45 No. Spans Main:	003	
	44 Structure Type Appr:	1 04	
	46 No. Spans Appr:	0027	
	226 Bridge Curve Horz:	0 Vert: 0	
	111 Pier Protection:	0	
	107 Deck Structure Type:	1	
	108 Wearing Surface Type:	1	
	Ma	8	
	P	8	

Signs & Attachments

	225 Expansion Joint Type:	02	
	242 Deck Drains:	1	
	243 Parapet Location:	0	
	Height:	0.00	
	Width:	0.00	
	238 Curb:	1.20	1
	239 Handrail:	1	1
*	240 Median Barrier Rail:	0	
	241 Bridge Median Height:	0.00	
	Width:	0.00	
*	230 Guardrail Loc Dir Rear:	3	
	Fwrd:	3	
	Oppo Dir Rear:	0	
	Fwrd:	0	
	244 Approach Slab:	3	
	224 Retaining Wall:	0	
	233 Posted Speed Limit:	55	
	236 Warning Sign:	0	
	234 Delineator:	1	
	235 Hazard Boards:	1	
	237 Utilities Gas:	00	
	W	00	
	Ele	00	
	Telephone:	34	
	Se	00	
	247 Lighting Street:	0	
	Naviagtion:	0	
	Aerial:	0	
*	248 County Continuity No.:	00	

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 029-0006-0 **Bryan** SUFF. RATING 47.44

Programming Data

201 Project No.: SNFAP-207
202 Plans Available: 4
249 Prop. Proj. No. 0000000000000000
250 Approval Status: 7010
251 P.I. No.: 0000000
252 Contract Date: 02/01/1901
260 Seismic No.: 00000
75 Type Work: 34 1
94 Bridge Imp. Cost: $ 1,284
95 Roadway Imp. Cost: $ 138
96 Total Imp Cost: $ 2,007
76 Imp. Length: 001555
97 Imp. Year: 1990
114 Future ADT: 013455 Year: 2023

Hydraulic Data

215 Waterway Data
Highwater Elev.: 0000.0 Year: 1900
Avg. Streambed Elev.: 0000.0 Freq.: 00
Drainage Area: 00000
Area Of Opening: 000000
113 Scour Critical: U
216 Water Depth: 07.0 Br. Height: 26.5
222 Slope Protection: 1
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No. Barrels: 0
Width: 0.00 Height: 0.00
Length: 0 Apron: 0
* 265 U/W Insp. Area: 2 Diver: WC

* Location I.D. No.: 029-00026D-005.79E

Measurements

* 29 ADT: 008970 Year: 2003
109 % Trucks: 15
* 28 Lanes On: 02 Under: 00
210 No. Tracks On: 00 Under: 00
* 48 Max. Span Length: 0090
* 49 Structure Length: 1,344
51 Br. Rwdy. Width: 25.80
52 Deck Width: 33.30
* 47 Tot. Horz. Cl: 25.80
50 Curb/Sdewlk Width: 4.00/1.00
32 Approach Rdwy Width: 031
* 229 Shoulder Width:
Rear Lt: 3.00 Type: 2 Rt: 3.60
Fwrd Lt: 3.00 Type: 2 Rt: 3.60
Pavement Width:
Rear: 24.50 Type: 2
Fwrd: 24.50 Type: 2
Intersection Rear: 0 Fwrd: 0
36 Safety Features Br. Rail: 2
Transition: 2
App. G. Rail: 2
App. Rail End: 2
53 Minimum Cl.Over: 99 ' 99 "
Under: N 00 ' 00 "
* 228 Min. Vertical Cl
Act. Odm Dir: 99 ' 99 "
Oppo. Dir: 99 ' 99 "
Posted Odm. Dir: 00 ' 00 "
Oppo. Dir: 00 ' 00 "
55 Lateral Undercl. Rt: N 99.90
56 Lateral Undercl. Lt: 0.00
* 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 6.70
Deck Thick Approach: 6.70
246 Overlay Thickness: 0.00
212 Year Last Painted: Sup: 1994 Sub: 0000

Ratings

65 Inventory Rating Method: 1
63 Inventory Rating Method: 1
66 Inventory Type: 2 Rating: 22
64 Operating Type: 2 Rating: 34
231 Calculated Loads
H-Modified: 21 0
HS-Modified: 26 0
Type 3: 26 0
Type 3s2: 31 0
Timber: 28 0
Piggyback: 32 0
261 H Inventory Rating: 15
262 H Operating Rating: 25
67 Structural Evaluation: 5
58 Deck Condition: 6
59 Superstructure Condition: 6
* 227 Collision Damage: 0
60A Substructure Condition: 6
60B Scour Condition: 6
60C Underwater Condition: 6
71 Waterway Adequacy: 8
61 Channel Protection Cond: 7
68 Deck Geometry: 2
69 UnderClr. Horz/Vert: N
72 Appr. Alignment: 8
62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
41 Struct Open, Posted, Cl: A
* 103 Temporary Structure: 0
232 Posted Loads H-Modified: 00
HS-Modified: 00
Type 3: 00
Type3s2: 00
Timber: 00
Piggyback: 00
253 Notification Date 02/01/1901
253 Fed Notify Date: 02/01/1901 0

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 103-0019-0 **Effingham** SUFF. RATING 47.42

Location & Geography

*	Structure I.D.No:	103-0019-0	
	200 Bridge Information	07	
*	6A Feature Int:	OGEECHEE RIVER O/F	
*	6B Critical Bridge:	0	
*	7A Route Number Carried:	SR00026	
*	7B Facility Carried:	SR 26 - US 80	
*	9 Location:	9 MI S OF GUYTON	
	2 DOT District:	5	
	207 Year Photo:	2004	
*	91 Inspection Frequency:	24 Date: 03/03/2004	
	92A Fract Crit Insp Freq:	00 Date: 02/01/1901	
	92B Underwater Insp Freq:	00 Date: 02/01/1901	
	92C Other Spc. Insp Freq:	00 Date: 02/01/1901	
*	4 Place Code:	00000	
*	5 Inventory Route (O/U):	1	
	Type:	2	
	Designation:	1	
	Number:	00080	
	Direction:	0	
*	16 Latitude: 32-11.5	MMS Prefix: SR	
*	17 Longitude: 81-24.6	MMS Suffix: 00 MP: 0.37	
	98 Border Bridge:	000 %Shared: 00	
	99 ID Number:	000000000000000	
*	100 STRAHNET:	0	
	12 Base Highway Network:	1	
	13A LRS Inventory Route:	1031002600	
	13B Sub Inventory Route:	0	
*	101 Parallel Structure:	N	
*	102 Direction of Traffic:	2	
*	264 Road Inventory Mile Post:	000.37	
*	208 Inspection Area:	05 Initials: EEP	
	Engineer's Initial:	jal	

* Location I.D. No.: 103-00026D-000.37E

*	104 Highway System:	0
*	26 Functional Classification:	06
*	204 Federal Route Type:	F No.: 00055
	105 Federal Lands Highway:	0
*	110 Truck Route:	0
	206 School Bus Route:	1
	217 Benchmark Elevation:	0046.25
	218 Datum:	2
*	19 Bypass Length:	26
*	20 Toll:	3
*	21 Maintenance:	01
*	22 Owner:	01
*	31 Design Load:	2
	37 Historical Significance:	5
	205 Congressional District:	12
	27 Year Constructed:	1944
	106 Year Reconstructed:	0000
	33 Bridge Median:	0
	34 Skew:	00
	35 Structure Flared:	0
	38 Navigation Control:	0
	213 Special Steel Design:	0
	267 Type of Paint:	0
*	42 Type of Service on:	5
		9
	214 Movable Bridge:	0
	203 Type Bridge:	D-O-O-O
	259 Pile Encasement:	3
*	43 Structure Type Main:	1 04
	45 No. Spans Main:	005
	44 Structure Type Appr:	0 00
	46 No. Spans Appr:	0000
	226 Bridge Curve Horz:	0 Vert: 0
	111 Pier Protection:	0
	107 Deck Structure Type:	1
	108 Wearing Surface Type:	1
	M	8
	P	8

Signs & Attachments

	225 Expansion Joint Type:	02	
	242 Deck Drains:	1	
	243 Parapet Location:	0	
	Height:	0.00	
	Width:	0.00	
	238 Curb:	1.00	1
	239 Handrail:	1	1
*	240 Median Barrier Rail:	0	
	241 Bridge Median Height:	0.00	
	Width:	0.00	
*	230 Guardrail Loc Dir Rear:	3	
	Fwrd:	3	
	Oppo Dir Rear:	0	
	Fwrd:	0	
	244 Approach Slab:	3	
	224 Retaining Wall:	0	
	233 Posted Speed Limit:	55	
	236 Warning Sign:	0	
	234 Delineator:	1	
	235 Hazard Boards:	1	
	237 Utilities Gas:	00	
	W	00	
	Ele	00	
	Telephone:	22	
	Se	00	
	247 Lighting Street:	0	
	Naviagtion:	0	
	Aerial:	0	
*	248 County Continuity No.:	00	

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 103-0019-0 **Effingham** SUFF. RATING 47.42

Programming Data

201 Project No.: SN-FAP 207-A (1&2)
202 Plans Available: 1
249 Prop. Proj. No. BRST-005-5 (47)
250 Approval Status: 0000
251 P.I. No.: 533145-
252 Contract Date: 02/01/2005
260 Seismic No.: 00000
75 Type Work: 34 1
94 Bridge Imp. Cost: $ 157
95 Roadway Imp. Cost: $ 48
96 Total Imp Cost: $ 284
76 Imp. Length: 000386
97 Imp. Year: 1990
114 Future ADT: 010950 Year: 2022

Hydraulic Data

215 Waterway Data
Highwater Elev.: 0033.3 Year: 1900
Avg. Streambed Elev.: 0000.0 Freq.: 00
Drainage Area: 00000
Area Of Opening: 000000
113 Scour Critical: 5
216 Water Depth: 1 Br. Height: 17.3
222 Slope Protection: 1
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No. Barrels: 0
Width: 0.00 Height: 0.00
Length: 0 Apron: 0
* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No.: 103-00026D-000.37E

Measurements

* 29 ADT: 007300 Year: 2002
109 % Trucks: 15
* 28 Lanes On: 02 Under: 00
210 No. Tracks On: 00 Under: 00
* 48 Max. Span Length: 0035
* 49 Structure Length: 175
51 Br. Rwdy. Width: 25.90
52 Deck Width: 33.50
* 47 Tot. Horz. Cl: 25.90
50 Curb/Sdewlk Width: 4.00/0.00
32 Approach Rdwy Width: 029
* 229 Shoulder Width:
Rear Lt: 3.00 Type: 2 Rt: 3.00
Fwrd Lt: 3.00 Type: 2 Rt: 3.00
Pavement Width:
Rear: 22.60 Type: 2
Fwrd: 22.60 Type: 2
Intersection Rear: 0 Fwrd: 0
36 Safety Features Br. Rail: 2
Transition: 2
App. G. Rail: 2
App. Rail End: 2
53 Minimum Cl.Over: 99 ' 99 "
Under: N 00 ' 00 "
* 228 Min. Vertical Cl
Act. Odm Dir: 99 ' 99 "
Oppo. Dir: 99 ' 99 "
Posted Odm. Dir: 00 ' 00 "
Oppo. Dir: 00 ' 00 "
55 Lateral Undercl. Rt: N 99.90
56 Lateral Undercl. Lt: 0.00
* 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 7.00
Deck Thick Approach: 0.00
246 Overlay Thickness: 2.00
212 Year Last Painted: Sup: 0000 Sub: 0000

Ratings

65 Inventory Rating Method: 2
63 Inventory Rating Method: 2
66 Inventory Type: 2 Rating: 22
64 Operating Type: 2 Rating: 41
231 Calculated Loads
H-Modified: 20 0
HS-Modified: 25 0
Type 3: 28 0
Type 3s2: 40 0
Timber: 36 0
Piggyback: 40 0
261 H Inventory Rating: 15
262 H Operating Rating: 28
67 Structural Evaluation: 5
58 Deck Condition: 7
59 Superstructure Condition: 7
* 227 Collision Damage: 0
60A Substructure Condition: 7
60B Scour Condition: 8
60C Underwater Condition: N
71 Waterway Adequacy: 8
61 Channel Protection Cond: 8
68 Deck Geometry: 2
69 UnderClr. Horz/Vert: N
72 Appr. Alignment: 7
62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
41 Struct Open, Posted, Cl: A
* 103 Temporary Structure: 0
232 Posted Loads H-Modified: 00
HS-Modified: 00
Type 3: 00
Type3s2: 00
Timber: 00
Piggyback: 00
253 Notification Date 02/01/1901
253 Fed Notify Date: 02/01/1901 0

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRST-005-5(47)		

ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO 'BEST FIT' EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A. NORMAL CROWN

SECTION WITH GRADES 0.5% OR GREATER	SECTION WITH GRADES LESS THAN 0.5%
0.0150 FT/FT - MINIMUM	0.0156 FT/FT - MINIMUM
0.0200 FT/FT - DESIRABLE	0.0200 FT/FT - DESIRABLE
0.0250 FT/FT - MAXIMUM	0.0300 FT/FT - MAXIMUM

B. SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR SE RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

C. SUPERELEVATION TRANSITION LENGTH (LENGTH FROM FLAT POINT TO FULL SE)

	RATE OF CHANGE	CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT
MINIMUM	1:150	0.67%
DESIRABLE	1:200	0.50%
MAXIMUM	1:300	0.33%

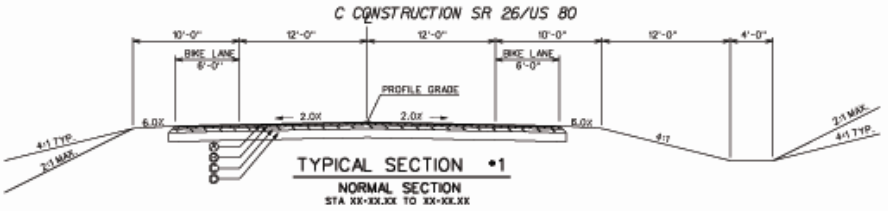
LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (10 FEET) EQUAL TO THE SPEED DESIGN (10 MPH).



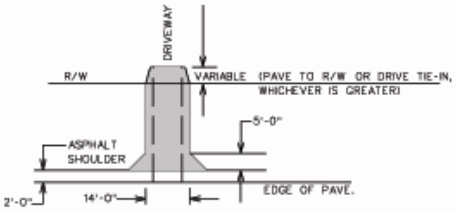
TYPICAL SECTION #1
NORMAL SECTION
STA XX+XX.XX TO XX+XX.XX

SLOPE CONTROL FILL & CUT	
SLOPE	HIGH FROM SHLD. PT.
4:1	0' - 10'
* 2:1	OVER 10'

* GUARDRAIL IS REQUIRED ON ALL 2:1 FILL SLOPES.

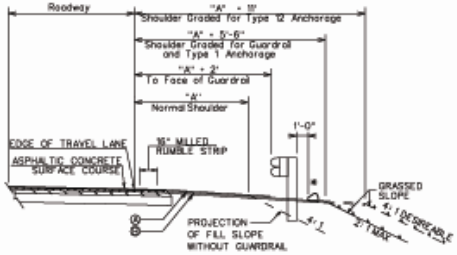
REQUIRED PAVEMENT

(A) RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME - (165 LB/SY) (MIX DESIGN LEVEL B)
(B) RECYCLED ASPH CONC 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - (220 LB/SY) (MIX DESIGN LEVEL B)
(C) RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - (440 LB/SY) (MIX DESIGN LEVEL A)
(D) GR AGGR BASE CRS, 12 INCH, INCL MATL
(E) RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME, AS DIRECTED BY THE ENGINEER
(F) CLASS B CONCRETE



TYPICAL DRIVEWAY DETAIL

REQUIRED DRIVEWAY PAVEMENT
RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME - (165 LB/SY) (MIX DESIGN LEVEL B)
RECYCLED ASPH CONC 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - (220 LB/SY) (MIX DESIGN LEVEL A)



TYPICAL SHOULDER DETAIL FOR
GUARDRAIL AND ASPHALT SHOULDER
SEE PLAN FOR LOCATION

* ASPHALTIC CONCRETE CURB PER SECTION 439 SHALL BE REQUIRED WHERE SPECIFIED. TYPICAL USE IS FOR EROSION PREVENTION OF HIGH FILL SLOPES. WHERE SPILLWAYS ARE REQUIRED.

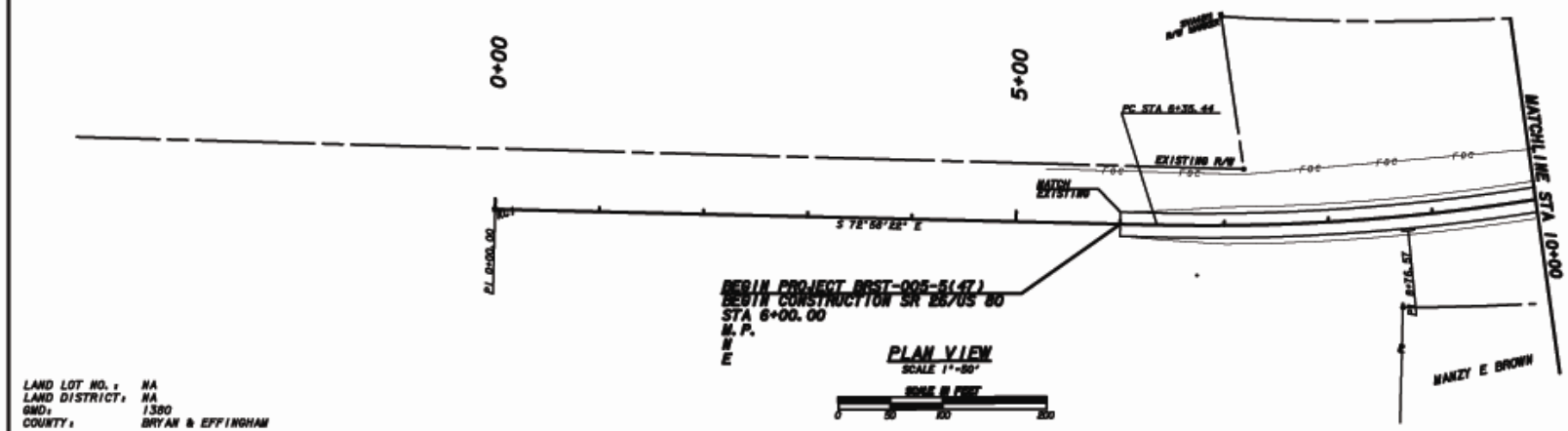
Heath & Linaback Engineers
INCORPORATED
12 POWDER SPRINGS STREET, SUITE 240
MARIETTA, GEORGIA 30064

DATE	REVISIONS	DATE	REVISIONS

GEORGIA
DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS
PROJECT: BRST-005-5(47)
COUNTY: EFFINGHAM & BRYAN

J:\7035\7035175\SHEET\533945TYP.DGN
DWG NO. 05-01

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRST-005-5(47)		



PLAN VIEW
SCALE 1"=50'

SCALE IN FEET
0 50 100 200

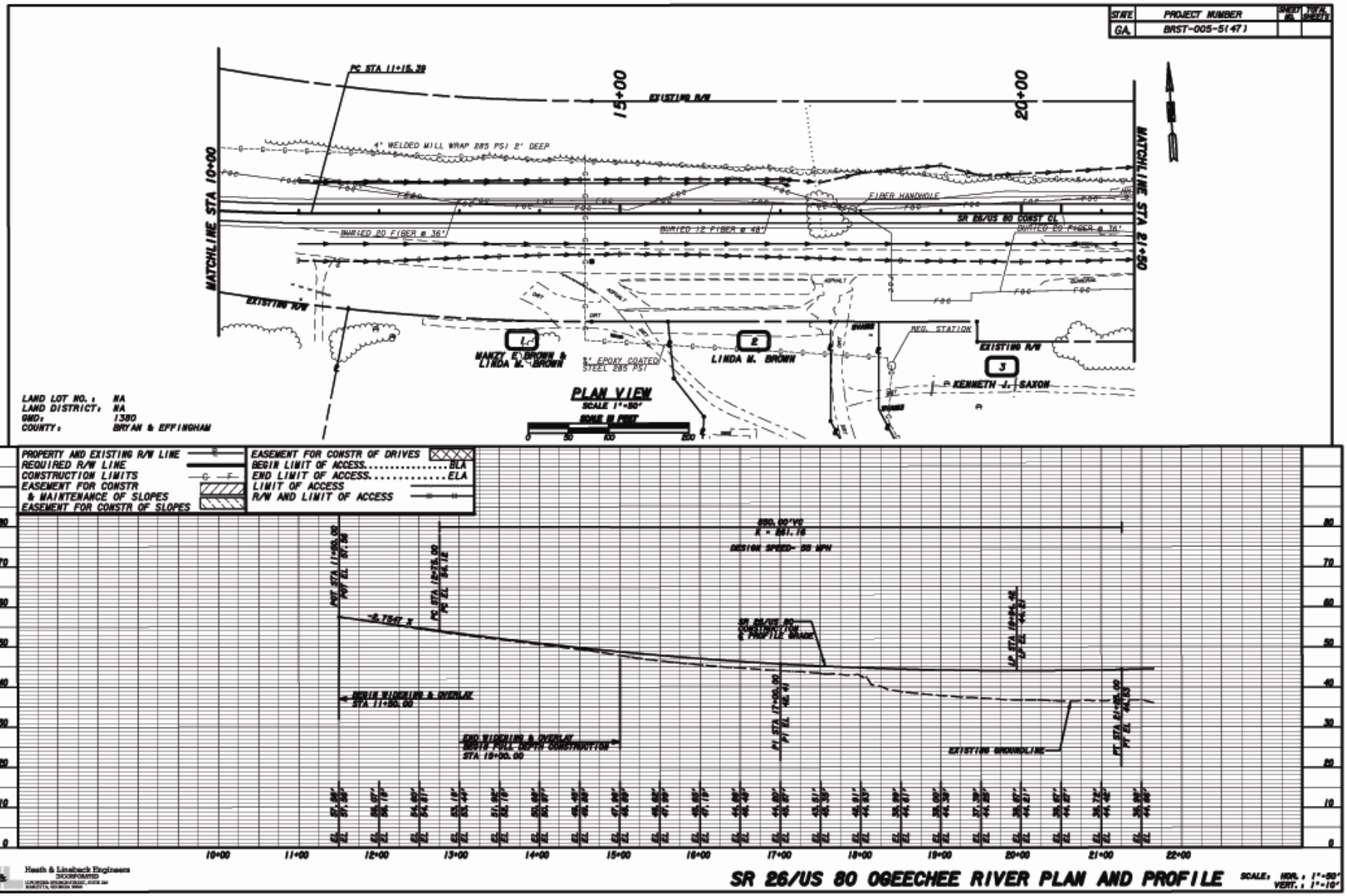
LAND LOT NO.: NA
LAND DISTRICT: NA
GMD: 1380
COUNTY: BRYAN & EFFINGHAM

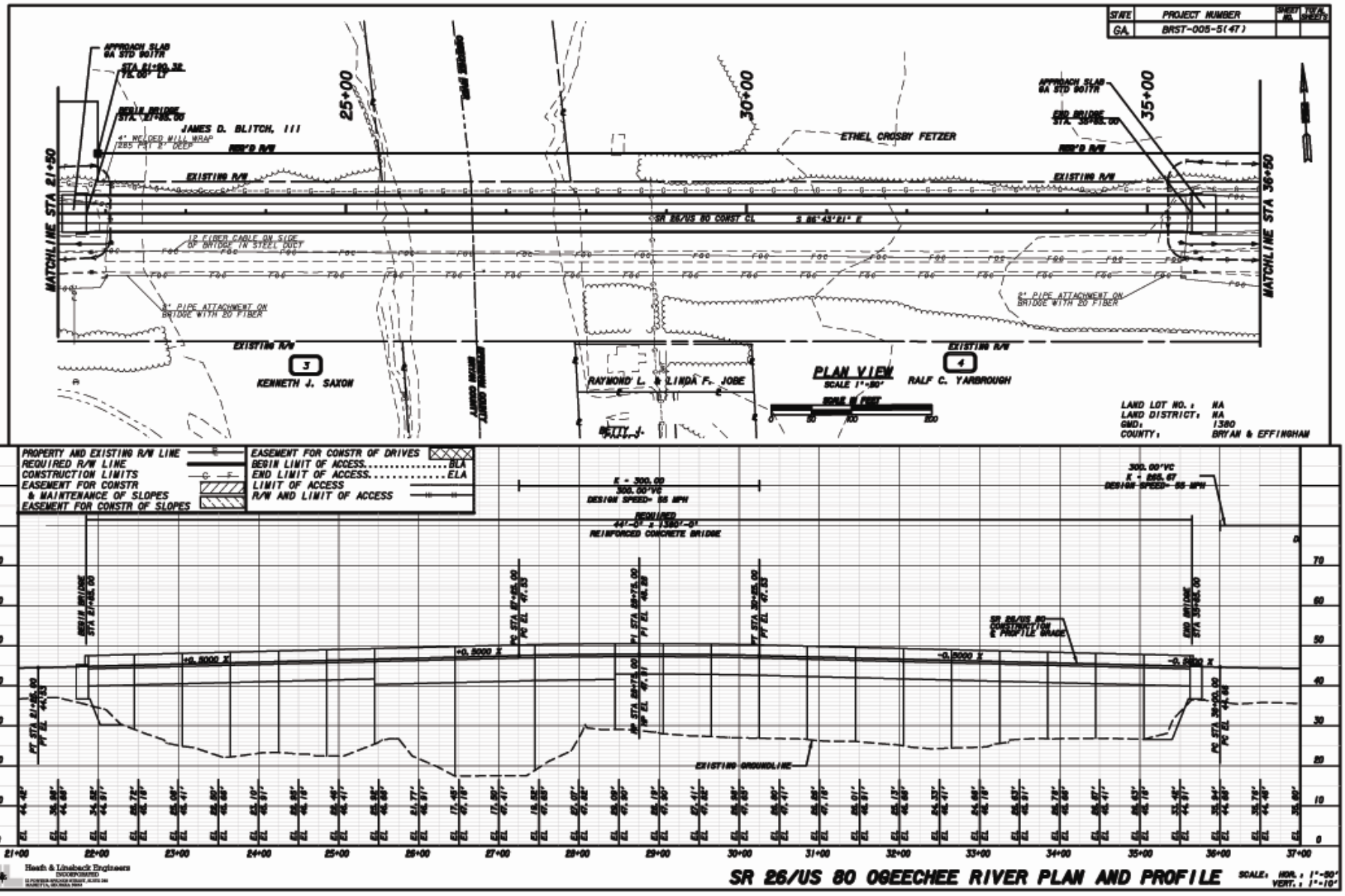
PROPERTY AND EXISTING R/W LINE	EASEMENT FOR CONSTR OF DRIVES
REQUIRED R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
CONSTRUCTION LIMITS	END LIMIT OF ACCESS.....ELA
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	R/W AND LIMIT OF ACCESS

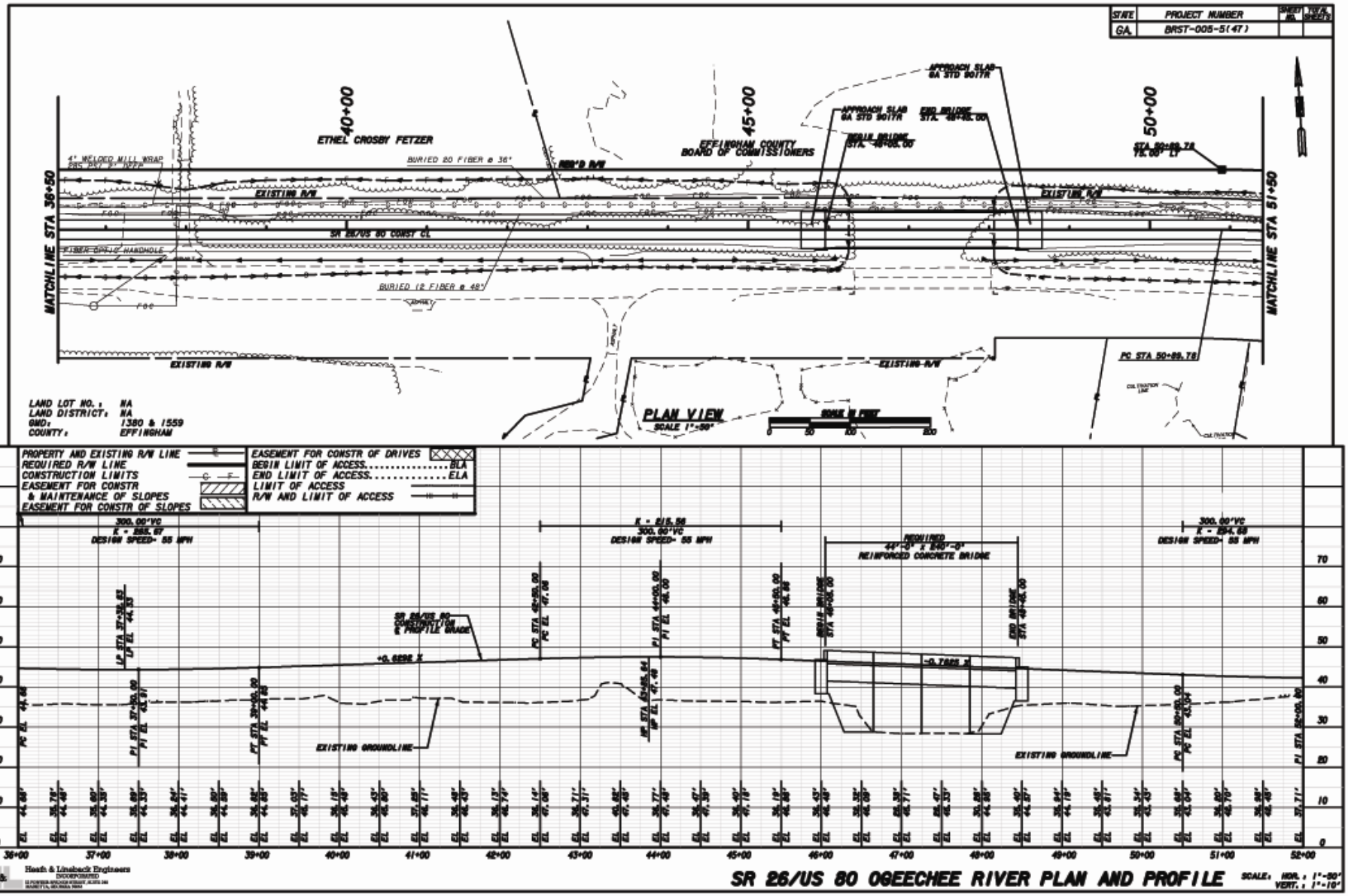
Heath & Lineback Engineers
(INCORPORATED)

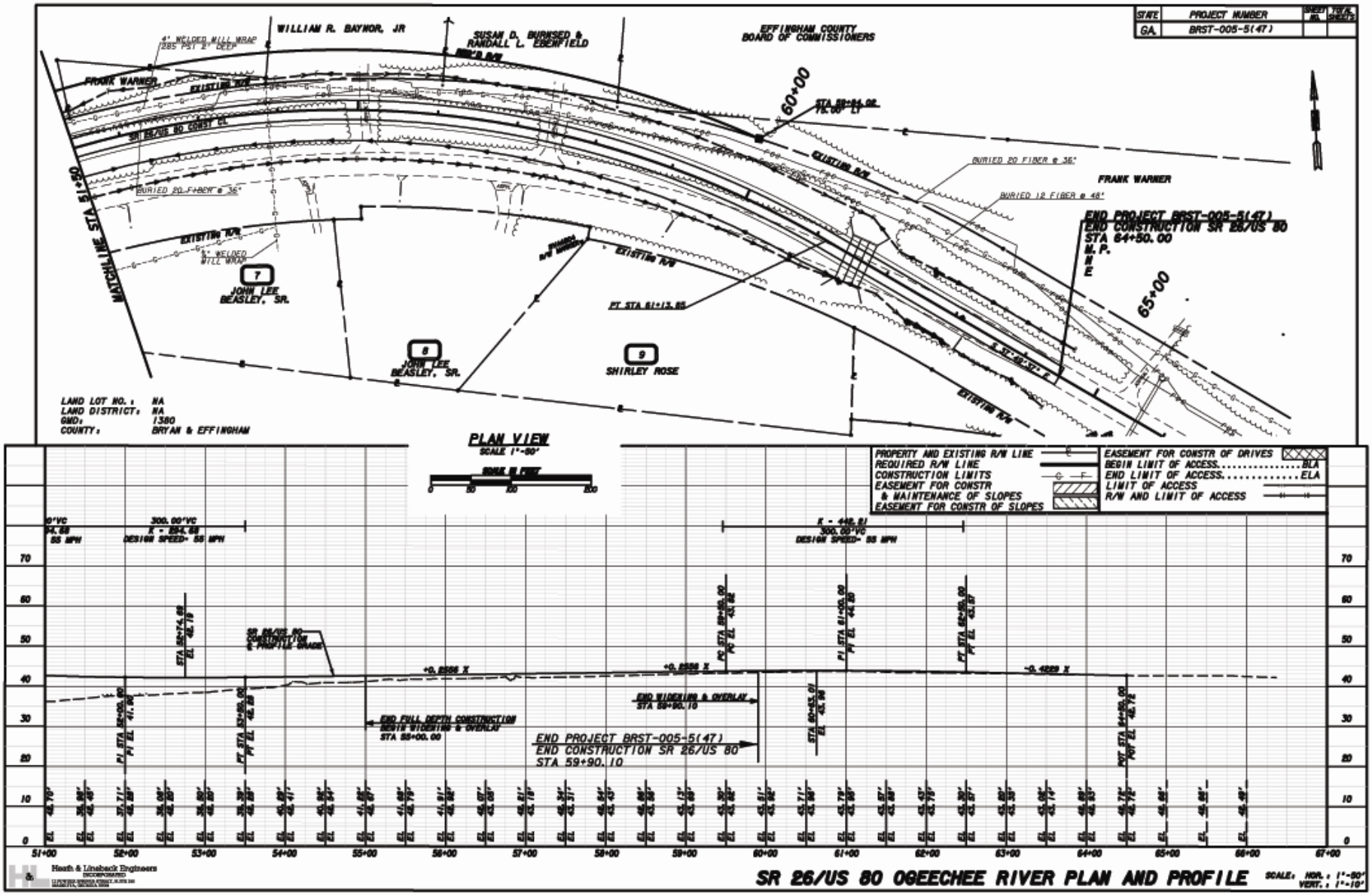
SR 26/US 80 OGEECHEE RIVER PLAN AND PROFILE

SCALE: HOR.: 1"=50'
VERT.: 1"=10'


STATE
GA.
PROJECT NUMBER
BRST-005-5(47)
PC STA 11+15.39
EXISTING R/W
15+00
20+00
MATCHLINE STA 10+00
MATCHLINE STA 21+50
4" WELDED MILL WRAP 285 PSI 2" DEEP
FIBER HANDHOLE
SR 26/US 80 CONST CL
BURIED 20 FIBER @ 36"
BURIED 12 FIBER @ 48"
BURIED 20 FIBER @ 36"
EXISTING R/W
REG. STATION
EXISTING R/W
1
MANZY E. BROWN &
LINDA M. BROWN
2
LINDA M. BROWN
3
KENNETH J. SAXON
8" EPOXY COATED
STEEL 285 PSI
PLAN VIEW
SCALE 1"=50'
SCALE IN FEET
0
50
100
200
LAND LOT NO.: NA
LAND DISTRICT: NA
GMD: 1380
COUNTY: BRYAN & EFFINGHAM
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
850.00'VC
K = 851.16
DESIGN SPEED= 55 MPH
-5.754% K
BEGIN WIDENING & OVERLAY
STA 11+90.00
END WIDENING & OVERLAY
WITH FULL DEPTH CONSTRUCTION
STA 19+90.00
SR 26/US 80
CONSTRUCTION
& PROFILE GRADE
EXISTING GROUNDLINE
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
19+00
20+00
21+00
22+00
Heath & Lineback Engineers
INCORPORATED
SR 26/US 80 OGEECHEE RIVER PLAN AND PROFILE
SCALE: HOR.: 1"=50'
VERT.: 1"=10'


STATE
GA.
PROJECT NUMBER
BRST-005-5(47)
SHEET NO.
TOTAL SHEETS
APPROACH SLAB
6A STD 9617R
STA 21+80.38
PL 08° LT
BEGIN BRIDGE
STA 21+85.00
JAMES D. BLITCH, III
4" WELDED WILL WRAP
285 FT± 8" DEEP
REB'D R/W
EXISTING R/W
25+00
30+00
35+00
APPROACH SLAB
6A STD 9617R
END BRIDGE
STA 35+65.00
ETHEL CROSBY FETZER
REB'D R/W
EXISTING R/W
MATCHLINE STA 21+50
MATCHLINE STA 36+50
SR 86/US 80 CONST CL
S 86°43'21" E
12 FIBER CABLE ON SIDE
OF BRIDGE IN STEEL DUCT
4" PIPE ATTACHMENT ON
BRIDGE WITH 20 FIBER
4" PIPE ATTACHMENT ON
BRIDGE WITH 20 FIBER
EXISTING R/W
EXISTING R/W
3
KENNETH J. SAXON
RAYMOND L. & LINDA F. JOBE
BETTY J.
4
RALF C. YARBROUGH
PLAN VIEW
SCALE 1"=80'
0
50
100
200
LAND LOT NO.: NA
LAND DISTRICT: NA
GMD: 1380
COUNTY: BRYAN & EFFINGHAM
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES
BEGIN LIMIT OF ACCESS..... BLA
END LIMIT OF ACCESS..... ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
K = 300.00
300.00'VC
DESIGN SPEED= 55 MPH
REQUIRED
441'-0" x 138'-0"
REINFORCED CONCRETE BRIDGE
300.00'VC
K = 285.47
DESIGN SPEED= 55 MPH
BEGIN BRIDGE
STA 21+85.00
PC STA 27+25.00
PC EL 47.53
PI STA 28+75.00
PI EL 46.28
PT STA 30+25.00
PT EL 47.53
SR 26/US 80
CONSTRUCTION
& PROFILE GRADE
END BRIDGE
STA 35+65.00
+0.5000 %
+0.5000 %
-0.5000 %
-0.5000 %
PT STA 21+25.00
PT EL 44.53
PC STA 29+20.00
PC EL 44.66
EXISTING GROUNDLINE
70
60
50
40
30
20
10
0
21+00
22+00
23+00
24+00
25+00
26+00
27+00
28+00
29+00
30+00
31+00
32+00
33+00
34+00
35+00
36+00
37+00
Heath & Lineback Engineers
INCORPORATED
SR 26/US 80 OGEECHEE RIVER PLAN AND PROFILE
SCALE: HOR.: 1"=50'
VERT.: 1"=10'


STATE
GA.
PROJECT NUMBER
BRST-005-5(47)
SHEET NO.
TOTAL SHEETS
40+00
45+00
50+00
ETHEL CROSBY FETZER
EFFINGHAM COUNTY
BOARD OF COMMISSIONERS
APPROACH SLAB
6A STD 9617R
END BRIDGE
STA. 48+05.00
BEGIN BRIDGE
STA. 48+05.00
STA 50+89.78
TIE 00° LT
4" WELDED MILL WRAP
DBL. DIP 9" DEEP
BURIED 20 FIBER @ 36"
R&R'D R/W
EXISTING R/W
SR 26/US 80 CONST CL
FIBER OPTIC HANDHOLE
BURIED (2 FIBER @ 48"
MATCHLINE STA 36+50
MATCHLINE STA 51+50
PC STA 50+89.78
LAND LOT NO.: NA
LAND DISTRICT: NA
GMD: 1380 & 1559
COUNTY: EFFINGHAM
PLAN VIEW
SCALE 1"=50'
SCALE IN FEET
0 50 100 200
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
300.00'VC
K = 555.67
DESIGN SPEED= 55 MPH
K = 515.56
300.00'VC
DESIGN SPEED= 55 MPH
300.00'VC
K = 554.69
DESIGN SPEED= 55 MPH
REQUIRED
44'-0" x 240'-0"
REINFORCED CONCRETE BRIDGE
BEGIN BRIDGE
STA 48+05.00
END BRIDGE
STA 48+45.00
SR 26/US 80
CONSTRUCTION
& PROFILE GRADE
+0.689% X
-0.700% X
EXISTING GROUNDLINE
EXISTING GROUNDLINE
70
60
50
40
30
20
10
0
36+00
37+00
38+00
39+00
40+00
41+00
42+00
43+00
44+00
45+00
46+00
47+00
48+00
49+00
50+00
51+00
52+00
Heath & Lineback Engineers
INCORPORATED
SR 26/US 80 OGEECHEE RIVER PLAN AND PROFILE
SCALE: HOR.: 1"=50'
VERT.: 1"=10'


STATE
GA.
PROJECT NUMBER
BRST-005-5(47)
WILLIAM R. BAYNOR, JR
SUSAN D. BURKSED & RANDALL L. EBERFIELD
EFFINGHAM COUNTY BOARD OF COMMISSIONERS
FRANK WARNER
4" WELDED WILL WRAP 285 PSI 2' DEEP
EXISTING R/W
SR 26/US 80 CONST CL
BURIED 20 FIBER @ 36"
BURIED 12 FIBER @ 48"
60+00
STA 59+84.02 75.00' LT
65+00
END PROJECT BRST-005-5(47)
END CONSTRUCTION SR 26/US 80
STA 64+50.00
M.P.
N
E
MARSHALL STA 5+50
JOHN LEE BEASLEY, SR.
SHIRLEY ROSE
PT STA 61+13.85
S 37°49'37" E
LAND LOT NO.: NA
LAND DISTRICT: NA
GMD: 1380
COUNTY: BRYAN & EFFINGHAM
PLAN VIEW
SCALE 1"=50'
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES
BEGIN LIMIT OF ACCESS BLA
END LIMIT OF ACCESS ELA
LIMIT OF ACCESS
R/W AND LIMIT OF ACCESS
300.00'VC
K = 284.68
DESIGN SPEED= 55 MPH
K = 446.81
300.00'VC
DESIGN SPEED= 55 MPH
PI STA 55+00.00
PVT EL 41.82
PT STA 57+00.00
PVT EL 46.88
PC STA 58+00.00
PVT EL 43.82
PI STA 61+00.00
PVT EL 44.80
PT STA 62+00.00
PVT EL 43.97
PVT STA 64+00.00
PVT EL 42.72
+0.8556 X
-0.4029 X
END FULL DEPTH CONSTRUCTION BEGIN WIDENING & OVERLAY STA 55+00.00
END WIDENING & OVERLAY STA 59+90.10
END PROJECT BRST-005-5(47)
END CONSTRUCTION SR 26/US 80
STA 59+90.10
51+00
52+00
53+00
54+00
55+00
56+00
57+00
58+00
59+00
60+00
61+00
62+00
63+00
64+00
65+00
66+00
67+00
Heath & Linebeck Engineers
INCORPORATED
SR 26/US 80 OGEECHEE RIVER PLAN AND PROFILE
SCALE: HOR.: 1"=50'
VERT.: 1"=10'

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. BRST-005-5(47)
P.I. No. 533145

Notice is hereby given in compliance with Georgia code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of the above project.

This project consists of improvements of S.R. 26/US 80 over Ogeechee River, located in Effingham & Bryan Counties, G.M.D. 1559 & 1380.

Date of Location Approval: _____

Drawings and/or maps, and/or plats of the proposed project as approved are on file and are available for inspection at the Georgia Department of Transportation.

Donnie Williams
District 5, Area 5 Engineer
Email: Donnie.Williams@dot.state.ga.us
630 West Boundary Street
Savannah,, Georgia 31402
912-651-2144

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

Yun Tang
Office of Consultant Design
Email: yun.tang@dot.state.ga.us
Georgia Department of Transportation
No. 2 Capitol Square
Atlanta, Georgia 30334
404-463-0290

Any written request or communication in reference to this project or notice SHOULD include the PROJECT and P.I. NUMBERS as noted at the top of this notice.