

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**OFFICE OF DESIGN POLICY & SUPPORT  
INTERDEPARTMENTAL CORRESPONDENCE**

**FILE** P.I. # 0010413

**OFFICE** Design Policy & Support

Lincoln County  
GDOT District 2 - Tennille  
SR 43 @ Soap Creek 4 Miles NE  
of Lincolnton

**DATE** November 2, 2012

**FROM** *for [Signature]* Brent Story, State Design Policy Engineer

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

**DISTRIBUTION:**

Bobby Hilliard, Program Control Administrator  
Genetha Rice-Singleton, State Program Delivery Engineer  
Glenn Bowman, State Environmental Administrator  
Cindy VanDyke, State Transportation Planning Administrator  
Ben Rabun, State Bridge Engineer  
Kathy Zahul, State Traffic Engineer  
Angela Robinson, Financial Management Administrator  
Lisa Myers, State Project Review Engineer  
Charles "Chuck" Hasty, State Materials Engineer  
Jeff Baker, State Utilities Engineer  
Ken Thompson, Statewide Location Bureau Chief  
Andy Casey, State Roadway Design Engineer  
Jimmy Smith, District Engineer  
Neal O'Brien, District Preconstruction Engineer  
Jamie Lindsey, District Design Engineer  
Chad White, Project Manager  
BOARD MEMBER - 10th Congressional District

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
PROJECT CONCEPT REPORT**

Project Type: Bridge Replacement  
 GDOT District: 2  
 Federal Route Number: 378

P.I. Number: 0010413  
 County: Lincoln  
 State Route Number: 43

This project consists of a bridge replacement on State Route 43 over Soap Creek 4 miles East of Lincolnton in Lincoln County.

**Submitted for approval:**

*[Signature]* TEW/UR D2  
 GDOT Concept/Design Phase Office Head & Office  
*[Signature]*  
 Office Head (GDOT Project Manager's Office)  
*[Signature]* SR.  
 GDOT Project Manager

Sept 7, 2012  
 DATE  
9/12/2012  
 DATE  
7 Sept 2012  
 DATE

**Recommendation for approval:**

\* *[Signature]* MMSA  
 Program Control Administrator  
 \* *[Signature]* MMSA  
 State Environmental Administrator (recommendation required)  
 \* *[Signature]* MMSA  
 Project Review Engineer  
 \* *[Signature]* MMSA  
 for State Utilities Engineer  
 \* *[Signature]* MMSA  
 State Bridge Design Engineer  
 \_\_\_\_\_  
 State Transportation Financial Management Administrator

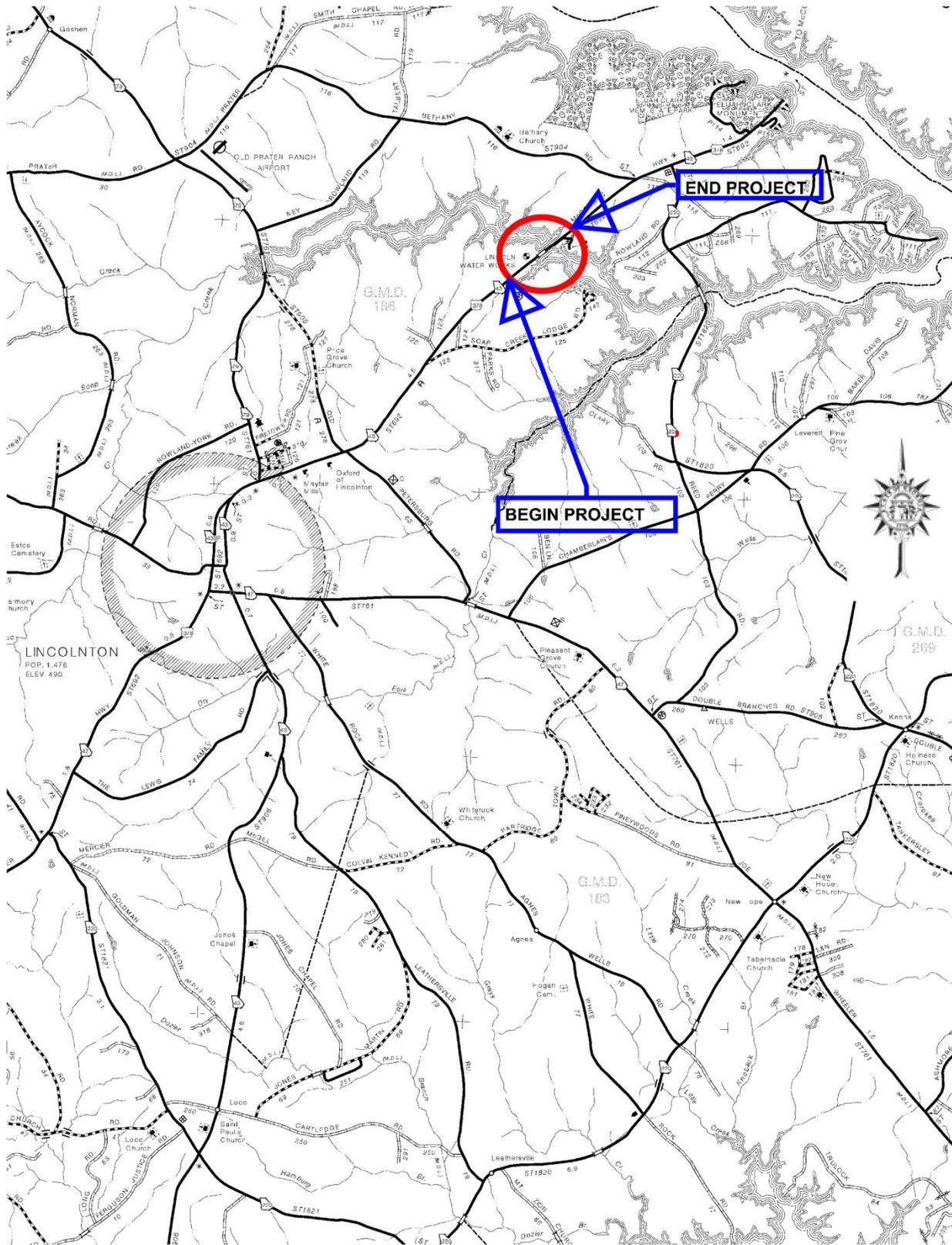
9/17/12  
 DATE  
9/23/12  
 DATE  
9/17/12  
 DATE  
9/17/12  
 DATE  
10/2/12  
 DATE  
 \_\_\_\_\_  
 DATE

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).

*[Signature]*  
 State Transportation Planning Administrator (recommendation required)

9-18-12  
 DATE

### PROJECT LOCATION



### PLANNING & BACKGROUND DATA

**Project Justification Statement:** This bridge (Structure ID 181-0002-0; SR 43 over Soap Creek) was built in 1951. The bridge consists of three spans of continuous steel girders on concrete caps and concrete columns. This bridge was designed using a truck configuration that weighs less than the current state legal truck weights. The overall condition of this bridge would be classified as poor to good. The deck is in poor condition due to advanced concrete cracking and spalling. The superstructure is in good condition with only minor problems. The substructure is in fair condition due to some minor concrete scaling and cracking. Due to the structural integrity, based on the design and the condition of the deck, replacement of this bridge is recommended.

**Description of the proposed project:** The proposed project is the replacement of the existing bridge located on SR 43 over Soap Creek at Lake Thurmond approximately 4 miles East of Lincoln, Georgia. The existing bridge needs replacement due to the previously listed structural issues. The U. S. Army Corp of Engineers has requested that the bridge be raised an additional 8 to 9 feet above the existing bridge in order to allow sufficient clearance for most pontoon boats to pass safely under the bridge when the lake is at full pool. The current bridge will be replaced with a 223 foot long by 40 foot wide bridge that follows the same alignment but with the profile being raised 8 feet above the existing bridge. The proposed approaches will consist of two-12 foot travel lanes and 8 foot rural shoulders with 2 foot paved. The proposed length of project is 0.56 miles. Traffic will be maintained by using an 8.3 mile off-site detour during construction.

**Federal Oversight:**  Full Oversight  Exempt  State Funded  Other

**MPO:**  N/A  MPO - Choose  
MPO Project TIP #

**Regional Commission:**  N/A  RC – Central Savannah River RC  
RC Project ID # N/A

**Congressional District(s):** 10

**Projected Traffic:** Choose  
Current Year (2010): 2250      Open Year (2018): 2600      Design Year (2038): 3500

**Functional Classification (Mainline):** Rural Minor Arterial

Is this project on a designated bike route?  No  YES

Is this project located on a pedestrian plan?  No  YES

Is this project located on or part of a transit network?  No  YES

### CONTEXT SENSITIVE SOLUTIONS

**Issues of Concern:** N/A

**Context Sensitive Solutions:** N/A

## DESIGN AND STRUCTURAL DATA

### Mainline Design Features:

Roadway Name/Identification: State Route 43

Feature	Existing	Standard*	Proposed
<b>Typical Section</b>			
- Number of Lanes	2	2	2
- Lane Width(s)	12	12	12
- Median Width & Type	N/A	N/A	N/A
- Outside Shoulder Width & Type	6-ft. (2 ft. paved & 4 ft. grassed)	8-ft. (2 ft. paved & 6 ft. grassed)	8-ft. (2 ft. paved & 6 ft. grassed)
- Outside Shoulder Slope	6%	6%	6%
- Inside Shoulder Width & Type	N/A	N/A	N/A
- Sidewalks	N/A	N/A	N/A
- Auxiliary Lanes	N/A	N/A	N/A
- Bike Lanes	N/A	N/A	N/A
Posted Speed	55 MPH	55 MPH	55 MPH
Design Speed	55 MPH	55 MPH	55 MPH
Min Horizontal Curve Radius	960-ft.	1060-ft.	1060-ft.
Superelevation Rate	8%	6%	6%
Grade	4%	4%	4%
Access Control	Permit	Permit	Permit
Right-of-Way Width	80-ft. to 150-ft.	100-ft. to 150-ft.	100-ft. to 150-ft.
Maximum Grade – Crossroad	7%	7%	7%
Design Vehicle	WB-67	WB-67	WB-67

\*According to current GDOT design policy if applicable

### Major Structures:

Structure	Existing	Proposed
ID #181-0002-0 Bridge on SR 43 over Soap Creek.	This bridge was built in 1951 and consist of 3 spans of continuous steel girders on concrete caps and concrete columns with a total length of 223-ft. The width is 26-ft. consisting of one 12-ft lane in each direction. The current sufficiency rating of this bridge is 53.18.	The proposed bridge is estimated to be 223-ft. long x 40-ft wide and the proposed bridge profile to be raised 8 feet above the existing bridge . The proposed bridge will have one 12-ft lane in each direction with 8-ft shoulders.

Major Interchanges/Intersections: N/A

### Utility Involvements:

- Telephone: Wilkes Telephone & Electric Company
- Power: Washington EMC

**Public Interest Determination Policy and Procedure recommended (Utilities)?**  YES  NO

**SUE Required:**  Yes  No

**Railroad Involvement:** N/A

**Right-of-Way:**

Required Right-of-Way anticipated:  YES  NO  Undetermined  
 Easements anticipated:  Temporary  Permanent  Utility  Other

Anticipated number of impacted parcels:	2
Anticipated number of displacements (Total):	0
Businesses:	0
Residences:	0
Other:	0

**Location and Design approval:**  Not Required  Required

**Off-site Detours Anticipated:**  No  Yes  Undetermined

An off-site detour would keep the project at low cost to construct. Traffic will be shifted to the detour starting on State Route 220 approximately 1.4 miles North East of the project. Continuing South on State Route 220 about 3.6 miles and turn right on Chamberlain S Ferry Road. Continue West on Chamberlain S. Ferry Road to about 2.6 miles making a right onto State Route 47 continuing 0.2 miles West. Make another right onto State Route 43 Connector heading north. Continue for about 1.9 miles where the detour ends back on State Route 43. The total length of the detour would be approximately 8.3 miles.

**Transportation Management Plan Anticipated:**  YES  NO

**Design Exceptions to FHWA/AASHTO controlling criteria anticipated:**

FHWA/AASHTO Controlling Criteria	YES	Appvl Date (if applicable)	NO	Undetermined
1. Design Speed	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Lane Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Shoulder Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Bridge Width	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Horizontal Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Superelevation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Vertical Alignment	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Grade	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. Stopping Sight Distance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Cross Slope	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Vertical Clearance	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Lateral Offset to Obstruction	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Bridge Structural Capacity	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Design Variances to GDOT standard criteria anticipated:**

GDOT Standard Criteria	Reviewing	Appvl Date			
	Office	YES	(if applicable)	NO	Undetermined
1. Access Control - Median Opening Spacing	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Median Usage & Width	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Intersection Skew Angle	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Lateral Offset to Obstruction	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Intersection Sight Distance	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Bike & Pedestrian Accommodations	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. GDOT Drainage Manual	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Georgia Standard Drawings	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. GDOT Bridge & Structural Manual	Bridge Design	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Roundabout Illumination	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Rumble Strips	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. Safety Edge	DP&S	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

VE Study anticipated:  No       Yes       Completed – Date:

**ENVIRONMENTAL DATA**

**Anticipated Environmental Document:**

GEPA:       NEPA:  Categorical Exclusion       EA/FONSI       EIS

**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

**Environmental Permits/Variations/Commitments/Coordination anticipated:**

Permit/ Variance/ Commitment/ Coordination Anticipated	YES	NO	Remarks
1. U.S. Coast Guard Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Forest Service/Corps Land	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. CWA Section 404 Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Tennessee Valley Authority Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Buffer Variance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Coastal Zone Management Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. NPDES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. FEMA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Cemetery Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Other Permits	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Other Commitments	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. Other Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Is a PAR required?  No  Yes  Completed – Date:

**NEPA/GEPA:** This project will require an individual 404 Permit.

**Ecology:** A summary of the federal and state threatened and endangered species listed within a three mile radius of the project, their federal status, and suitable habitat requirements is included in the table below.

Scientific Name	Common Name	State Status	Federal Status	Type	Habitat Requirements
<i>Aimophila aestivalis</i>	Bachman's Sparrow	R	None	Bird	Mature open pinewoods, regenerating clear-cuts (both pine and hardwoods), utility rights-of-way, and old pastures with a dense ground cover of grasses (particularly wiregrass, bluestem, or broomsedge) and forbs, or palmetto scrub. This sparrow is often associated with open, mature pine forests where red-cockaded woodpeckers are found, since this habitat often provides the thick grassy ground cover this sparrow prefers. However, it will be lost from sites well before red-cockaded woodpeckers where burning is not frequent enough since it does not tolerate encroachment by hardwood trees and shrubs as readily as does the red-cockaded woodpecker.
<i>Distocambarus devexus</i>	Broad River Burrowing Crayfish	T	None	Crustacean	Simple and complex burrows adjacent to streams or in low areas where the water table is near the surface of the ground. A single specimen was collected from a burrow that did not penetrate the water table and was only damp in the bottom. This species, particularly juveniles, are frequently collected in temporary pools and ephemeral streams.

<p>Haliaeetus leucocephalus</p>	<p>Bald Eagle</p>	<p>T</p>	<p>None</p>	<p>Bird</p>	<p>Juvenile bald eagles and non-nesting adults can be seen throughout Georgia, but known nesting activity is concentrated mostly along the coast and near major rivers, wetlands, and reservoirs in the southern and central parts of the state. Like other members of the "fish eagle" group, bald eagles almost always nest near open water. The coastal area, including the barrier islands, marsh islands, and nearby mainland, has always provided good eagle nesting habitat historically and still supports the greatest population density. However, construction of reservoirs such as Seminole, Walter F. George, Oconee, Allatoona, Carters, Clarks Hill, Nottley and West Point, has increased suitable inland nesting habitat. Bald eagles prefer isolated sites for nesting but are adapting to the presence of human disturbance in some areas. The nest is usually in a large, open-topped pine near open water, often on high ground if available. Occasionally cypress trees are used.</p>
<p>Lampsilis cariosa</p>	<p>Yellow Lampmussel</p>			<p>mollusk</p>	<p>This is considered to be a species of larger streams and rivers, typically found in sand and gravel where good current exists (Johnson, 1970). It has also been reported (primarily historically) from ponds in northern portions of range, but generally prefers flowing water. Riddick (1973) reports this species from clay banks in Virginia. Generally, however, it is a species of medium to large rivers, preferring hard water, stable low gradient, lowland rivers and streams and that stream size probably most important factor</p>
<p>Notropis scepticus</p>	<p>Sandbar Shiner</p>	<p>R</p>	<p>None</p>	<p>Fish</p>	<p>The sandbar shiner is found over sandy bottoms in flowing pools near gravel rocky riffles in medium-sized streams. It usually avoids small headwater tributaries, large rivers and reservoirs.</p>

Amorpha schwerinii	Schwerin Indigo-bush	E	None	Plant	Forest and woodlands, primarily rather xeric and rocky, although not exclusively so. (Weakley In Progress); Rocky river bluffs and woods (Radford et al.1968). Amorpha schwerinii is often found in Piedmont Monadnock Forests (Schafale and Weakley 1990). These areas are generally rocky with well drained soils. The canopy is dominated by Quercus prinus, with Q. alba, Q. coccinea, Q. stellata, Q. marilandica, Q. falcata, Carya glabra, C. tomentosa, Pinus virginiana, and P. echinata. The understory includes Oxydendrum arboreum, Acer rubrum, and others. The shrub layer of this community is patchy and contains Vaccinium pallidum, V. staineum, Gaylussacia baccata, and Kalmia latifolia. The herb layer is generally sparse with Chimaphila maculta, Desmodium nudiflorum, Danthonia spicata, and others. (Schafale and Weakley 1990)
Cypripedium acaule	Pink Ladyslipper	U	None	Plant	Upland pine and mixed pine-hardwood forests with acidic soils; in the mountains, near edges of rhododendron thickets and mountain bogs.
Eurybia jonesiae	Piedmont Bigleaf Aster			Plant	Rich deciduous forests bordering rivers and streams; moist ravines.
Hymenocallis coronaria	Shoals Spiderlily	T	None	Plant	Rocky shoals of large streams and rivers in the lower Piedmont.
Lotus helleri	Carolina Trefoil	E	None	Plant	Openings in post oak and blackjack oak woodlands with clay soils, over bedrock high in iron and magnesium, such as ultramafic rock; clearings, roadsides, and rights-of-way through these habitats.
Quercus oglethorpensis	Oglethorpe Oak	T	None	Plant	Wet clay soils of Piedmont seepage swamps, stream terraces, and moist hardwood forests upslope from these habitats; roadsides and pasture edges near these habitats. Often with cherrybark oak or chalk maple.
Trepocarpus aethusae	Trepocarpus			Plant	

**History:** The Bridge is not historic.

**Archeology:** None

**Air & Noise:**

**Air:** This project will be evaluated for its consistency with state and federal air quality goals, including CO, Ozone, PM 2.5 and MSATS as part of the assessment.

**Noise:** This project will be evaluated for the type of Noise Study required. When evaluated, this project will be found to meet the criteria for a Type III project established in 23 CFR 722. Therefore, the project requires no analysis for highway traffic noise impacts.

**Public Involvement:**

- A PIOH detour meeting was held on August 30, 2012. A total of 18 people attended with 9 comments, (1 Opposed, 4 Support, 1 Uncommitted and 3 Conditional). The expressed concerns were about the increased truck traffic and possible wear and tear to Chamberlain Ferry Road as a result of its inclusion in the proposed detour route.

**Major stakeholders:** U.S. Army Corp. of Engineers

**CONSTRUCTION**

**Issues potentially affecting constructability/construction schedule:** N/A

**Early Completion Incentives recommended for consideration:**  No  Yes

**PROJECT RESPONSIBILITIES**

**Project Activities:**

Project Activity	Party Responsible for Performing Task(s)
Concept Development	GDOT – District 2
Design	GDOT – District 2
Right-of-Way Acquisition	GDOT – District 2
Utility Relocation	Utility Owners
Letting to Contract	GDOT – District 2
Construction Supervision	GDOT – District 2
Providing Material Pits	Contractor
Providing Detours	Contractor
Environmental Studies, Documents, & Permits	GDOT
Environmental Mitigation	GDOT
Construction Inspection & Materials Testing	GDOT

**Lighting required:**  No  Yes

**Initial Concept Meeting:** N/A

**Concept Meeting:** A Concept Team Meeting was held on 6-27-2012. The meeting minutes are attached.

**Other projects in the area:** BR000-0001-00(370) P.I. No. 0001370 consists of a Bridge Replacement on State Route 43 located at Savannah River 6.8 miles East of Lincolnton at South Carolina.

**Other coordination to date:** Coordinating with the US Army Corp. of Engineers on raising the grade of the bridge. A copy of the email dated 5/22/12 from Susan Boyd with USACE is attached.

**Project Cost Estimate and Funding Responsibilities:**

	<b>Breakdown of PE</b>	<b>ROW</b>	<b>Utility</b>	<b>CST*</b>	<b>Environmental Mitigation</b>	<b>Total Cost</b>
By Whom		GDOT	GDOT	GDOT	GDOT	
\$ Amount		\$287,000	\$0	\$4,177,858	\$160,000.00	\$4,624,858
Date of Estimate		9/6/2012	6/25/2012	9/5/2012	9/6/2012	

\*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

**ALTERNATIVES DISCUSSION**

**Alternative selection:**

**Preferred Alternative:** Off-Site Detour – This Alternative would construct the bridge on State Route 43 on its existing alignment, raising the existing profile grade of the bridge by 8 feet per request of USACE. Thru-traffic would be detoured along an 8.3 mile off-site detour during construction. (See Attached Detour Map) After the new bridge and approaches are complete traffic would be shifted from the off-site detour back to their original location. The length of the project would be 0.56 miles.

<b>Estimated Property Impacts:</b>	<b>2</b>	<b>Estimated Total Cost:</b>	<b>\$4,624,858</b>
<b>Estimated ROW Cost:</b>	<b>\$287,000</b>	<b>Estimated CST Time:</b>	<b>18 MONTHS</b>

**Rationale:** This Alternate was selected as the preferred alternate as it satisfies the need and purpose of this project while minimizing impacts to Soap Creek.

**No-Build Alternative:**

<b>Estimated Property Impacts:</b>	<b>N/A</b>	<b>Estimated Total Cost:</b>	<b>N/A</b>
<b>Estimated ROW Cost:</b>	<b>N/A</b>	<b>Estimated CST Time:</b>	<b>N/A</b>

**Rationale:** This alternate would not address the need and purpose of this project.


**Alternative 1: On-Site Detour** – This Alternative would construct the bridge on State Route 43 on its existing alignment, raising the existing profile grade of the bridge by 8 feet per request of USACE. Thru traffic would be detoured onto an on-site detour approximately 70-feet East of the existing roadway. Once the detour construction is complete traffic would be shifted to the detour while the existing bridge and approach slabs are replaced. After the new bridge and approaches are complete traffic would then be shifted back to their original location and the detour would be removed. The length of the project will be 0.56 miles.

<b>Estimated Property Impacts:</b>	<b>2</b>	<b>Estimated Total Cost:</b>	<b>\$5,056,545</b>
<b>Estimated ROW Cost:</b>	<b>\$357,000</b>	<b>Estimated CST Time:</b>	<b>24 MONTHS</b>

**Rationale:** This alternative would cost more to build since an on-site detour would have to be constructed including an additional bridge. The cost for a detour bridge would be more than normal due to the required rock embankment. Right of way cost would be increased to include Detour Easement. And the project would be extended an additional 6 months to build the detour, shift traffic, demolish and reconstruct the old bridge . This office feels that this would be an undue cost to the department financially and time wise.

**Comments:** This office recommends that the Preferred Alternate of this concept be approved for implementation.

**Attachments:**

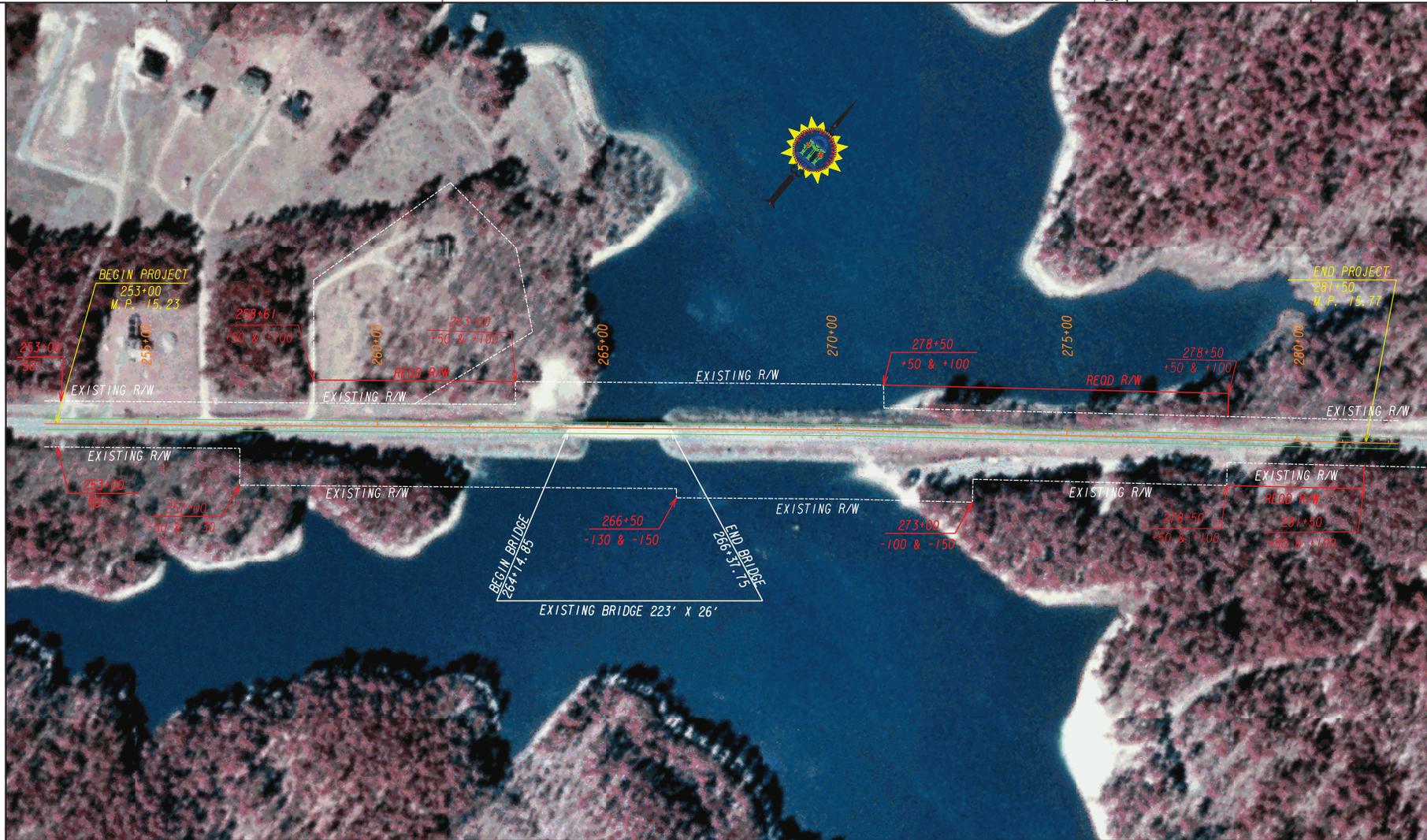
1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
  - a. Construction including Engineering and Inspection, Fuel & Asphalt Price Adjustment forms
  - b. Right-of-Way
  - c. Utilities
  - d. Environmental Mitigation (EPD, etc)
4. Crash summaries
5. Corridor Traffic Data
6. Bridge inventory
7. Historic Bridge Inventory Report
8. Justification Statement from Bridge Maintenance
9. Minutes of Concept meetings
10. Kickoff Team Meeting Minutes
11. USCE Early Coordination
12. Detour Map
13. PIOH Meeting Summary – September 19, 2012
14. Confirmation to Raise Bridge

**APPROVALS**

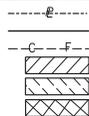
Concur:   
 Director of Engineering

Approve:   
 Chief Engineer

11-1-12  
 Date



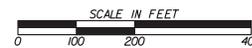
PROPERTY AND EXISTING R/W LINE  
 REQUIRED R/W LINE  
 CONSTRUCTION LIMITS  
 EASEMENT FOR CONSTR  
 & MAINTENANCE OF SLOPES  
 EASEMENT FOR CONSTR OF SLOPES  
 EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA  
 END LIMIT OF ACCESS.....ELA  
 LIMIT OF ACCESS  
 REQ'D R/W & LIMIT OF ACCESS



**GEORGIA**  
 DEPARTMENT  
 OF  
 TRANSPORTATION



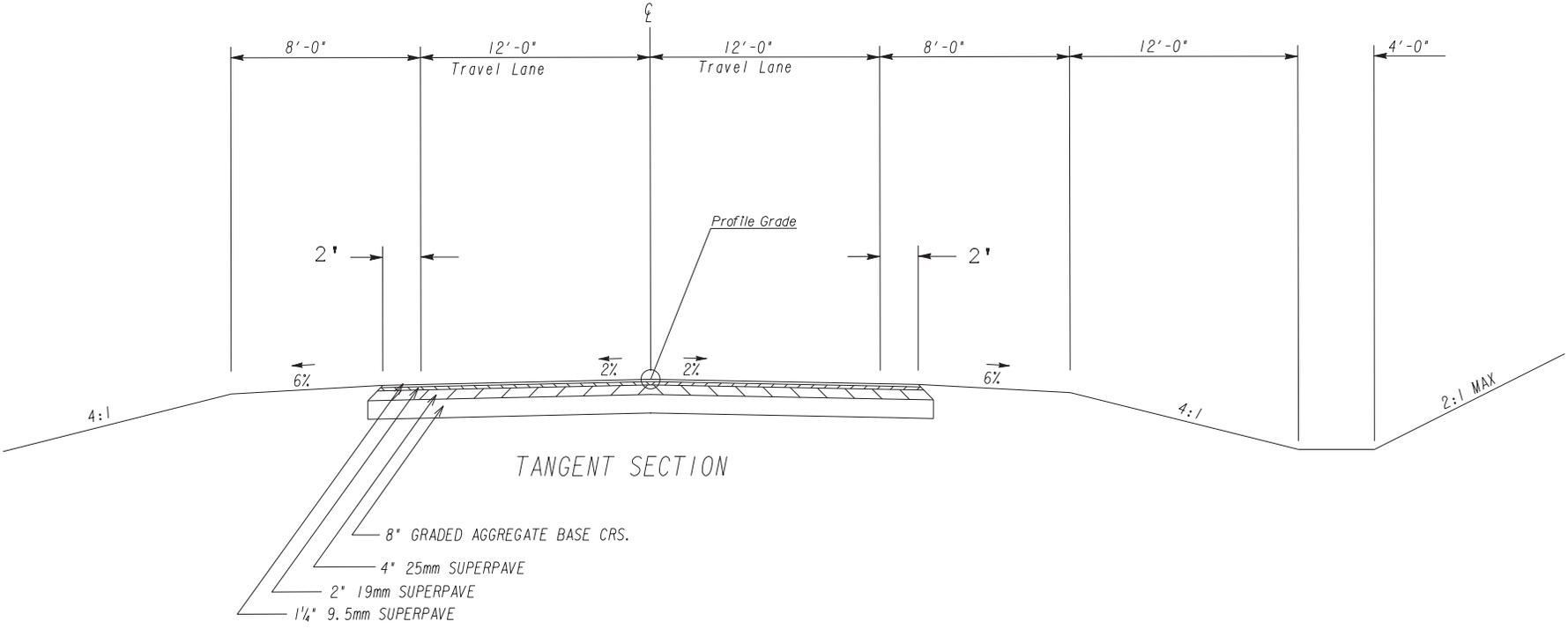
REVISION DATES


STATE OF GEORGIA  
 DEPARTMENT OF TRANSPORTATION

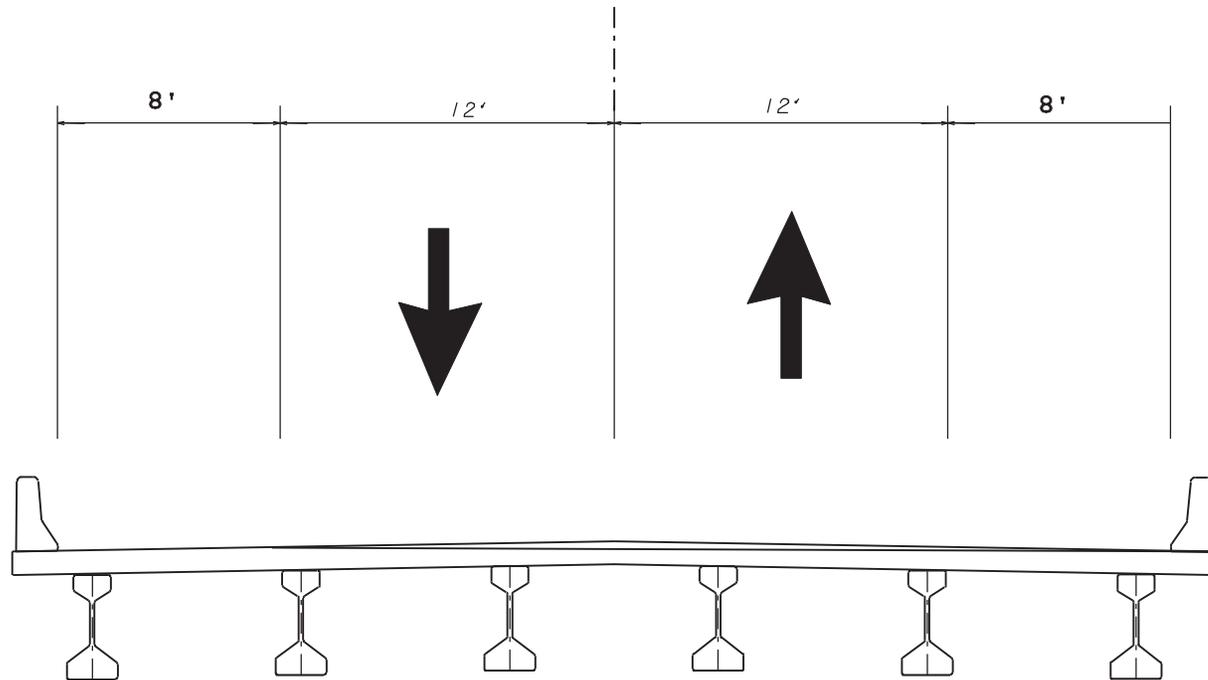
OFFICE:

MAINLINE PLAN

ROADWAY TYPICAL  
PI 0010413  
LINCOLN COUNTY



BRIDGE  
TYPICAL SECTION  
PI 0010413  
LINCOLN COUNTY



PROPOSED BRIDGE TYPICAL

**PROJ. NO.:** Lincoln County

**P.I. NO.** 0010413

**DATE:** 9/5/2012

<b>Base Construction Cost</b>		\$	3,841,237.15
E & I	5%	\$	192,061.86
Construction Contingency		\$	-
<b>Subtotal Construction Cost</b>		\$	4,033,299.01
Liquid AC Adjustment (50 % cap)		\$	144,558.65
<b>Total Construction Cost</b>		\$	4,177,857.66

PROJ. NO.

Lincoln County

CALL NO.

P.I. NO.

0010413

DATE

9/5/2012

INDEX (TYPE)

REG. UNLEADED

DATE

Aug-12

INDEX

\$ 3.431

DIESEL

\$ 3.786

LIQUID AC

\$ 594.00

Link to Fuel and AC Index:

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

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)

143272.8

\$

143,272.80

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 950.40

Monthly Asphalt Cement Price month project let (APL)

\$ 594.00

Total Monthly Tonnage of asphalt cement (TMT)

402

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	3710	5.0%	185.5
25 mm SP	2705	5.0%	135.25
19 mm SP	1625	5.0%	81.25
	<b>8040</b>		<b>402</b>

BITUMINOUS TACK COAT

Price Adjustment (PA)

\$ 1,285.85

\$

1,285.85

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 950.40

Monthly Asphalt Cement Price month project let (APL)

\$ 594.00

Total Monthly Tonnage of asphalt cement (TMT)

3.607884774

Bitum Tack

Gals	gals/ton	tons
840	232.8234	3.60788477

PROJ. NO.

Lincoln County

CALL NO.

P.I. NO.

0010413

DATE

9/5/2012

**BITUMINOUS TACK COAT (surface treatment)**

Price Adjustment (PA)						<b>0</b>	<b>\$</b>	<b>-</b>
Monthly Asphalt Cement Price month placed (APM)		Max. Cap	60%	\$		950.40		
Monthly Asphalt Cement Price month project let (APL)				\$		594.00		
Total Monthly Tonnage of asphalt cement (TMT)						0		

Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

<b>TOTAL LIQUID AC ADJUSTMENT</b>	<b>\$</b>	<b>144,558.65</b>
-----------------------------------	-----------	-------------------

# DETAILED COST ESTIMATE



**Job: 0010413\_MS**

JOB NUMBER 0010413\_MS

FED/STATE PROJECT NUMBER PI 0010413

SPEC YEAR: 01

DESCRIPTION: SR 43 BRIDGE REPLACEMENT OVER SOAP CREEK  
(PREFERRED ALTERNATE)

**ITEMS FOR JOB 0010413\_MS**

**10 - ROADWAY**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0005	150-1000	1.000	LS	\$40,000.00000	TRAFFIC CONTROL - PI 0010413	\$40,000.00
0010	153-1300	1.000	EA	\$75,676.23400	FIELD ENGINEERS OFFICE TP 3	\$75,676.23
0014	201-1500	1.000	LS	\$34,322.00000	CLEARING & GRUBBING - PI 0010413	\$34,322.00
0015	207-0203	454.000	CY	\$39.14923	FOUND BK FILL MATL, TP II	\$17,773.75
0023	208-0100	53000.000	CY	\$4.75821	IN PLACE EMBANKMENT	\$252,185.13
0024	208-0500	68000.000	TN	\$15.65000	ROCK EMBANKMENT	\$1,064,200.00
0025	310-1101	6860.000	TN	\$19.74621	GR AGGR BASE CRS, INCL MATL	\$135,459.00
0030	318-3000	175.000	TN	\$19.67210	AGGR SURF CRS	\$3,442.62
0035	402-1812	500.000	TN	\$73.07969	RECYL AC LEVELING, INC BM&HL	\$36,539.85
0040	402-3103	3710.000	TN	\$79.54519	REC AC 9.5 MM SP, TPII, GP2, INCL BM & H L	\$295,112.65
0045	402-3121	2705.000	TN	\$68.64167	RECYL AC 25MM SP, GP1/2, BM&HL	\$185,675.72
0050	402-3190	1625.000	TN	\$71.68723	RECYL AC 19 MM SP, GP 1 OR 2, INC BM&HL	\$116,491.75
0055	413-1000	840.000	GL	\$3.15558	BITUM TACK COAT	\$2,650.69
0060	433-1200	284.000	SY	\$157.32838	REF CONC APPR SL/I SLOPED EDGE	\$44,681.26
0065	436-1000	3230.000	LF	\$7.63708	ASPH CONC CURB - 6 IN	\$24,667.77
0074	441-0302	4.000	EA	\$1,961.66667	CONC SPILLWAY, TP 2	\$7,846.67
0075	446-1100	3070.000	LF	\$4.25154	PVMT REF FAB STRIPS, TP2, 18 INCH WIDTH	\$13,052.23
0080	456-2015	1.000	GLM	\$3,347.09684	INDENT. RUMB. STRIPS - GRND-IN-PL (SKIP)	\$3,347.10
0094	500-3200	75.000	CY	\$394.14286	CL B CONC	\$29,560.71
0095	511-1000	1150.000	LB	\$0.85968	BAR REINF STEEL	\$988.63
0100	550-1180	100.000	LF	\$32.63342	STM DR PIPE 18", H 1-10	\$3,263.34
0105	550-2180	200.000	LF	\$25.96124	SIDE DR PIPE 18", H 1-10	\$5,192.25
0110	550-3618	10.000	EA	\$578.28765	SAFETY END SECTION 18", SD, 6:1	\$5,782.88
0114	550-4218	2.000	EA	\$433.23512	FLARED END SECT 18 IN, ST DR	\$866.47
0115	603-2024	3740.000	SY	\$45.73958	STN DUMPED RIP RAP, TP 1, 24"	\$171,066.03
0120	603-6006	40.000	SY	\$132.01856	SAND-CEMENT BAG RIP RAP, 6 IN	\$5,280.74
0124	603-7000	3740.000	SY	\$3.81485	PLASTIC FILTER FABRIC	\$14,267.54
0125	634-1200	10.000	EA	\$101.93107	RIGHT OF WAY MARKERS	\$1,019.31
0130	641-1100	84.000	LF	\$58.94717	GUARDRAIL, TP T	\$4,951.56
0135	641-1200	3230.000	LF	\$15.75052	GUARDRAIL, TP W	\$50,874.18
0140	641-5001	2.000	EA	\$636.69213	GUARDRAIL ANCHORAGE, TP 1	\$1,273.38
0145	641-5012	2.000	EA	\$1,925.34426	GUARDRAIL ANCHORAGE, TP 12	\$3,850.69
0150	643-8200	1000.000	LF	\$1.69528	BARRIER FENCE (ORANGE), 4 FT	\$1,695.28
<b>SUBTOTAL FOR ROADWAY:</b>						<b>\$2,653,057.41</b>

**20 - PERMANENT EROSION CONTROL**

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0165	700-6910	11.900	AC	\$803.56752	PERMANENT GRASSING	\$9,562.45
0170	700-7000	54.000	TN	\$48.71806	AGRICULTURAL LIME	\$2,630.78
0175	700-8000	11.000	TN	\$507.41935	FERTILIZER MIXED GRADE	\$5,581.61
0180	700-8100	893.000	LB	\$2.66013	FERTILIZER NITROGEN CONTENT	\$2,375.50
0185	710-9000	1200.000	SY	\$3.91241	PERM SOIL REINFORCING MAT	\$4,694.89
0190	716-2000	9500.000	SY	\$1.10016	EROSION CONTROL MATS, SLOPES	\$10,451.52
<b>SUBTOTAL FOR PERMANENT EROSION CONTROL:</b>						<b>\$35,296.75</b>

# DETAILED COST ESTIMATE



**Job: 0010413\_MS**

## 30 - TEMPORARY EROSION CONTROL

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0195	163-0232	6.100	AC	\$225.77960	TEMPORARY GRASSING	\$1,377.26
0200	163-0240	186.000	TN	\$199.02175	MULCH	\$37,018.05
0205	163-0300	4.000	EA	\$1,158.88676	CONSTRUCTION EXIT	\$4,635.55
0210	163-0520	1000.000	LF	\$14.16917	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	\$14,169.17
0215	163-0528	1500.000	LF	\$3.24544	CONSTR AND REM FAB CK DAM -TP C SLT FN	\$4,868.16
0220	163-0529	500.000	LF	\$3.70610	CNST/REM TEMP SED BAR OR BLD STRW CK DM	\$1,853.05
0225	165-0030	2500.000	LF	\$0.75143	MAINT OF TEMP SILT FENCE, TP C	\$1,878.58
0230	165-0041	1500.000	LF	\$1.01414	MAINT OF CHECK DAMS - ALL TYPES	\$1,521.21
0235	165-0050	1200.000	LF	\$1.78714	MAINT OF SILT RETENTION BARRIER	\$2,144.57
0240	165-0071	250.000	LF	\$1.19727	MAINT OF SEDIMENT BARRIER - BALED STRAW	\$299.32
0245	165-0101	4.000	EA	\$544.67500	MAINT OF CONST EXIT	\$2,178.70
0250	167-1000	4.000	EA	\$545.41667	WATER QUALITY MONITORING AND SAMPLING	\$2,181.67
0255	167-1500	18.000	MO	\$428.95833	WATER QUALITY INSPECTIONS	\$7,721.25
0260	170-1000	2400.000	LF	\$12.44318	FLOAT SILT RETENTION BARRIER	\$29,863.63
0265	171-0030	5000.000	LF	\$2.81750	TEMPORARY SILT FENCE, TYPE C	\$14,087.50
<b>SUBTOTAL FOR TEMPORARY EROSION CONTROL:</b>						<b>\$125,797.67</b>

## 40 - SIGNING AND MARKING

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0270	636-1020	13.000	SF	\$16.91799	HWY SGN,TP1MAT,REFL SH TP3	\$219.93
0275	636-1033	29.000	SF	\$21.32947	HWY SIGNS, TP1MAT,REFL SH TP 9	\$618.55
0280	636-2070	96.000	LF	\$9.09781	GALV STEEL POSTS, TP 7	\$873.39
0284	652-5451	27456.000	LF	\$0.09963	SOLID TRAF STRIPE, 5 IN, WHITE	\$2,735.44
0285	652-5452	27456.000	LF	\$0.06977	SOLID TRAF STRIPE, 5 IN, YELLO	\$1,915.61
0290	653-0120	2.000	EA	\$71.16440	THERM PVMT MARK, ARROW, TP 2	\$142.33
0295	653-1501	4630.000	LF	\$0.41643	THERMO SOLID TRAF ST 5 IN, WHI	\$1,928.07
0300	653-1502	4400.000	LF	\$0.38041	THERMO SOLID TRAF ST, 5 IN YEL	\$1,673.80
0305	653-1704	48.000	LF	\$4.09751	THERM SOLID TRAF STRIPE,24",WH	\$196.68
0310	654-1001	406.000	EA	\$3.68184	RAISED PVMT MARKERS TP 1	\$1,494.83
0315	654-1003	11.000	EA	\$4.49961	RAISED PVMT MARKERS TP 3	\$49.50
0325	657-1085	450.000	LF	\$6.05794	PRF PL SD PVT MKG,8",B/W,TP PB	\$2,726.07
0320	657-6085	450.000	LF	\$6.14916	PRF PL SD PVMT MKG,8",B/Y,TPPB	\$2,767.12
<b>SUBTOTAL FOR SIGNING AND MARKING:</b>						<b>\$17,341.32</b>

## 50 - BRIDGE

Line Number	ITEM	QUANTITY	UNITS	PRICE	DESCRIPTION	AMOUNT
0330	540-1102	1.000	LS	\$162,344.00000	REM OF EX BR, BR NO - 1 (223-FT X 26-FT X \$28)	\$162,344.00
0335	543-9000	1.000	LS	\$847,400.00000	CONSTR OF BRIDGE COMPLETE - 1 (223-FT X 40-FT X \$95)	\$847,400.00
<b>SUBTOTAL FOR BRIDGE:</b>						<b>\$1,009,744.00</b>

### TOTALS FOR JOB 0010413\_MS

<b>ITEMS COST:</b>	<b>\$3,841,237.15</b>
<b>COST GROUP COST:</b>	<b>\$0.00</b>
<b>ESTIMATED COST:</b>	<b>\$3,841,237.15</b>
<b>CONTINGENCY PERCENT:</b>	<b>0.00</b>
<b>ENGINEERING AND INSPECTION:</b>	<b>0.00</b>
<b>ESTIMATED COST WITH CONTINGENCY AND E&amp;I:</b>	<b>\$3,841,237.15</b>



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** Lincoln County P.I. No. 0010413 **OFFICE** Tennille  
**FROM** Lynn Bean District Utilities Engineer **DATE** June 25, 2012  
**TO** Neal O'Brien, District Preconstruction Engineer  
**ATTN** Chad White, Project Manager  
**SUBJECT** CONCEPT UTILITY COST (ESTIMATE)

As requested by your office, we are furnishing you with a Concept Utility Cost estimates for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
Georgia Power Co. (D)	\$ 50,000.00	
Wilkes Telephone Co.	\$ 18,000.00	
City of Lincolnton	\$ 37,000.00	
Lincoln County	\$400,000.00	
<b>Total</b>	<b>\$505,000.00</b>	

Total non-reimbursable cost for the above project is \$505,000.00.

If you have any questions, please contact Jeanie Wheeler at 478-552-4638.

**LB/JEW**

**C: Jeff Baker, P.E., State Utilities Engineer  
Rodney Way, Area Engineer**

DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

---

INTERDEPARTMENT CORRESPONDENCE

**FILE** P.I. No. 0010413

**OFFICE** Environmental Services

**DATE** September 6, 2012

**FROM**  Glenn Bowman, P.E., State Environmental Administrator

**TO** Renee Decker, Design Engineer III

**SUBJECT** Preliminary Mitigation Cost Estimate

As requested by your office, we are furnishing you with a preliminary cost estimate for the subject project. The project is located on SR 43 approximately 4.0 miles east of Lincolnton, Georgia. The project will replace the existing bridge over Soap Creek and raised per the request of the Army Corps of Engineers. During construction, an offsite detour will be used. After reviewing the NWI mapping and based on the information provided, jurisdictional open waters will be impacted and mitigation will be required. The estimated cost for mitigation is \$160,000.

**DISCLAIMER:** This information is based solely on a desktop review of the information available. Only after a field reconnaissance, can a more detailed and accurate cost be estimated.

Thank you for your cooperation and expeditious handling of this matter. If you have any questions or need additional information, please contact Lisa Westberry (404) 631-1772 of our office.

GB/HDC/lmw

cc: Chad White, Project Manager  
General File

ACCIDENT RATE CALCULATION for year(s) 2004,2005,2006,2007,2008

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2004	Lincoln	1	004300	15.00	16.00	2,040	1.00	2,040

Total Vehicle Miles: 2,040	Total Accidents: 1	Accident Rate: 134
Average ADT: 2,040	Total Injuries: 3	Injury Rate: 403
Length in Miles: 1.00	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2005	Lincoln	1	004300	15.00	16.00	2,140	1.00	2,140

Total Vehicle Miles: 2,140	Total Accidents: 2	Accident Rate: 256
Average ADT: 2,140	Total Injuries: 1	Injury Rate: 128
Length in Miles: 1.00	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2006	Lincoln	1	004300	15.00	16.00	2,410	1.00	2,410

Total Vehicle Miles: 2,410	Total Accidents: 4	Accident Rate: 455
Average ADT: 2,410	Total Injuries: 3	Injury Rate: 341
Length in Miles: 1.00	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2007	Lincoln	1	004300	15.00	16.00	2,210	1.00	2,210

Total Vehicle Miles: 2,210	Total Accidents: 0	Accident Rate: 0
Average ADT: 2,210	Total Injuries: 0	Injury Rate: 0

Length in Miles: 1.00	Total Fatalities: 0	Fatality Rate: 0.00
-----------------------	---------------------	---------------------

NOTE: Rates are per 100 Million Vehicle Miles

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2008	Lincoln	1	004300	15.00	16.00	2,210	1.00	2,210

Total Vehicle Miles: 2,210	Total Accidents: 1	Accident Rate: 124
Average ADT: 2,210	Total Injuries: 0	Injury Rate: 0
Length in Miles: 1.00	Total Fatalities: 0	Fatality Rate: 0.00

NOTE: Rates are per 100 Million Vehicle Miles

# Department of Transportation State of Georgia

---

## INTERDEPARTMENT CORRESPONDENCE

**FILE** Lincoln County  
P.I. # 0010413

**OFFICE** Planning

**DATE** March 15, 2012

**FROM** Cynthia L. VanDyke, State Transportation Planning Administrator

**TO** Bobby Hilliard, P.E., State Program Delivery Engineer  
**Attention:** Chad White

**SUBJECT** Traffic Assignments for SR 43 @ SOAP CREEK 4 MI NE OF LINCOLNTON.

Traffic Assignments for the above project are attached below:

**TC # 0115**  
**BUILD = NO BUILD**

Existing 2010 ADT = 2250  
2018 ADT = 2600  
2038 ADT = 3500  
Existing 2010 DHV = 180  
2018 DHV = 210  
2038 DHV = 280  
D = 60%  
K = 8%  
T = 12%  
S.U. = 6.5%  
COMB. = 5.5%  
24 HR. T. = 18%  
S.U. = 9.5%  
COMB. = 8.5%

If you have any questions concerning this information please contact Rhonda Niles @ 404-631-1924.

CLV/RFN

# Bridge Inventory Data Listing



Parameters: Bridge Serial Num

Structure ID:181-0002-0

Lincoln

SUFF. RATING: 53.18

**Location & Geography**

**Structure ID:** 181-0002-0  
 200 Brgde Information: 06  
 \*6A Feature Int: SOAP CREEK  
 \*6B Critical Bridge: 0  
 \*7A Route No Carried: SR00043  
 \*7B Facility Carried: US 378/SR 43  
 9 Location: 4 MI E OF LINCOLNTON  
 2 Dot District: 2  
 207 Year Photo: 2011  
 \*91 Inspection Frequency: 24 Date: 09/06/2011  
 92A Fract Crit Insp Freq: 0 Date: 02/01/1901  
 92B Underwater Insp Freq: 1 Date: 10/20/2010  
 92C Other Spc. Insp Freq: 0 Date: 02/01/1901  
 \* 4 Place Code: 00000  
 \*5 Inventory Route(O/U): 1  
 Type: 2  
 Designation: 1  
 Number: 00378  
 Direction: 0  
 \*16 Latitude: 33 50.0162 HMMS Prefix:SR  
 \*17 Longitude: 82 -25.7578 HMMS Suffix:00 MP:15.51  
 98 Border Bridge: 000%Shared:00  
 99 ID Number: 0000000000000000  
 \*100 STRAHNET: 0  
 12 Base Highway Network: 1  
 13A LRS Inventory Route: 1811004300  
 13B Sub Inventory Route: 0  
 101 parallel Structure: N  
 \*102 Direction of Traffic: 2  
 \*264 Road Inventory Mile Post: 015.10  
 \*208 Inspection Area: 2 Initials: EFP  
 Engineer's Initials: sgm  
 \* Location ID No: 181-00043D-015.51N

\*104 Highway System: 0  
 \*26 Functional Classification: 06  
 \*204 Federal Route Type: F No: 00692  
 105 Federal Lands Highway: 0  
 \*110 Truck Route: 0  
 2006 School Bus Route: 1  
 217 Benchmark Elevation: 0000.00  
 218 Datum: 0  
 \*19 Bypass Length: 02  
 \*20 Toll: 3  
 \*21 Maintanance: 01  
 \*22 Owner: 01  
 \*31 Design Load: 2  
 37 Historical Significance: 5  
 205 Congressional District: 10  
 27 Year Constructed: 1951  
 106 Year Reconstructed: 0000  
 33 Bridge Medium: 0  
 34 Skew: 00  
 35 Structure Flared: 0  
 38 Navigation Control: 0  
 213 Special Steel Design: 0  
 267 Type of Paint: 5  
 \*42 Type of Service On: 1  
 Type of Service Under: 5  
 214 Movable Bridge: 0  
 203 Type Bridge: A  
 259 Pile Encasement 3  
 \*43 Structure Type Main: 4 02  
 45 No.Spans Main: 003  
 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 Structure Type: 1  
 Membrane Type: 8  
 Deck Protection: 8

**Signs & Attachments**

225 Expansion Joint Type: 02  
 242 Deck Drains: 1  
 243 Parapet Location: 0  
 Height: 0  
 Width: 0  
 238 Curb Height: 1  
 Curb Material: 1  
 239 Handrail 11  
 \*240 Medium Barrier Rail: 0  
 241 Bridge Median Height: 0  
 \* Bridge Median Width: 0  
 230 Guardrail Loc. Dir. Rear: 3  
 Fwr: 3  
 Oppo. Dir. Rear: 0  
 Oppo. Fwr: 0  
 244 Aproach Slab 3  
 224 Retaining Wall: 0  
 233Posted Speed Limit: 55  
 236 Warning Sign: 1.00  
 234 Delineator: 1.00  
 235 Hazzard Boards: 1  
 237 Utilities Gas: 00  
 Water: 00  
 Electric: 00  
 Telephone: 31  
 Sewer: 00  
 247 Lighting Street: 0  
 Navigation: 0  
 Aerial: 0  
 \*248 County Continuity No.: 00

# Bridge Inventory Data Listing



Parameters: Bridge Serial Num

**Structure ID:**181-0002-0

Programming Data		Measurements:				
201 Project No:	SP 1044 (3) CT.1	*29ADT	002260	Year:2010	65 Inventory Rating Method:	1
202 Plans Available:	4	109%Trucks:	18		63 Operating Rating Method:	1
249 Prop Proj No:	0010413	* 28 Lanes On:	02	Under:00	66 Inventory Type:	2 Rating: 25
250 Approval Status:	0000	210 No. Tracks On:	00	Under:00	64 Operating Type:	2 Rating: 25
251 PI Number:	0010413	* 48 Max. Span Length	0085		231 Calculated Loads:	
252 Contract Date:	02/01/1901	* 49 Structure Length:	223		H-Modified:	21 0
260 Seismic No:	00000	51 Br. Rwdy. Width	23.90		HS-Modified:	27 0
75 Type Work:	34 1	52 Deck Width:	29.60		Type 3:	24 0
94 Bridge Imp. Cost:	\$260	* 47 Tot. Horiz. Cl:	24		Type 3s2:	37 0
95 Roadway Imp. Cost:	53	50 Curb / Sidewalk Width	2.00 / 2.00		Timber:	30 0
96 Total Imp Cost:	418	32 Approach Rdwy. Width	028		Piggyback:	40 0
76 Imp Length:	000434	*229 Shoulder Width:			261 H Inventory Rating:	19
97 Imp Year:	1990	Rear Lt:	2.40	Type:2 Rt:2.30	262 H Operating Rating	32
114 Future ADT:	003390	Fwd. Lt:	2.40	Type:2 Rt:2.30	67 Structural Evaluation:	5
		Permanent Width:			58 Deck Condition:	4
		Rear:	23.30	Type:2	59 Superstructure Condition:	7
			23.30	Type:2	* 227 Collision Damage:	0
		Intersaction Rear:	0	Fwd: 0	60A Substructure Condition:	5
		36 Safety Features Br. Rail:	2		60B Scour Condition:	7
		Transition:	2		60C Underwater Condition	5
		App. G. Rail:	2		71 Waterway Adequacy:	8
		App. Rail End:	2		61 Channel Protection Cond.:	7
		53 Minimum Cl. Over:	99' 99 "		68 Deck Geometry:	2
		Under:			69 UnderClr. Horz/Vert:	N
		*228 Minimum Vertical Cl			72 Appr. Alignment:	8
		Act. Odm Dir.:	99' 99"		62 Culvert:	N
		Oppo. Dir:	99' 99"		<b>Posting Data</b>	
		Posted Odm. Dir:	00' 00"		70 Bridge Posting Required	5
		Oppo. Dir:	00' 00"		41 Struct Open, Posted, CL:	A
		55 Lateral Undercl. Rt:	N 0 0		* 103 Temporary Structure:	0
		56 Lateral Undercl. Lt:	0.00		232 Posted Loads	
		*10 Max Min Vert Cl:	99' 99" Dir:0		H-Modified:	00
		39 Nav Vert Cl:	000 Horiz:0000		HS-Modified:	00
		116 Nav Vert Cl Closed:	000		Type 3:	00
		245 Deck Thickness Main	7.00		Type 3s2:	00
		Deck Thick Approach:	0.00		Timber:	00
		246 Overlay Thickness:	0.00		Piggyback	00
		212 Year Last Painted:	Sup:1998Sub:0000		253 Notification Date:	02/01/1901
					258 Fed Notify Date:	2/1/1901 12:00:00AM

**GEORGIA DEPARTMENT OF TRANSPORTATION**

**HISTORIC BRIDGE INVENTORY REPORT**

**Serial #:** 181-0002-0 **NO ATTACHMENT** **NO ATTACHMENT**

---

**County:** LINCOLN **Municipality:** **GDOT District** 2 **Owner:** STATE

**Location:** 4 MI E OF LINCOLNTON

**Bridge Name:** **UTM:** 17 383511 3708154

**Facility Carried:** US 378

**Feature Intersected:** SOAP CREEK

**Type:** STRINGER **Design:** CONTINUOUS

**Material:** STEEL **# Spans:** 3 **Length:** 223 **Width:** 33.7 **# Lanes:** 2

**Railing Type:** CONCRETE RAILINGS

**Date of Construction:** 1951 **Alteration:** **Source:** SP 1044

**Designer/Builder:** PATCHEN & ZIMMERMAN

---

**Current National Register Status of Bridge:** Not Eligible

**Local, Determined Eligible, or NR Historic District/Status:**

**Inventory NR Recommendation:** Not Eligible

---

**Setting/Context:**

The bridge carries a 2-lane state highway over Soap Creek, a branch of J. Strom Thurmond Lake (formerly Clark Hill Lake), the 39-mile long reservoir created by the US Army Corps of Engineer's dam on the Savannah River. The dam was built from 1946 to 1954 as part of a multi-use hydroelectric and flood control project. The dam and 70,000 acre reservoir required the state highway department to raise or relocate at least 8 bridges. Because of the large scope of work, the highway department contracted with the Augusta civil engineering firm of Patchen & Zimmerman to design and supervise several of the bridges affected by the reservoir, including this one. The lake is bordered by recreational facilities including the Soap Creek County Park beach and campground to the east of the bridge. Northwest of the bridge is an intake for the Lincoln Co. water works.

**Physical Description:**

**Summary of Significance:**

The 3-span bridge is one continuous 69'-84'-69' steel stringer span with riveted splice plates and steel diaphragms. The bridge is supported on 2-column concrete bent piers and concrete pile end bents. It has plain concrete railings, safety walks, and concrete deck. In 1951 the bridge was constructed to replace a 10-span steel stringer bridge flooded by the reservoir. It is one of at least 15 identified bridges from 1940 to 1955 that were built as the result of various federal flood control and hydroelectric projects. The replacement or relocation of bridges was relatively routine and the bridge is not historically significant for its association with the J. Strom Thurmond Lake. The 1951 bridge is not a technologically significant example of a continuous steel stringer bridge. The technology was introduced in the

**GEORGIA DEPARTMENT OF TRANSPORTATION**

**HISTORIC BRIDGE INVENTORY REPORT**

---

**Serial #:** 181-0002-0      **County:** LINCOLN      **District** 2      **City:**

1930s. Earlier and longer span examples have been identified.

**Bibliography:**

GADOT. Bridge Inspection File & Plans.

---

**Reviewed By/ Date:** JPH

**Notes/Comments**

NO  
ATTACHMENT

**PI 0010413**

**Kevin Schwartz**

**December 14, 2011**

This bridge (Structure ID 181-0002-0; SR 43 over Soap Creek) was built in 1951. The bridge consists of three spans of continuous steel girders on concrete caps and concrete columns. This bridge was designed using a truck configuration that weighs less than the current state legal truck weights. The overall condition of this bridge would be classified as poor to good. The deck is in poor condition due to advanced concrete cracking and spalling. The superstructure is in good condition with only minor problems. The substructure is in fair condition due to some minor concrete scalling and cracking. Due to the structural integrity, based on the design and the condition of the deck, replacement of this bridge is recommended.

# Meeting Minutes

6-27-2012

0010413, Lincoln County

Concept Meeting

## Attendees

Chad E. White Sr.-Program Delivery (Project Manager)  
Jamie Lindsey- District 2 Roadway Design Group Leader  
Renee Decker- District 2 Roadway Design  
Neal O'Brien-District 2 Preconstruction  
Jimmy Hobby – District 2 GDOT Consultant  
Lynn Bean- District 2 GDOT  
Rodney Way- Area District 2 Engineer  
Corbett Reynolds- District 2 Construction  
Todd Price- District 2 Traffic Operations  
Vonda Everett- District 2 Planning & Environmental

\*Ben Rabun- Bridge Design- State Bridge Engineer  
*\*Attendance by conference call*

- The Project Manager (PM) Chad E. White introduced the Project P.I. 0010413 bridge replacement SR43 @ Soap Creek 4 Miles NE of Lincoln
- The PM indicated that the schedule is as follows.
  - Right of Way (R/W) Approval by 4/24/2014
  - Management LET date 07/15/2015
- Jamie Lindsey District 2 Roadway Design Group Leader gave an overview of the project, went through the concept report, and briefly explained the staging layout.
  - Alternatives were discussed and rationale for preferred alternative along with constraints was mentioned. The preferred alternative is to use an offsite detour during the construction period as a means to mitigate risk, reduce construction time and for major cost savings.
  - Jamie Lindsey stated that project site has a 404 permit area expected on this project. Mr. Lindsey advised that this project is not an Ozone non-attainment area and the possibility of the bridge being historic (built in

1951). No Environmental Justice issues are expected and UST should not be an issue either.

- Utility impacts were discussed with the Georgia Power stated that the power lines on the bridge will be removed off the well be before the start of the project construction phase.
  - No other impact with the project using an offsite detour
- Mr. Chad White closed the meeting.

Action Items:

- The Corps of Engineers desire the bridge to be raised 8ft above exiting conditions. (Needing results from the meeting between management and the Corps.)

Meeting Minutes  
05-09-2012  
0010413, Lincoln County  
Project Kickoff Meeting

Attendees

Cory Cliatt	Wilkes Telephone & Telegraph	706-678-9524
Renee' Decker	GDOT - Design	478-552-4659
Jill Davis	USACE	864-333-1100
Chris Spiller	USACE	864-333-1102
Susan Boyd	USACE	864-333-1140
Matthew Sammons	GDOT - Design	478-553-2275
Chad White	GDOT - OPD	404-867-2888
Jamie Lindsey	GDOT - Design	478-552-4642
Jeanie Wheeler	GDOT - Utilities	478-552-4638
Clinton B. Ford	GDOT - OPD	678-343-0929
Robert Seymour	Water Superintendent	

The scope of the meeting was to introduce the new bridge project PI#0010413 Bridge Replacement project in Lincoln County. The Project Manager (Chad White) opened the meeting giving the overall scope of the meeting.

The D2 Design Group Manager (Jamie Lindsey) review the concept package of in great detail, and opened the meeting the USACE (Chris Spiller) to the requirements for the project.

Chris Spiller, USACE, requested that we consider raising the bridge due to passage of boats under the bridge to give continuous access to the Lincolnton Marine. It would require the bridge to be raised.

Robert Seymour, Lincoln Co. Water Superintendent said that there is a water main on the same side of the bridge as the marine. It is not attached to the bridge.

Follow-Up Action:

1. Review the standards of rising up the bridge to meet the request of the USACE.
2. Review the Detail Environmental Considerations for the project.

## Grimes, Foster

---

**From:** Boyd, Susan R SAS [Susan.R.Boyd@usace.army.mil]  
**Sent:** Tuesday, May 22, 2012 3:18 PM  
**To:** Grimes, Foster  
**Cc:** Spiller, Christopher D SAS  
**Subject:** Hwy 378/SR 43 at Soap Creek, Lincoln County  
**Attachments:** 9LC939.pdf; Hwy378-SR43 bridge.jpg

Foster,

I talked with Chris and it looks like the bridge on Hwy 378/SR 43 over Soap Creek currently sits 11' above the lake at full pool elevation of 330' msl. If it could be raised an additional 8-9 feet, that would allow sufficient clearance for some of the pontoon boats to pass safely under the bridge when the lake is at full pool.

I checked our records and the closest known active eagle nest is located 5.5 miles northwest of the current bridge. There are three additional nest approx. 5.2 miles from the bridge. Two of those nests have blown down; the other is present but inactive. I've attached a GIS map showing the location of archaeological sites and eagle nests relative to the bridge.

A phase I cultural resources survey was conducted in 1999 and no sites were identified in the project area that are eligible or potentially eligible for listing on the National Register. Additionally, there were no cemeteries identified within the project area. The nearest cultural resource is located approx. 1,500 feet northwest of the bridge (a prehistoric campsite identified as potentially eligible - site 9LC939). The survey, conducted by Panamerican Consultants, is titled "Phase I Cultural Resource Survey of 8,450 Acres...Lincoln County, GA and McCormick County, SC". A copy of the pertinent page for site 9LC939 from the survey report is attached. The phase I survey, however, only included anything above the 330' full pool elevation. No property below the full pool lake elevation was surveyed.

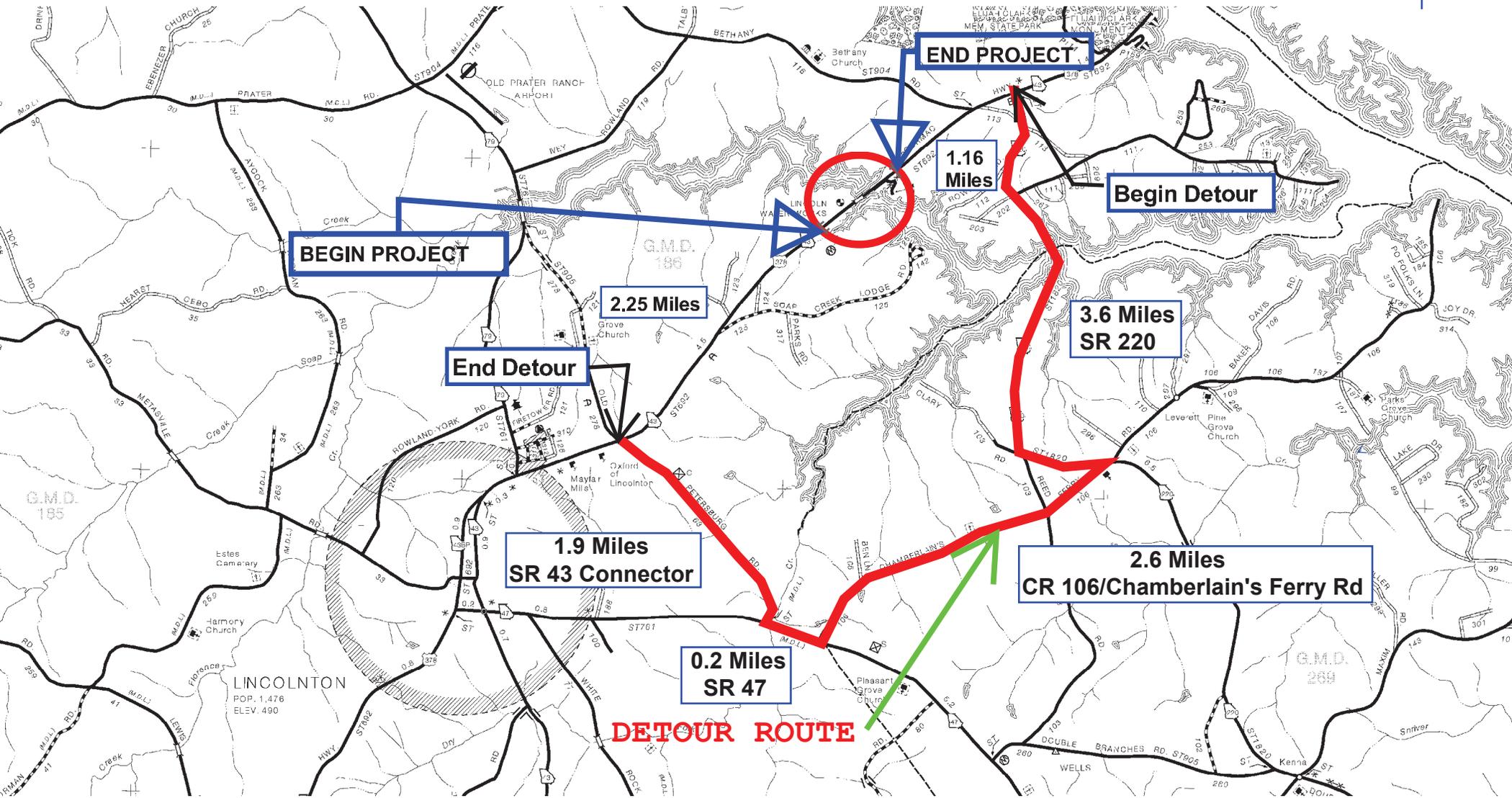
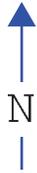
As soon as I can find anything on the exact location of the Lincoln County water intake, I will send it. If there is any additional information that you need, please don't hesitate to call me.

Susan

Susan Boyd  
Chief Ranger  
Shoreline Management  
J. Strom Thurmond Project  
510 Clarks Hill Highway  
Clarks Hill, SC 29821  
864-333-1140

# Detour Map

## P.I. No. 0010413 Lincoln County



**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

**INTERDEPARTMENT CORRESPONDENCE**

**FILE:** P. I. No. 0010413

**OFFICE:**Environmental Services

**DATE:** September 19, 2012

**FROM:**

*PB/mw*  
Glenn Bowman, P.E., State Environmental Administrator

**TO:**

Distribution Below

**SUBJECT:**

Project 0010413, Lincoln County, Bridge replacement over Soap Creek on State Route 43 - Summary of Comments Received during the Public Comment Period

**COMMENT TOTALS:**

A total of 18 people attended the Public Detour Meeting held for the subject project on August 30, 2012.

From those attending, 9 comment forms, 0 letters and 1 verbal statement were received. An additional 1 comment was received during the ten-day comment period following the public detour meeting for a total of 9\* comments. They are summarized as follows:

\*11 comments were received, but two attendees commented twice.

No. Opposed  
1

No. In Support  
4

Uncommitted  
1

Conditional  
3

**MAJOR CONCERNS:**

The increased truck traffic and possible wear and tear to Chamberlain Ferry Road as a result of its inclusion in the proposed detour route.

**OFFICIALS:**

Officials attending included the following:

Casey Broom, Lincoln County Director of Emergency Services

Paul C. Reviere, Lincoln County Coroner

Gerald Lawson, Lincoln County Sheriff

H.Wade Johnson, Chairman, Lincoln County Board of Commissioners

Roby Seymour, Lincoln County

MEDIA:

Jacquelyn Johnson, Lincoln Journal

DISPOSITION OF COMMENTS:

The following represents a breakdown of a review of comments by the offices to which they pertain. The project manager will review all responses.

RESPONSIBLE OFFICE	COMMENT #	NATURE OF COMMENT
Program Delivery	2,4,7	Conditional, concerned about the increased truck traffic and possible wear and tear to Chamberlain Ferry Road as a result of the proposed detour route.
	8	Against, concerned about the affect of the bridge closure on their business.

RESPONSIBLE OFFICE	COMMENT #	NATURE OF COMMENT
Right-of-Way	None	

RESPONSIBLE OFFICE	COMMENT #	NATURE OF COMMENT
Traffic Operations	None	

RESPONSIBLE OFFICE	COMMENT #	NATURE OF COMMENT
Planning	6	Uncommitted, concerned about the basis for the project.

RESPONSIBLE OFFICE	COMMENT #	NATURE OF COMMENT
Environmental Services	None	

RESPONSIBLE OFFICE	COMMENT #	NATURE OF COMMENT
Environmental Services	All Letters	<p>Thank you for your comments concerning the proposed project referenced above. We appreciate your attendance and all of the input that was received as a result of the August 30, 2012 Public Detour Meeting. Every comment will be made part of the official record of the project.</p> <p>The attendees of the detour meeting and those persons sending in comments afterwards raised the following questions and concerns. The Georgia Department of Transportation (GDOT) has prepared this one response letter that addresses all comments received so that everyone can be aware of the concerns raised and the responses given. Please find the comments summarized below (<i>in italics</i>) followed by our response.</p>

Please review the comments and email responses to Carla Benton-Hooks (cbenton-hooks@dot.ga.gov) by October 3, 2012.

Attached is a complete transcript of the comments received during the comment period and a copy of the public detour meeting handout.

If you have any questions about the comments, please either email or call Carla Benton-Hooks at (404) 631-1415.

GB/cbh

Attachments

**DISTRIBUTION:**

- Russell R. McMurry, P.E., w/attachments
- Bobby Hilliard, P.E., w/attachments
- Cynthia Van Dyke, w/attachments
- Howard (Phil) Copeland (Attn: Troy Byers), w/attachments
- Kathy Zahul P.E., w/attachments
- District 4 Attn: James Smith, P.E., w/attachments
- Chad White, w/attachments

## Decker, Renee

---

**From:** White, Chad  
**Sent:** Friday, August 17, 2012 9:06 AM  
**To:** O'Brien, Neal; Lindsey, Jamie; Decker, Renee  
**Cc:** Hill, Stanley  
**Subject:** PI#0010413 Lincoln County Bridge Replacement Project

Greetings,

I just receive word that we are to continue with the Concept of the above stated Project with the intent of raising the bridge the 8-9 ft. This is per the request of the Army Corps of Engineers.

Thanks,

*Chad E. White Sr.* MBA, MEM, E.I.T.

Georgia Department of Transportation  
Project Manager  
Office of Program Delivery  
One Georgia Center  
600 West Peachtree Street  
25th Floor Room 2535  
Atlanta, Georgia 30303  
Office: (404) 631-1546  
Mobile: (404) 987-1988  
Fax: (404) 631-1855

