

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-165-1(70)/STP-3332-00(950) Henry County **OFFICE** Preconstruction
P. I. Nos. 333127/333295

DATE August 15, 2002

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

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

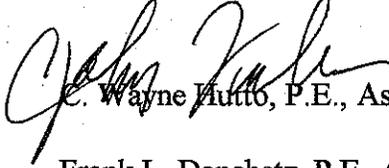
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Paul Liles
Ben Buchan
Thomas Howell
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-165-1(70)/STP-3332-00(950) Henry County **OFFICE** Preconstruction
P.I. Nos. 333127/333295

DATE July 24, 2002

FROM  E. Wayne Hutto, P.E., Assistant Director of Preconstruction

TO Frank L. Danchetz, P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

These combined projects are the replacement of a structurally deficient and functionally obsolete bridge on SR 155 over Big Cotton Indian Creek and to reconstruct the intersection of SR 155 at Millers Mill Road/Selfridge Road to improve sight distance. The existing eight span reinforced concrete T-beam bridge, built in 1953, is technologically significant as the first bridge with a sag curve over the span. It is also an early example of the hammer head pier that came into use in this country after World War II. The bridge is adjacent to the Miller Grist Mill and Country Store that make up a potential historic district. The bridge is individually significant and a contributing resource to a potential historic district. Currently SR 155, within the project limits, consists of two, 12' lanes with a 2' paved and variable width grassed shoulders on 100' of existing right-of-way. The base year traffic (2007) is 12,650 VPD and the design year traffic (2027) is 22,800 VPD. The posted speed and the design speed are 55 MPH.

Project BRST-165-1(70) proposes to relocate SR 155 east of its present location, extending a total of 0.57 mile. The proposed new bridge will be 530' x 44' and will be located approximately 110' east of the existing bridge structure. The relocated SR 155 will consist of two, 12' lanes with 10' rural shoulders (6.5' paved). An additional 150' of right-of-way will be acquired on the east side of the existing road. Traffic will be maintained along the existing roadway during construction.

Project STP-3332-00(950) proposes the intersection improvements of SR 155 at Millers Mill Road. The intersection will be relocated approximately 100' east to tie into the relocated SR 155 alignment and to provide the required sight distance and speed design for a 55 MPH roadway. The intersection will consist of one, 12' travel lane in each direction, one, 12' left turn lane, and right turn lanes as needed on all approaches. This project will be built in conjunction with the bridge replacement project over Big Cotton Indian Creek.

Measures to avoid an adverse effect (demolition of the bridge and the two contributing buildings) were addressed as project alternatives and are discussed in the report. The preferred alternative is to proceed with the proposed bridge replacement, accompanied by mitigation. Replacement of

Frank L. Danchetz

Page 2

BRST-165-1(70)/STP-3332-00(950) Henry
July 24, 2002

the historic bridge, along with mitigation measures, would include documenting the existing bridge structure and the contributing buildings.

Environmental concerns include requiring a 4f document be prepared; a public information meeting has been held; time saving procedures are not appropriate.

The estimated costs for these projects are:

BRST-165-1(70) Henry County

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$3,315,000	\$583,000	2005	FY-04
Right-of-Way	\$ 260,000	\$ 10,000		
Utilities*	----	----		

*LGPA sent requesting Henry County do utilities.

STP-332-00(950) Henry County

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$1,178,000	\$522,000	Lump	FY-04
Right-of-Way	\$ 50,000	----		
Utilities*	----	----		

*LGPA sent to Henry County 5-24-01.

These projects are in the STIP. I recommend these project concepts be approved and constructed concurrently.

CWH:JDQ/cj

Attachment

CONCUR



Thomas L. Turner, P.E., Director of Preconstruction

APPROVE



Frank L. Danchetz, P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: BRST-165-1(70) Henry
STP-3332-00(950) Henry
P.I. Number 333127 & 333295

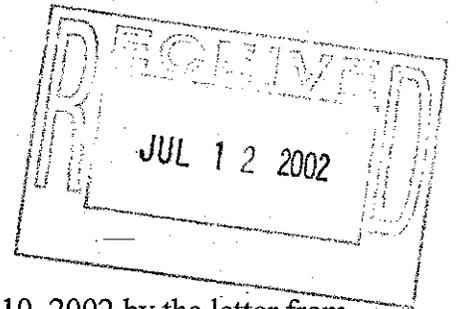
OFFICE: Engineering Services

DATE: July 11, 2002

FROM: David Mulling, Project Review Engineer *REW*

TO: Wayne Hutto, Assistant Director of Pre-construction

SUBJECT: CONCEPT REPORT



We have reviewed the concept report submitted July 10, 2002 by the letter from James B. Buchan dated July 2, 2002, and have the following comment:

1. Estimated costs for reimbursable utilities were not provided. The Draft Concept Report mentioned that there were existing Utilities on both sides of S.R. 155 and that Henry Co. has a proposed Sanitary Sewer line but did not state whether any of the relocation costs were reimbursable.

The costs for these projects are:

BRST-165-1(70) Henry

Construction	\$2,732,880
Inflation	\$280,121
E&C	\$301,301
Reimbursable Utilities	\$???
Right of Way	\$260,000

STP-3332-00(950) Henry

Construction	\$1,043,986
Inflation	\$64,424
E&C	\$69,295
Reimbursable Utilities	\$???
Right of Way	\$50,000

DTM/REW

c: Ben Buchan, attn: Ted Cashin

SCORING RESULTS AS PER MOG 2440-2

Project Number: BRST-165-1(70) & STP-3332-00(950)		County: Henry		PI No.: 333127 & 333295		
Report Date: 7/5/02		Concept By: DOT Office: Consultant Design				
<input checked="" type="checkbox"/> Concept Stage		Consultant: Parsons Brinckerhoff Quade & Douglas				
Project Type: Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input checked="" type="checkbox"/> Bridge Replacement <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input checked="" type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous		
FOCUS AREAS	SCORE	RESULTS				
Presentation	90	Reimbursable Utility Costs were not identified.				
Judgement	100					
Environmental	100					
Right of Way	100					
Utility	100					
Constructability	100					
Schedule	100					

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-165-1(70) & STP-3332-00(950)

County: HENRY

P. I. Number: 333127 & 333295

Federal Route Number: N/A

State Route Number: 155

Recommendation for approval:

DATE 7-2-02

DATE 7-5-02



Project Manager

James B. Buchanan MSA

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 _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District 3 Engineer, Thomaston

DATE 7-12-02

David G. Mulling REW
Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE **BRST-165-1(70) Henry County** **OFFICE** Atlanta
SR 155 @ Big Cotton Indian Creek 6 mi N of McDonough
P.I. No. 333127-

James B. Buchan ^{MBA}
FROM James B. Buchan, State Consultant Design Engineer **DATE** July 2, 2002

TO Wayne Hutto, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**

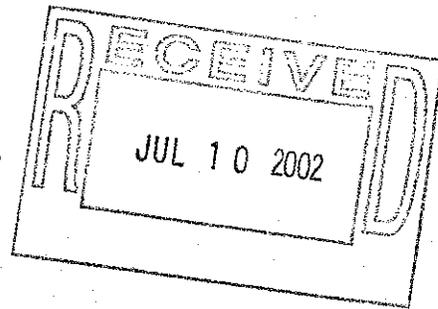
Attached is the original copy of the Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

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

If you have any questions or require further information please call Ted Cashin at (404)463-6135 or John Durand of Parsons Brinckerhoff Quade & Douglas at (404) 364-5236.

Distribution:

David Mulling, Project Review Engineer
Harvey Keepler, State Environmental/Location Engineer
Phillip Allen, State Traffic Safety and Design Engineer
Marta Rosen, State Transportation Planning Administrator
Herman Griffin, Office of Financial Management Administrator
Thomas Howell, District Engineer – Thomaston
Paul Liles, State Bridge & Structural Engineer



JBB:MBA:EJC

cc: Parsons Brinckerhoff Quade & Douglas

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-165-1(70) & STP-3332-00(950)

County: HENRY

P. I. Number: 333127 & 333295

Federal Route Number: N/A

State Route Number: 155

Recommendation for approval:

DATE 7-2-02

DATE 7-5-02



Project Manager

James B. Buchanan mBA

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 _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District 3 Engineer, Thomaston

DATE _____

Project Review Engineer

DATE _____

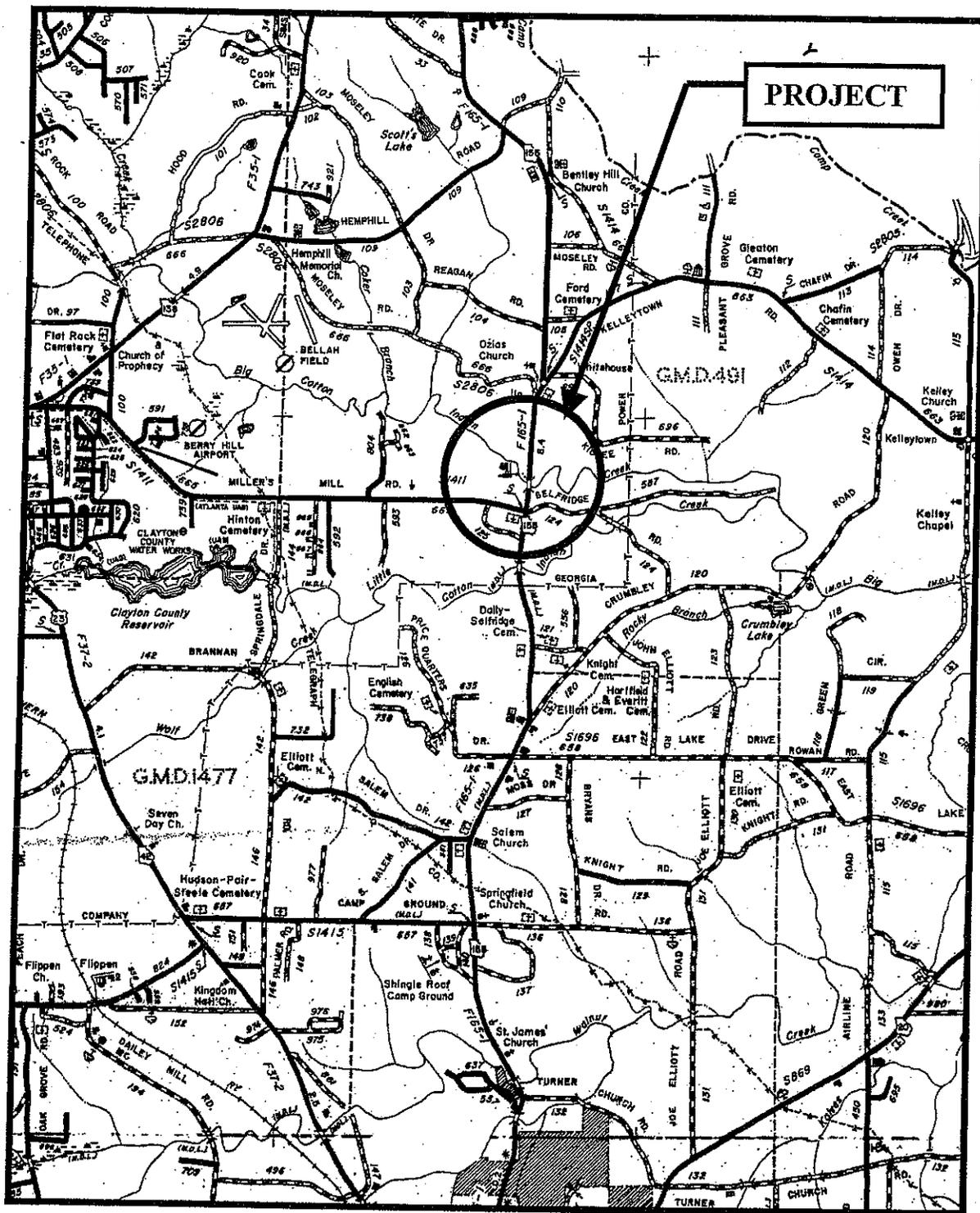
State Bridge and Structural Design Engineer

Page 1

Project Concept Report page 1

Project Number: BRST-165-1 (70) & STP-3332-00(950)

P. I. Number: 333127 & 333295



Location Map

Project: BRST-165-1 (70) Henry County PI No.: 333127

Project: STP-3332-00(950) Henry County PI No.: 333295

DESCRIPTION: SR 155 @ Big Cotton Indian Creek & @ Millers Mill /Selfridge Road Intersection
 Project Concept Report page 2

Project Number: BRST-165-1(70) & STP-3332-00(950)

P. I. Number: 333127 & 333295

Need and Purpose: The purpose of project BRST-165-1(70) is to replace a structurally deficient and functionally obsolete bridge on S.R.155 over the Big Cotton Indian Creek. The existing bridge sufficiency rating is currently 45.9. Also included is project STP-3332-00(950) to reconstruct the intersection of Millers Mill Road and Selfridge Road to improve intersection sight distance. See attached Need & Purpose Statements.

Description of the proposed project: Project BRST-165-1 (70) is a bridge replacement project in Henry County 6 miles north of McDonough on State Route 155 over the Big Cotton Indian Creek to include the intersection project STP-3332-00 (950). The total project length is approximately 3000 feet (0.568 miles), beginning at M.P. 14.47 and extending to M.P.15.03.

Is the project located in a Non-attainment area? Yes No
The proposed design, of these projects, does not add any additional capacity to State Route 155. The existing roadway has two lanes. The proposed roadway will be designed for two lanes. The projects are consistent with what is identified in the District 3 STIP.

PDP Classification: Major Minor
Federal Oversight: Full Oversight (), Exempt (), State Funded (), or Other ()

Functional Classification: Rural Minor Arterial

U. S. Route Number(s): None **State Route Number(s):** 155
Local Road Number(s): None

Traffic (AADT):
Current Year: (2007) 12,650 Design Year: (2027) 22,800

Existing design features:

- Typical Section: 2-12 ft. travel lanes, with a 2 ft. paved and variable width grassed shoulder on both sides.
- Posted speed 55mph Maximum degree of curvature: 1deg.
- Maximum grade: 8.0 % Mainline; 12.0% Cross Roads, and 10% Driveways
- Width of right of way: 100ft. total
- Major structures: Concrete bridge, 6 spans for a total length of 288 ft., width 30.4 ft., (bridge roadway width 23.8 ft.) sufficiency rating is 45.9.
- Major interchanges or intersections along the project: The project limits extend through the S.R. 155/ Miller's Mill Road (CR 665)/Selfridge Road (CR 587) intersection.
- Existing length of the S.R. 155 roadway is approximately 3000 feet long.

Proposed Design Features:

Proposed typical section(s): Two 12'-0" travel lanes with 10' graded shoulders (6.5 Ft. paved due to the high volume of traffic). Typical section attached.

- Proposed Design Speed Mainline 55 mph based on Green Book for ADT
- Proposed Maximum grade Mainline 6% Maximum grade allowable 6%.
- Proposed Maximum grade Side Street 12% Maximum grade allowable 12%.
- Proposed Maximum grade driveway 12%
- Proposed Maximum degree of curve 5 deg.-45 min. Maximum degree allowable 6 deg.
- Right of way
 - Width 150' additional R/W on east side of existing road.
 - Easements: Temporary (**X**), Permanent (), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (**X**), Other ().
 - Number of parcels: 7 Number of displacements: One
 - Business: 0
 - Residences: 1
 - Mobile homes: 0
 - Other: 0
- Structures:
 - Bridges: The proposed concrete bridge will be 44 ft wide and approximately 530 ft long, consisting of two 12'-0" travel lanes and 10'-0" shoulders.
 - Retaining walls: None Required
- Major intersections and interchanges. The project limits extend through the S.R. 155/ Millers Mill Road/Selfridge Road 4-legged intersection. It is proposed to reconstruct the intersection as a part of the project, to provide signalization, turn lanes and improve intersection stopping sight distance. Project No. STP-3332-00 (950), P.I. No. 333295.
- Traffic control during construction: The traffic will be maintained along existing State Route 155 by shifting the horizontal alignment and constructing the new bridge to the east of the existing roadway.

Design Exceptions to controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
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: The property along the west side, adjacent to S.R. 155 north of the Creek has been identified as Historical. Miller's Mill and Store are located on the property on the west side of S.R. 155. The property along the east side, adjacent to S.R. 155 north of the creek is linked to the historical west side property by common ownership and is considered historical as documented in the Assessment of Effects to Cultural Resources and as determined by SHPO. A 4f document will be required. The existing S.R. 155 bridge over Big Cotton Indian Creek is also classified as historical. A Public Information Meeting was held on 11-29-01. The comments have been addressed and response letters have been mailed to the people who made comments at the PIM. The results of the PIM were 21 people in support of the project, 3 conditionals, and 0 people who do not support the project.
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (), No (X),
 - Categorical exclusion:
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (X), or
 - Environmental Impact Statement (EIS) ().
- Utility involvement: Overhead power lines on the east and west side of S.R.155. Also Henry County is proposing a 36" Sanitary Sewer line in the vicinity of the proposed project on the east side.

Project responsibilities:

- Design: Office of Consultant Design
- Right of Way Acquisition: Dist. 3 Preconstruction R/W Office
- Relocation of Utilities: District 3 Utility Office.
- Letting to contract: General Office (Office of Contract Administration)
- Supervision of construction: District 3 Construction Office
- Providing material pits: District 3 Materials Office
- Providing detours: None Required

Coordination

- Initial Concept Meeting date and brief summary. See Attach minutes.
- Concept meeting date and brief summary. See Attach minutes. Held on 10-15-01.
- P. A. R. meetings, dates and results: None required.
- FEMA, USCG, and/or TVA: Nationwide 404
- Public involvement: P.I.M. held on 11-29-01.
- Local government comments: Henry County signed utility LGPA
- Other projects in the area: GDOT Project No. BRS-165-1(66), P.I. 332467, bridge replacement over Little Cotton Indian Creek
- Other coordination to date.
- Railroads: None-N/A

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 18 Months.
- Time to complete preliminary construction plans: 3 Months.
- Time to complete right of way plans: 1 Month.
- Time to complete the Section 404 Permit: 2 Months.
- Time to complete final construction plans: 3 Months.
- Time to complete to purchase right of way: 6 Months.
- List other major items that will affect the project schedule: Assessment of Effects to Cultural Resources (Historical House 4F)

Other alternates considered: (1) Construct proposed bridge at same location as the existing bridge with temporary on-site detour and detour bridge (2) Construct proposed bridge at same location as the existing bridge with off-site detour; close road: (3) Construct proposed bridge by staging construction and maintaining traffic; (4) Construct proposed bridge parallel and offset from existing, and remove existing bridge; (5) No Build

Comments:

Comparison Summary of Concepts 1 - 5

Alternate (1) was eliminated due to the additional costs of building an on site detour and detour bridge on S.R. 155 and due to the Historical property located on the west side. Also S.R. 155 is programmed for a divided 4-lane roadway in the future, as shown in the STIP for 2010 construction. (See Attached Cost Estimate for Alternate 1)

Alternate (2) is not recommended for this concept, due to the high volumes of traffic on S.R. 155 (Approximately 12,650 ADT). Also, there are no acceptable State Routes or County Roads in the area to detour traffic or to provide access for emergency vehicles.

Alternate (3) was eliminated because staging the construction would cause a shift in the alignment at the bridge. This shift would require additional right of way impacts to the historical property located on the west side of S.R. 155. Also since S.R. 155 is programmed for a divided 4-lane roadway, any shift in the alignment should reflect the future 4-lane construction. This shift due to the existing vertical profiles of 7 and 8 percent on the roadway on either side of the bridge makes staging more difficult with respect to maintaining traffic on existing S.R. 155.

Alternate (5) was eliminated due to the condition of the existing bridge (Sufficiency Rating of 45.9) and also because of the long-term maintenance cost on structurally and functionally deficient bridge.

Alternate (4) is recommended for this concept. It is proposed to construct a new bridge offset to the east and parallel to the existing bridge. The offset distance between the existing S.R. 155 roadway centerline and the new proposed centerline is 110 feet. This distance is required to align with the future proposed four lane project for S.R. 155 and eliminate the need for any additional Right of Way from the historical property on the west side of S.R. 155 at the Big Cotton Indian Creek. The alignment proposed for this alternate will provide sufficient construction area to maintain traffic on the existing roadway and bridge. This shifted alignment will also provide for stage constructing the proposed intersection reconstruction at S.R.155/Miller's Mill Road (CR 665)/Selfridge Road (CR 587), while maintaining traffic through the intersection. Due to the steepness in the surrounding terrain (classified as mountainous through this area, and other areas along the S.R. 155 corridor) through the limits of this project, the offset alignment will provide less impact related to the bridge construction and maintenance of traffic.

Attachments:

1. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities.
2. Cost Estimate. (Alternate 1 for "On-Site" Detour)
3. Need and Purpose Statements.
4. Minutes of Concept Meeting.
5. Typical Section.
6. Bridge Inventory, Historic Bridge Survey
7. Traffic Assignments, Accident Data
8. Flexible Pavement Design.
9. Location and Design Notice.
10. Project Concept Conformity/Certification letter.
11. Assessment of Effects to Cultural Resources

PRELIMINARY COST ESTIMATE

DATE: June 24, 2002 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: BRST-165-1 (70) Henry County

P.I. NO.: 333127

LENGTH: 0.568mi./3000 ft.

PROJECT DESCRIPTION: SR 155 over the Big Cotton Indian Creek bridge replacement - Proposed bridge length of 530 ft and 44'-0" wide.

PROPOSED CONCEPT: Two 12'-0" travel lanes with 10'-0" shoulders (6.5' Paved). Traffic shall be maintained on S.R. 155 during construction of a parallel roadway and bridge.

EXISTING ROADWAY: STATE ROUTE 155

TRAFFIC: Existing: 12,650 ADT (2007) Design: 22,800 ADT (2027)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) 11 acre R/W@\$10,000/Ac.	\$ 110,000
2. DISPLACEMENTS: 1 Res.	\$ 100,000 0
3. OTHER COST (ADM./COST, INFLATION)	\$ 50,000
SUBTOTAL:A	\$ 260,000
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$ 0
2. TRANSMISSION LINES	\$ 0
3. SERVICES (Henry County signed LGPA)	\$
SUBTOTAL:B	0
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	
a. OVERPASSES – Bridge over Big Cotton Indian Creek (44'x 530')@\$65/Sq.Ft.	\$1,515,800
b. APPROACH SLAB – 270 SY @\$90/SY 2 each spillways @\$1200 ea	\$ 26,700
SUBTOTAL:C-1	\$1,542,500
2. GRADING AND DRAINAGE:	
a. EARTHWORK – 60,000 CY Borrow @ \$5.00/CY (Mainline & Cross Road)	\$ 300,000
b. DRAINAGE:	
1) CROSS DRAIN PIPE	\$ 15,000

PROJECT COST		
2) LONGITUDINAL PIPE		\$
3) CATCH BASINS		\$
SUBTOTAL:C-2		\$ 315,000
3. BASE AND PAVING:		
a. AGGREGATE BASE – Mainline 8550 TN @ \$18/TN		\$ 153,900
b. ASPHALT PAVING: SURFACE – Mainline 1504 TN@\$45/TN	\$	\$ 67,680
BINDER – Mainline 2005 TN@\$40	\$	\$ 80,200
BASE –Mainline 4010 TN @\$40	\$	\$ 160,400
SUBTOTAL:C-3.b		\$ 462,180
c.-CONCRETE PAVING		
d. OTHER		\$
SUBTOTAL:C-3		\$
4. LUMP ITEMS:		
a. GRASSING – 11 acres @ \$2000/ac		\$ 22,000
b. CLEARING AND GRUBBING - 16 acres @ \$2000/ac		\$ 32,000
c. LANDSCAPING		\$
d. EROSION CONTROL- Silt fence type A 10000 LF @\$3.10/LF, Silt fence type C 5000 LF @ \$4.80/LF, Floating silt fence 1000 ft. @ \$12/LF		\$ 67,000
e. TRAFFIC CONTROL		\$ 25,000
SUBTOTAL:C-4		\$ 146,000
5. MISCELLANEOUS:		
a. LIGHTING - NONE		\$
b. SIGNING - MARKING and Signalization @ \$80,000		\$ 95,000
c. GUARDRAIL – 4000 LF @ \$15/LF, 6 ea Type 12 or 1 anch @ \$1700/ea		\$ 70,200
d. CURB & GUTTER		\$
SUBTOTAL:C-5		\$ 165,200
6. SPECIAL FEATURES- Rem. Exist. Bridge @\$7/sq.ft-\$62,000; Field Eng. Office Ty 3 \$40,000		\$ 102,000
SUBTOTAL:C-6		

ESTIMATE SUMMARY

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$ 260,000	
B. REIMBURSABLE UTILITIES (Henry Co. signed LGPA.)	\$	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$ 1,542,500	
2. GRADING AND DRAINAGE	\$ 315,000	
3. BASE AND PAVING	\$ 462,180	
4. LUMP ITEMS	\$ 146,000	
5. MISCELLANEOUS	\$ 165,200	
6. SPECIAL FEATURES	\$ 102,000	
SUBTOTAL CONSTRUCTION COST		\$ 2,732,880
E. & C. (10%)		\$ 301,301
INFLATION (5% PER YEAR)		
NUMBER OF YEARS	2	\$ 280,121
TOTAL CONSTRUCTION COST		\$ 3,314,302
GRAND TOTAL PROJECT COST		\$ 3,574,302

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. BRST-165-1(70) & STP-3332-00 (950) HENRY COUNTY

P.I. No. 333127 & 333295

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.

The date of Location Approval is: AUGUST 15, 2002

Project BRST-165-1 (70) is a bridge replacement project and project STP-3332-00 (950) is an intersection improvement project within the limits of the bridge project in Henry County. They are in the 491st GMD, 6 miles north of McDonough on State Route 155 over the Big Cotton Indian Creek and at the intersection of Miller's Mill Road (CR 665)/ Selfridge Road (CR587). The total project length is approximately 3000 feet (0.568 miles), beginning at M.P. 14.47 and extending to M.P. 15.03 . The purpose of this project is to replace a structurally deficient and functionally obsolete bridge on S.R. 155 over the Big Cotton Indian Creek and to improve the intersection sight distance at Miller's Mill/Selfridge Roads. Traffic will be maintained on State Route 155 and Miller's Mill/Selfridge Roads while the proposed bridge is constructed to the east on a shifted horizontal alignment.

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:

Marc Mastronardi

Marc.Mastronardi@DOT.STATE.GA.US

1001 Highway 19 South

Griffin, Ga. 30223

Tel. No. 770-228-7205

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:

Ted Cashin

Georgia Department of Transportation

Ted.Cashin@DOT.STATE.GA.US

No. 2 Capitol Square

Atlanta, Georgia 30334

Tel. No. 404-463-6135

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.

PRELIMINARY COST ESTIMATE

Alternate 1 (On-site Detour)

DATE: June 24, 2002 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: BRST-165-1 (70)

P.I. NO.: 333127 LENGTH: 0.568mi./3000 ft.

PROJECT DESCRIPTION: SR 155 over the Big Cotton Indian Creek bridge replacement - Proposed bridge length of 268 ft and 40'-0" wide.

PROPOSED CONCEPT: Two 12'-0" travel lanes with 10'-0" shoulders (6.5 ft. Paved). Traffic shall be maintained on SR 155 during construction of parallel roadway and bridge.

EXISTING ROADWAY: STATE ROUTE 155

TRAFFIC: Existing: 12,650 ADT (2007) Design: 22,800 ADT (2027)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) 9 acre R/W	\$ 90,000
2. DISPLACEMENTS: 1 Res.	\$100,000
3. OTHER COST (ADM./COST, INFLATION)	\$ 50,000
SUBTOTAL:A	\$240,000
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$ 0
2. TRANSMISSION LINES	\$ 0
3. SERVICES (Henry County signed LGPA 8-12-99)	\$
SUBTOTAL:B	0
C. CONSTRUCTION:	
1. MAJOR STRUCTURES Req'd. Br. (44'x530')@\$65/Sq.Ft.	\$1,515,800
a. OVERPASSES -Detour Bridge over Big Cotton Indian Creek (24'x 300')@\$40/Sq.Ft.	\$ 288,000
b. APPROACH SLAB - 270SY @\$90/SY 2 each spillways @\$1200 ea	\$26,700
SUBTOTAL:C-1	\$1,830,500
2. GRADING AND DRAINAGE:	
a. EARTHWORK - 70,000 CY Borrow @ \$5.00/CY (Mainline & Detour)	\$ 350,000
b. DRAINAGE:	
1) CROSS DRAIN PIPE - Permanent and Temporary Drainage	\$ 19,000
2) LONGITUDINAL PIPE	\$
3) CATCH BASINS	\$

PROJECT COST			
		SUBTOTAL:C-2	\$ 369,000
3. BASE AND PAVING:			
a. AGGREGATE BASE – Mainline and Detour 11000 TN @ \$18/TN			\$ 198,000
b. ASPHALT PAVING: SURFACE – 1400Tn@ \$45/Tn- Mainline	\$		\$ 63,000
BINDER –Detour and Mainline 3320 TN@\$40	\$		\$ 132,800
BASE 4000Tn @ \$40/Tn- Mainline	\$		\$ 160,000
		SUBTOTAL:C-3.b	\$ 553,800
c. CONCRETE PAVING-			\$
d. OTHER			\$
		SUBTOTAL:C-3	\$
4. LUMP ITEMS:			
a. GRASSING – 8 acres @ \$2000/ac			\$ 16,000
b. CLEARING AND GRUBBING - 14 acs. @ 2000/ Ac			\$ 28,000
c. LANDSCAPING			\$
d. EROSION CONTROL- Silt fence type A 12000 LF @\$3.10/LF, Silt fence type C 6000 LF @ \$4.80/LF and Floating silt fence 1000Ft. @ \$12/Ln.Ft.			\$ 78,000
e. TRAFFIC CONTROL			\$ 25,000
		SUBTOTAL:C-4	\$ 147,000
5. MISCELLANEOUS:			
a. LIGHTING - NONE			
b. SIGNING - MARKING / Temporary signal			\$ 40,000
c. GUARDRAIL – Temporary Barrier 500LF @\$42/LF – 4000Ft. GR & Anch @\$72,000			\$93,000
d. CURB & GUTTER			\$
		SUBTOTAL:C-5	\$133,000
6. SPECIAL FEATURES- Rem.Detour Bridge @\$7/sq.ft-\$50,400; Remove Detour Rdway \$30,000, Rem Exist Br .@ \$7/SqFt-\$62,000, Tp 3 Field Eng Office \$40,000			\$182,400
		SUBTOTAL:C-6	

ESTIMATE SUMMARY

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$ 240,000	
B. REIMBURSABLE UTILITIES (Henry Co. signed LGPA.)	\$	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$1,830,000	
2. GRADING AND DRAINAGE	\$ 369,000	
3. BASE AND PAVING	\$ 553,800	
4. LUMP ITEMS	\$ 147,000	
5. MISCELLANEOUS	\$ 133,000	
6. SPECIAL FEATURES	\$ 182,400	
SUBTOTAL CONSTRUCTION COST		\$ 3,215,200
E. & C. (10%)		\$ 354,476
INFLATION (5% PER YEAR)		
NUMBER OF YEARS	2	\$ 329,558
TOTAL CONSTRUCTION COST		\$ 3,899,234
GRAND TOTAL COST(ALT. 1)		\$ 4,139,234

PRELIMINARY COST ESTIMATE

DATE: June 24, 2002 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: STP-3332-00 (950) Henry County

P.I. NO.: 333295 LENGTH: 0.284mi./1500 ft.

PROJECT DESCRIPTION: SR 155 intersection improvement at Miller's Mill Road (Co Rd 665) and Selfridge Road (Co Rd 587).

PROPOSED CONCEPT: Two 12'-0" travel lanes with 10'-0" shoulders (6.5' Paved). Traffic shall be maintained on the existing roads during construction of the relocated alignment.

EXISTING ROADWAY: STATE ROUTE 155/Miller's Mill Rd(CR665)/Selfridge Rd(CR587)

TRAFFIC: Existing: 12,650 ADT (2007)(SR 155) Design: 22,800 ADT (2027)(SR 155)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) 3 acre R/W@\$10,000/Ac.	\$ 30,000
2. DISPLACEMENTS:	\$
3. OTHER COST (ADM./COST, INFLATION)	\$ 20,000
SUBTOTAL:A	\$ 50,000
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$ 0
2. TRANSMISSION LINES	\$ 0
3. SERVICES (Henry County signed LGPA)	\$
SUBTOTAL:B	0
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	
a. OVERPASSES –	
b. APPROACH SLAB –	
SUBTOTAL:C-1	
2. GRADING AND DRAINAGE:	
a. EARTHWORK – 30,000 CY Borrow @ \$5.00/CY (Mainline & Cross Road)	\$ 150,000
b. DRAINAGE:	
1) CROSS DRAIN PIPE	\$ 25,000
2) LONGITUDINAL PIPE	\$

PROJECT COST		
3) CATCH BASINS		\$
SUBTOTAL:C-2		\$ 175,000
3. BASE AND PAVING:		
a. AGGREGATE BASE – Mainline 4215 TN @ \$18/TN		\$ 75,870
b. ASPHALT PAVING: SURFACE – Mainline 870 TN@\$45/TN	\$	\$ 39,150
BINDER – Mainline 1200 TN@\$40	\$	\$ 48,000
BASE – Mainline 2400 TN @\$40	\$	\$ 96,000
SUBTOTAL:C-3.b		\$ 259,020
c. CONCRETE PAVING		
d. OTHER		
SUBTOTAL:C-3		\$
4. LUMP ITEMS:		
a. GRASSING – 9 acres @ \$2000/ac		\$ 18,000
b. CLEARING AND GRUBBING - 10 acres @ \$2000/ac		\$ 20,000
c. LANDSCAPING		
d. EROSION CONTROL- Silt fence type A 4000 LF @\$3.10/LF, Silt fence type C 1000 LF @ \$4.80/LF		\$ 17,200
e. TRAFFIC CONTROL		\$ 15,000
SUBTOTAL:C-4		\$ 70,200
5. MISCELLANEOUS:		
a. LIGHTING - NONE		
b. SIGNING - MARKING and Signalization		\$110,000
c. GUARDRAIL – 500 LF @ \$15/LF, 4 ea Type 12 or 1 anch @ \$1700/ea		\$ 14,300
d. CURB & GUTTER		
SUBTOTAL:C-5		\$ 124,300
6. SPECIAL FEATURES-		
SUBTOTAL:C-6		

ESTIMATE SUMMARY

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$ 50,000	
B. REIMBURSABLE UTILITIES (Henry Co. signed LGPA.)	\$	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$	
2. GRADING AND DRAINAGE	\$ 175,000	
3. BASE AND PAVING	\$ 259,020	
4. LUMP ITEMS	\$ 70,200	
5. MISCELLANEOUS	\$ 124,300	
6. SPECIAL FEATURES	\$	
SUBTOTAL CONSTRUCTION COST		\$ 628,520
E. & C. (10%)		\$ 69,295
INFLATION (5% PER YEAR)		
NUMBER OF YEARS	2	\$ 64,424
TOTAL CONSTRUCTION COST		\$ 762,239
GRAND TOTAL PROJECT COST		\$ 812,239

NEED AND PURPOSE
PROJECT BRST-165-1 (70), HENRY COUNTY
PI No. 333127
BRIDGE REPLACEMENT

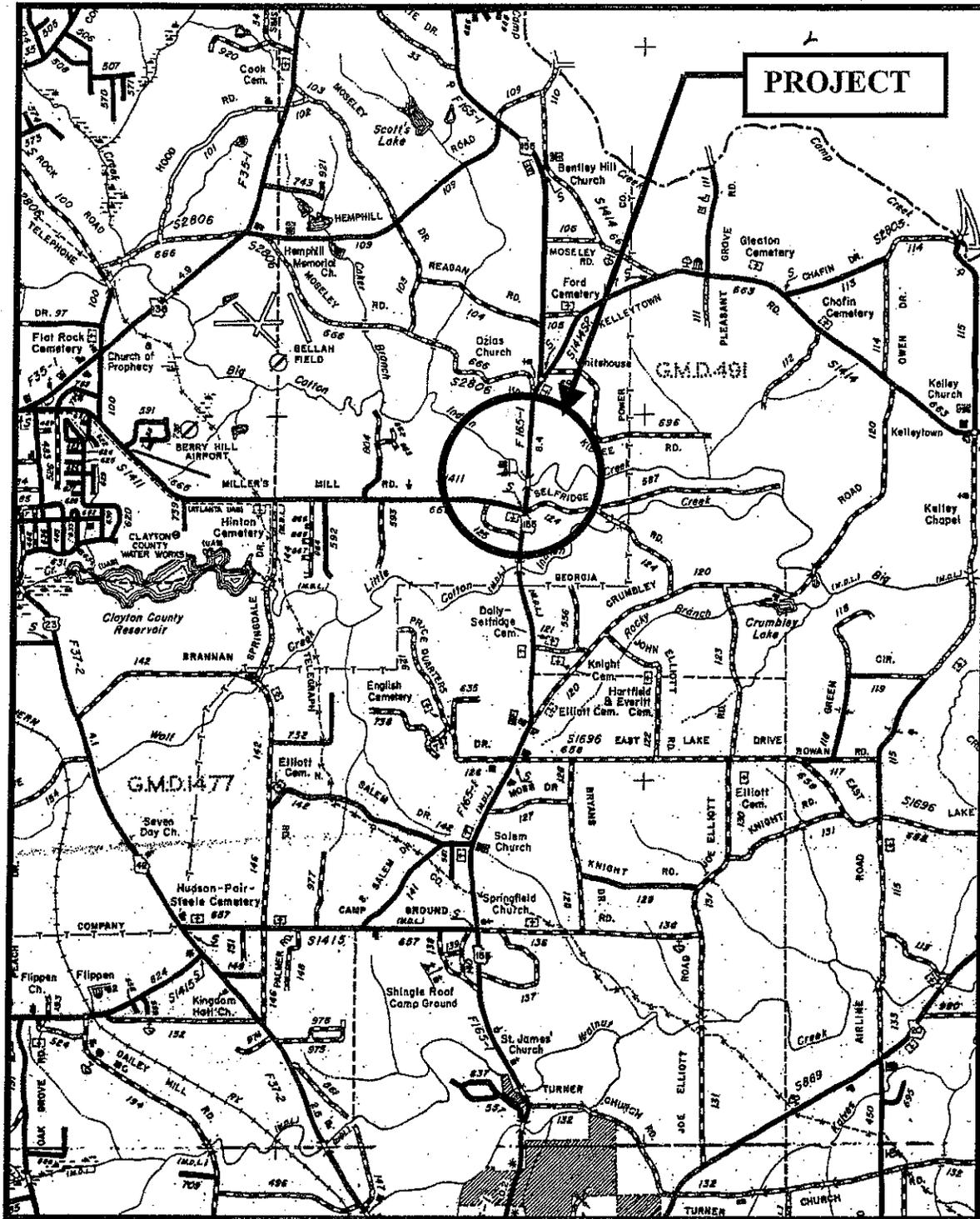
Bridge project BRST-165-1 (70) will replace the structurally deficient bridge located on State Route (SR) 155 over the Big Cotton Indian Creek. The bridge's sufficiency rating is 45.9. The sufficiency rating, a number from 0 to 100, is a method of evaluating data by calculating four separate factors to obtain a numeric value that is indicative of bridge sufficiency to remain in service. The resultant rating would range between zero, which represents an entirely insufficient or deficient bridge; and 100, which represents an entirely sufficient bridge. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. This project will replace the existing bridge with a structurally adequate bridge.

This section of SR 155 is functionally classified as a rural minor arterial. The posted speed limit along this section of SR 155 is 55 mph. The bridge is located 6 miles north of McDonough and was constructed in 1953. The Average Daily Traffic (ADT) along this section of roadway was 8,100 in 1999 with 9 percent trucks. The projected 2007 and 2027 ADT for this section of roadway is 12,650 and 22,800 respectively.

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

Statement of Need & Purpose
SR 155 @ Millers Mill & Selfridge Roads
Henry County
STP-3332-00(950)
333295

Accident history for this location shows an average of 5 accidents per year for the last eight years. One fatal accident occurred in September 1994. Extensive field inspections have been done on this intersection to find out what the major problems are. Currently, there are several with the major problem being the limited sight distance when traveling northbound on SR 155 approaching the intersection. Vehicles traveling east and west bound on the County Roads can not see approaching vehicles traveling northbound on SR 155 to make a safe movement. The proposed project will relocate the intersection approximately 100 feet east to provide the required sight distance and speed design for a 55 mph roadway. The intersection will have 1 – 12 foot travel lane in each direction on all approaches with 1 – 12 foot left turn lane and 1 – 12 foot auxiliary right turn lane if needed. This project will also be built in conjunction with the bridge replacement project over Big Cotton Indian Creek. To improve the safety and enhance the operational efficiency of the intersection, these improvements are recommended.



Location Map

Project: BRST-165-1 (70) Henry County PI No.: 333127

Project: STP-3332-00(950) Henry County PI No.: 333295

DESCRIPTION: SR 155 @ Big Cotton Indian Creek & @ Millers Mill /Selfridge Road Intersection

Project Concept Report page 2

Project Number: BRST-165-1(70) & STP-3332-00(950)

P. I. Number: 333127 & 333295

MINUTES OF PRELIMINARY CONCEPT TEAM MEETING

Project: GDOT Project Work Order No. 2 in Henry County
BRST-165-1(70) – PI No. 333127,
SR 155 @ Big Cotton Indian Creek & Miller's Mill Road

Date: August 27, 2001

Place: GDOT Office of Consultant Design

Present: Ted Cashin – GDOT OCD
Jimmy Chambers – GDOT OCD
Don Mills – GDOT Office of Planning
Jim Graybeal – Parsons Brinckerhoff
John Durand – Parsons Brinckerhoff

Distribution: Attendees

Purpose: Preliminary Concept Team Meeting

DISCUSSION (Page 1 of 1):

Future four lane improvements to SR 155 and Miller's Mill Road were discussed with respect to the current design contract. Since the plan to four lane SR 155 is projected for 2010 according to the current TIP database, a decision was needed regarding the current bridge replacement staging at Big Cotton Indian Creek and the final roadway alignment to be used.

The bridge at Big Cotton Indian Creek could be replaced by either staging construction maintaining a partially offset alignment, replacement along the existing alignment utilizing a temporary detour bridge, or constructing the replacement structure at new location along a proposed future alignment for the four lane section. Significant grade changes would be required for each case to improve sight distance and speed design at the nearby Miller's Mill Road intersection and each case would impact staging and potentially historical property near the bridge.

It was agreed by the group to proceed with concept based on relocation of SR 155 to a parallel alignment to the east. The alignment would be located along the future northbound lanes of a proposed four lane section. The details of the four lane section would be worked out by Parsons Brinckerhoff. After completion of the new work, the existing bridge would be removed and the R/W remain available for future southbound lanes. Intersection improvements at Miller's Mill Road would include provisions for the future four lane section as well. Tie-in to the existing SR 155 alignment would be by best fit to the existing curve to the north and by transitioning into the new alignment resulting from the Little Cotton Indian Creek bridge replacement to the south.

MINUTES OF INITIAL CONCEPT TEAM MEETING

Project: GDOT Project Work Order No. 2 in Henry County
BRST-165-1(70) – PI No. 333127,
SR 155 @ Big Cotton Indian Creek & Miller's Mill Road

Date: September 4, 2001

Place: GDOT Office of Consultant Design

Present: Ted Cashin – GDOT OCD
Jimmy Chambers – GDOT OCD
Steve Tiedemann--J. B. Trimble, INC.
Jim Graybeal – Parsons Brinckerhoff
John Durand – Parsons Brinckerhoff
Sean Johnston – Parsons Brinckerhoff

Distribution: Attendees

Purpose: Initial Concept Team Meeting

DISCUSSION:

1. Sean provided two graphic layouts of the proposed horizontal alignments and one layout with two proposed vertical alignments shown.
2. John and Jim explained how the different proposed alignments could affect the required design criteria for the project. Also the alignments were discussed with regards to improving the intersection at S.R.155 and Millers Mill Road, which is included as a part of the design of the Big Cotton Indian Creek bridge replacement project. The future project to four lane S.R. 155 as identified in the STIP was discussed with regards to the horizontal alignment required to tie into the Little Cotton Indian Creek bridge replacement project which is approximately 2200 feet south on S.R. 155, and is currently under design.
3. Ted stated that as a result of the steepness of the surrounding existing terrain through the project limits, it is probably not feasible to set the design parameters to meet desirable design criteria.
4. The group was in agreement to design for a 55MPH minimum design criteria.
5. Jimmy stated that it is not likely that S.R. 155 would be improved to a four- lane roadway before other improvements such as passing lanes or turn lanes were constructed in the interim.
6. Everyone agreed that because of the existing roadway grades of 7 and 8 percent the project could be considered as mountainous terrain in the project area.
7. Steve indicated that Trimble could adjust the horizontal and vertical alignment on the Little Cotton Indian Creek project in order to match the Big Cotton Indian Creek design for 55 MPH.

8. It was agreed at the meeting to only construct a two-lane section of roadway on S.R. 155 through the intersection of Millers Mill Road. This will allow for a desirable tie-in to the existing S.R. 155 until the future four-lane project is built.
9. Ted stated that PB should look to see if the proposed horizontal alignment could be shifted any, back to the west in order to shorten the distance required to transition back to the existing S.R. 155 roadway.
10. Jimmy stated that the Concept Report needed to provide a thorough explanation for utilizing design criteria for minimum design.

The foregoing is my understanding of the topics discussed. If you have any corrections or comments, please fax them to me at 404-237-3015.

Sincerely,

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

John Durand, P.E.
Project Manager

MINUTES OF INITIAL CONCEPT TEAM MEETING

Project: GDOT Project Work Order No. 2 in Henry County
BRST-165-1(70) – PI No. 333127,
SR 155 @ Big Cotton Indian Creek & Miller's Mill Road

Date: September 4, 2001

Place: GDOT Office of Consultant Design

Present: Ted Cashin – GDOT OCD
Jimmy Chambers – GDOT OCD
Steve Tiedemann--J. B. Trimble, INC.
Jim Graybeal – Parsons Brinckerhoff
John Durand – Parsons Brinckerhoff
Sean Johnston – Parsons Brinckerhoff

Distribution: Attendees

Purpose: Initial Concept Team Meeting

DISCUSSION:

1. Sean provided two graphic layouts of the proposed horizontal alignments and one layout with two proposed vertical alignments shown.
2. John and Jim explained how the different proposed alignments could affect the required design criteria for the project. Also the alignments were discussed with regards to improving the intersection at S.R.155 and Millers Mill Road, which is included as a part of the design of the Big Cotton Indian Creek bridge replacement project. The future project to four lane S.R. 155 as identified in the STIP was discussed with regards to the horizontal alignment required to tie into the Little Cotton Indian Creek bridge replacement project which is approximately 2200 feet south on S.R. 155, and is currently under design.
3. Ted stated that as a result of the steepness of the surrounding existing terrain through the project limits, it is probably not feasible to set the design parameters to meet desirable design criteria.
4. The group was in agreement to design for a 55MPH minimum design criteria.
5. Jimmy stated that it is not likely that S.R. 155 would be improved to a four-lane roadway before other improvements such as passing lanes or turn lanes were constructed in the interim.
6. Everyone agreed that because of the existing roadway grades of 7 and 8 percent the project could be considered as mountainous terrain in the project area.
7. Steve indicated that Trimble could adjust the horizontal and vertical alignment on the Little Cotton Indian Creek project in order to match the Big Cotton Indian Creek design for 55 MPH.

8. It was agreed at the meeting to only construct a two- lane section of roadway on S.R. 155 through the intersection of Millers Mill Road. This will allow for a desirable tie-in to the existing S.R. 155 until the future four- lane project is built.
9. Ted stated that PB should look to see if the proposed horizontal alignment could be shifted any, back to the west in order to shorten the distance required to transition back to the existing S.R. 155 roadway.
10. Jimmy stated that the Concept Report needed to provide a thorough explanation for utilizing design criteria for minimum design.

The foregoing is my understanding of the topics discussed. If you have any corrections or comments, please fax them to me at 404-237-3015.

Sincerely,

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

John Durand, P.E.
Project Manager



Parsons
Brinckerhoff

3340 Peachtree Road, NE
Suite 2400, Tower Place
Atlanta, GA 30326-1001
404-237-2115
Fax 404-237-3015

Memorandum of Meeting

Date: October 29, 2001

Date of Meeting: October 15, 2001

Projects: BRST-165-1(70) P.I. 333127
PBQD Project No. 15877A Work Order # 2

Purpose of Meeting: Concept Team Meeting

Meeting Location: Henry County Government Complex 9:30 am.

Attendees: Allen Rape, Henry County Water And Sewer Authority
Tony Carnell, Henry County Water And Sewer Authority
Jim O'Neal, Henry County DOT
Ronnie Conner, Henry County DOT
Terry L. McMickle, Henry County DOT
Keith B. Rohling, GDOT District 3 Construction
John Morretto GDOT District 3 Traffic Operations
Andrew Aiello, GDOT Environment Location
Ted Cashin, GDOT Consultant Design Services
Ken Werho, GDOT Traffic Operations
Marc Mastronardi, GDOT District 3 Construction, Griffin Area Office
David Coleman, GDOT District 3 Construction, Griffin Area Office
Glenn A. Williams, GDOT Utilities
Frank Stone, Bellsouth
David Wagoner, Bellsouth
Sean Johnston, Parsons Brinckerhoff
John Durand, Parsons Brinckerhoff
Jim Graybeal, Parsons Brinckerhoff
Matt McDaniel, Parsons Brinckerhoff
Cristina Ley, Parsons Brinckerhoff

Distribution: Attendees
Jimmy Chambers, GDOT, Consultant Design Services
Dom Saulino, Parsons Brinckerhoff
Terry Kazmerzak, Parsons Brinckerhoff
Herman Griffin, GDOT Programming
Walter Boyd, FHWA



Discussion:

1. Introductions and welcomes were presented by John Durand of Parsons Brinckerhoff. He indicated that a "sign- in " sheet was being passed around for everyone to sign. He identified PB as the consulting firm hired by the Department to provide the concept for the project. John then turned the meeting over to Jim Graybeal of PB to begin the project discussion of Big Cotton Indian Creek, P.I. 333127.
2. Jim described the project as a bridge replacement over Big Cotton Indian Creek on SR155, as well as the improvement of the intersection between SR155 and Miller's Mill Rd in Henry County. Jim mentioned the existence of several historic properties on the project site, including a graveyard at the intersection, and several buildings comprising the Miller's Mill complex. These buildings include the original mill, a convenience store and a house. He stated that the project consists of approximately 3000' of construction along SR155, and while the proposed work adds no capacity to the roadway, the STIP calls for SR155 to be widened to a 4 lane divided section in 2010.
3. Ken Werho of GDOT questioned whether the current traffic count through the intersection was too low. PB agreed to contact Gary Langford to verify the most recent traffic data.
4. The question of shoulder widths was raised, and Ted Cashin of the GDOT Consultant Design Office noted that shoulders should be 6.5' paved with 6" rumble strips, per the current GDOT guidelines.
5. The safety issue was raised by Ken Werho in reference to the intersection of SR155 and Miller's Mill Road. Sean Johnston of PB pointed out that the current proposed profile meets minimum design requirements for 55mph, and max proposed grades meet requirements for mountainous terrain. Ken emphasized that, for a safety project, the Traffic Operations office would only accept a design that meets desirable parameters. Ted Cashin pointed out that Jim Chambers of GDOT had instructed the project team to proceed with minimum requirements to facilitate the tie in between this project and the adjoining Little Cotton Indian Creek bridge replacement project. Also, Ted noted that minimum design values would still significantly improve the intersection. PB agreed to revisit the profile to see how desirable K values would impact the intersection and the tie in with the Little Cotton Indian Creek project. Also, it was noted that the current intersection sight distance is 346', and needs to be improved. PB will coordinate with the design consultant for Little Cotton Indian Creek, J.B. Trimble, INC, regarding any alignment changes that may be required.



Minutes of Meeting
Page 3

6. Matt McDaniel of PB explained the various historical resources on the project site, including the Miller's Mill buildings, Miller store and Miller home on the north end of the project. The Miller house will be directly impacted by the project, because of the alignment shift to the east of existing SR 155. Andy Aiello of the GDOT Environment Location Office explained that the possible destruction of the house could constitute an adverse effect to a historical resource, and would therefore require an environmental assessment and 4f document. This will require in-depth documentation of alternatives, as well as a public information meeting and a public hearing.
7. PB will contact the GDOT District 3 Preconstruction Office to schedule a PIM. PB will facilitate this meeting. The final concept report will be completed after including comments from the PIM.
8. Mark Mastronardi of GDOT asked whether the PIM for this project could be combined with the PIM for the project at Miller's Mill Rd and SR138 intersection. PB will coordinate with District 3 Preconstruction regarding this issue.
9. Ken Werho requested a Need And Purpose Statement for the project.
10. After the environmental discussion, John Durand opened the meeting to general comments.
11. Jim O'Neal of Henry County DOT asked if the bridge replacement and intersection improvement projects would be let together. Ted Cashin answered that this would likely be the case, and that the let date is July 2004.
12. Henry County Water stated that there would be major impacts to their existing facilities if the SR 155/Miller's Mill intersection is lowered significantly. They listed a planned 32" sanitary sewer line, an existing 6" PVC water line on the north side of Miller's Mill Rd and existing water lines to the east and west of SR155 as possible impacts.
13. Bell South noted the existence of a slick site at the NE corner of the SR155/Miller's Mill Rd intersection. This site may be impacted by the proposed construction.
14. GDOT District 3 Traffic Operations requested that turn lane distance be checked, as well as right of way width for future signal poles. They recommended 300' plus a 100' taper for turn lane storage.

John Durand adjourned the meeting after asking for any further comments. Parsons Brinckerhoff is responsible for the official meeting minutes.



Minutes of Meeting
Page 4

The foregoing is our understanding of the topics discussed. If you have any corrections or comments, please fax them to John Durand at 404-237-3015.

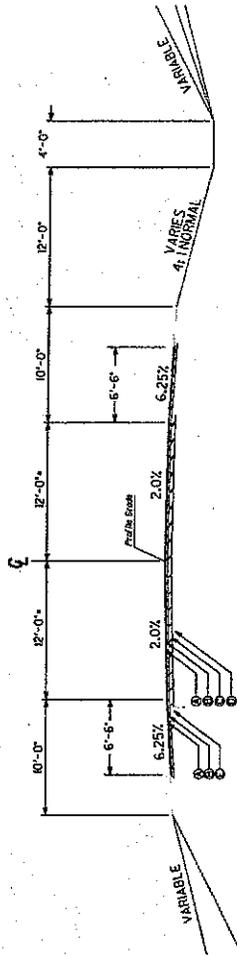
Sincerely,

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
John Durand
Project Manager

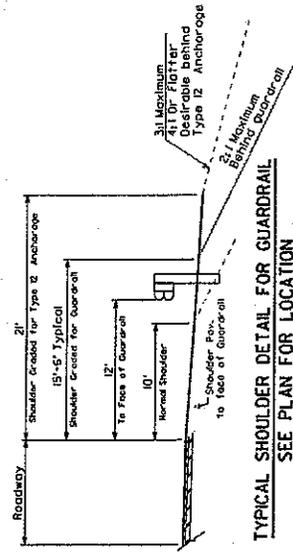
TYPICAL SECTIONS

S. R. 155 MAINLINE

DATE	PROJECT NUMBER	DATE PLOTTED
04/11/01	BRST-163-11701	3



FULL DEPTH SECTION



TYPICAL SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION

- REQUIRED PAVEMENT
- Ⓐ 12.5 mm ASPHALTIC CONCRETE SUPERPAVE - 165#/SY
 - Ⓑ 19mm ASPHALTIC CONCRETE SUPERPAVE - 220#/SY
 - Ⓒ 25mm ASPHALTIC CONCRETE SUPERPAVE - 550#/SY
 - Ⓓ GRADED AGGREGATE BASE, 10"
 - Ⓔ GRADED AGGREGATE BASE, 6" (ALTERNATE 1)

NOT TO SCALE

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 151-0022-0

Henry County

SUFF. RATING: 45.9

Location & Geography

* Structure I.D. No.: 151-0022-0
 * 200 Bridge Information: 07
 * 6A Feature Int.: BIG COTTON INDIAN CREEK
 * 6B Critical Bridge: 0
 * 7A Route Number Carried: SR00155
 * 7B Facility Carried: SR 155
 * 9 Location: 6 MIN OF MCDONOUGH
 2 DOT District: 3
 207 Year Photo: 1999

* 91 Inspection Frequency: 24 Date: 01/11/1999
 92A Fract Crit Insp Freq: 0 00 Date: 0000
 92B Underwater Insp Freq: 0 00 Date: 0000
 92C Other Spc. Insp Freq: 0 00 Date: 0000

* 4 Place Code: 00000

* 5 Inventory Route (O/U): 1
 Type: 3
 Designator: 1
 Number: 00155
 Direction: 0

* 16 Latitude: 33-31.9
 * 17 Longitude: 84-08.3

98 Border Bridge: 000 %Shared: 00
 99 ID Number: 0000000000000000

* 100 Defense Highway: 0
 * 101 Parallel Structure: N
 * 102 Direction of Traffic: 2
 264 Road Inventory Mile Post: 014.97

* 208 Inspection Area: 03 Initials: DJM
 * Location I.D. No: 151-00155D-014.81N
 * XReferen I.D. No: 000-0000000-000.000

Signs & Attachments

* 104 Highway System: 1
 * 26 Functional Classification: 14
 * 204 Federal Route Type: F No: 165-1
 * 110 Truck Route: 0
 206 School Bus Route: 1
 217 Benchmark Elevation: 0.00
 218 Datum: 0
 * 19 Bypass Length: 8
 * 20 Toll: 3
 * 21 Maintenance: 01
 * 22 Owner: 01
 * 31 Design Load: 2
 37 Historical Significance: 5
 205 Congressional District: 03
 * 27 Year Constructed: 1953
 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 Service On: 1 Under: 5
 214 Movable Bridge: 00 A-O-O-O
 203 Type Bridge: A-O-O-O
 259 Pile Encasement: 3
 * 43 Structure Type Main: 1 04
 45 No. Spans Main: 004
 44 Structure Type Appr: 1 1
 46 No. Spans Appr: 0004
 226 Bridge Curve Horz: 0 Vert: 1
 111 Pier Protection: 0
 107 Deck Structure Type: 1
 108 Wearing Surface Type: 6 Membrane: 8 Protection: 8
 223 Expansion Joint Type: 02
 242 Deck Drains: 1
 243 Parapet Location: 0
 Height: 0
 Width: 0
 238 Curb: 1.0 1
 239 Handrail: 1 1
 * 240 Median Barrier Rail: 0
 241 Bridge Median Height: 0 Width: 0
 * 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: 1
 234 Delineator: 1
 235 Hazard Boards: 1
 237 Utilities Gas: 00 Water: 00 Electric: 00 Telephone: 00 Sewer: 00
 247 Lighting Street: 0 Navigation: 0 Aerial: 0
 * 248 County Continuity No: 00

Report Date: 01/05/2001

SIA - 1

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 151-0022-0

Henry County

SUFF. RATING: 45.9

Programming Data

201 Project No: S-0866 (2) CT.2
 202 Plans Available: 0
 249 Prop. Proj No: BRST-165-1 (70)
 250 Approval Status: 0000
 251 P.I. No: 333127
 252 Contract Date: 02/01/2004
 260 Seismic No: 00000
 75 Type Work: 34 1
 94 Bridge Imp. Cost: \$ 304
 95 Roadway Imp. Cost: \$ 246
 96 Total Imp. Cost: \$ 700
 76 Imp. Length: 001608
 97 Imp. Year: 1990
 114 Future ADT: 012150 Year: 2019

Measurements

* 29 ADT: 008100 Year: 1999
 * 109 % Trucks: 9
 * 28 Lanes On: 02 Under: 00
 * 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0040
 * 49 Structure Length: 288
 * 51 Br. Rdwy. Width: 23.8
 * 52 Deck Width: 30.4
 * 47 Tot. Horz. Cl: 23.8
 * 50 Curb/Sdewlk Width: 2.0/2.0
 * 32 Approach Rdwy Width: 024
 * 229 Shlder Width:
 Rear Lt: 6.0 Type: 8 Rt: 6.0
 Fwd Lt: 6.0 Type: 8 Rt: 6.0
 Pvmnt Width:
 Rear: 24.0 Type: 2
 Fwd: 24.0 Type: 2
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail: 2
 Transition: 1
 App. G. Rail: 2
 App. Rail End: 2
 53 Minimum Cl. Over: 99' 99"
 Under: N 00' 00"
 * 228 Min. Vert. Cl
 Act. Odm. Dir: 99' 99"
 Oppo. Dir: 99' 99"
 Posted Odm. Dir: 00' 00"
 Oppo. Dir: 00' 00"
 55 Lateral Undercl. Rt: N 99.9
 56 Lateral Undercl. Lt: 0.0
 * 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: 7.0
 Deck Thick Approach: 7.0
 246 Overlay Thickness: 3.0
 211 Tons Structural Steel: 0.0
 212 Year Last Painted: Sup: 0000 Sub: 0000

Ratings

66 Inventory Type: 2 Rating: 17
 64 Operating Type: 2 Rating: 31
 231 Calculated Loads
 H-Modified: 20 0
 HS-Modified: 25 0
 Type 3: 28 0
 Type 3s2: 40 0
 Timber: 36 0
 Piggyback: 00 0
 261 H Inventory Rating: 13
 262 H Operating Rating: 22
 67 Structural Evaluation: 2
 58 Deck Condition: 7
 59 Superstructure Condition: 7
 * 227 Collision Damage: 0
 60A Substructure Condition: 6
 60B Scour Condition: 6
 60C Underwater Condition: N
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 7
 68 Deck Geometry: 2
 69 UnderClr. Horz/Vert: N
 72 Appr. Alignment: 6
 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
 Type 3S2: 00
 Timber: 00
 Piggyback: 00
 253 Notification Date: 0000
 253 Fed Notify Date: 0000

Hydraulic Data

215 Waterway Data
 Highwater Elev: 0000.0 Year: 0000
 Flood Elev: 0000.0 Freq: 00
 Avg. Streambed Elev: 0000.0
 Drainage Area: 00000
 Area of Opening: 000000
 113 Scour Critical: 6
 216 Water Depth: 01.3 Br Height: 29.3
 222 Slope Protection: 6
 221 Spur Dikes Rear: 0 Fwd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type:
 No Barrels: 0
 Width: 0.0
 Height: 0.0
 Length: 0
 Apron: 0
 * 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No: 151-00155D-014.81N
 * XReferen I.D. No: 000-000000-000.000

Report Date: 01/05/2001

GEORGIA HISTORIC BRIDGE SURVEY

SERIAL NUMBER: 151-0022-0 COUNTY: HENRY OWNER: STATE HIGHWAY
 BRIDGE LOCATION: 151-00155D-014.81 LOCATION: 6 MI N OF MCDONOUGH
 FACILITY CARRIED: SR 155

FEATURE INTERSECTED: BIG COTTON INDIAN CREEK

TYPE: T BEAM DESIGN:

MATERIAL: REINFORCED CONCRETE SUBSTRUCTURE: HAMMER HEAD BENTS

SPANS: 8 LENGTH: 288 WIDTH: 30.4

DATE OF CONSTRUCTION: 1953 ALTERATION: SOURCE: S-0866(2)C 2

DESIGNER/BUILDER: STATE HWY DEPT BRIDGE DEPT DOT DIST: 3

Update Status:

SETTING: The bridge carries a two-lane state route over a stream in a lightly-developed rural setting. At the northwest quadrant is a former grist mill, gin, and store complex owned and operated by the Miller family. An abandoned ca. 1900 pin-connected Pratt thru truss bridge sits nearby. The mill and gin complex appear to be a potentially eligible National Register historic district.

NR Recommendation: Eligible

SUMMARY: The eight-span reinforced-concrete T beam bridge (1 @ 26', 4 @ 40', 3 @ 34') built in 1953 is technologically significant as the first bridge with a sag curve over the span. It is also an early example of the hammer head pier that came into use in this country right after World War II. The bridge is adjacent to the Miller grist mill and country store that make up a potential historic district. The bridge is individually significant and a contributing resource to a potential historic district.

Split

Load Split

PHOTO: 31:16-24

REVIEWED BY: MEM

DATE: 8/95

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-165-1(70) Henry
P.I. 333127

OFFICE Environment/ Location
DATE January 5, 2001

FROM Harvey D. Keeper, State Environmental/ Location Engineer

TO Jim Chambers, P.E., Office of Consultant Services
Attn: Ted Cashin

SUBJECT SR 155 @ Big Cotton Indian Creek

We are furnishing estimated traffic assignments for the above project as follows:

2007 ADT = 12650
2027 ADT = 22800
K = 11%
D = 60%
T = 8%
24 HR T = 10%
SU = 4%
COMB = 6%

If you have any questions concerning this information please contact
Teresa Williamson at (404)699-4456.

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: BRST-165-1(70)

County: Henry

P.I. no.: 333127

Description: S.R. 155@ Big Cotton Indian Creek Bridge Replacement

Traffic Data (NOTE: AADTs are one-way)

24-hour Truck Percentage: 10.00%

AADT initial year of design period: 6,325 vpd (2007)

AADT final year of design period: 11,400 vpd (2027)

Mean AADT (one-way): 8,862 vpd

Design Loading

Mean AADT	LDL	Trucks	18-K ESAL	Total Daily Loads
8,862	* 1.00	* 0.100	* 0.95	= 843

Total predicted design period loading = 843 * 20 * 365 = 6,153,900

Design Data

Terminal Serviceability Index: 2.50

Soil Support: 2.50

Regional Factor: 1.60

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness mm	(in.)	Structural Coefficient	Structural Value
12.5 mm Superpave	38	(1.50)	0.0173	0.66
19 mm Superpave	50	(1.97)	0.0173	0.86
25 mm Superpave	26	(1.02)	0.0173	0.45
	100	(3.94)	0.0118	1.18
Graded Aggregate Base	300	(11.81)	0.0063	1.89

Required SN = 5.85

Proposed SN = 5.04

>>> Proposed pavement is 13.8% Underdesign <<<

Remarks: Preliminary Pavement Design for Concept Development

Prepared by Ted Cashin/Office of Consultant Design September 18, 2001
Date

Recommended State Road Design Engineer
Date

Approved Chief Engineer
Date

PROJECT STATUS REPORT

PI NUMBER			READY
PROJECT	COUNTY	DESCRIPTION	TO LET

333295-	HENRY	SR 155 @ MILLERS MILL RD/CR 665	0202
STP-3332-00(950)	US:	<u>APPROVED DATES</u> PE DATE:	LOCL RW DATE: LOCL CST DATE: 2004
PROJ MGR: T. CASHIN		<u>PROPOSED DATES</u> TII PE DATE:	LOCL TII RW DATE: LOCL TII CST DATE: LUMP
PROG TYPE: INTERSECTION IMP		<u>APPROVED COSTS</u> PE\$:	\$0 RW COST: \$0 CST EST: \$522,000
CONCEPT:		<u>PROPOSED COSTS</u> TII PE\$:	\$0 TII RW\$: \$0 TII CST\$ \$522,000
P.E. PROJECT:	NN; SB57	REF PROJ:	TWIN PROJ: 333127- EST DATE: 9/16/99
LENGTH: 0.00	C DIST: 3	FIELD DIST: 3	STATUS: PRECST TIP #: AR 157 UAC: 1 FUND 1: Q21

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		DEFINE CONCEPT RPT:			00	LONG FORM SENT FOR APPROVAL 1-21-2000 COUNTY WANTS TIP AMENDMENTS FROM ARC NEED TO PUT W/333127 AND LET TOGETHER COUNTY CONSULTANT =
		CONCEPT MEETING:			00	
		SUB RTP TO ENG SERVICES:			00	
		REC ENG SERV APPROVAL:			00	
		MGT APPROV CPT REPORT:			00	
		ENVIRONMENTAL:	10/1/01	3/31/02	00	
		PUBLIC HEARING:			01	
		PHOTO MAPPING:			00	
		FIELD SURVEY:			00	
		FINAL ALT APPRV:			00	
		PRELIM FPR HELD:			00	LOCALS WANT DOT TO DO BUT HAVE NOT SENT
		PREL RDWY RW PLANS:			00	A LETTER - IT WAS REQD. SEVERAL TIMES.
		SECURE 404 PROCESS:			00	
		LOC DZN APPRV:			00	
		FINAL CST PLANS:			00	
		APPRV RW PLANS:			00	
		STAKE RW:			00	
		FINAL FPR HELD:			00	
		LAB RECV SOIL REQUEST:			00	
		PREL HYDR PLANS:			01	
		LAB BFI REQUEST:			00	
		BRIDGE PLANS:			01	
		U.S.T.s:			00	

BIKE PROVISIONS INCLUDED?: MEASUREMENT SYSTEM: E CONSULTANT: C UT EST: \$0.00

PDD : W/333127. COUNTY WILL NOT DO! WE CAN'T. 3/6/01

PLANNING: NETWORK ANALYSIS YR 2003

DZN CMT: NEEDS TO GO FY04 W/ P.I. 333127

UTIL CMT: NEED P. PLANS 09/01

LGPA: REQ HENRY DO UTILITIES 5-24-01.

LOC CMT: INTERS IMPROVEMENT

EIS: RG/LOCALS | MITCHELL COORDINATE W/333127

404: N/R OR NW 23 EXPECTED; LOCALS

TS: CAH|D3 TO REVW LCL CNSLTNT PLNS|030601|+

ROW:

RR

PITS:

UST CMT:

BR CMT: NO BRIDGE REQUIRED

R/W INFORMATION:

R/W STATUS: NUMBER OF PARCELS TO BE ACQUIRED: 0 ACQUIRED BY: LOC ACQ MGR

UNDER-REVIEW: 0 RELEASED 0 OPT-PEND: 0 DEEDS 0 COND-PEND 0 COND-FILED 0

RWCERT:

**ASSESSMENT OF EFFECTS
TO CULTURAL RESOURCES
FOR THE REPLACEMENT OF THE GDOT BRIDGE
OVER BIG COTTON INDIAN CREEK (151-0022-0)
ON STATE ROUTE 155**

**GDOT PROJECT BRST-165-1 (70)
HENRY COUNTY, GEORGIA
P.I. NO. 333127**

**PREPARED PURSUANT TO
SECTION 106 OF THE
NATIONAL HISTORIC PRESERVATION ACT OF 1966,
AS AMENDED**

MARCH 2002



**Department of Transportation
State of Georgia
Office of Environment/Location
3993 Aviation Circle
Atlanta, Georgia 30336-1593**

ASSESSMENT OF EFFECTS

GDOT PROJECT BRST-165-1 (70), HENRY COUNTY

P.I. # 333127

HP # 010925-008

FINDING OF ADVERSE EFFECT TO

***MILLER'S MILL MULTIPLE RESOURCE AREA
(ON GEORGIA STATE ROUTE 155)***

May 8, 2002

This document has been produced for use in compliance with Section 106 of the National Historic Preservation Act of 1966 and subsequent amendments.

This document also serves in compliance with commitments attendant to the "Nationwide Programmatic 4(f) Statement for Historic Bridges" approved July 1983 by the Federal Highway Administration and the U.S. Department of Transportation pursuant to 23 U.S.C. Section 138.

INTRODUCTION

This document has been prepared for use in completion of applicable Section 106 procedures in compliance with the National Historic Preservation Act (NHPA) of 1966 and subsequent amendments. The documentation has been developed in accordance with the GDOT/FHWA Cultural Resource Survey Guidelines and 36 CFR Part 800. As such, this document assesses the effects to historic properties identified within the area of potential effect for the proposed improvements to the bridge over Big Cotton Indian Creek, on State Route (SR) 155 in Henry County. This undertaking is referenced as GDOT Project BRST-165-1 (70), or hereafter, as "the project."

The design of the proposed project was developed by GDOT engineering personnel who, as a standard procedure, include environmental parameters as a part of the initial investigations prior to laying out a proposed design. Basic data of the project area that was gathered and studied included aerial photography, topographic maps, traffic (existing and projected), previous studies, wetland inventory maps, soil survey maps, flood plain maps, and Georgia Department of Natural Resources' historic resource survey maps.

This data was used to delineate any relevant wetland or hydric soil boundaries, flood plains, parks and recreational facilities, known or suspected historic properties and archaeological sites, existing rights-of-way, possible UST/landfill/hazardous waste sites, and areas of possible endangered species habitat on the aerial photography prior to laying out an alignment. In addition, other "controls" such as churches, cemeteries, schools, hospitals, and any other noise sensitive areas were also identified.

Only at this point was the proposed alignment developed, with all attempts made to avoid sensitive ecological, historic and archaeological areas. In the event that avoidance was not possible, every attempt was made to minimize harm to such resources. The proposed alignment, once laid out, was then field checked and additional refinements were made to further minimize harm to both the natural and built environment.

NEED AND PURPOSE

Project BRST-165-1 (70), Henry County, would replace the existing bridge that spans Big Cotton Indian Creek, which is located 6.0 miles north of McDonough on State Route 155. This section of SR 155 is functionally classified as a rural minor arterial and features a posted speed limit of 55 mph. The Average Daily Traffic (ADT) along this section of roadway was 8,100 in 1999 with 9 percent trucks. The projected 2007 and 2027 ADT for this section of roadway is 12,650 and 22,800 respectively.

This bridge (GDOT Serial # 151-0022-0) was built in 1953 and serves two-lane, two-way traffic, with travel lanes of 12 feet in width. It employs eight spans, with a total overall length of 288 feet, a width of 30.4 feet, and a right-of-way width of 100 feet. Constructed of reinforced concrete, its superstructure consists of T-beams with a concrete deck and overlay, while the substructure is comprised of hammer-head piers and concrete abutments.

The current bridge is considered structurally deficient and functionally obsolescent, with a sufficiency rating of 45.9. The sufficiency rating is a scale used by the Georgia Department of Transportation to determine the structural and geometric condition of the bridge. This rating is determined by a Federal definition adopted from AASHTO standards, and is based on structural adequacy and safety, serviceability, functional obsolescence, and how essential the structure is for public use. Ranging on a point system from 1 to 100, any bridges with ratings of 50 points or lower are candidates for replacement in order to provide a safe, structurally sufficient bridge for motorists and pedestrians to use. A bridge with a rating of 1 would be in serious need of replacement, while one with a rating of 100 would have no deficiencies.

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

DESCRIPTION OF THE UNDERTAKING

GDOT Project BRST-165-1 (70) is on the National Highway System (NH) and is partially federally funded. Therefore, Section 106 compliance is being processed through the Federal Highway Administration (FHWA).

The proposed project consists of the replacement of a structurally deficient and functionally obsolescent bridge on SR 155 over Big Cotton Indian Creek, 6 miles north of McDonough. The existing bridge, constructed in 1953, is 288' x 30' 4" with a sufficiency rating of 45.9. The existing approaches consist of a two-lane rural 24' roadway on a right-of-way width of approximately 100'. This project proposes to replace the existing bridge over Big Cotton Indian Creek with a new 530' x 44' bridge. The replacement structure and approaches will consist of two 12' lanes with 10' graded shoulders (6.5' paved). Traffic will be maintained during the replacement of the existing bridge by shifting the horizontal alignment and the new bridge construction to the east of the existing roadway. An additional 150' of right-of-way, as well as temporary construction easements, will be acquired on the east side of the existing roadway. The project limits extend through the intersection of SR 155/Millers Mill Road and Selfridge Road. The project also proposes to provide signalization, turn lanes, and improve intersection stopping sight distance at this intersection. Total project length is approximately 3000'.

As defined in 36 CFR 800.16(d), the area of potential effects (APE) for an undertaking is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist". Based on this definition, the nature and scope of the undertaking, the guidance in the GDOT/FHWA Cultural Resource Survey Guidelines and past experience with similar projects, the APE was defined, in consultation with the Georgia SHPO, as consisting of the current and proposed right-of-way within the project limits and the view-shed from the bridge.

IDENTIFICATION OF HISTORIC PROPERTIES

Existing information on previously identified historic properties was checked to determine if any are located within the APE of this undertaking. This review included National Register listed properties, proposed National Register nominations, National Historic Landmarks, and the updated Georgia Historic Bridge Survey (GHBS). The Department of Natural Resources (DNR) 1985 and 1998 Henry County surveys were also consulted. As a result of these efforts, one previously identified historic property was found to be within the proposed project's APE (*refer to Figure 1*). In 1995, the GHBS evaluated the same bridge that is to be improved, GDOT Serial # 151-0022-0, and recommended that it was eligible for listing in the National Register.

The state archaeological site files at the University of Georgia and existing survey reports were also consulted to locate previously identified archaeological sites within the APE. Additionally, topographic maps and aerial photography were reviewed to identify areas of high archaeological site potential within the APE.

Following the review of any existing information on previously identified historic properties, potential consulting parties for the Section 106 process were identified, based on the nature of the undertaking and the guidance in the GDOT/FHWA Cultural Resource Survey Guidelines. In addition to the Georgia SHPO, the other parties invited to participate in the Section 106 process were the Genealogical Society of Henry and Clayton Counties, the Henry County Board of Commissioners, and the Atlanta Regional Commission. These entities were informed both of our efforts to locate previously identified historic properties and of the results of this initiative. They were asked to provide information on any unidentified National Register listed or potentially eligible historic properties within the proposed project's APE. A response was received from the Atlanta Regional Commission by a letter dated September 27, 2001.

Finally, after reviewing any additional information received from consulting parties, field surveys were conducted within the APE of the proposed project to identify any historic properties or archaeological sites eligible for listing in the National Register. The results of the field surveys, along with attendant background research, were summarized in a Historic Resources Survey Report and an Archaeological Assessment. These reports were provided to all consulting parties participating in the Section 106 process for their review and comment.

As mentioned before, one previously identified eligible National Register resource, the bridge itself, was found to be within the proposed project's APE. However, as documented in the Historic Resources Survey Report, the field survey and accompanying background research revealed the existence of a previously unidentified historic Multiple Resource Area that was also determined to be potentially eligible for the National Register. [This MRA is comprised of those structures and activities associated with a late 19th century mill site referenced as Miller's Mill. The MRA boundary includes the mill complex and both old and new iterations of the family store/service station, as well as the residences of the multiple generations of the Miller family that operated the mill and store businesses. Moreover, this boundary also includes the same bridge over Big Cotton Indian Creek that is to be improved. Not only was this bridge deemed potentially NR eligible by the GHBS, it also contributes to the significance of the MRA due to the role it played in the location and orientation of the new store and the later family residences.]

No National Register listed or eligible archaeological sites were identified during the archaeological survey of the APE.

The Historic Resources Survey Report was submitted to the SHPO and FHWA on January 17, 2002. The Archaeological Assessment was submitted to the SHPO and FHWA on February 6, 2002.

DESCRIPTION OF HISTORIC PROPERTIES

Miller's Mill Multiple Resource Area

This historic resource is comprised of various types of buildings and structures that were all originally focused around, and tied to, the activities at a former grist-mill known throughout the last 75 years of the 20th century as Miller's Mill. Included in the multiple resource area are two general store/service stations that were operated successively by members of the Miller family since 1932. Additionally, four houses lived in by succeeding generations of Miller sons, as well as the small residence of the family's handyman, Lum Campbell, are also encompassed within the discontinuous boundaries. The Hinton-Miller house was built around 1900 by the previous owners of the mill. After the Millers bought the land and milling operation in 1925, the D.S. Miller House, the W. David Miller House, and the Miller-White House were built by either D.S. "Dave" Miller or his son, David Miller, in 1925, 1936, and 1948, respectively.

The mill complex's oldest building burned in 1990, but otherwise, all other aspects of the mill operations are still extant. They include the remaining c. 1900 wood-framed, sheet metal sided main building, the miller's house, the dam, mill pond and race, the water wheels from both mills, as well as all gear and machine assemblies. Further east of the mill complex, the metal truss bridge that originally carried State Route 155's traffic across Big Cotton Indian Creek before 1952 also remains intact, if dilapidated. The 1952 realignment of the highway led to the construction of the new Miller Store, built in the same year.

This multiple resource property was evaluated for eligibility for listing in the National Register under *Criteria A and C* and appears to possess a *local* level of significance in the areas of *agriculture, architecture, commerce, community planning and development, engineering, and transportation*. The mill complex itself is an important example of the connection between agriculture and the commercial production of goods for market. Moreover, the intricate design of the mill site, including the multiple mill buildings, the hydraulics necessary to run them, and the complex gear operations, is an excellent example of the engineering that was employed to build functional and productive mill facilities. Although a small rural community, Millers Mill grew according to the development of the mill site and the highway. The earliest historic residences were built near the mill site and were originally oriented toward the old location of the highway. The 'Old Store' was also located along the old route. When the highway shifted, the old store gave way to the new, and some historic buildings now seem oddly placed on the landscape. This site is thus an interesting example of the importance of roadway locations and the results of shifting such alignments. Furthermore, the various structures and buildings, of a primarily vernacular nature, provide a rare and complete glimpse of a small, rural mill community dating from the turn-of-the-century. The changes in architecture are representative of the site's development through the mid 20th century. In summary, the Miller's Mill Multiple Resource Area is a good, intact example of an early-to-mid 20th century rural mill community.

The eligible National Register boundary for this Multiple Resource Area corresponds to the legal property boundaries of all related historic properties to the north, west, and south, and is bounded on the east by Big Cotton Indian Creek and the tree line behind the Miller-White House. The boundaries for the two discontinuous resources, the D.S. Miller House and W. David Miller House, correspond to their legal property lines.

CRITERIA OF ADVERSE EFFECT

Section 106 of the National Historic Preservation Act requires that a Federal Agency head with jurisdiction over a Federal, federally-assisted or federally-licensed undertaking take into account the effect of the agency's undertakings on properties listed in or eligible for listing in the National Register of Historic Places (NRHP). The regulations and criteria used for assessing effects are outlined in 36 CFR 800, "Protection of Historic Properties." The regulations stipulate that a determination of project effect must be made to those NRHP-eligible or listed resources identified in a project's APE.

An adverse effect is described in 36 CFR 800.5 as follows:

An adverse effect is found when an undertaking may alter, directly or indirectly, the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonable foreseeable effects by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Under 36 CFR 800.5, adverse effects on historic properties include, but are not limited to:

- (i) Physical destruction of or damage to all or part of the property;*
- (ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;*
- (iii) Removal of the property from its historic location;*
- (iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;*
- (v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;*
- (vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and*
- (vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.*

To determine if the project would adversely affect the NRHP-eligible resource, the Criteria of Adverse Effect were applied. This process involved field examination of the subject property in relation to the proposed improvements, review of the applicable NRHP criteria for the property, and examination of aerial photographs depicting the existing and proposed alignment in relation to the properties. Existing development was noted and the potential for future development in the vicinity of the historic resource was also evaluated.

ASSESSMENT OF EFFECTS

Miller's Mill Multiple Resource Area

Due to the nature of this project, the replacement of a historic, 1953 bridge that has been deemed to be National Register eligible, this undertaking is certain to have an *Adverse Effect* on the targeted structure, GDOT Serial # 151-0022-0. Additionally, the proposed project is anticipated to have a concurrent *Adverse Effect* on the National Register-eligible Miller's Mill Multiple Resource Area, to which the extant bridge contributes.

The project limits extend through the intersection of SR 155/Millers Mill and Selfridge Road. The project also proposes to provide signalization, turn lanes, and improved sight distance at this intersection. The total project length is approximately 3000'. Within the APE, project implementation would consist of the construction of a new bridge parallel to the existing, historic bridge. The replacement structure and approaches will consist of two 12' lanes with 10' graded shoulders (6.5' paved). An additional 150' of right-of-way, along with temporary construction easements, will be acquired on the east side of the existing roadway. Relocation of the new bridge further east of the existing roadway will allow continued usage of the current bridge while the project progresses, thus maintaining traffic flow without major interruption. After the new 530' x 44' bridge is completed, the existing historic bridge will be demolished.

The realignment of the roadway approaches necessitated by the eastward relocation of the creek crossing will likewise cause the destruction of the Miller-White House, an element that contributes to the significance and integrity of the overall Multiple Resource Area. Built in 1948 by W. David Miller, the exterior walls of the house are formed of solid granite that was quarried at the Klondike community in nearby south DeKalb County. The project will also result in the removal or relocation of the Lum Campbell House, another contributing resource. This small frame structure, which was already moved once, in 1952, for the previous highway realignment, was formerly the residence of an African-American handyman who worked at the mill.

Since the two individual historic properties, as well as the endangered historic bridge, are important elements that contribute to the overall significance and integrity of the Miller's Mill Multiple Resource Area, project implementation would result in not only the complete physical destruction of all three structures, but would also cause corresponding damage to the integrity and context of the entire historic resource. This potential harm is sufficient to incur a determination as an adverse effect to the Miller's Mill Multiple Resource Area.

ALTERNATIVES TO AVOID ADVERSE EFFECT

Four alternatives to the proposed project (preferred alternative) were investigated as a means to avoid the destruction of the historic bridge, the Miller-White House, the Lum Campbell House, and the corresponding compromise to the significance and integrity of the Miller's Mill Multiple Resource Area:

Alternate 1:

Construct proposed bridge at the same location as the existing structure, with a temporary on-site detour and a detour bridge

This alternative was eliminated due to the additional cost of building an on-site detour and detour bridge on S.R. 155. Further, any potential detour to the west side would be prohibited by the presence of the historic mill complex, while even a temporary detour to the east would still impact the same two individual contributing elements, the Miller-White House and the Lum Campbell House, that the preferred alternative effects.

Alternate 2:

Construct proposed bridge at the same location as the existing bridge, while closing current road, and redirecting traffic to a temporary off-site detour

After analysis, this alternative was prohibited due to the high volumes of traffic on S.R. 155 (12,650 ADT). Moreover, no other acceptable state routes or county roads were found in the area that could be employed to detour traffic across Big Cotton Indian Creek, or provide suitable access for emergency vehicles.

Alternate 3:

Construct proposed bridge by staging construction and maintaining traffic

This alternative was also rejected because the detour and additional right-of-way required for its enactment would cause a shift in the alignment of the new bridge and roadway. Similarly to Alternate 1, a shift to either the west or east sides would, in both cases, adversely effect one or more buildings or structures that contribute to the significance and integrity of the NR eligible Miller's Mill Multiple Resource Area.

Alternate 4:

No-Build

This alternative would not address the need or purpose of the proposed project, and was eliminated due to the poor condition of the existing bridge (sufficiency rating of 45.9). The no-build alternative would allow the existing bridge to continue to deteriorate, creating a hazard for motorists, and driving up long-term maintenance cost projections.

PLANNING TO MINIMIZE HARM AND PROPOSED MITIGATION

Planning to minimize harm was taken into consideration during project development. Measures to avoid an adverse effect (demolition of the bridge and the two contributing buildings) were addressed as project alternatives, and are discussed in the previous section. The preferred alternative is to proceed with the proposed bridge replacement, accompanied by mitigation. Replacement of the historic bridge, along with mitigating measures, would involve documenting the existing bridge structure and both the Miller-White and Lum Campbell Houses.

The following mitigation measures are proposed for discussion at consultation between the FHWA and the SHPO:

1. Prior to project implementation, GDOT Bridge # 151-0022-0 will be recorded to Historic American Engineering Record (HAER) standards, utilizing large format (negatives of 4 x 5 inches) photography so there will be a permanent record of their existence. The documentation will be submitted to the Georgia SHPO for acceptance and retention.
2. Prior to project implementation, the Miller-White House will be recorded to Historic American Building Survey (HABS) standards, utilizing large format (negatives of 4 x 5 inches) photography so there will be a permanent record of this granite-walled building. The documentation will be submitted to the Georgia SHPO for acceptance and retention.
3. Prior to project implementation, the Lum-Campbell House will be recorded to Historic American Building Survey (HABS) standards, utilizing large format (negatives of 4 x 5 inches) photography so there will be a permanent record of this example of vernacular architecture. The documentation will be submitted to the Georgia SHPO for acceptance and retention. Following this, the Lum Campbell House will be moved back to near its original site on the west side of SR 155, across from its current location on the east side. The house was moved once before, in 1952, to make way for the previous highway improvements. However, the proposed realignment of the current highway to the east will open space for its return to its approximate original location, next to the "new store."

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-165-1(70) & STP-3332-00(950)

County: HENRY

P. I. Number: 333127 & 333295

Federal Route Number: N/A

State Route Number: 155

Recommendation for approval:

DATE 7-2-02



Project Manager

DATE 7-5-02

James B. Buchanan MPA

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 _____

Office of Financial Management Administrator

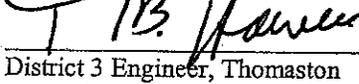
DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE 7-15-02



District 3 Engineer, Thomaston

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

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Federal Route Number: N/A

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Recommendation for approval:

DATE 7-2-02

DATE 7-5-02



Project Manager

James B. Brindley MPA

State Consultant Design Engineer

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DATE 7/12/02

Marta V. Rosen /c/c
State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District 3 Engineer, Thomaston

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
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Project Manager

DATE 7-5-02

James S. Bondman *MBA*

State Consultant Design Engineer

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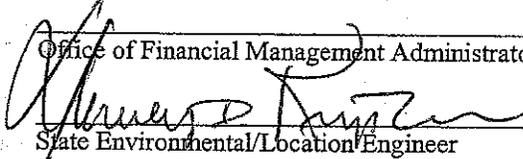
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Recommendation for approval:

DATE 7-2-02

DATE 7-5-02



Project Manager

James B. Bondman MBA

State Consultant Design Engineer

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DATE _____

Office of Financial Management Administrator

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State Environmental/Location Engineer

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District 3 Engineer, Thomaston

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Project Review Engineer

DATE 8/12/02

Paul V. Miles Jr
State Bridge and Structural Design Engineer

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