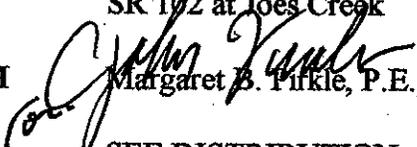


D.O.T. 66

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-1575(8) Glascock County **OFFICE** Preconstruction
P. I. No. 245345
SR 102 at Joes Creek **DATE** March 24, 2004

FROM  Margaret B. Finkle, 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

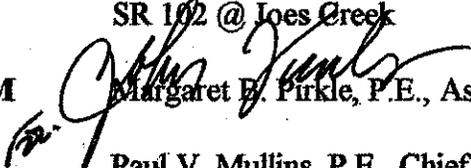
DISTRIBUTION:

David Mulling
Harvey Keeper
Jerry Hobbs
Percy Middlebrooks
Michael Henry
Phillip Allen
Joe Palladi (file copy)
Paul Liles
Brent Story
Mike Thomas
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-1575(8) Glascock County **OFFICE** Preconstruction
P.I. No. 245345
SR 102 @ Joes Creek **DATE** March 8, 2004

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

TO Paul V. Mullins, P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the replacement of a structurally deficient bridge on SR 102 over Joes Creek, 2.2 miles southeast of Mitchell, Georgia. The existing bridge, constructed in 1942, is load limited with a sufficiency rating of 40. State Route 102 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. This section of SR 102 is functionally classified as a rural major collector. Traffic is projected to be 1200 VPD and 1800 VPD in the years 2006 and 2026 respectively. The posted speed and the design speed are 55 MPH.

The construction proposes to construct a new 81' x 38' concrete bridge over Joes Creek at the existing bridge site. The approaches will consist of two, 12' lanes with 6' rural shoulders (2' paved). Traffic will be maintained during construction utilizing an on-site detour.

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

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$1,435,000	\$1,435,000	Q10	2005
Right-of-Way	\$ 80,000	\$ 80,000	Q10	
Utilities*	\$ 20,000	---		

*Glascock County refused LGPA for utilities 4-6-99.

Paul V. Mullins

Page 2

BRST-1575(8) Clascock

March 8, 2004

I recommend this project concept be approved.

MBP:JDQ/cj

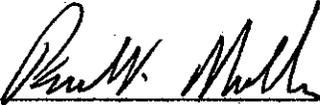
Attachment

CONCUR



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

APPROVE



Paul V. Mullins, P.E., Chief Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: BRST-1575(8) Glascock
P.I. No.: 245345
S.R. 102 @ Joes Creek

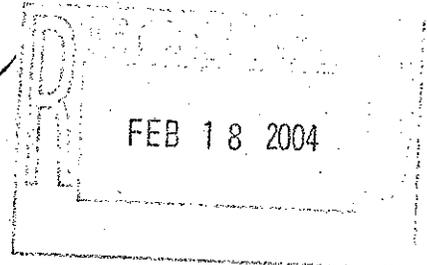
OFFICE: Engineering Services

DATE: February 18, 2004

FROM: David Mulling, Project Review Engineer

REW

TO: Meg Pirkle, Assistant Director of Preconstruction



SUBJECT: CONCEPT REPORT

We have reviewed the Concept Report submitted February 12, 2004 by the letter from Brent Story dated February 6, 2004, and have the following comment.

- Utility Relocation costs should be shown for informational purposes.

The costs for this project are:

Construction	\$1,186,929
Inflation	\$118,693
E&C	\$130,562
Reimbursable Utilities	Not provided (Glascock Co. has not signed LGPA)
Right of Way	\$80,000

REW

c: Brent Story, Attn.: Yun Tang

SCORING RESULTS AS PER MOG 2440-2

Project Number: BRST-1575(8)		County: Glascock		PI No.: 245345	
Report Date: February 11, 2004		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 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	Utility Relocation costs should be shown for informational purposes.			
Judgement	100				
Environmental	100				
Right of Way	100				
Utility	100				
Constructability	100				
Schedule	100				

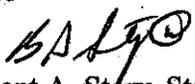
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE BRST-1575(8), Glascock County
P.I. 245345

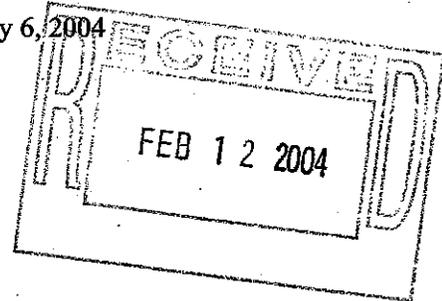
OFFICE : Consultant Design

DATE : February 6, 2004

FROM:  Brent A. Story, State Consultant Design Engineer

TO: Margaret B. Pirkle, Assistant Director of Preconstruction

SUBJECT **PROJECT CONCEPT REPORT**



Attached is the original copy of the Concept Report for your further handling and approval in accordance with the Plan Development Process (PDP). Those people on the distribution list below should review the concept report and send comments and/or signature page to the Preconstruction office within 10 days as per the PDP.

Distribution:

David Mulling, Project Review Engineer
Harvey Keepler, State Environmental/Location Engineer
Phillip Allen, State Traffic Safety and Design Engineer
Joe Palladi, State Transportation Planning Administrator
Percy Middlebrooks, State Financial Management Administrator
Mike Thomas, District 2 Engineer
Paul Liles, State Bridge Design Engineer
Yun Tang, Office of Consultant Design

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-1575(8)
County: GLASCOCK
P. I. Number: 245345

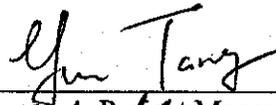
Federal Route Number: N/A
State Route Number: 102

DESCRIPTION: Bridge Replacement on SR 102 Over Joes Creek

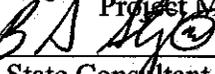
Recommendation for approval:

DATE 2/9/2004

DATE 2/11/04



Project Manager



State Consultant Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

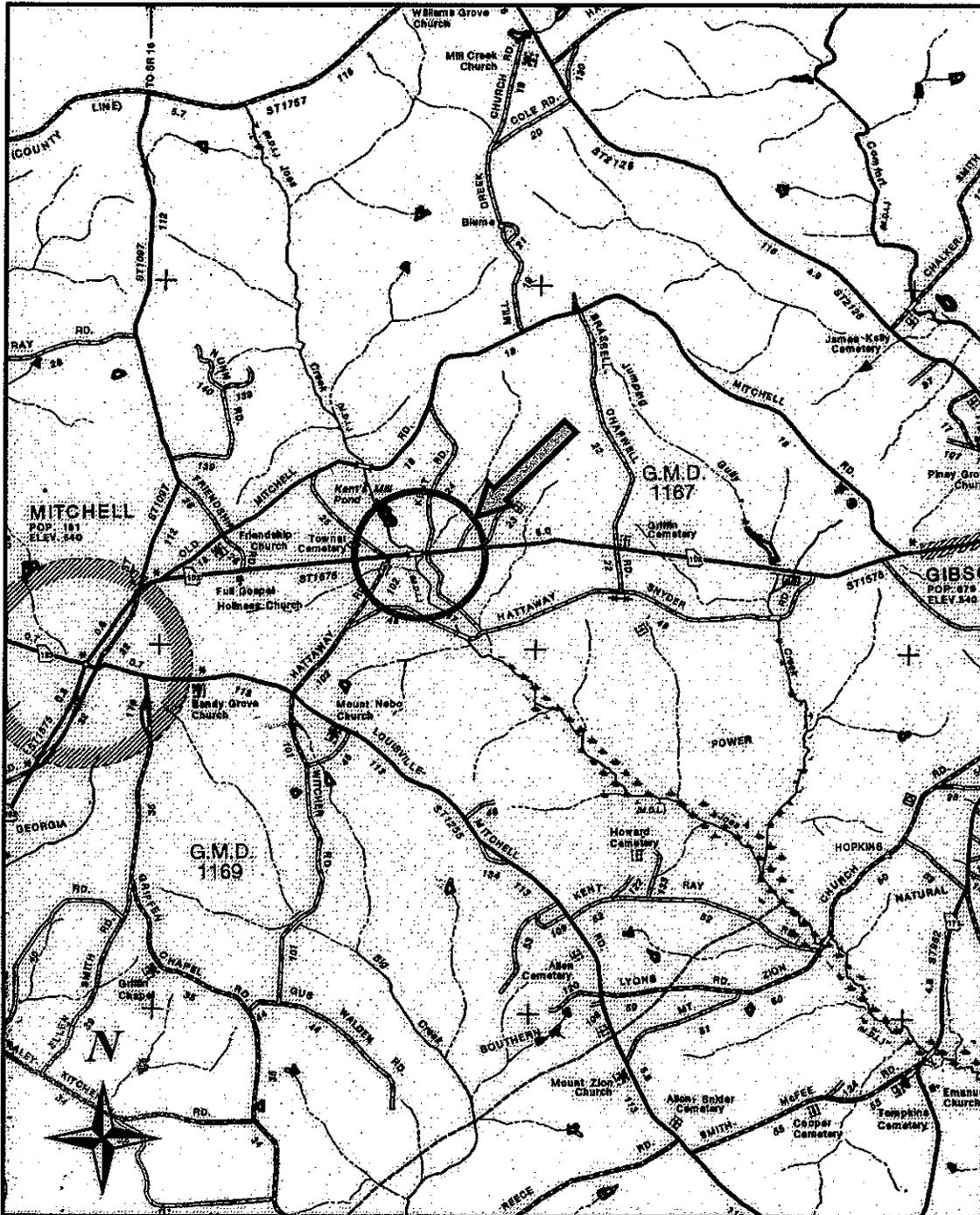
District 2 Engineer, Tennille

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer



Scale: 1 inch = 1 mile

Location Map

Project: BRST-1575(8) Glascock County PI No.: 245345
Description: SR 102 over Joes Creek 2.2 mi SE of Mitchell

Need and Purpose: The purpose of project BRST-1575(8) is to replace a structurally deficient bridge on S.R.102 over Joes Creek in Glascock County. The existing bridge sufficiency rating is currently 40.47. See attached Need & Purpose Statements.

Description of the proposed project: Project BRST-1575(8) is a bridge replacement project in Glascock County 2.2 miles northeast of Mitchell on State Route 102 over Joes Creek. The total project length is approximately 3074 feet (0.582 miles), beginning at M.P. 5.702 and extending to M.P. 6.284.

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

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

Functional Classification: Rural Major Collector

U. S. Route Number(s): None **State Route Number(s):** 102
Local Road Number(s): None

Traffic (AADT):

Current Year: (2006) 1200 Design Year: (2026) 1800

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: No Curves.
- Maximum grade: 7.0 % Mainline; 12.0% Cross Roads, and 10% Driveways
- Width of right of way: 100 ft. total
- Major structures: Concrete bridge, 3 spans at 27 feet long, total length 81 ft., width 27.70 ft., (bridge roadway width 23.70 ft.), sufficiency rating is 40.47.
- Major intersections and interchanges. None

Proposed Design Features:

Proposed typical section(s): Two 12'-0" travel lanes with 6' graded shoulders (2.0 Ft. paved).

Typical section attached.

- Proposed Design Speed Mainline 55 mph
- Proposed Maximum grade Mainline: 7% Maximum grade allowable: 7%.
- Proposed Maximum grade Side Street: 7% Maximum grade allowable: 12%.
- Proposed Maximum grade driveway: 12%
- Proposed Maximum degree of curve: No curves Minimum radius allowable: 965 ft.
- Right of way
 - Additional R/W will be required for miters at the Towner Rd, Hattaway Rd, and CR 47 intersections.
 - Easements: Temporary (X), Permanent (), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 9 Number of displacements: None
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Structures:
 - Bridges: The proposed concrete bridge will be 38 ft wide and approximately 81 ft long, consisting of two 12'-0" travel lanes and 7'-0" shoulders.
 - Retaining walls: None Required
- Major intersections and interchanges: None. Towner Rd and CR 47/Joels Creek Rd will be realigned to provide improved intersection angles.
- Traffic control during construction: Traffic will be maintained on an "on-site" detour constructed on the north side of existing S.R.102 while the new bridge is constructed in the same location as the existing bridge. Approximately 3000 feet of temporary detour roadway, as well as a temporary detour bridge structure, will be required.

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:**
 - A mill complex exists with structures approx. 75' south of SR 102 on west bank of Joes Creek. A small, wood framed building that was likely related to the operations site in the open a short distance to the west. This site is potentially eligible for the National Historic Register;
 - There is an NRHP-eligible archeological site in the southwestern quadrant of the project vicinity. The site is a complex, multi-component set of features and deposits that include unique standing structures (3-sided chimney) probably associated with Kent's Mill (referenced on USGS maps) or an earlier mill, and late prehistoric Lamar pottery.
 - Small, medium to low quality wetlands exist to the north and south of the existing ROW, east of the intermittent tributary to Joe's Creek. Temporary impacts as a result of the proposed detour would occur to the medium/low quality wetland, the intermittent tributary to Joe's Creek, and the Joe's Creek channel.
 - A Nationwide 404 permit with PCN will be required.
- **Level of environmental analysis:**
 - Are Time Savings Procedures appropriate? Yes (X), No (),
 - Categorical exclusion: **Anticipated**
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) ().
- **Utility involvement:** Overhead power lines are present on the north and south side of S.R.102, along with existing fiber optic telephone lines on the north side. Also, there is a 3" (approximate) PVC conduit hanging from the bridge rail on the north side.

Project responsibilities:

- Design: Office of Consultant Design/Parsons Brinckerhoff
- Right of Way Acquisition: Dist. 2 Preconstruction R/W Office
- Relocation of Utilities: District 2 Utility Office.
- Letting to contract: General Office (Office of Contract Administration)
- Supervision of construction: District 2 Construction Office
- Providing material pits: Responsibility of the Construction Contractor
- Providing detours: A temporary "on-site" detour designed by Parsons Brinckerhoff/Office of Consultant Design

Coordination

- Initial Concept Meeting date and brief summary. N/A
- Concept meeting date and brief summary. 1/13/04 See Attached minutes.
- P. A. R. meetings, dates and results: None required.
- FEMA, USCG, and/or TVA: None Required
- Public involvement: None Required
- Local government comments: Glascock County refused utilities on 4/8/99.
- Other projects in the area: None identified.
- Other coordination to date.
- Railroads: None-N/A

Scheduling – Responsible Parties’ Estimate

- Time to complete the environmental process: 9 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: 9 Months.
- List other major items that will affect the project schedule:

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 parallel and offset from the existing bridge on a new alignment, and remove existing bridge; (4) No Build

Comments:

Comparison Summary of Alternates 1 - 4

Alternate (1) is recommended for this concept. The short “on-site” run-around detour will eliminate the need to impact properties located on the south side of S.R. 102.

Alternate (2) is not recommended for this concept, since there are no acceptable State Routes or County Roads in the area to detour traffic or to provide access for emergency vehicles.

Alternate (3) is not recommended for this concept due to the right of way impact to adjacent properties and homes along S.R. 102 in close proximity to the existing roadway and bridge. A permanent offset would also cause a shift in the existing tangent horizontal alignment.

Alternate (4) was eliminated due to the condition of the existing bridge (Sufficiency Rating of 40.47) and also because of the long-term maintenance cost on a structurally and functionally deficient bridge.

Attachments:

1. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities.
2. Need and Purpose Statement
3. Typical Section
4. Bridge Inventory
5. Traffic Assignments
6. Flexible Pavement Design.
7. Location and Design Notice.
8. Concept Team Meeting Minutes.
9. Concept Layout – 8 ½ x 11 Copy

PRELIMINARY COST ESTIMATE

DATE: November 1, 2003 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: BRST-1575(8) Glascock County

P.I. NO.: 245345

LENGTH: 0.582 mi/3074 ft.

PROJECT DESCRIPTION: SR 102 over Joes Creek bridge replacement - Proposed bridge length of 81 ft and 38'-0" wide.

PROPOSED CONCEPT: Two 12'-0" travel lanes with 6'-0" shoulders (2.0' Paved). Traffic will be maintained along an "on-site" temporary detour constructed on the north side of existing S.R. 102 and a new bridge will be constructed in the same location as the existing bridge

EXISTING ROADWAY: STATE ROUTE 102

TRAFFIC: Existing: 1200 ADT (2006) Design: 1800 ADT (2026)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) 4 acres R/W@\$20,000/Ac.	\$ 80,000
2. DISPLACEMENTS:	
3. OTHER COST (ADM./COST, INFLATION)	
SUBTOTAL:A	
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$ 0
2. TRANSMISSION LINES	\$ 0
3. SERVICES (Glascock County has not signed LGPA)	\$
SUBTOTAL:B	\$
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	
a. OVERPASSES – Bridge over Joes Creek (41'-3"x 81')@\$55/Sq.Ft.	\$ 183,769
b. Detour Bridge (38' x 81')@\$30/Sq.Ft.)	\$ 92,340
b. APPROACH SLAB – 267 SY @\$100/SY 2 each spillways @ \$1500 ea; 100 lf slope drain pipe @ \$23/LF	\$ 32,000
SUBTOTAL:C-1	\$ 308,109

PROJECT COST		
2. GRADING AND DRAINAGE:		
a. EARTHWORK – 10,000 CY(Mainline) Borrow-Detour 25,000CY @ \$5.70/CY		\$ 199,500
b. DRAINAGE:		
1) CROSS DRAINS: 200 LF 24" St. Dr. Pipe @ \$35/LF; 4 ea 24" Flared End Sections @ \$475 ea; 100 LF 48" St. Dr. Pipe @ \$70/LF; 4.80 CY Class A Concrete Headwall @ \$400/CY		\$ 17,820
2) SIDE DRAIN PIPE: 100 lf 18" Side Dr. Pipe @ 25/LF; 4 ea 18" Safety End Section @ \$450/EA		\$ 4,300
3) METAL DRAIN INLETS: 6 ea metal drain inlets under req'd g'rail @ \$1200 ea		\$ 7,200
	SUBTOTAL:C-2	\$ 228,820
3. BASE AND PAVING:		
a. AGGREGATE BASE – Mainline 1400 TN-Detour 2700 TN @ \$18/TN		\$ 73,800
b. ASPHALT PAVING: SURFACE – Mainline 270 TN-Detour 540 @ \$45/TN	\$ 36,450	
BINDER – Mainline 440 TN-Detour 880 @ \$40/TN	\$ 52,800	
BASE –Mainline 660 TN- Detour 1320 TN-Asph Conc Leveling 300 TN @ \$40/TN	\$ 91,200	
	SUBTOTAL:C-3.b	\$ 180,450
c. CONCRETE PAVING		
d. OTHER Bituminous Tack Coat 850 Gals.@ \$1.00/Gal		\$ 850
	SUBTOTAL:C-3	\$ 255,100
4. LUMP ITEMS:		
a. GRASSING – 7.5 acres @ \$2000/ac		\$ 15,000
b. CLEARING AND GRUBBING - 9 acres @ \$2000/ac		\$ 18,000
c. LANDSCAPING		\$
d. EROSION CONTROL- Baled Straw 3000 LF @ \$3/LF Silt fence type A 6000 LF @ \$3.50/LF, Silt fence type C 6000 LF @ \$4.80/LF, Floating silt fence 1200 ft. @ \$12/LF		\$ 73,200
e. TRAFFIC CONTROL		\$ 50,000
	SUBTOTAL:C-4	\$ 156,200
5. MISCELLANEOUS:		
a. LIGHTING - NONE		\$
b. SIGNING - MARKING		\$ 20,000

PROJECT COST	
c. GUARDRAIL – 2500 LF @ \$15/LF, 6 ea Type 12 or 1 anch @ \$1700/ea	\$ 47,700
d. CURB & GUTTER	\$
SUBTOTAL:C-5	\$ 67,700
6. SPECIAL FEATURES- Rem. Exist. Bridge @\$7/sq.ft-\$31,000; Field Eng. Office Ty 3 \$40,000, Remove Detour Br. and Roadway –Grade to Drain and Grass \$100,000	\$ 171,000
SUBTOTAL:C-6	

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY		\$ 80,000
B. REIMBURSABLE UTILITIES (Glascock Co. has not signed LGPA.)		\$ 20,000 - del 3/17/04
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$ 308,109	
2. GRADING AND DRAINAGE	\$ 228,820	
3. BASE AND PAVING	\$ 255,100	
4. LUMP ITEMS	\$ 156,200	
5. MISCELLANEOUS	\$ 67,700	
6. SPECIAL FEATURES	\$ 171,000	
SUBTOTAL CONSTRUCTION COST		\$ 1,186,929
E. & C. (10%)		\$ 118,693
INFLATION (5% PER YEAR)		
NUMBER OF YEARS	2	\$ 130,562
TOTAL CONSTRUCTION COST		\$ 1,436,184
GRAND TOTAL PROJECT COST		81,516,184 1,516,184

Need and Purpose
Project BRST-1575(8) Glascock County
PI No. 245345
Bridge Replacement on SR 102 Over Joes Creek

Project Number BRST-1575(8) will replace the structurally deficient bridge located on State Route 102 over Joes Creek, 2.2 miles southeast of Mitchell.

The Joes Creek bridge sufficiency rating is 40.47. 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.

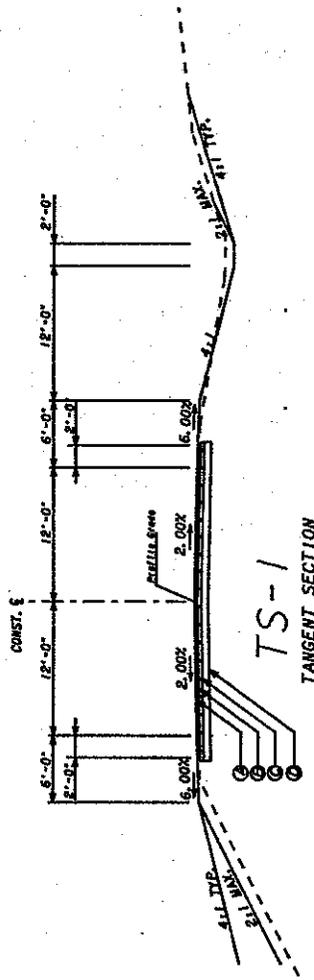
State Route 102 is functionally classified as a Rural Major Collector and is a designated school bus route. SR 102 is not part of the Statewide Bicycle Plan. The posted speed limit along SR 102 near Mitchell is 55 mph. The bridge was originally constructed 1942. Sidewalks are not proposed for this bridge. The Average Daily Traffic (ADT) along this section of roadway is projected to be 1,200 in 2006 with 8 percent of that being truck traffic. The projected (2026) ADT for this section of roadway is 1,800.

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

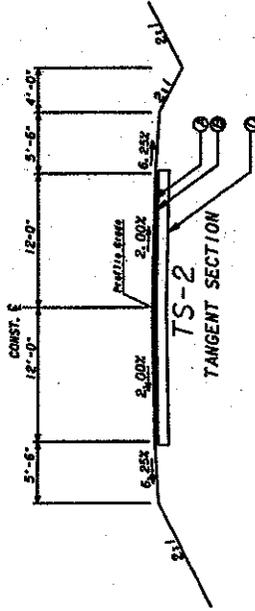
TYPICAL SECTIONS

STATE	PROJECT NUMBER	SHEET NUMBER
GA.	880-1575(1)	1

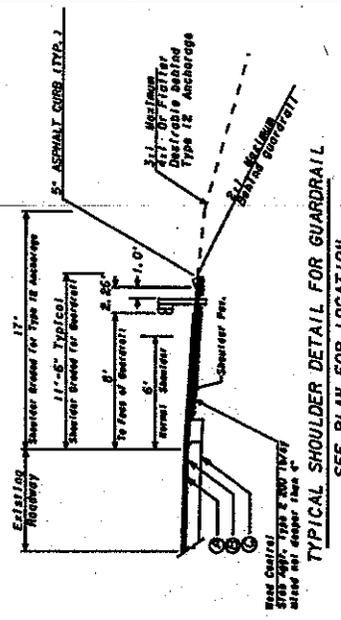
S. R. 102 MAINLINE



S. R. 102 DETOUR



- (A) RECYCLED ASPHALTIC CONCRETE 9.5 mm SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME - 135*/SY (MIX LEVEL A)
- (B) RECYCLED ASPHALTIC CONCRETE 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 220*/SY (MIX LEVEL A)
- (C) RECYCLED ASPHALTIC CONCRETE 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME - 330*/SY (MIX LEVEL A)
- (D) OR AGGR BASE COURSE, 6 INCH, INCL MATL



NOT TO SCALE

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 125-0007-0

Glascock

SUFF. RATING

40.47

Location & Geography

* Structure I.D.No.: 125-0007-0

* 200 Bridge Information: 06

* 6A Feature Int: JOES CREEK

* 6B Critical Bridge: 0

* 7A Route Number Carried: SR00102

* 7B Facility Carried: SR 102

* 9 Location: 2.2 MI SE OF MITCHELL

2 DOT District: 2

207 Year Photo: 1997

* 91 Inspection Frequency: 24 Date: 01/24/2001

92A Fract Crit Insp Freq: 00 Date: 02/01/1901

92B Underwater Insp Freq: 00 Date: 02/01/1901

92C Other Spc. Insp Freq: 00 Date: 02/01/1901

* 4 Place Code: 000000

* 5 Inventory Route (O/U): 1

Type: 3

Designation: 1

Number: 00102

Direction: 0

* 16 Latitude: 33-08.8 MMS Prefix: SR

* 17 Longitud 82-40.0 MMS Suffix: 00 MP: 6.20

98 Border Bridge: 000 %Shared: 00

99 ID Number: 0000000000000000

* 100 STRAHNET: 0

12 Base Highway Network: 1

13A LRS Inventory Route: 1251010200

13B Sub Inventory Route: 0

* 101 Parallel Structure: N

* 102 Direction of Traffic: 2

* 264 Road Inventory Mile Post: 005.97

* 208 Inspection Area: 02 Initials: JTB

Engineer's Initial:

* Location I.D. No.: 125-00102D-006.20E

Signs & Attachments

* 104 Highway System: 0

* 26 Functional Classification: 07

* 204 Federal Route Type: S No.: 01575

* 105 Federal Lands Highway: 0

* 110 Truck Route: 1

206 School Bus Route: 0000.00

217 Benchmark Elevation: 0

218 Danum: 03

* 19 Bypass Length: 3

* 20 Toll: 3

* 21 Maintenance: 01

* 22 Owner: 01

* 31 Design Load: 2

37 Historical Significance: 5

205 Congressional District: 10

27 Year Constructed: 1942

106 Year Reconstructed: 0000

33 Bridge Median: 0

34 Skew: 00

35 Structred Flared: 0

38 Navigation Control: 0

213 Special Steel Design: 0

267 Type of Paint: 2

* 42 Type of Service on: 1

214 Movable Bridge: 5

203 Type Bridge: A-O-M-O

259 Pile Encasement: 3

* 43 Structure Type Main: 4 02

45 No. Spans Main: 002

44 Structure Type Appr: 3 02

46 No. Spans Appr: 0001

226 Bridge Curve Horz: 0 Vert: 0

111 Pier Protection: 0

107 Deck Structure Type: 1

108 Wearing Surface Type: 6 M 8 F 8

225 Expansion Joint Type: 02

242 Deck Drains: 1

243 Parapet Location: 0

Height: 0.00

Width: 0.00

238 Curb: 0.80 1

239 Handrail: 1 1

* 240 Median Barrier Rail: 0

241 Bridge Median Height: 0.00

Width: 0.00

* 230 Guardrail Loc Dir Rear: 3

Fwr: 3

Oppo Dir Rear: 0

Fwr: 0

244 Approach Slab: 0

224 Retaining Wall: 0

233 Posted Speed Limit: 55

236 Warning Sign: 1

234 Delineator: 1

235 Hazard Boards: 1

237 Utilities Gas: 00

W 00

Ele 00

Telephone: 31

St 00

247 Lighting Street: 0

Navigation: 0

Aerial: 0

* 248 County Continuity No.: 00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 125-0007-0

Glascock

SUFF. RATING

40.47

Programming Data

201 Project No.: SAP 1600-A.PT.1
 202 Plans Available: 2
 249 Prop. Proj. No. BRST-1575 (8)
 250 Approval Status: 0000
 251 P.I. No.: 245345-
 252 Contract Date: 02/01/2004
 260 Seismic No.: 00000
 75 Type Work: 34 1
 94 Bridge Imp. Cost \$ 80
 95 Roadway Imp. Cos \$ 221
 96 Total Imp Cost: \$ 358
 76 Imp. Length: 001401
 97 Imp. Year: 1990
 114 Future ADT: 001650 Year: 2021

Measurements

* 29 ADT: 001100 Year: 2001
 109 % Trucks: 10
 * 28 Lanes On: 02 Under: 00
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0027
 * 49 Structure Length: 81
 51 Br. Rwdy. Width: 23.70
 52 Deck Width: 27.70
 * 47 Tot. Horz. Cl: 23.70
 50 Curb/Sdewlk Width: 0.80/0.80
 32 Approach Rdwy Width: 025
 * 229 Shoulder Width:
 Rear Lt: 1.50 Type: 2 Rt: 1.50
 Fwd Lt: 1.50 Type: 2 Rt: 1.50
 Pavement Width:
 Rear: 22.20 Type: 2
 Fwd: 22.20 Type: 2
 Intersection Rear: 0 Fwd: 1
 36 Safety Features Br. Rail:
 Transition: 2
 App. G. Rail: 2
 App. Rail End: 2
 53 Minimum Cl. Over:
 Under: N
 * 228 Min. Vertical Cl
 Act. Odsm Dir: 99 ' 99 "
 Oppo. Dir: 99 ' 99 "
 Posted Odsm. Dir: 00 ' 00 "
 Oppo. Dir: 00 ' 00 "
 55 Lateral Undercl. Rt: N 99.90
 56 Lateral Undercl. Lt: 0.00
 * 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
 39 Nav Vert Cl: 000 Horz: 0000
 116 Nav Vert Cl Closed: 000
 245 Deck Thickness Main: 7.70
 Deck Thick Approach: 7.70
 246 Overlay Thickness: 3.00
 212 Year Last Painted: Sup: 1996 Sub: 0000

Ratings

65 Inventory Rating Method: 1
 63 Inventory Rating Method: 1
 66 Inventory Type: 2 Rating: 15
 64 Operating Type: 2 Rating: 26
 231 Calculated Loads
 H-Modified: 20 0
 HS-Modified: 25 0
 Type 3: 28 0
 Type 3s2: 40 0
 Timber: 36 0
 Piggyback: 40 0

261 H Inventory Rating: 13
 262 H Operating Rating: 23
 67 Structural Evaluation: 4
 58 Deck Condition: 5
 59 Superstructure Condition: 7
 * 227 Collision Damage: 0
 60A Substructure Condition: 5
 60B Scour Condition: 8
 60C Underwater Condition: N
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 6
 68 Deck Geometry: 3
 69 UnderChr. Horz/Vert: N
 72 Appr. Alignment: 8
 62 Culvert: N

Posting Data

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

Hydraulic Data

215 Waterway Data
 Highwater Elev.: 0549.0 Year: 1900
 Avg. Streambed Elev.: 0000.0 Freq.: 00
 Drainage Area: 00010
 Area Of Opening: 000217
 113 Scour Critical: 6
 216 Water Depth: 01.3 Br. Height: 20.2
 222 Slope Protection: 1
 221 Spur Dikes Rear: 0 Fwd: 0
 219 Fender System: 0
 220 Dolphin: 0
 223 Culvert Cover: 000
 Type: 0
 No. Barrels: 0
 Width: 0.00 Height: 0.00
 Length: 0 Apron: 0
 * 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No.: 125-00102D-006.20E

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-1575(8) Glascock
P.I. No. 245345

OFFICE Environment/ Location

DATE May 23, 2002

FROM Harvey D. Keeper, State Environmental/ Location Engineer

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

SUBJECT SR 102 @ Joes Creek

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

Existing 1998 ADT = 950
2006 ADT = 1200
2026 ADT = 1800
K = 9%
D = 60%
T = 8%
24 HR T = 10%
S.U. = 5%
COMB. = 5%

If you have any questions concerning this information please contact
Teresa Williamson at (404)699-4458.

HDK:TJW

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: BRST-1575(8)

County: GLASCOCK

P.I. no.: 245345

Description: BRIDGE REPLACEMENT ON SR 102 @ JOES CREEK

Traffic Data (NOTE: AADTs are one-way)

24-hour Truck Percentage: 10.00%

AADT initial year of design period: 720 vpd (2006)

AADT final year of design period: 1,080 vpd (2026)

Mean AADT (one-way): 900 vpd

Design Loading

Mean AADT	LDF	Trucks	18-K ESAL	Total Daily Loads
900 *	1.00 *	0.100 *	0.62	= 57

Total predicted design period loading = 57 * 20 * 365 = 416,100

Design Data

Terminal Serviceability Index: 2.50

Soil Support: 3.00

Regional Factor: 1.50

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness		Structural Coefficient	Structural Value
	Inches	(mm)		
9.5 mm Superpave	1.25	(32)	0.44	0.55
19 mm Superpave	2.00	(51)	0.44	0.88
25 mm Superpave	1.25	(32)	0.44	0.55
	1.75	(44)	0.30	0.53
Graded Aggregate Base	6.00	(152)	0.16	0.96

Required SN = 3.67

Proposed SN = 3.47

>>> Proposed pavement is 5.4% Underdesign <<<

Remarks: CONCEPTUAL PAVEMENT DESIGN

Prepared by SEAN JOHNSTON (PBQD) / YUN TANG (GDOT) November 20, 2003
Date

Recommended State Materials & Research Engineer Date

Approved State Consultant Design Engineer Date

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. BRST-1575(8) GLASCOCK COUNTY

P.I. No. 245365-

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: _____

Project BRST-1575(8) is a bridge replacement project in Glascock County. It is in the GMD 1167 & 1169, 2.2 miles northeast of Mitchell on State Route 102 over Joes Creek. The total project length is approximately 3074 feet (0.582 miles), beginning at M.P. 5.702 and extending to M.P. 6.284. The purpose of this project is to replace a structurally deficient and functionally obsolete bridge on S.R. 102 over Joes Creek. Traffic will be maintained along an "on-site" temporary detour constructed on the north side of existing S.R. 102 and a new bridge will be constructed in the same location as the existing bridge.

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:

Edwin L. Thompson, Jr.
Georgia Department of Transportation
Edwin.Thompson@DOT.STATE.GA.US
424 Industrial Drive
Sandersville, Ga. 31082
Tel. No. 478-552-2464

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

Yun Tang
Georgia Department of Transportation
Yun.tang@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.



**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: February 4, 2004

Date of Meeting: January 13, 2004

Project: BRST-1575(8) Glascock County
P. I. 245345

Purpose of Meeting: Concept Team meeting for the bridge replacement project in Glascock County on S.R. 102 over Joes Creek approximately 2.2 miles northeast of Mitchell.

Meeting Location: District 2 Office located in Tennille, GA

Attendees:

Barry Wood, GDOT
Chris Holmes, GDOT District 2, Area 1 Construction Engineer
Eric Murray, GDOT District 2 Right of Way
Jimmy Smith, GDOT District 2 Assistant Construction Engineer
Kedrick Collins, GDOT District 2 Traffic Operations Manager
Christa McKinney, GDOT District 2 Planning, Programming Engineer
Nick Everett, GDOT District 2 Utilities
Gus Cooper, GDOT District 2 Utilities Engineer
Phillip Scarborough, GDOT District 2 Environmentalist
Mark Holmberg, Heath & Lineback
Daveitta Jenkins, PBQD
Sean Johnston, PBQD
Edgar Leicht, PBQD

Distribution: Attendees

Michael Thomas, GDOT District 2 Engineer
Yun Tang, GDOT Office of Consultant Design
John Durand, PBQD



Minutes of Meeting
February 4, 2004
Page 2

Discussion:

1. Daveitta Jenkins began the meeting as follows:

- Stated that the meeting was a Concept Team Meeting for Project BRST-1575(8), Glascock County, which is a bridge replacement on S.R. 102 over Joes Creek.
- Conducted an introduction of all attendees and the organization they represent.
- Discussed the sign-in sheet with regards to distribution of the meeting minutes for their review, requested email address or phone number.

2. Sean Johnston then began the concept presentation. Sean stated the project description, functional classification, existing and design year traffic, and described the existing typical section and existing bridge structure.

3. Sean then noted the proposed design features, including the proposed typical section and bridge width, and also mentioned the following:

- The existing bridge has a 40.47 sufficiency rating which requires that the bridge be replaced rather than improved.
- The proposed bridge will be constructed in the same location as the existing bridge with a temporary on-site detour designed for 45mph. Sean noted that the proposed detour will be to the north side of existing S.R. 102, which differs from the draft concept report.
- There are no major intersections on the project. However, the intersection with Towner Road will be improved to provide a 90 degree intersection angle. The existing intersection angle is less than 60 degrees.

4. Sean pointed out the following environmental concerns:

- There is a potential historic property on the south side of S.R. 102 west of Joes Creek. This site also contains archaeological resources. Sean stated this sites location as the reason for constructing the temporary detour on the north side of SR 102.
- There are small, low quality wetlands east of Kent Road, but the impacts to these wetlands will be negligible.

5. Daveitta reviewed the Need and Purpose statement and noted that no design exceptions are expected for this project.

6. Daveitta then requested comments from the attendees and received the following responses and comments:

- Mark Holmberg asked if the drainage area for Joes Creek had been determined, and asked PBQD to consider a box culvert if the area is less than 20 acres. Mark also asked if the detour length could be reduced to avoid impacting the intersection with Towner Road.
- Mark then asked PB to identify the offset between the mainline and detour centerlines. Sean stated that the offset was 55 feet, which allows for 17 feet between the detour and proposed bridge parapets. Mark stated that 60' has been deemed an acceptable offset,



Minutes of Meeting
February 4, 2004
Page 3

and Sean noted that 55' was chosen to avoid excessive impacts to the front yard of a house located just north and west of Joes Creek. Mark then requested that PB be sensitive of exiting right of way limits in the area of the historic property on the south and the house on the north side of S.R. 102.

- Jimmy Smith requested that the detour length be reduced by utilizing smaller radius curves to reduce cost and ensure constructability. Jimmy also noted the difficulty of constructing the proposed bridge at the same location as the existing bridge, and suggested lengthening the bridge to avoid constructing the new end bents directly on top of the old ones.
- Nick Everett noted that existing utilities consist of Jefferson Energy power lines on the north and south side of the bridge, as well as Bellsouth aerial telephone lines and a 3" PVC conduit attached to the north bridge rail. He stated that he expects no cost to GDOT for utilities, and requested that if right of way is required, enough be acquired to facilitate any utility relocation. Nick also stated that there is no request at this time for Bellsouth to attach to the proposed bridge.
- Christa McKinney of GDOT District 2 Planning asked why the concept called for 6' shoulders on the mainline. Sean noted that AASHTO Green Book policy calls for 6' shoulders for a Rural Major Collector with AADT in the 1500 – 2000 range.
- Phillip Scarborough, the GDOT District 2 Environmentalist, asked PB to identify the truck percentage on SR 102. Sean stated that it is 8%. Phillip then requested that 12' lanes be considered for the detour. He also requested that rumble strips be used in advance of the bridge.
- Jimmy Smith noted that, if a box culvert is used in lieu of a bridge over Joes Creek, that staging plans should be developed so that the culvert wingwalls may be poured at the same time as the barrel.

The foregoing is my understanding of the topics discussed.

Sincerely,

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

Sean P. Johnston, P.E.
Engineer II

**Over a Century of
Engineering Excellence**



CURVE DATA

CURVE	RADIUS	PC	PT	PI	NC
CURVE 1	8000				
CURVE 2	8000				
CURVE 3	5000				
CURVE 4	8000				

LEGEND

- ROADWAY CENTERLINE
- PROPOSED ROADWAY EDGE OF PAVEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- EXISTING ROW AND PROPERTY LINES
- PROPOSED ROW
- PROPOSED CONSTRUCTION EASEMENT
- POTENTIAL HISTORIC BOUNDARY

SR 102 OVER JOES CREEK
 CLATSOP COUNTY
 GRST-1575(18)
 P.L. NO. 245345

SCALE IN FEET
 0 100 200 400

Heath & Lirbeck Engineers
 1840 PEACHTREE RD. NE
 SUITE 2000, TORGER PLACE 100
 ATLANTA, GA 30328-0008

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-1575(8)
County: GLASCOCK
P. I. Number: 245345

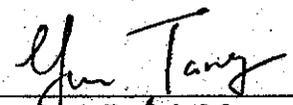
Federal Route Number: N/A
State Route Number: 102

DESCRIPTION: Bridge Replacement on SR 102 Over Joes Creek

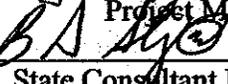
Recommendation for approval:

DATE 2/9/2004

DATE 2/11/04



Project Manager



State Consultant Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

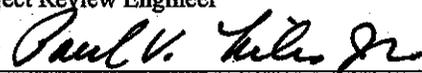
DATE _____

District 2 Engineer, Tennille

DATE _____

Project Review Engineer

DATE 2/20/04



State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-1575(8)
County: GLASCOCK
P. I. Number: 245345

Federal Route Number: N/A
State Route Number: 102

DESCRIPTION: Bridge Replacement on SR 102 Over Joes Creek

Recommendation for approval:

DATE 2/9/2004

DATE 2/11/04

Yun Tang
Project Manager
BS Sjo
State Consultant Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE 2/26/04

Phillip M. Allen
State Traffic Operations Engineer
Safety & Design

DATE _____

District 2 Engineer, Tennille

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

Project Concept Report page 1
Project Number: BRST-1575(8) Glascock County
P. I. Number: 245345

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-1575(8)
County: GLASCOCK
P. I. Number: 245345

Federal Route Number: N/A
State Route Number: 102

DESCRIPTION: Bridge Replacement on SR 102 Over Joes Creek

Recommendation for approval:

DATE 2/9/2004

DATE 2/11/04

Yun Tang
Project Manager
BS Mc
State Consultant Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE 2/23/04

Michael L. Thomas
District 2 Engineer, Tennille *RLS*

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-1575(8)
County: GLASCOCK
P. I. Number: 245345

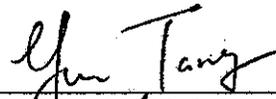
Federal Route Number: N/A
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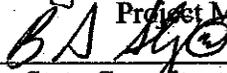
DESCRIPTION: Bridge Replacement on SR 102 Over Joes Creek

Recommendation for approval:

DATE 2/9/2004

DATE 2/11/04



Project Manager


State Consultant Design Engineer

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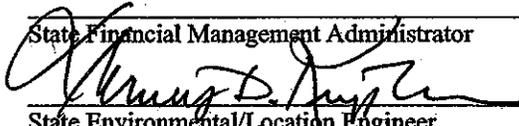
DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE 2.16.04



State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District 2 Engineer, Tennille

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-1575(8)
County: GLASCOCK
P. I. Number: 245345

Federal Route Number: N/A
State Route Number: 102

DESCRIPTION: Bridge Replacement on SR 102 Over Joes Creek

Recommendation for approval:

DATE 2/9/2004

DATE 2/11/04

Yun Tang

Project Manager

BA Mc

State Consultant Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Operations Engineer

DATE _____

District 2 Engineer, Tennille

DATE 2/18/04

Daniel J. Mullany

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer