ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-165-1(71) Henry County
P. I. No. 333126

OFFICE Preconstruction

DATE January 16, 2002

FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
Michael Henry
Phillip Allen
Marta Rosen
Paul Liles
Ben Buchan
Glenn Durrence
BOARD MEMBER

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-165-1(71) Henry County
P.I. No. 333126

OFFICE Preconstruction

DATE January 7, 2002

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

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

SUBJECT PROJECT CONCEPT REPORT

This project is the replacement of a structurally deficient bridge on SR 155 over Walnut Creek at the McDonough city limits. The existing bridge, constructed in 1951, is load limited with a sufficiency rating of 34. State Route 155 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. This section of SR 155 is functionally classified as a rural minor arterial and is a designated school bus route. Traffic is projected to be 10,100 VPD and 18,200 VPD in the years 2006 and 2026 respectively. The posted speed and the design speed are 45 MPH.

The construction proposes to relocate SR 155 east of its present location, extending a total of 0.435 mile. The proposed new bridge will be 190' x 44' and will be located just east of the existing bridge structure. The relocated SR 155 will consist of two, 12' lanes with 10' rural shoulders (2' paved). Traffic will be maintained on the existing bridge while the proposed bridge is constructed.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; time saving procedures are appropriate.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE	LET DATE
Construction (includes E&C and inflation)	$1,551,000	$1,100,000	2004	FY-05
Right-of-Way	$ 125,000	$ 10,000		
Utilities*	LGPA	LGPA		

*City of McDonough signed LGPA for utilities 8-2-99; LGPA sent 7-20-99 requesting Henry County do utilities.

BRST-165-1(71) Henry
January 7, 2002

This project is in the STIP. I recommend this project concept be approved.

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(71) Henry
P.I. Number 333126-

OFFICE: Engineering Services

DATE: December 27, 2001

FROM: David Mulling, Project Review Engineer

TO: Wayne Hutto, Assistant Director of Pre-construction

DEC 28 2001

SUBJECT: **CONCEPT REPORT**

We have reviewed the concept report submitted December 13, 2001 by the letter from James B. Buchan dated December 12, 2001, and have the following comments:

1. Since cost was used to eliminate Alternate 1, the on-site detour alternate, a complete cost estimate for Alternate 1 should be provided in the report for comparison to the cost of the recommended alternate. Providing only the additional costs makes it difficult to evaluate the estimates.
2. The Need and Purpose and Attachments Sections of the report makes references to an attached Need and Purpose Statement. There is no attached Need and Purpose Statement.

The costs for the project are:

Construction	$1,282,000
Inflation	$ 128,000
E&C	$ 141,000
Reimbursable Utilities	$ 0
Right of Way	$ 125,000

DTM

c: Ben Buchan

SCORING RESULTS AS PER MOG 2440-2

Project Number:	County:	PI No.:
BRST-165-1(71)	HENRY	333126-

Report Date: 12/12/01	**Concept By:**
	DOT Office: CONSULTANT DESIGN
☒ CONCEPT	
	Consultant: PARSONS BRINCKERHOFF QUADE & DOUGLAS

Project Type: Choose One From Each Column	☐ Major ☒ Minor	☐ Urban ☒ Rural	☐ ATMS ☒ Bridge ☐ Building ☐ Interchange ☐ Intersection ☐ Interstate ☐ New Location ☐ Widening & Reconstruction ☐ Miscellaneous

FOCUS AREAS	SCORE	RESULTS
Presentation	90%	Since cost eliminated Alternate 1, complete cost estimate needed for this alternate. Incorrect references to attached Need and Purpose Statement.
Judgement	100%	
Environmental	100%	
Right of Way	100%	
Utility	100%	
Constructability	100%	
Schedule	100%	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

RECEIVED
DEC 14 2001
OFFICE Atlanta

FILE **BRST-165-1(71) Henry County**
SR 155 over Walnut Creek at McDonough City Limits
P.I. No. 333126-

James B. Buchan, MBA

FROM James B. Buchan, State Consultant Design Engineer

DATE December 12, 2001

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, State Transportation Programming Engineer
Glenn Durrence, District Engineer – Thomaston
Paul Liles, State Bridge & Structural Engineer

MBA
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(71)
County: HENRY
P. I. Number: 333126

Federal Route Number: N/A
State Route Number: 155

Recommendation for approval:

DATE 12-12-01 _____
Project Manager

DATE 12-12-01 _____
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 Transportation Programming Engineer

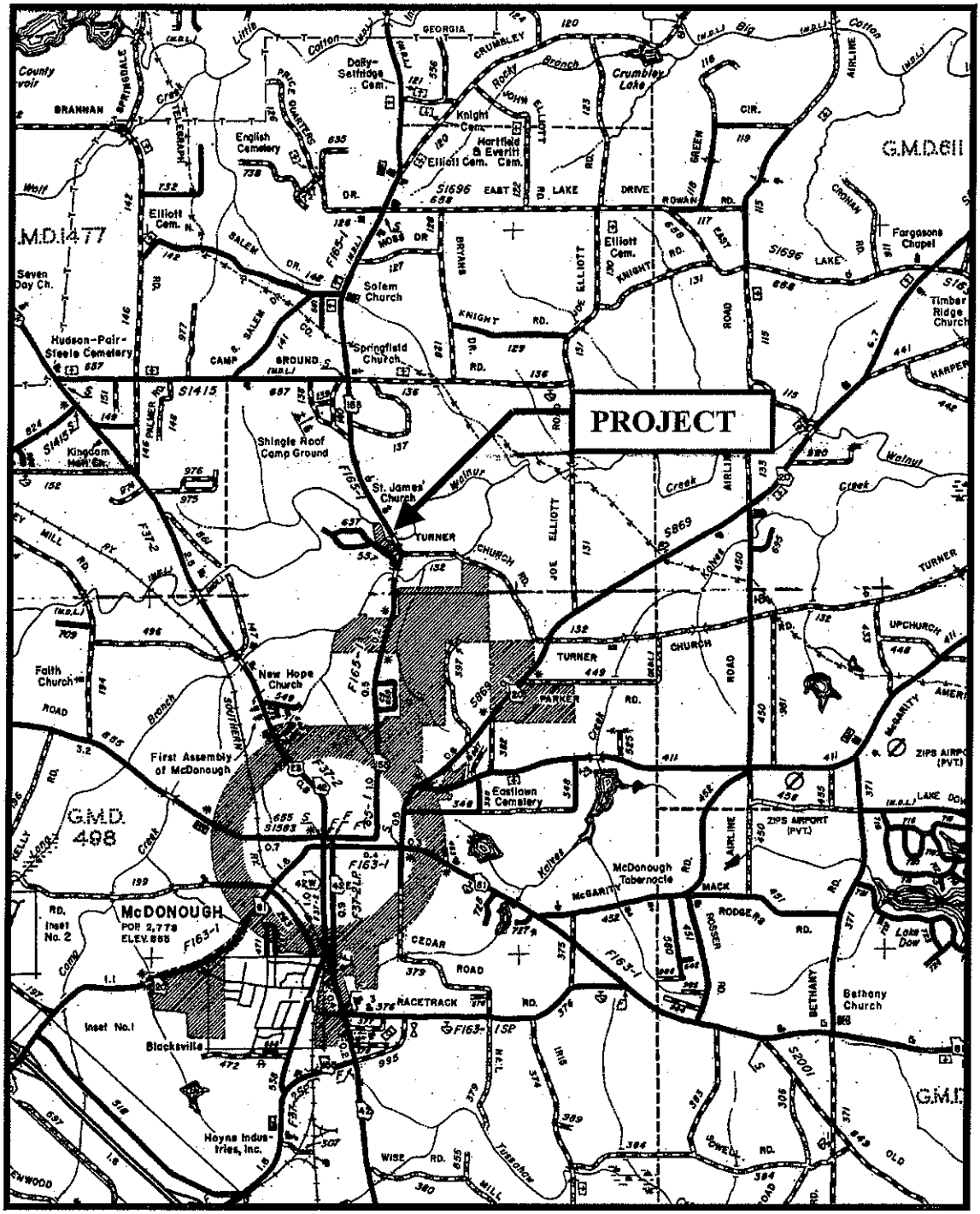
DATE_____ _____
State Environmental/Location Engineer

DATE_____ _____
State Traffic Safety and Design Engineer

DATE_____ _____
District 3 Engineer, Thomaston

DATE_____ _____
Project Review Engineer

DATE_____ _____
State Bridge and Structural Design Engineer



Location Map

Project: BRST-165-1 (71) Henry County PI No.: 333126

DESCRIPTION: SR 155 @ Walnut Creek

Project Concept Report page __2___
Project Number: BRST-165-1(71)
P. I. Number: 333126

Need and Purpose: The purpose of project BRST-165-1(71) is to replace a structurally deficient and functionally obsolete bridge on S.R.155 over Walnut Creek. The existing bridge sufficiency rating is currently 34.9. ~~See attached Need & Purpose Statement.~~ JDP

Description of the proposed project: Project BRST-165-1 (71) is a bridge replacement project in Henry County 0.5 miles north of McDonough on State Route 155 over Walnut Creek. The total project length is approximately 2300 feet (0.435 miles), beginning at M.P. 10.46 and extending to M.P. 10.89.

Is the project located in a Non-attainment area? X **Yes** _____ **No**
The proposed design of this project does not add any capacity to State Route 155. The existing roadway has two lanes. The proposed roadway will be designed for two lanes. The project is identified in the District 3 STIP.

PDP Classification: **Major**_____ **Minor**____X____
Federal Oversight: Full Oversight ( ), Exempt(**X**), 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: (2006) 10,100 Design Year: (2026) 18,200
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 45mph Maximum degree of curvature: 6deg.
- Maximum grade: 4.7 % Mainline; 12.0% Cross Roads, and 10% Driveways
- Width of right of way: 100ft. total
- Major structures: Steel beam bridge, 4 spans for a total length of 160 ft., width 32.3 ft., (bridge roadway width 23.8 ft.) sufficiency rating is 34.9.
- Major interchanges or intersections along the project: None (Minor Intersection at Co. Rd. 132/ Turner Church Road).
- Existing length of the S.R. 155 roadway is approximately 2300 feet long.

Proposed Design Features:

Proposed typical section(s): Two 12'-0" travel lanes with 10' graded shoulders (2.0 Ft. paved). Typical section attached.

- Proposed Design Speed Mainline 45 mph based on Green Book for ADT
- Proposed Maximum grade Mainline 4.7% Maximum grade allowable 6%.
- Proposed Maximum grade Side Street 5% Maximum grade allowable 12%.
- Proposed Maximum grade driveway 12%
- Proposed Maximum degree of curve 5 deg.-45 min. Maximum degree allowable 10deg.
- Right of way
  - Width 120' 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: 4 Number of displacements: None
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: 0
- Structures:
  - Bridges: The proposed concrete bridge will be 44 ft wide and approximately 190 ft long, consisting of two 12'-0" travel lanes and 10'-0'' shoulders.
  - Retaining walls: None Required
- Major intersections and interchanges. None
- Traffic control during construction: The traffic will be maintained along the existing State Route 155 by shifting the horizontal alignment and the new bridge construction to the east of the existing roadway

Design Exceptions to controlling criteria anticipated:

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

- Design Variances; None
- Environmental concerns: None

- 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 on the east and west side of S.R.155 and underground telephone pedestals.

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: N/A.
- Concept meeting date and brief summary: Attach minutes. To Be Scheduled (See Attachments)
- P. A. R. meetings, dates and results: None required.
- FEMA, USCG, and/or TVA: Nationwide 404
- Public involvement: None Required
- 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 (Approximately 4 miles to the north of this project)
- Other coordination to date:
- Railroads: None-N/A

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 6 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 the purchase right of way: 6 Months.
- List other major items that will affect the project schedule: None

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 on a shifted horizontal alignment to the east and remove existing bridge; (5) No Build

Comments:

Comparison Summary of Concepts 1 - 5

_Alternate (1) was eliminated due to the additional costs of $454,080 in building an on site detour and detour bridge on S.R. 155. (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 10,100 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 City water treatment plant property located close to the road on the west side of S.R. 155. This shift, due to the existing profiles 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 34.9) 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 on a shifted alignment to the east of the existing bridge. The shifted distance between the existing S.R. 155 roadway centerline and the new proposed centerline is 50 feet at the south end of the existing bridge. The alignment proposed for this alternate will provide sufficient construction area to maintain traffic on the existing roadway and bridge during construction of a new bridge.

Attachments:

1. Cost Estimates:
    a. Construction including E&C,
    b. Right of Way, and
    c. Utilities.
2. Cost Estimate.(Alternate 1- Onsite Detour)
3. Need and Purpose Statement.
4. Minutes of Concept Meeting.
5. Typical Section.
6. Bridge Inventory.
7. Traffic Assignments.
8. Flexible Pavement Design.
9. Location and Design Notice.

PRELIMINARY COST ESTIMATE

DATE: November 12, 2001 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: BRST-165-1 (71) Henry County

P.I. NO.: 333126 LENGTH: 0.435mi./2300 ft.

PROJECT DESCRIPTION: SR 155 over Walnut Creek bridge replacement - Proposed bridge length of 190 ft and 44'-0" wide.

PROPOSED CONCEPT: Two 12'-0" travel lanes with 10'-0" shoulders (2.0' Paved). Traffic shall be maintained on S.R. 155 during construction by shifting the roadway and bridge alignment to the east.

EXISTING ROADWAY: STATE ROUTE 155

TRAFFIC: Existing: 10,100 ADT (2006) Design: 18,200 ADT (2026)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) 5 acre R/W @ $15,000/Ac.	$ 75,000
2. DISPLACEMENTS: NONE	$ 0
3. OTHER COST (ADM./COST, INFLATION)	$ 50,000
SUBTOTAL:A	$ 125,000
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 Walnut Creek (44'x 190')@$65/Sq.Ft.	$543,400
b. APPROACH SLAB – 270 SY @$90/SY 2 each spillways @$1200 ea	$ 26,700
SUBTOTAL:C-1	$570,100
2. GRADING AND DRAINAGE:	
a. EARTHWORK – 50,000 CY Borrow @ $5.00/CY (Mainline & Cross Road)	$ 250,000

PROJECT COST		
b. DRAINAGE:		
1) CROSS DRAIN PIPE		$ 10,000
2) LONGITUDINAL PIPE		$
3) CATCH BASINS		$
SUBTOTAL:C-2		$260,000
3. BASE AND PAVING:		
a. AGGREGATE BASE – Mainline and X-rds 5,050 TN @ $18/TN		$ 90,900
b. ASPHALT PAVING: SURFACE – Mainline and X-rds 900 TN@$45/TN	$	$ 40,500
BINDER – Mainline and X-rds 1200 TN@$40	$	$ 48,000
BASE – Mainline and X-rds 1600 TN @$40	$	$ 64.000
SUBTOTAL:C-3.b		$ 243,400
c. CONCRETE PAVING		
d. OTHER		$
SUBTOTAL:C-3		$
4. LUMP ITEMS:		
a. GRASSING – 5 acres @ $2000/ac		$ 10,000
b. CLEARING AND GRUBBING - 14 acres @ $2000/ac		$ 28,000
c. LANDSCAPING		$
d. EROSION CONTROL- Silt fence type A 5000 LF @$3.10/LF, Silt fence type C 2000 LF @ $4.80/LF, Floating silt fence 500 ft. @ $12/LF		$ 31,100
e. TRAFFIC CONTROL		$ 25,000
SUBTOTAL:C-4		$ 94,100
5. MISCELLANEOUS:		
a. LIGHTING - NONE		$
b. SIGNING - MARKING		$ 15,000
c. GUARDRAIL – 1000 LF @ $15/LF, 4 ea Type 12&1 anch @ $1700/ea		$ 21,800
d. CURB & GUTTER		$
SUBTOTAL:C-5		$ 36,800
6. SPECIAL FEATURES- Rem. Exist. Bridge @$7/sq.ft-$38000; Field Eng. Office Ty 3 $40,000 SUBTOTAL:C-6		$ 78,000

ESTIMATE SUMMARY			
A. RIGHT-OF-WAY		$ 125,000	
B. REIMBURSABLE UTILITIES (Henry Co. signed LGPA)		$	
C. CONSTRUCTION			
1. MAJOR STRUCTURES		$ 570,100	
2. GRADING AND DRAINAGE		$ 260,000	
3. BASE AND PAVING		$ 243,400	
4. LUMP ITEMS		$ 94,100	
5. MISCELLANEOUS		$ 36,800	
6. SPECIAL FEATURES		$ 78,000	
SUBTOTAL CONSTRUCTION COST			$ 1,282,400
E. & C. (10%)			$ 141,385
INFLATION (5% PER YEAR)			
NUMBER OF YEARS	2		$ 131,446
TOTAL CONSTRUCTION COST			$ 1,555,231
GRAND TOTAL PROJECT COST			**$ 1,680,231**

PRELIMINARY COST ESTIMATE

Alternate 1 (On-site Detour) Additional Cost

DATE: November 12, 2001 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: BRST-165-1 (71)

P.I. NO.: 333126 LENGTH: 0.435mi./2300 ft.

PROJECT DESCRIPTION: SR 155 over Walnut Creek bridge replacement - Proposed bridge length of approximately190 ft long and 44'-0" wide.

PROPOSED CONCEPT: Two 12'-0" travel lanes with 10'-0" shoulders (2.0 ft. Paved). Traffic shall be maintained on SR 155 during construction by shifting the roadway and bridge alignment to the east.

EXISTING ROADWAY: STATE ROUTE 155

TRAFFIC: Existing: 10,100 ADT (2006) Design: 18,200 ADT (2026)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) acre R/W	$ 10,000
2. DISPLACEMENTS: NONE	$ 0
3. OTHER COST (ADM./COST, INFLATION)	$ 15,000
SUBTOTAL:A	$ 25,000
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 –Detour Bridge over Walnut Creek (24'x 160')@$40/Sq.Ft.	$ 76,800
b. APPROACH SLAB –	$
SUBTOTAL:C-1	$ 153,600
2. GRADING AND DRAINAGE:	
a. EARTHWORK – 25,000 CY Borrow @ $3.00/CY (Mainline & Graded Shld)	$ 75,000
b. DRAINAGE:	
1) CROSS DRAIN PIPE – Temporary Drainage	$ 4,000
2) LONGITUDINAL PIPE	$

PROJECT COST		
3) CATCH BASINS		$
SUBTOTAL:C-2		$ 79,000
3. BASE AND PAVING:		
a. AGGREGATE BASE – Mainline 2250 TN @ $18/TN		$ 40,500
b. ASPHALT PAVING: SURFACE –	$	$
BINDER –Detour Mainline 800 TN@$40	$	$ 32,000
BASE	$	$
SUBTOTAL:C-3.b		$ 72,500
c. CONCRETE PAVING-		$
d. OTHER		$
SUBTOTAL:C-3		$
4. LUMP ITEMS:		
a. GRASSING – 1 acres @ $2000/ac		$ 2,000
b. CLEARING AND GRUBBING -		$
c. LANDSCAPING		$
d. EROSION CONTROL- Silt fence type A 3000 LF @$3.10/LF, Silt fence type C 1000 LF @ $4.80/LF		$ 14,100
e. TRAFFIC CONTROL		$ 15,000
SUBTOTAL:C-4		$ 31,100
5. MISCELLANEOUS:		
a. LIGHTING - NONE		$
b. SIGNING - MARKING		$
c. GUARDRAIL – Temporary Barrier 500LF@$42/LF		$21,000
d. CURB & GUTTER		$
SUBTOTAL:C-5		$ 21,000
6. SPECIAL FEATURES- Rem.Detour Bridge @$7/sq.ft-$26,880; Remove Detour Rdway $20,000 SUBTOTAL:C-6		$ 46,880

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	$ 25,000	
B. REIMBURSABLE UTILITIES (Henry Co. signed LGPA .)	$	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	$ 153,600	
2. GRADING AND DRAINAGE	$ 79,000	
3. BASE AND PAVING	$ 72,500	
4. LUMP ITEMS	$ 31,100	
5. MISCELLANEOUS	$ 21,000	
6. SPECIAL FEATURES	$ 46,880	
SUBTOTAL CONSTRUCTION COST		$
E. & C. (10%)		$
INFLATION (5% PER YEAR)		
NUMBER OF YEARS 2	$	
TOTAL CONSTRUCTION COST	$ 429,080	
GRAND TOTAL ADDITIONAL COST(ALT. 1)	**$ 454,080**	

Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-165-1(71) Henry
P.I. 333126

OFFICE Environment/ Location

DATE January 5, 2001

FROM Harvey D. Keepler, State Environmental/ Location Engineer

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

SUBJECT SR 155 @ Walnut Creek

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

2006 ADT = 10100
2026 ADT = 18200
K = 10%
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.

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(71) P.I. 333126
PBQD Project No. 15877A Work Order # 1

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 Walnut Creek Project, P.I. 333126.

2. Jim began by providing opening comments and orientation of the concept layout drawing developed by PB. Jim discussed the project description and location with regards to project lengths and typical section. He stated that the project is a bridge replacement over Walnut Creek consisting of 2300 feet of construction on SR 155. The design speed is 45 mph and there is one 12' travel lane in each direction. He noted the existing design year 2026 traffic volumes of 18,200 vehicles per day.

3. Jim continued by describing the right of way requirements of the project, which consist of 120' of additional right of way along the east side of SR 155.

4. Jim addressed environmental issues, noting that the stream (Walnut Creek) falls under section 303(d) for impacted waters. Andy Aiello noted that no special bridge drainage devices would be required.

5. Other alternates considered were listed, including (1) construction of a new bridge while diverting traffic onto an on-site detour and temporary bridge, (2) construction of the bridge with an off-site detour, (3) construction of the bridge by staging and maintaining traffic, (4) construction of a new bridge built under traffic to the east of existing SR155 and (5) the no-build option. John noted that alternate (4) was recommended for the project. Reasons for eliminating the other 4 alternates are given in the concept report.

6. After John opened the discussion to comments, Terry McMickle of Henry County DOT noted that there are plans to realign the existing intersection of SR 155 and Turner Church Rd 150' to 200' south of its current location. Ken Werho of GDOT Traffic Operations recommended that the intersection be aligned with that of CR 537.

7. Ken also recommended that pavement widths on the concept layout be shown to match passing lanes at the church at the north end of the project.

8. Representatives of the Henry County Water Department stated that they have permitted the construction of a 42' gravity sewer line in the northeast quadrant of the project which may conflict with the end bent of the proposed bridge. They requested a copy of the concept so

that they may review their pipe location against the proposed bridge layout. Henry County also noted an existing 10" water line along the west side of SR 155, and a 12" PVC force main along the east side. Glenn Williams of GDOT commented on Oct 17 2001 that the 42" line was actually located at another site and would not have an effect on this project. Utility Plans are to be furnished by GDOT District 3 Utilities.

9. Bell South representatives noted the existence of buried fiber optic cable on the east side of SR155 which crosses over to the west side at Turner Church Rd. They mentioned that there may be a conflict between this line and the proposed construction.

10. Ken Werho asked how the steep cut area in the vicinity of the Henry County Water Treatment Plant (SW quadrant of project) would be addressed. Jim Graybeal stated that the proposed construction limits would not interfere with this slope, because the of the proposed alignment shift to the east.

11. Ted Cashin of GDOT requested that PB review the LGPA document to see what involvement the local agency would have.

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

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.

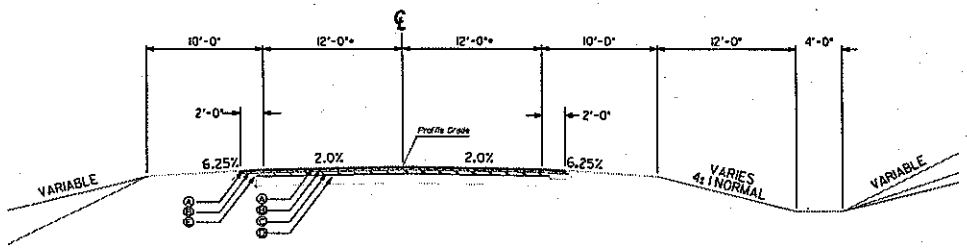
Sincerely,

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

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRST-165-1(711)	3	

TYPICAL SECTIONS

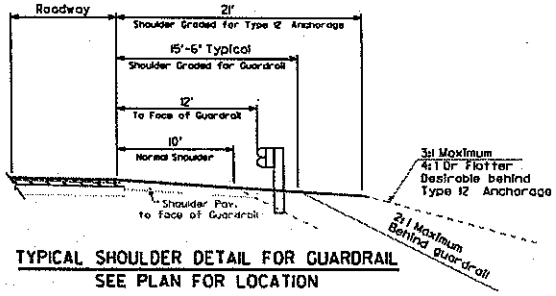
S. R. 155 MAINLINE



FULL DEPTH SECTION

REQUIRED PAVEMENT

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



TYPICAL SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION

NOT TO SCALE

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 151-0020-0 **Henry County** SUFF. RATING: 34.9

Location & Geography

* Structure I.D. No.: 151-0020-0
200 Bridge Information: 07

* 6A Feature Int.: WALNUT CREEK
* 6B Critical Bridge: 0
* 7A Route Number Carried: SR00155
* 7B Facility Carried: SR 155
* 9 Location: AT MCDONOUGH CITY LIMITS
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: 33-28.5
* 17 Longitude: 84 -08.4

98 Border Bridge: 000 %Shared: 00
99 ID Number: 000000000000000

* 100 Defense Highway: 0
* 101 Parallel Structure: N
* 102 Direction of Traffic: 2
264 Road Inventory Mile Post: 010.88

* 208 Inspection Area: 03 Initials: DJM

* Location I.D. No: 151-00155D-010.60N
* XReferen I.D. No: 000-000000-000.000

* 104 Highway System: 1
* 26 Functional Classification: 02
* 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: 7
* 20 Toll: 3
* 21 Maintenance: 01
* 22 Owner: 01
* 31 Design Load: 2
37 Historical Significance: 5
205 Congressional District: 03
* 27 Year Constructed: 1951
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: 5

* 42 Type Service On: 1
Under: 5
214 Movable Bridge: 00
203 Type Bridge: E-N-M-O
259 Pile Encasement: 1
* 43 Structure Type Main: 3 02
45 No. Spans Main: 004
44 Structure Type Appr: 0 0
46 No. Spans Appr: 0000
226 Bridge Curve Horz: 1 Vert: 1
111 Pier Protection: 0
107 Deck Structure Type: 1

108 Wearing Surface Type: 6
Membrane: 8
Protection: 8

Signs & Attachments

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: 0
224 Retaining Wall: 0

233 Posted Speed Limit: 45
236 Warning Sign: 0
234 Delineator: 1
235 Hazard Boards: 1

237 Utilities Gas: 00
Water: 00
Electric: 00
Telephone: 31
Sewer: 00

247 Lighting Street: 0
Navigation: 0
Aerial: 0

* 248 County Continuity No: 00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 151-0020-0 **Henry County** SUFF. RATING: 34.9

Programming Data

201 Project No: S-0866 (1)
202 Plans Available: 0
249 Prop. Proj No: BRST-165-1 (71)
250 Approval Status: 0000
251 P.I. No: 333126
252 Contract Date: 02/01/2003
260 Seismic No: 00000
75 Type Work: 34 1
94 Bridge Imp. Cost: $ 153
95 Roadway Imp. Cost: $ 236
96 Total Imp. Cost: $ 481
76 Imp. Length: 001480
97 Imp. Year: 1990
114 Future ADT: 010650 Year: 2019

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: 01.5 Br Height: 22.5
222 Slope Protection: 1
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No Barrels: 0
Width: 0.0
Height: 0.0
Length: 0
Apron: 0
* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No: 151-00155D-010.60N
* XReferen I.D. No: 000-000000-000.000

Measurements

* 29 ADT: 007100 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: 160
51 Br. Rdwy. Width: 23.8
52 Deck Width: 32.3
* 47 Tot. Horz. Cl: 23.8
50 Curb/Sdewlk Width: 2.0/2.0
32 Approach Rdwy Width: 024
* 229 Shlder Width:
Rear Lt: 7.0 Type: 8 Rt: 7.0
Fwrd Lt: 7.0 Type: 8 Rt: 7.0
Pvment Width:
Rear: 24.0 Type: 2
Fwrd: 24.0 Type: 2
Intersection Rear: 1 Fwrd: 0
36 Safety Features Br. Rail: 2
Transition: 1
App. G. Rail: 1
App. Rail End: 1
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: 6.5
Deck Thick Approach: 0.0
246 Overlay Thickness: 2.5
211 Tons Structural Steel: 40.0
212 Year Last Painted: Sup: 1998 Sub: 1984

Ratings

66 Inventory Type: 2 Rating: 13
64 Operating Type: 2 Rating: 29
231 Calculated Loads
H-Modified: 15 1
HS-Modified: 25 0
Type 3: 27 1
Type 3s2: 40 0
Timber: 30 1
Piggyback: 00 0
261 H Inventory Rating: 10
262 H Operating Rating: 15
67 Structural Evaluation: 2
58 Deck Condition: 7
59 Superstructure Condition: 8
* 227 Collision Damage: 0
60A Substructure Condition: 6
60B Scour Condition: 6
60C Underwater Condition: N
71 Waterway Adequacy: 6
61 Channel Protection Cond: 6
68 Deck Geometry: 2
69 UnderClr. Horz/Vert: N
72 Appr. Alignment: 5
62 Culvert: N

Posting Data

70 Bridge Posting Required: 3
41 Struct Open, Posted, Cl: P
* 103 Temporary Structure: T

232 Posted Loads H-Modified: 15
HS-Modified: 00
Type 3: 27
Type 3S2: 00
Timber: 30
Piggyback: 00
253 Notification Date: 0000
253 Fed Notify Date: 0000 2

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: BRST-165-1(71) **County:** Henry
P.I. no.: 333126
Description: S.R. 1550 Walnut Creek Bridge Replacement

Traffic Data (NOTE: AADTs are one-way)
24-hour Truck Percentage: 10.00%
AADT initial year of design period: 5,500 vpd (2006)
AADT final year of design period: 9,100 vpd (2026)
Mean AADT (one-way): 7,300 vpd

Design Loading

Mean AADT		LDF		Trucks		18-K ESAL		Total Daily Loads
7,300	*	1.00	*	0.100	*	0.95	=	694

Total predicted design period loading = 694 * 20 * 365 = 5,066,200

Design Data
Terminal Serviceability Index: 2.50
Soil Support: 2.50
Regional Factor: 1.60

PROPOSED FLEXIBLE PAVEMENT STRUCTURE

Material	Thickness mm	Thickness (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 = 5.69 Proposed SN = 5.04

>>> Proposed pavement is 11.5% 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

Name: pavement des.JPG
Dimensions: 3364 x 4464 pixels

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. BRST-165-1(71) HENRY COUNTY
P.I. No. 333126

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: JANUARY 16, 2002

Project BRST-165-1 (71) is a bridge replacement project in Henry County, in the 498th GMD, 0.5 miles north of McDonough on State Route 155 over the Walnut Creek. The total project length is approximately 2300 feet (0.435 miles), beginning at M.P. 10.46 and extending to M.P. 10.89. The purpose of this project is to replace a structurally deficient and functionally obsolete bridge on S.R. 155 over Walnut Creek. Traffic will be maintained on State Route 155 while the proposed bridge is staged 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.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-165-1(71)
County: HENRY
P. I. Number: 333126

Federal Route Number: N/A
State Route Number: 155

Recommendation for approval:

DATE 12.12.01 _____ Project Manager

DATE 12-12-01 _____ 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 Transportation Programming Engineer

DATE_____ _____ State Environmental/Location Engineer

DATE_____ _____ State Traffic Safety and Design Engineer

DATE 12/27/01 _____ 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

Project Number: BRST-165-1(71)
County: HENRY
P. I. Number: 333126

Federal Route Number: N/A
State Route Number: 155

Recommendation for approval:

DATE 12-12-01 _____
Project Manager

DATE 12-12-01 _____
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 Transportation Programming Engineer

DATE_____ _____
State Environmental/Location Engineer

DATE_____ _____
State Traffic Safety and Design Engineer

DATE_____ _____
District 3 Engineer, Thomaston

DATE 12/27/01 _____
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-165-1(71)
County: HENRY
P. I. Number: 333126

Federal Route Number: N/A
State Route Number: 155

Recommendation for approval:

DATE 12-12-01 _____ Project Manager

DATE 12-12-01 _____ 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 12/14/01 _____ State Transportation Programming Engineer

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

INTERDEPARTMENTAL CORRESPONDENCE

JAN 4 2002

File: BRST-165-1(171) / Henry County
P.I. No. 333126

Office: Traffic Safety & Design
Atlanta, Georgia
Date: December 20, 2001

From: PMAllen Phillip M. Allen, State Traffic Safety and Design Engineer

To: Wayne Hutto, Assistant Director of Preconstruction

Subject: Project Concept Report Review

We have reviewed the above referenced concept report for the proposed bridge replacement along State Route 155 over Walnut Creek in Clayton County.

The Office of Traffic Safety & Design finds this report satisfactory for approval because it will improve safety and traffic operations within this area.

PMA/sz

Attachment (signature page)

Cc: Harvey Keepler, Environment/Location Engineer
Glenn Durrence, District Engineer – Thomaston
Attention: David Millen, District Preconstruction Engineer
David Mulling, Engineer Services, w/ attachment
Marta Rosen, State Transportation Planning Administrator
Chuck Hasty, TMC
General Files
Office Files

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-165-1(71)
County: HENRY
P. I. Number: 333126

Federal Route Number: N/A
State Route Number: 155

Recommendation for approval:

DATE 12-12-01 _____
Project Manager

DATE 12-12-01 _____
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 Transportation Programming Engineer

DATE_____ _____
State Environmental/Location Engineer

DATE 12/26/01 _____
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
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRST-165-1(71)
County: HENRY
P. I. Number: 333126

Federal Route Number: N/A
State Route Number: 155

Recommendation for approval:

DATE 12-12-01 _____
Project Manager

DATE 12-12-01 _____
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 Transportation Programming Engineer

DATE_____ _____
State Environmental/Location Engineer

DATE_____ _____
State Traffic Safety and Design Engineer

DATE_____ _____
District 3 Engineer, Thomaston

DATE_____ _____
Project Review Engineer

DATE 1/7/02 _____
State Bridge and Structural Design Engineer