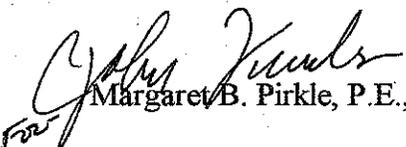


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRN-035-1(38) Henry County **OFFICE** Preconstruction
P. I. No. 323050 **DATE** November 27, 2002

FROM *for*  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 Keeper
- Jerry Hobbs
- Percy Middlebrooks
- Michael Henry
- Phillip Allen
- Marta Rosen
- Paul Liles
- Ben Buchan
- Thomas Howell
- BOARD MEMBER

Frank L. Danchetz

Page 2

BRN-035-1(38) Henry

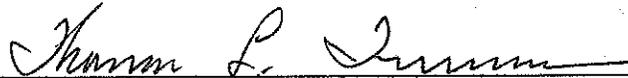
November 19, 2002

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

MBP: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: BRN-035-1(38) Henry
P.I. Number 323050

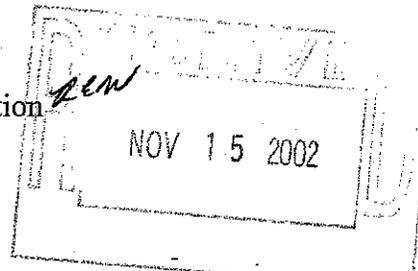
OFFICE: Engineering Services

DATE: November 14, 2002

FROM: David Mulling, Project Review Engineer

TO: Meg Pirkle, Assistant Director of Preconstruction

SUBJECT: CONCEPT REPORT



We have reviewed the concept report submitted October 24, 2002 by the letter from James B. Buchan dated October 23, 2002, and have no additional comments.

The costs for this project are:

Construction	\$1,280,918
Inflation	\$131,295
E&C	\$141,222
Reimbursable Utilities	\$40,000 (LGPA anticipated)
Right of Way	\$128,000

REW

c: Ben Buchan, Attn: Ted Cashin

SCORING RESULTS AS PER MOG 2440-2

Project Number: BRN-035-1(38)		County: Henry		PI No.: 323050	
Report Date: October 23, 2002		Concept By: DOT Office: Consultant Design			
<input checked="" type="checkbox"/> Concept Stage		Consultant: Parsons Brincherhoff Quade & Douglas			
Project Type: Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input checked="" type="checkbox"/> Urban <input 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	100				
Judgement	100				
Environmental	100				
Right of Way	100				
Utility	100				
Constructability	100				
Schedule	100				

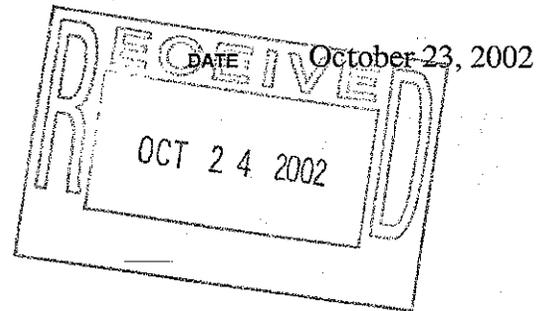
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE **BRN-035-1(38) Henry County**
SR 138 @ Big Cotton Indian Creek 3 mi E of Stockbridge
P.I. No. 323050-

OFFICE Atlanta

FROM 
James B. Buchan, 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 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: BRN-035-1(38)

County: HENRY

P. I. Number: 323050-

Federal Route Number: N/A

State Route Number: 138

Recommendation for approval: _____

DATE 10-23-02

DATE 10-23-02



Project Manager
James B. Buchanan WBSA
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 _____

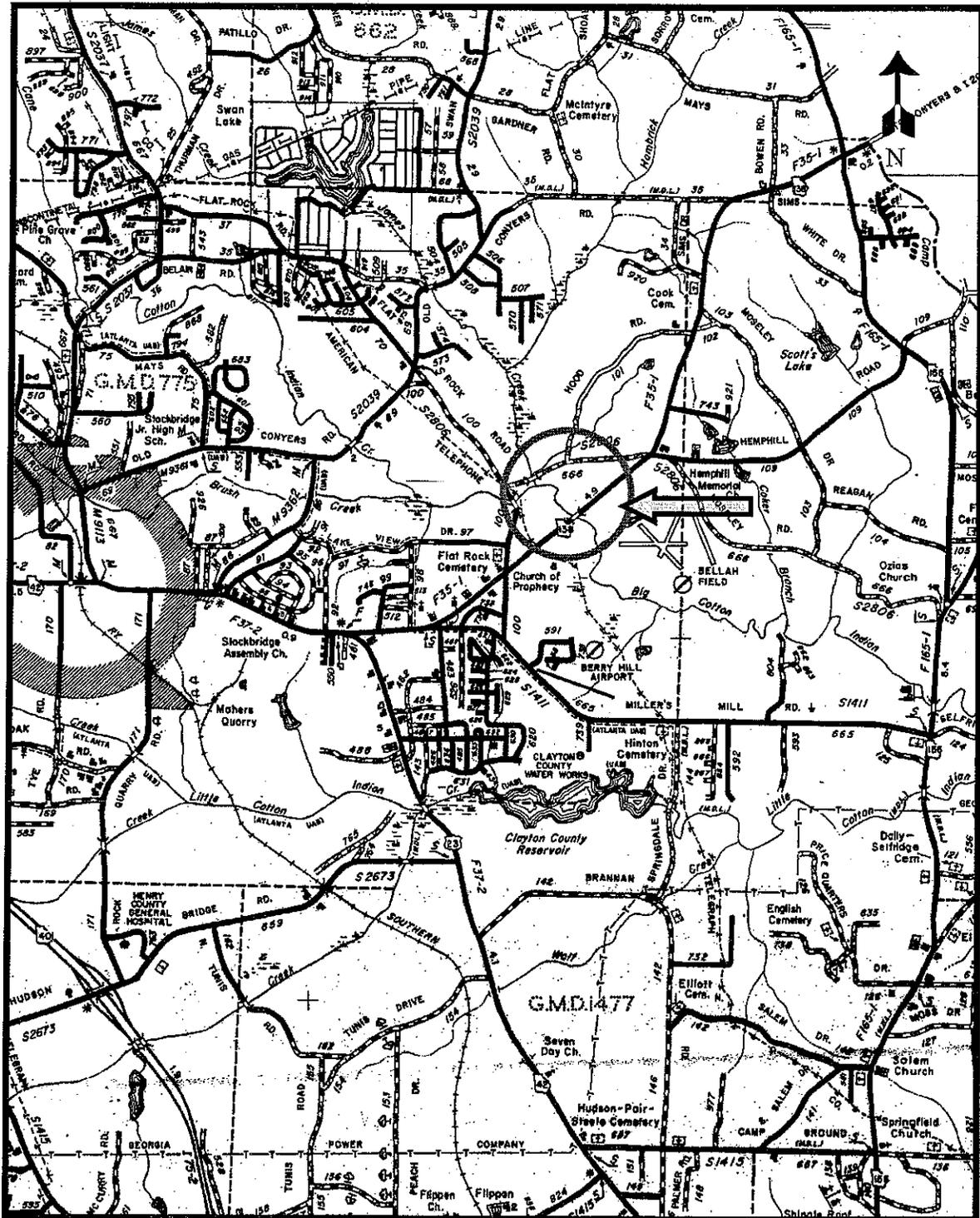
District 3 Engineer, Thomaston

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer



Location Map

Project: BRN-035-1(38) Henry County PI No.: 323050-

Description: SR 138 @ Big Cotton Indian Creek 3 mi E of Stockbridge

Project Concept Report page 2

Project Number: BRN-035-1(38) Henry County

P. I. Number: 323050-

Need and Purpose: The purpose of project BRN-035-1(38) is to replace a structurally deficient and functionally obsolete bridge on S.R.138 over the Big Cotton Indian Creek. The existing bridge sufficiency rating is currently 31.36. See attached Need & Purpose Statements.

Description of the proposed project: Project BRN-035-1 (38) is a bridge replacement project in Henry County 3 miles east of Stockbridge on State Route 138 over the Big Cotton Indian Creek. The total project length is approximately 1500 feet (0.284 miles), beginning at M.P. 7.230 and extending to M.P. 7.514.

Is the project located in a Non-attainment area? Yes No
The proposed design, of this project, does not add any additional capacity to State Route 138. The existing roadway has two lanes. The proposed roadway will be designed for two lanes. The project is 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: Urban Major Collector

U. S. Route Number(s): None **State Route Number(s):** 138
Local Road Number(s): None

Traffic (AADT):
Current Year: (2007) 14,000 Design Year: (2027) 22,000

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: 100ft. total

- Major structures: Concrete bridge, 5 spans for a total length of 135 ft., width 32 ft., (bridge roadway width 25.8 ft.) sufficiency rating is 31.36.
- Existing length of the S.R. 138 roadway is approximately 1500 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 8%.
- Proposed Maximum grade Side Street N/A Maximum grade allowable 12%.
- Proposed Maximum grade driveway 12%
- Proposed Maximum degree of curve No curves Maximum degree allowable 6 deg.
- Right of way
 - Additional R/W width varies from 15 ft. on the north side to 20 to 80 ft. south side
 - Easements: Temporary (), Permanent (), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 12 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 135 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 an "on-site" detour constructed on the south side of existing S.R.138 and a new bridge will be constructed in the same location as the existing bridge

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: 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 north and south side of S.R.138. Also Henry County has a 36" Sanitary Sewer line in pre-design phase for the east side of creek and a 8" PVC water in the vicinity of the proposed project on the south side. Also Snapping Shoals EMC, Charter Communications and Bell South have facilities in the area of the project.

Project responsibilities:

- Design: Office of Consultant Design/Parsons Brinckerhoff
- 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: 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. Concept Meeting Held on 9-26-02 See Attach minutes.
- P. A. R. meetings, dates and results: None required.
- FEMA, USCG, and/or TVA: Nationwide 404
- Public involvement: None Required
- Local government comments: No agreement signed with Henry County at this time.
- Other projects in the area: GDOT project on S.R. 138 at Flat Rock Road
- Other coordination to date.

Spoke with Rusty Chapman and Dick Bescombe with FAA. Rusty checked his list of public-use airports in Georgia. It did not list Bellah Field (the grass strips east of the project). This indicates Bellah Field is a private-use airfield. Rusty suggested that the owners of the field be made aware when construction is about to begin.

Dick said that private-use airfields do not require FAA notification. However, our project is relatively close to Berry Hill Airport (public). For a public airport with a runway greater than 3200', an object that penetrates into a 100:1 slope from the nearest point on the airport requires filing notice to FAA. For a public airport with runway(s) 3200' or less, the area of concern is only a 50:1 slope.

Berry Hill Airport currently has a 3000' runway. We've been assuming at most a 100' tall crane. The 50:1 slope relates to 5000' horizontally. The distance between the bridge and the nearest point of the runway is roughly 5400' – so no notice is required by FAA.

If the contractor is likely to use a 110' or higher crane then a notice to FAA needs to be filed. If Berry Hill Airport extends their runway beyond 3200' by the time this project is built, then a notice needs to be filed. Or if Bellah Field becomes a public-use airfield, then a notice needs to be filed. But based on current conditions and assumptions, the crane is not an issue.

- 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: 12 Months.
- List other major items that will affect the project schedule:

^{mlk}
~~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 parallel and offset from the existing bridge on a new alignment, and remove existing bridge; (4) No Build

Comments:

Comparison Summary of Concepts 1 - 4

Alternate (1) is recommended for this concept. The short "on-site" run-around detour will eliminate the need to impact homes and properties located on the south side of S.R. 138.

Alternate (2) is not recommended for this concept, due to the high volumes of traffic on S.R. 138 (Approximately 12,000 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) is not recommended for this concept due to the right of way impact to adjacent properties and homes along S.R. 138 in close proximity to the existing roadway and bridge.

Alternate (4) was eliminated due to the condition of the existing bridge (Sufficiency Rating of 31.36) 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 Statements.
3. Minutes of Concept Meeting.
4. Typical Section.
5. Bridge Inventory
6. Traffic Assignments
7. Flexible Pavement Design.
8. Location and Design Notice.
9. Project Concept Conformity/Certification letter.
10. Concept Layout
11. Status Report

PRELIMINARY COST ESTIMATE

DATE: October 21, 2002 PREPARED BY: Parsons Brinckerhoff

PROJECT NO.: BRN-035-1 (38) Henry County

P.I. NO.: 323050-

LENGTH: 0.284mi./1500 ft.

PROJECT DESCRIPTION: SR 138 over the Big Cotton Indian Creek bridge replacement - Proposed bridge length of 135 ft and 44'-0" wide.

PROPOSED CONCEPT: Two 12'-0" travel lanes with 10'-0" shoulders (6.5' Paved). Traffic will be maintained along an "on-site" temporary detour constructed on the south side of existing S.R. 138 and a new bridge will be constructed in the same location as the existing bridge

EXISTING ROADWAY: STATE ROUTE 138

TRAFFIC: Existing: 14,000 ADT (2007) Design: 22,000 ADT (2027)

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

PROJECT COST	
A. RIGHT-OF-WAY:	
1. PROPERTY (R/W & EASEMENT) 4acre R/W@\$20,000/Ac.	\$ 80,000
2. DISPLACEMENTS:	
3. OTHER COST (ADM./COST, INFLATION)	\$ 48,000
SUBTOTAL:A	\$ 128,000
B. REIMBURSABLE UTILITIES:	
1. RAILROAD	\$ 0
2. TRANSMISSION LINES	\$ 0
3. SERVICES (Henry County has not signed LGPA)	\$ 40,000
SUBTOTAL:B	\$ 40,000
C. CONSTRUCTION:	
1. MAJOR STRUCTURES	
a. OVERPASSES – Bridge over Big Cotton Indian Creek (47'-3"x 135')@\$55/Sq.Ft.	\$461,195
b. Detour Bridge (27'-3" x 135')@\$30/Sq.Ft.)	
b. APPROACH SLAB – 294 SY @\$90/SY 2 each spillways @\$1200 ea	\$ 28,860
SUBTOTAL:C-1	\$490,055
2. GRADING AND DRAINAGE:	
a. EARTHWORK – 6,400 CY(Mainline) Borrow-Detour 22,300CY @ \$5.00/CY	\$ 143,500
b. DRAINAGE:	

PROJECT COST		
1) CROSS DRAIN PIPE & Side Drain Pipe		\$ 5,000
2) LONGITUDINAL PIPE		\$
3) CATCH BASINS		\$
SUBTOTAL:C-2		\$ 148,500
3. BASE AND PAVING:		
a. AGGREGATE BASE – Mainline 3123 TN-Detour 1913 TN @ \$18/TN		\$ 90,648
b. ASPHALT PAVING: SURFACE – Mainline 463 TN-Detour 468@\$45/TN	\$	\$ 41,895
BINDER – Mainline 618 TN-Detour 624@\$40	\$	\$ 49,680
BASE –Mainline 1001TN- Detour 660TN-Asph Conc Leveling 500TN @\$40	\$	\$ 86,440
SUBTOTAL:C-3.b		\$ 268,663
c. CONCRETE PAVING		
d. OTHER Bituminous Tack Coat 800 Gals.@ \$1.00/Gal		\$ 800
SUBTOTAL:C-3		\$ 269,463
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- Silt fence type A 6000 LF @\$3.10/LF, Silt fence type C 2000 LF @ \$4.80/LF, Floating silt fence 1500 ft. @ \$12/LF		\$ 46,200
e. TRAFFIC CONTROL		\$ 50,000
SUBTOTAL:C-4		\$ 129,200
5. MISCELLANEOUS:		
a. LIGHTING - NONE		\$
b. SIGNING - MARKING		\$ 25,000
c. GUARDRAIL – 2500 LF @ \$15/LF, 6 ea Type 12 or 1 anch @ \$1700/ea		\$ 47,700
d. CURB & GUTTER		\$
SUBTOTAL:C-5		\$ 72,700
6. SPECIAL FEATURES- Rem. Exist. Bridge @\$7/sq.ft-\$31,000; Field Eng. Office Ty 3		\$ 171,000

PROJECT COST	
\$40,000, Remove Detour Br. and Roadway –Grade to Drain and Grass \$100,000	
SUBTOTAL:C-6	

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$ 128,000	
B. REIMBURSABLE UTILITIES (Henry Co. has not signed LGPA.)	\$ 40,000	
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$ 490,055	
2. GRADING AND DRAINAGE	\$ 148,500	
3. BASE AND PAVING	\$ 269,463	
4. LUMP ITEMS	\$ 129,200	
5. MISCELLANEOUS	\$ 72,700	
6. SPECIAL FEATURES	\$ 171,000	
SUBTOTAL CONSTRUCTION COST		\$ 1,280,918
E. & C. (10%)		\$ 141,222
INFLATION (5% PER YEAR)		
NUMBER OF YEARS	2	\$ 131,295
TOTAL CONSTRUCTION COST		\$ 1,553,435
GRAND TOTAL PROJECT COST		\$ 1,721,435

NEED AND PURPOSE
PROJECT BRN-035-1 (38), HENRY COUNTY
PI No. 323050
BRIDGE REPLACEMENT

Project BRN-035-1 (38) consists of the replacement of the bridge on State Route 138 over the Big Cotton Indian Creek in Henry County, three miles east of the City of Stockbridge. This route serves commuter traffic traveling west to Clayton and Fulton Counties and east to Rockdale and Walton Henry Counties. State Route 138 is classified as an Urban Principal Arterial and is not a designated bike route.

This bridge was constructed in 1947 and consists of concrete bents, steel beam superstructure, and a concrete deck. The original load capacity is H-15. The sufficiency rating on this structure is 31.36, and the bridge is classified as Functionally Obsolete. The sufficiency rating is a number from 0 to 100 and is a method of evaluating structural adequacy and safety, serviceability, and functional obsolescence. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved.

Present conditions on this structure are 12-foot, one-lane travel lanes in each direction, no sidewalks or shoulders to allow for pedestrian movements. Existing 2000 Average Annual Daily Traffic (AADT) along this section of roadway were 11,800. Future volumes are expected to be approximately 14,000 AADT in the year 2007; and 22,000 AADT in 2027 with four-percent trucks.

Replacing this bridge will bring it up to current AASHTO geometric design standards and in doing so will improve the operation and safety of this roadway. This project is committed to a safe, efficient and sustainable transportation system for all users.

MINUTES OF INITIAL CONCEPT TEAM MEETING

Project: GDOT Project Work Order No. 4 in Henry County
BRN-035-1(38) – PI No. 323050,
SR 138 @ Big Cotton Indian Creek

Date: September 26, 2002

Place: Henry County Government Offices, Rm. 203 (Training Room)

Present: Ted Cashin – GDOT OCD
Wade Harris – GDOT Eng. Services
Tom Queen – GDOT District 3
Kerry Gore – GDOT District 3 Utilities
David Coleman – GDOT
Marc Mastronardi – GDOT
Shawanna Qawiy – Henry County
Jim O’Neal – Henry County DOT
Barry Carter – Henry County Board of Education
Beverly Skipper – Henry County Board of Education
Jerry Wylie – Georgia Power
Shane Hallford – HCWSA
Tony Carwell – HCWSA
Steve Manley – Manley Acquisition Services, LLC
Jim Graybeal – Parsons Brinckerhoff
John Durand – Parsons Brinckerhoff
George Krausser – Parsons Brinckerhoff

Distribution: Attendees

Purpose: Initial Concept Team Meeting

DISCUSSION:

1. The proposed realignment to the south side of S.R. 138 along with photos looking north and south along the project, and a photo of the bridge, looking upstream were presented.
2. Jim Graybeal explained to the group the major aspects of the concept report and why we decided to go with the option of shifting the alignment to the south of S.R. 138. Based on discussions and follow-up as referenced in comment 12, a detour bridge option is now recommended.
3. Ted stated that he will provide a Need and Purpose statement for this project (one was not included in the concept report).
4. Tom said that an LGPA has been requested but not signed by the county. He also said to expect environmental approval in June, so Right of Way plans will need to be done by then.

5. Steve called for allowing more time to purchase right of way – from 6 months as originally stated in the concept report, to 10-12 months because of the number of parcels that will be affected.
6. Ted requested the cost for the bridge be changed from \$65/sq. ft. to \$55/sq. ft.
7. Jim O'Neal said that a cost estimate is needed before the LGPA is signed. He then voiced concern about access to Ronald Lewis's property, since it will have guardrail across the length of his property. Jim Graybeal said a break in the guardrail on the east side of the bridge would be provided for an entrance to Mr. Lewis's property. Wade asserted that it would be then up to Mr. Lewis to provide for a bridge over the creek to access the rest of his property
8. Wade said to change on the report that the contractor must provide for a material pit. The district does not provide for material pits anymore.
9. Wade then asked about straightening the alignment to provide for a possible 4-lane roadway. It was said that a 4-lane roadway is not in the long-range plans. John said that it would be more cost prohibitive and have more impact on right of way.
10. Jim O'Neal voiced concern about the traffic counts. He said that for the past 9 years, the counts have always missed on the low side in terms of VPD.
11. Steve questioned some of the proposed right of way acquisitions, including the jogs. Jim Graybeal said that with 10' shoulders, we will need the additional right of way. However, the right of way will be extended to the property limits.
12. A discussion ensued about using a detour bridge in lieu of the new alignment. It was decided that a runaround detour be looked into further. No one in attendance was opposed to an on-site runaround detour
13. The project at S.R. 138 and Flat Rock Rd. is less than 1 mile from the project site (scheduled for 2003 construction) and it was inquired if the two projects could be tied together. Ted said no, because the project at Flat Rock is being expedited for safety concerns and it would complicate the environmental documents for both.
14. Beverly asked about the weight limit on the proposed bridge. She stated that Henry County school buses weigh 14 tons. John assured her that the new bridge is sufficient to carry their buses.
15. Tony described the waterlines in the vicinity of this project, including an 8" PVC waterline along the south side of the project (it goes under the creek). There will also be a 36" ductile iron sanitary sewer line on the east side (preliminary plans are in progress).
16. Kerry recommended a \$40,000 reimbursable cost for utilities. He added that Snapping Shoals EMC and Charter Communications are also utility owners in the area (they were not included in the concept report).
17. Marc later added that this project is in a non-attainment zone.

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

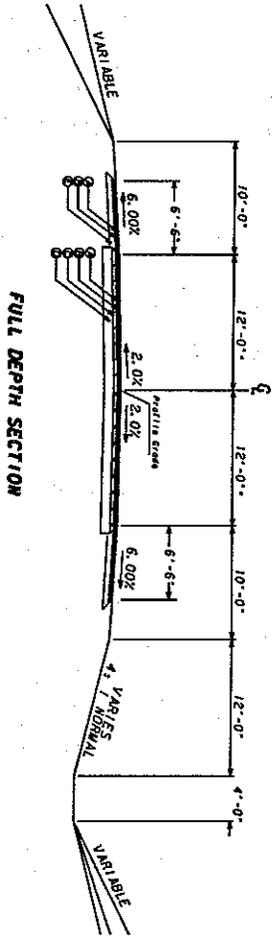
Sincerely,

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.

John Durand, P.E.
Project Manager

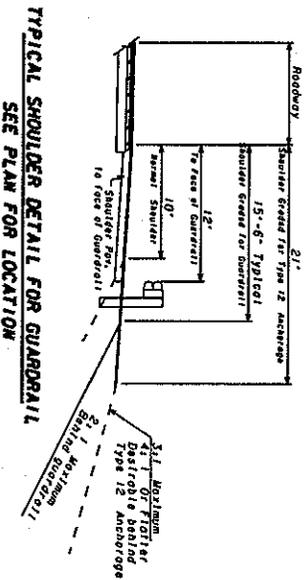
TYPICAL SECTIONS

S. R. 138 MAINLINE



FULL DEPTH SECTION

- REQUIRED PAVEMENT**
- ① 12.5 mm ASPHALTIC CONCRETE SUPERPAVE - 165*/5Y
 - ② 19mm ASPHALTIC CONCRETE SUPERPAVE - 220*/5Y
 - ③ 23mm ASPHALTIC CONCRETE SUPERPAVE - 550*/5Y
 - ④ GRADED AGGREGATE BASE, 12"
 - ⑤ GRADED AGGREGATE BASE, 6"



TYPICAL SHOULDER DETAIL FOR GUARDRAIL
SEE PLAN FOR LOCATION

NOT TO SCALE

DATE	PROJECT NUMBER	SCALE
04	SR-035-11381	

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Location & Geography

Signs & Attachments

* Structure I.D. No:	151-0016-0	* Highway System:	104	1				
* 200 Bridge Information	07	* Functional Classification:	26	14		225	Expansion Joint Type: 02	
* 6A Feature Int:	BIG COTTON INDIAN CREEK	* Federal Route Type:	204	F	No.: 035-1	242	Deck Drains: 1	
* 6B Critical Bridge:	0	* Federal Lands Highway:	105			243	Parapet Location: 0	
* 7A Route Number Carried:	SR00138	* 110 Truck Route:	110	0			Height: 0.00	
* 7B Facility Carried:	SR 138	* 206 School Bus Route:	206	1			Width: 0.00	
* 9 Location:	3 MI E OF STOCKBRIDGE	* 217 Benchmark Elevation:	217	0000.00		238	Curb: 1.20	
* 2 DOT District:	3	* 218 Datum:	218	0		239	Handrail: 1	
* 207 Year Photo:	1999	* 19 Bypass Length:	19	08		240	Median Barrier Rkll: 0	
* 91 Inspection Frequency:	24	* 20 Toll:	20	3		241	Bridge Median Height: 0.00	
* 92A Fract Crit Insp Freq:	00	* 21 Maintenance:	21	01			Width: 0.00	
* 92B Underwater Insp Freq:	60	* 22 Owner:	22	01		230	Guardrail Loc Dir Rear: 3	
* 92C Other Spc. Insp Freq:	00	* 31 Design Load:	31	2			Fwd: 3	
* 4 Place Code:	000000	* 37 Historical Significance:	37	5			Oppo Dir Rear: 0	
* 5 Inventory Route (O/U):	1	* 205 Congressional District:	205	03		244	Approach Slab: 0	
Type:	3	* 27 Year Constructed:	27	1947		224	Retaining Wall: 0	
Designation:	1	* 106 Year Reconstructed:	106	0000		233	Posted Speed Limit: 55	
Number:	00138	* 33 Bridge Median:	33	0		236	Warning Sign: 1	
Direction:	0	* 34 Skew:	34	00		234	Delineator: 1	
* 16 Latitude: 33-33.1	MMS Prefix: SR	* 35 Structed Flared:	35	00		235	Hazard Boards: 1	
* 17 Longitude 84-10.7	MMS Suffix: 00	* 38 Navigation Control:	38	0		224	Retaining Wall: 0	
* 98 Border Bridge:	000	* 213 Special Steel Design:	213	0		233	Posted Speed Limit: 55	
* 99 ID Number:	0000000000000000	* 267 Type of Paint:	267	5		236	Warning Sign: 1	
* 100 STRAHNET:	0	* 42 Type of Service on:	42	1		234	Delineator: 1	
* 12 Base Highway Network:	0	* 214 Movable Bridge:	214	0		237	Utilities Gas: 00	
* 13A LRS Inventory Route:	0	* 203 Type Bridge:	203	E-N-M-O			W: 00	
* 13B Sub Inventory Route:	0	* 259 Pile Encasement:	259	2			Ele: 00	
* 101 Parallel Structure:	N	* 43 Structure Type Main:	43	4	02		Telephone: 22	
* 102 Direction of Traffic:	2	* 45 No. Spans Main:	45	004			Sk: 00	
* 264 Road Inventory Mile Post:	007.37	* 44 Structure Type Appr:	44	3	02		247	Lighting Street: 0
* 208 Inspection Area:	03	* 46 No. Spans Appr:	46	0001			Navigation: 0	
Engineer's Initial:	wss	* 226 Bridge Curve Horiz:	226	0	Vert: 0		Aerial: 0	
* Location I.D. No.:	151-00138D-006.34E	* 107 Deck Structure Type:	107	1		* 248	County Continuity No.: 00	
		* 108 Wearing Surface Type:	108	1				
				M: 8				
				F: 8				

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 151-0016-0

Henry

SUFF. RATING

Programming Data

201 Project No.: SP 1859-B(1)
 202 Plans Available: 0
 249 Prop. Proj. No. BRN-035-1(38)
 250 Approval Status: 0000
 251 P.I. No.: 323050-
 252 Contract Date: 02/01/2004
 260 Seismic No.: 000000
 75 Type Work: 34 1
 94 Bridge Imp. Cost \$ 131
 95 Roadway Imp. Cos \$ 46
 96 Total Imp Cost: \$ 240
 76 Imp. Length: 000346
 97 Imp. Year: 1990
 114 Future ADT: 015450 Year: 2019

Measurements

* 29 ADT: 010300 Year: 1999
 109 % Tracks: 9
 * 28 Lanes On: 02 Under: 00
 210 No. Tracks On: 00 Under: 00
 * 48 Max. Span Length: 0027
 * 49 Structure Length: 135
 51 Br. Rwdy. Width: 25.80
 52 Deck Width: 32.00
 * 47 Tot. Horz. Cl: 25.80
 50 Curb/Sdewlk Width: 2.00/2.00
 32 Approach Rdwy Width: 024
 * 229 Shoulder Width:
 Rear Lt: 6.00 Type: 8 Rt: 6.00
 Fwd Lt: 5.00 Type: 8 Rt: 5.00
 Pavement Width:
 Rear: 24.00 Type: 2
 Fwd: 24.00 Type: 2
 Intersection Rear: 0 Fwd: 0
 36 Safety Features Br. Rail:
 Transition: 2
 App. G. Rail: 2
 App. Rail End: 1
 53 Minimum Cl Over: 99 ' ' 99 "
 Under: N 00 ' 00 "

Ratings

65 Inventory Rating Method: 1
 63 Inventory Rating Method: 1
 66 Inventory Type: 2 Rating: 13
 64 Operating Type: 2 Rating: 29
 231 Calculated Loads
 H-Modified: 5 1
 HS-Modified: 25 0
 Type 3: 27 1
 Type 3s2: 40 0
 Timber: 32 1
 Piggyback: 40 0
 261 H Inventory Rating: 10
 262 H Operating Rating: 15
 67 Structural Evaluation: 2
 58 Deck Condition: 6
 59 Superstructure Condition: 8
 * 227 Collision Damage: 0
 60A Substructure Condition: 6
 60B Scour Condition: 7
 60C Underwater Condition: 6
 71 Waterway Adequacy: 8
 61 Channel Protection Cond: 6
 68 Deck Geometry: 2
 69 UnderClr. Horz/Vert: N
 72 Appr. Alignment: 7
 62 Culvert: N

Hydraulic Data

215 Waterway Data
 Highwater Elev.: 0000.0 Year: 1900
 Avg. Streambed Elev.: 0000.0 Freq.: 00
 Drainage Area: 00000
 Area Of Opening: 000000
 113 Scour Critical: 6
 216 Water Depth: 4 Br. Height: 17.4
 222 Slope Protection: 6
 221 Spur Dikes Rear: 1 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 UVW Insp. Area: 1 Diver: WS

Posting Data

* 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: 6.00
 Deck Thick Approach: 6.00
 246 Overlay Thickness: 0.00
 212 Year Last Painted: Sup: 1998 Sub: 1974

* Location I.D. No.: 151-00138D-006.34E

Department of Transportation State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE BRN-035-1(38), Henry County OFFICE Environment/Location
P.I. # 323050
DATE January 24, 2002

FROM Harvey D. Keepler, State Environment/Location Engineer

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

SUBJECT Traffic Assignments for S.R. 138 @ Big Cotton Indian Creek 3 Mi E of
Stockbridge in Henry County.

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

2000 AADT = 11800
2007 AADT = 14000
2027 AADT = 22000
K = 9%
D = 60%
T. = 4%
24 HOUR T = 6%
S.U. = 3.5%
COMB. = 2.5%

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

FLEXIBLE PAVEMENT DESIGN ANALYSIS

Project: BRN-035-1(38)

County: Henry

P.I. no.: 323050

Description: Bridge Replacement on S.R. 138 over Big Cotton Indian Creek

Traffic Data (NOTE: AADTs are one-way)

24-hour Truck Percentage: 6.00%

AADT initial year of design period: 7,000 vpd (2007)

AADT final year of design period: 11,000 vpd (2027)

Mean AADT (one-way): 9,000 vpd

Design Loading

Mean AADT	*	LDF	*	Trucks	*	18-K ESAL	=	Total Daily Loads
9,000	*	1.00	*	0.060	*	1.06	=	573

Total predicted design period loading = 573 * 20 * 365 = 4,182,900

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
	99	(3.90)	0.0118	1.17
Graded Aggregate Base	300	(11.81)	0.0063	1.89

Required SN = 5.55

Proposed SN = 5.03

>>> Proposed pavement is 9.4% Underdesign <<<

Remarks: Bridge replacement on a shifted alignment

Prepared by Ted Cashin-GDOT/Jim Graybeal-PB September 4, 2002
Date

Recommended State Materials & Research Engineer Date

Approved State Consultant Design Engineer Date

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. BRN-035-1(38) HENRY COUNTY

P.I. No. 323050-

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: NOVEMBER 27, 2002

Project BRN-035-1(38) is a bridge replacement project in Henry County. It is in the 491st GMD, 3 miles east of Stockbridge on State Route 138 over the Big Cotton Indian Creek. The total project length is approximately 1500 feet (0.284 miles), beginning at M.P. 7.230 and extending to M.P. 7.514. The purpose of this project is to replace a structurally deficient and functionally obsolete bridge on S.R. 138 over the Big Cotton Indian Creek. Traffic will be maintained along an "on-site" temporary detour constructed on the south side of existing S.R. 138 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:

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

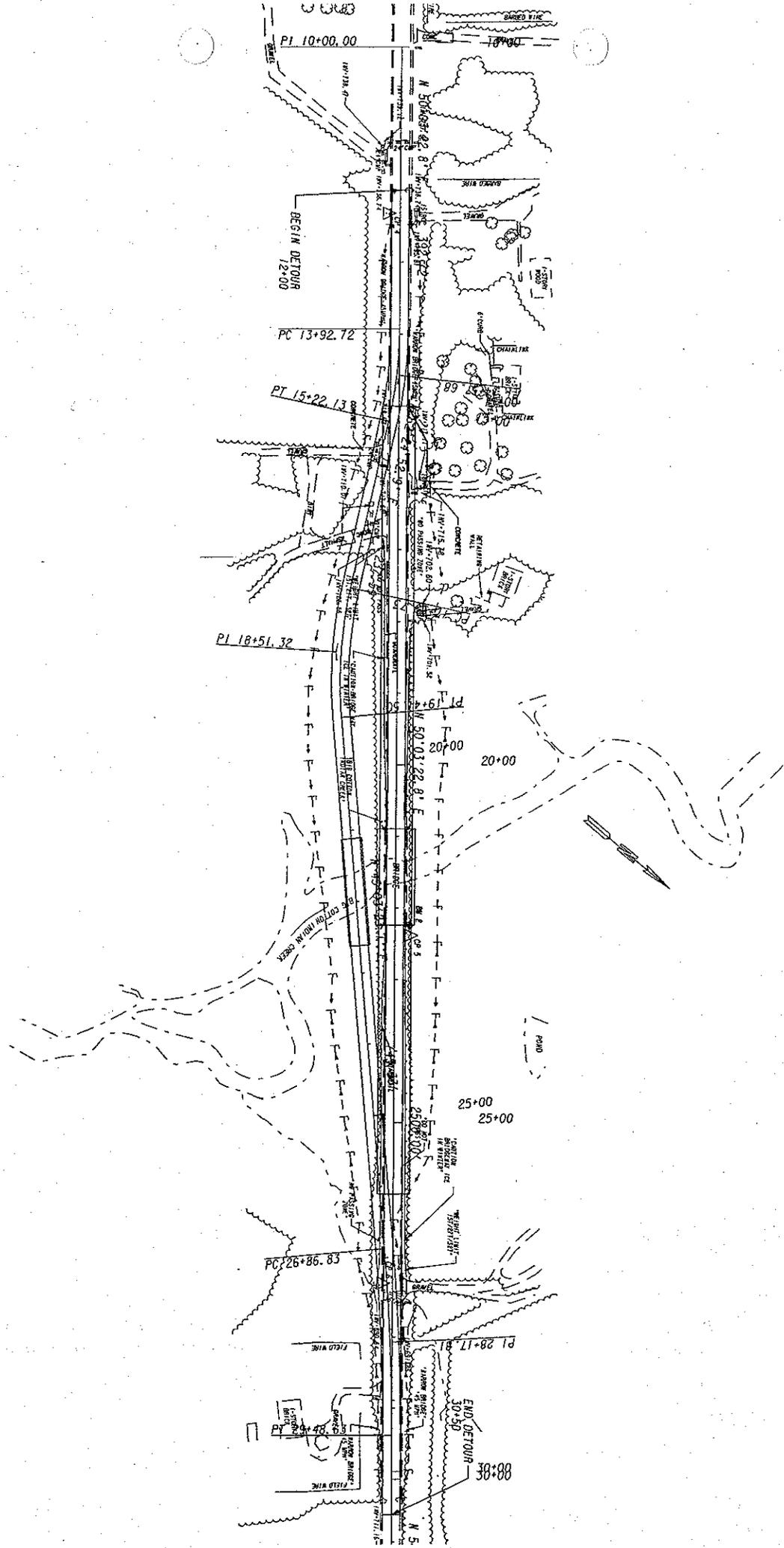
Ted.Cashin@DOT.STATE.GA.US

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.



PROJECT STATUS REPORT

PI NUMBER			READY
PROJECT	COUNTY	DESCRIPTION	TO LET
323050-	HENRY	SR 138 @ BIG COTTON INDIAN CREEK 3 MI E OF STOCKBRIDGE	0407
BRN-035-1(38)	US:	<u>APPROVED DATES</u> PE DATE: 2002 RW DATE: 2003 CST DATE: 2004	
PROJ MGR: T. CASHIN		<u>PROPOSED DATES</u> TH PE DATE: 2002 TH RW DATE: 2004 TH CST DATE: 2005	
PROG TYPE: BRIDGES		<u>APPROVED COSTS</u> PES: \$20,000 RW COST: \$10,000 CST EST: \$1,100,000	
CONCEPT:		<u>PROPOSED COSTS</u> TH PES: \$20,000 TH RWS: \$10,000 TH CSTS \$1,100,000	
P.E. PROJECT:	NN: 46.0	REF PROJ: TWIN PROJ: EST DATE: 10/23/00	
LENGTH: 0.22	C DIST: 3	FIELD DIST: 3 STATUS: PRECST	TIP #: HE 157 UAC: 1 FUND 1: Q10

SCHED START	SCHED FINISH	ACTIVITY	ACTUAL START	ACT/EST FINISH	PCT	DISTRICT COMMENTS
		DEFINE CONCEPT RPT:			00	WILL NEEDED COPY OF C.T.F. SCHEDULE
		CONCEPT MEETING:				
		SUB RTP TO ENG SERVICES:				
		REC ENG SERV APPROVAL:				
		MGT APPROV CPT REPORT:			00	
		ENVIRONMENTAL:	1/1/03	7/31/03	00	
		PUBLIC HEARING:				
		PHOTO MAPPING:			01	
		FIELD SURVEY:			00	
		FINAL ALT APPRV:				
		PRELIM FPR HELD:				
		PREL RDWY RW PLANS:			00	
		SECURE 404 PROCESS:			00	
		LOC DZN APPRV:			00	
		FINAL CST PLANS:			00	
		APPRV RW PLANS:			00	
		STAKE RW:			00	
		FINAL FPR HELD:				
		LAB REC V SOIL REQUEST:			00	
		PREL HYDR PLANS:			00	
		LAB BFI REQUEST:			00	
		BRIDGE PLANS:			00	
		U.S.T.s:			00	

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

PDD: APRIL BOARD ADDITION: ASSIGNED CONSULTANT TASK FORCE 4/30/99

PLANNING: *HOLD*

DZN CMT:

UTIL CMT:

LGPA: REQ HENRY DO UTILITIES 7-20-99.

LOC CMT: BRIDGE

EIS: MM | AIELLO - CONSULT TASK FORCE

404: NEED IMPACTS TO DETERMINE

TS: CAH|BR REPL PRJCT|S&M PLNS N/R|030601

ROW:

RR

PITS:

UST CMT:

BR CMT: 3-161

R/W INFORMATION:

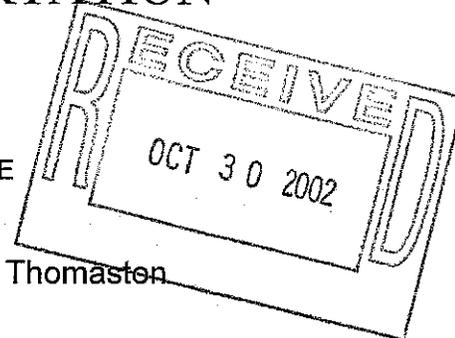
R/W STATUS: PRECST NUMBER OF PARCELS TO BE ACQUIRED: 0 ACQUIRED BY: DOT ACQ MGR

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

RWCERT:

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE BRN-035-1(38) Henry County OFFICE Thomaston
P. I. No. 323050
SR138 @ Big Cotton Indian Creek 3 mi E of Stockbridge
FROM *DBM* Thomas B. Howell, P.E., District Engineer DATE October 29, 2002
TO — Margaret B. Pirkle, Assistant Director of Preconstruction
SUBJECT **PROJECT CONCEPT REPORT**

We have reviewed the concept report on the above project and concur with the recommendation for approval.

Attached for your further handling is the concept report cover sheet which has been signed by the District Engineer.

DBM:PD

Attachment

xc: David Mulling
Harvey Keepler
James B. Buchan

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRN-035-1(38)

County: HENRY

P. I. Number: 323050-

Federal Route Number: N/A

State Route Number: 138

Recommendation for approval:

DATE 10-23-02

DATE 06-23-02



Project Manager
James B. Buchanan WBA
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

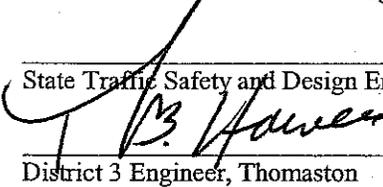
DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE 10-26-02



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

Project Number: BRN-035-1(38)

County: HENRY

P. I. Number: 323050-

Federal Route Number: N/A

State Route Number: 138

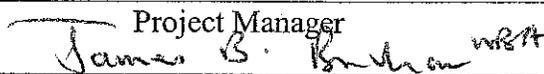
Recommendation for approval:

DATE 10-23-02

DATE 10-23-02



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 10/31/02



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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRN-035-1(38)

County: HENRY

P. I. Number: 323050-

Federal Route Number: N/A

State Route Number: 138

Recommendation for approval:

DATE 10-23-02

DATE 10-23-02



Project Manager
James B. Buchanan WBA

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 11-14-02

David J. Mullins DEW
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: BRN-035-1(38)

County: HENRY

P. I. Number: 323050-

Federal Route Number: N/A

State Route Number: 138

Recommendation for approval:

DATE 10-23-02

DATE 10-23-02



Project Manager

James B. Buchanan WBSA

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

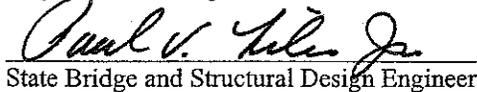
DATE _____

District 3 Engineer, Thomaston

DATE _____

Project Review Engineer

DATE 11/9/02



State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Consultant Design

PROJECT CONCEPT REPORT

Project Number: BRN-035-1(38)

County: HENRY

P. I. Number: 323050-

Federal Route Number: N/A

State Route Number: 138

Recommendation for approval:

DATE 10-23-02

DATE 10-23-02



Project Manager

James B. Buchanan *WBT*

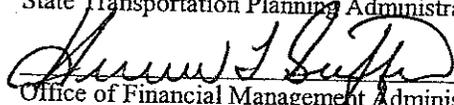
State Consultant Design Engineer

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 _____

DATE 10/24/02

State Transportation Planning Administrator



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