**ORIGINAL TO GENERAL FILES**

D.O.T. 66

# DEPARTMENT OF TRANSPORTATION
# STATE OF GEORGIA

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** BRST-074-1(51) Meriwether County
P. I. No. 333183

**OFFICE** Preconstruction

**DATE** January 16, 2003

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

**TO** SEE DISTRIBUTION

**SUBJECT PROJECT CONCEPT REPORT APPROVAL**

Attached for your files is the approval for subject project.

MBP/cj

Attachment

DISTRIBUTION:

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

D.O.T. 66

# DEPARTMENT OF TRANSPORTATION
# STATE OF GEORGIA

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** BRST-074-1(51) Meriwether County
P.I. No. 333183

**OFFICE** Preconstruction

**DATE** January 10, 2003

**FROM** Margaret B. Pirkle, 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 85 over CSX Railroad within the city limits of Warm Springs, Georgia. The existing bridge, constructed in 1941, is load limited with a sufficiency rating of 49. State Route 85 at this location is a rural two lane roadway with 12' travel lanes with rural shoulders. Traffic is projected to be 3000 VPD and 4500 VPD in the years 2004 and 2024 respectively. The posted speed and the design speed are 45 MPH.

The construction proposes to relocate SR 85 east of its present location, extending a total of 0.29 mile. The proposed new bridge will be 170' x 48' and will be located just east of the existing bridge structure. The relocated SR 85 will consist of two, 12' travel lanes (one in each direction), 4' bike lanes amd 6' sidewalks on both sides. 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) | $1,471,000 | $1,100,000 | 2005 | FY-05 |
| Right-of-Way | $ 295,000 | $ 25,000 | | |
| Utilities* | $ 75,000 | ----- | | |

*Warm Springs refused LGPA for utilities 8-31-99.

BRST-074-1(51) Meriwether
January 10, 2003

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

**INTERDEPARTMENT CORRESPONDENCE**

FILE **BRST-074-1(51) Meriwether County**
SR 85 Alt. Over CSX Railroad in Warm Springs
P.I. No. 333183-

OFFICE Atlanta

FROM James B. Buchan, State Consultant Design Engineer

DATE December 9, 2002

TO Margaret B. Pirkle, Assistant Director of Preconstruction

DEC 10 2002

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 Otis Clark at (404)463-6265 or Steve Tiedemann of J.B. Trimble, Inc. at (770) 952-1022.

*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:OC

cc: J.B. Trimble, Inc.

# DEPARTMENT OF TRANSPORTATION
# STATE OF GEORGIA
# OFFICE OF CONSULTANT DESIGN

## PROJECT CONCEPT REPORT

Project Number: **BRST-074-1(51)**
County: **MERIWETHER**
P.I. Number: **333183**

Federal Route Number: **N/A**
State Route Number: **85 ALT.**

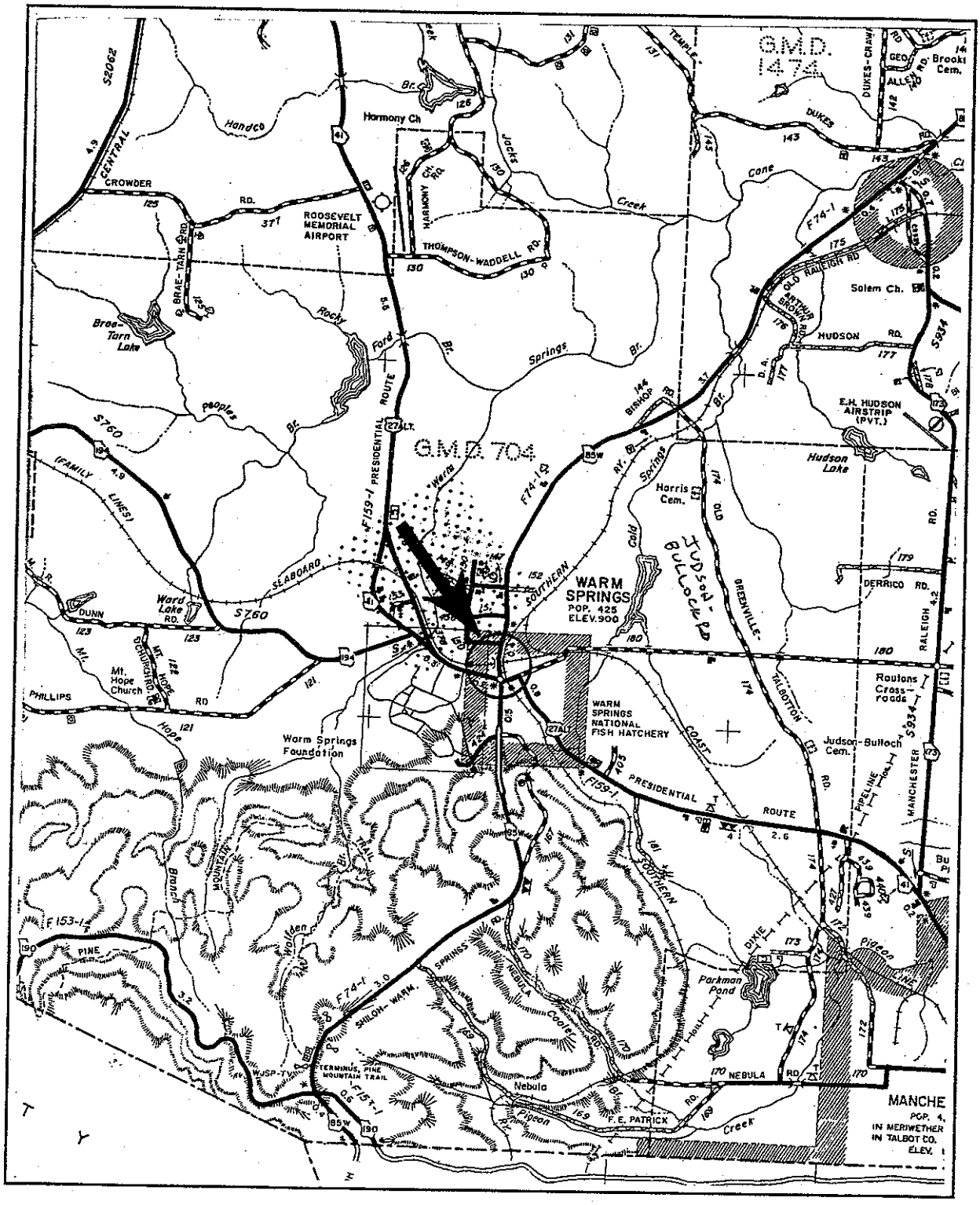
Recommendation for approval:

DATE 12-9-02 _____ Project Manager

DATE 12-9-02 _____ State Consultant Design Engineer

The concept as presented herein and submitted for approval is consistent with that which is included in 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 Engineer |
| DATE | Project Review Engineer |
| DATE | State Bridge & Structural Design Engineer |




# Location Map

Project: BRST-074-1(51) Meriwether County PI No.: 333183

Description: SR 85 Alt. Over CSX Transportation, Inc. in Warm Springs

# PROJECT CONCEPT REPORT

**PROJECT: BRST-074-1(51)**

## PROJECT NEED & PURPOSE

Bridge project BRST-074-1 (51) would replace the structurally deficient bridge located on State Route (SR) 85 Alternate over CSX railroad. The bridge's sufficiency rating is 49.3. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 be replaced rather than improved. This project would replace the existing bridge with a structurally adequate bridge.

This section of SR 85 Alternate is functionally classified as a minor arterial and is designated as a school bus route. The posted speed along this section of SR 85 Alternate is 45 mph. The bridge is located in Warm Springs and was constructed in 1941. The Average Daily Traffic (ADT) along this section of SR 85 Alternate is 3,000 for 2004. The projected (2024) ADT is 4,500 with 7% trucks.

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

## DESCRIPTION OF PROPOSED PROJECT

This project is located along SR 85 Alt. over a single active track of CSX Transportation and it is within the city limits of the historic town of Warm Springs in Meriwether County. The bridge is located approximately 500 feet north of the main commercial street in Warm Springs on US 27. Meriwether County Hospital is also located just south of the project on US 27. Warm Springs is heavily dependant on tourism for financial support and promotes the fact that the area was the part time home of former president Franklin D. Roosevelt. Norfolk Southern railroad previously operated immediately east of the roadway and bridge, also crossing over CSX but the rails and ballast were removed some years ago. A visitor/tourism center has been constructed just south of the bridge on the east side of the road as a replica of the original train depot that was reported to have been in the same location when President Roosevelt visited the area.

**Project Length:** 0.29 miles

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

## PDP CLASSIFICATION

**Full Oversight ( )** **Exempt ( X )** **State Funded ( )**

## FUNCTIONAL CLASSIFICATION

MINOR ARTERIAL

| TRAFFIC | | | |
|---|---|---|---|
| CURRENT | | PROJECTED | |
| YEAR | AADT | YEAR | AADT |
| 2004 | 3000 | 2024 | 4500 |

**EXISTING DESIGN FEATURES**

**TYPICAL SECTION:** The existing roadway is a two lane urban section with variable width lanes ranging from 10 to 12 feet. There is curb and gutter on both of the outside edges of pavement but sidewalk exists only on the west side of the bridge. The existing bridge has an open rail parapet on both sides.

**R/W WIDTH:** 50'

| POSTED SPEED | MAX DEGREE OF CURVATURE | MAX GRADE |
|---|---|---|
| 45 mph | 4°00'00" | 3.0% |

| STRUCTURES: | Length | Width | Priority Rating | Suff. Rating |
|---|---|---|---|---|
| STRUCTURE NO. 199-0037-0<br>BRIDGE OVER CSX RAILROAD | 115' | 40' | 2-17S | 49.3 |

**EXISTING ROADWAY SEGMENT LENGTH:** 0.28 miles
**BEGINNING MILE LOG FOR COUNTY SEGMENT:** 4.0

**PROPOSED DESIGN FEATURES**

**TYPICAL SECTION:** The proposed roadway will consist of two 12' travel lanes (one in each direction), 4' bike lanes on both sides and urban section shoulder. The shoulder will consist of 2.5' curb & gutter and 6' sidewalk. The proposed bridge will be an approximate total length of 170' and will be a 3 span concrete beam structure. The bridge will also have 4' bike lanes, 2' gutters and 6' sidewalks. The total gutter-to-gutter width of the proposed structure will be 36'. The total width from parapet to parapet will be 48'.

| MAINLINE DESIGN SPEED | MAX DEGREE OF CURVE | MAX GRADE |
|---|---|---|
| 45 mph | Proposed: 8°00'00"<br>Allowable: 9°00'00" | Proposed: 3.0%<br>Allowable: 6.0% |

| PROPOSED RIGHT OF WAY | | | | |
|---|---|---|---|---|
| **R/W WIDTH:** 100' min. 150' max. | | | | |
| **EASEMENTS:** | **Temporary** (X) | **Permanent** (X) | **Utility ( )** | **Other** (X) |
| **TYPE OF ACCESS CONTROL:** | **Full ( )** | **Partial ( )** | **By Permit** (X) | **Other ( )** |
| **NUMBER OF PARCELS IMPACTED:** 11 | | | | |
| **DISPLACEMENTS:** | **Businesses (1)** | **Residences (1)** | **Mobile Homes ( )** | **Other ( )** |

| PROPOSED STRUCTURES | | |
|---|---|---|
| | **LENGTH** | **WIDTH** |
| **Bridge** | 170' | 48' |
| **Description:** The proposed bridge will be a 3 span structure with prestressed concrete beams. The center span, 70' long, will be long enough to accommodate a future second track on the north side of the existing track as required by CSX railroad. The deck will have 6' sidewalks, 2' gutters and 4' bike lanes on both sides. CSX will probably require fencing on top of the parapets. | | |

| MAJOR INTERSECTIONS AND INTERCHANGES |
|---|
| **Description:** This project would not require the realignment of the intersection of US 27 and SR 85 Alt., which is just south of the proposed bridge structure. |

| TRAFFIC CONTROL DURING CONSTRUCTION |
|---|
| **Description:** The proposed structure will be constructed on a new alignment to the east so that the existing traffic can be maintained on SR 85 Alt. |

**DESIGN EXCEPTIONS TO CONTROLLING CRITERIA ANTICIPATED:**

| | YES | NO | UNDETERMINED |
|---|---|---|---|
| HORIZ ALIGNMENT | ( ) | (X) | ( ) |
| ROADWAY WIDTH | ( ) | (X) | ( ) |
| SHOULDER WIDTH | ( ) | (X) | ( ) |
| VERT GRADES | ( ) | (X) | ( ) |
| CROSS SLOPES | ( ) | (X) | ( ) |
| STOPPING SIGHT DIST | ( ) | (X) | ( ) |
| SUPERELEV RATES | ( ) | (X) | ( ) |
| HORIZ CLEARANCE | ( ) | (X) | ( ) |
| SPEED DESIGN | ( ) | (X) | ( ) |
| VERTICAL CLEARANCE | ( ) | (X) | ( ) |
| BRIDGE WIDTH | ( ) | (X) | ( ) |
| BR STRUCT CAPACITY | ( ) | (X) | ( ) |

**Design Variances:** NONE

**Environmental Concerns:** Structures of potential historical significance. The rail bed itself is also believed to be historically significant as well. Section 106 involvement possible.

**LEVEL OF ENVIRONMENTAL ANALYSIS**

Are Time Saving Procedures Appropriate?: Yes (X) No ( )

| | | |
|---|---|---|
| Categorical Exclusion (X) (Anticipated) | Environmental Assessment / Finding of No Significant Impact (FONSI) ( ) | Environmental Impact Statement ( ) |

**UTILITY INVOLVEMENTS**

WATER: Meriwether County water line is on existing bridge.

TELEPHONE: Bellsouth

POWER: Georgia Power, Troup EMC

GAS: Atlanta Gas Light Company

CABLE TV: Unknown

## PROJECT RESPONSIBILITIES

DESIGN: J.B. Trimble, Inc.

RIGHT OF WAY ACQUISITION: Georgia Department of Transportation

RELOCATION OF UTILITIES: City of Warm Springs is responsible for reimbursable utilities; LGPA signed 8-31-99

LETTING TO CONTRACT: Georgia Department of Transportation

SUPERVISION OF CONSTRUCTION: Georgia Department of Transportation

PROVIDING MATERIAL PITS: Contractor

PROVIDING DETOURS: N/A

## COORDINATION

CONCEPT TEAM MEETING DATE: August 8, 2001 (Minutes Attached)

MEETS LOGICAL TERMINI REQUIREMENTS: Yes

P.A.R. MEETING: None

LOCATION INSPECTION DATE: February 2, 2001

FEMA, USCG AND/OR TVA: NA

LEVEL OF PUBLIC INVOLVEMENT: Public Information Meeting held March 4, 2002 (see attachment)

LOCAL GOVERNMENT COMMITMENTS: LGPA signed 8-31-99 for utilities

OTHER PROJECTS IN THE AREA: None

OTHER COORDINATION TO DATE: CSX, Meriwether County Hospital, Police and Fire Depart.

| SCHEDULING (Responsible Parties' Estimate) | | |
|---|---|---|
| TIME TO COMPLETE ENVIRONMENTAL PROCESS: | 6 | Months |
| TIME TO COMPLETE PRELIMINARY RD/RW PLANS: | 5 | Months |
| TIME TO COMPLETE 404 PERMIT: | 3 | Months |
| TIME TO COMPLETE FINAL CONSTRUCTION PLANS: | 3 | Months |
| TIME TO PURCHASE RIGHT-OF-WAY: | 12 | Months |
| OTHER MAJOR ITEMS THAT WILL AFFECT PROJECT SCHEDULE: | Railroad coordination/Force Account preparation; City of Warm Springs coordination. | |

## ALTERNATIVES CONSIDERED

**Alternate 1** – Rehabilitation of existing structure – this alternate was not chosen because the Department has determined that any structure with a sufficiency rating less than 50 should be replaced. The sufficiency rating for this bridge is 49.3 and therefore requires replacement.

**Alternate 2** - Close SR 85 Alt. and route traffic to an off-site detour. An offsite detour via SR 173 to US 27 Alt. would be approximately 6 miles long. However, conversations with Vann Chapman, Director of EMS and 911 services for Meriwether County, indicate that Mr. Chapman is opposed to closing the road during construction due to a lack of alternative routes in emergencies since the hospital is located just south of the bridge. Although Warm Springs police are unconcerned about the closure because they could still access the north side of the bridge via narrow neighborhood streets in patrol cars, they felt that the fire department would also be opposed to the closure. No fire personnel were available for comment.

**Alternate 3** – Reconstruct the bridge in the same location by staging the bridge construction - traffic would be maintained on the existing bridge during construction with one lane being constructed at a time. This would require a temporary signal to control one-way traffic and would probably back traffic into the southern intersection. This would also be expensive since the bridge would have to be constructed over an active railroad.

**Alternate 4** - Permanent realignment of SR 85 Alt. to the west and maintain traffic on the existing bridge during construction - several buildings including a hardware store, a doctor's office and 2 residences are located on the west side of the road and would either have to be removed or would be heavily damaged if the road were permanently constructed to the west.

**Alternate 5** - Permanent realignment of SR 85 Alt. to the east and maintain traffic on the existing bridge during construction. The proximity of the former Norfolk Southern railroad to the project has resulted in a large amount of right of way on the east side of the road, almost eliminating the need for additional right of way. There are no structures on this side and the new bridge can be constructed close to the existing bridge, eliminating any impacts to the welcome center. **This is the recommended alternative.**

COMMENTS: Alternate 5, consisting of permanent realignment of SR 85 Alt. to the east and maintain traffic on the existing bridge during construction, is the recommended alternative for this project.

ATTACHMENTS:

- Detailed Cost Estimate
- Typical Sections
- Estimated traffic assignments
- Concept Team meeting minutes
- Notice of Location and Design Approval
- Bridge inventory data
- Existing bridge plan
- File memo for coordination regarding bridge closure
- File memo for coordination with CSXT railroad
- ~~Public Information Meeting documents~~
- ~~Datatrieve Sheet~~

**PREPARED BY:** J.B. Trimble, Inc.

## PROJECT CONCEPT REPORT

## PRELIMINARY COST ESTIMATE

**PROJECT NUMBER:** BRST-074-1(51) **COUNTY:** MERIWETHER

**DATE:** July 23, 2001 **ESTIMATED LETTING DATE:** July 2004

**PREPARED BY:** J.B. Trimble, Inc. **PROJECT LENGTH (MILES):** 0.35 Mi

( ) PROGRAMMING PROCESS **(X) CONCEPT DEVELOPMENT** ( ) DURING PROJECT DEV.

| PROJECT COST | |
|---|---|
| **A. RIGHT-OF-WAY:** | |
| 1. PROPERTY (LAND & EASEMENT) | $35,000.00 |
| 2. DISPLACEMENTS; RES:1, BUS;1, M.H.:0 | $250,000.00 |
| 3. OTHER COST (ADM./COST, INFLATION) | $10,000.00 |
| **SUBTOTAL: A** | **$295,000.00** |
| | |
| **B. REIMBURSABLE UTILITIES:** (LGPA for utilities only) | |
| 1. RAILROAD | $75,000.00 |
| 2. TRANSMISSION LINES | $0.00 |
| 3. SERVICES (by LGPA – cost not included in total) | $10,000.00 |
| **SUBTOTAL:B** | **$75,000.00** |
| **CONSTRUCTION** | |
| **C. MAJOR STRUCTURES** | |
| 1. RETAINING WALLS | $0.00 |
| 2. BRIDGES (170' X 50.42' bridge) | $685,712.00 |
| 3. DETOUR BRIDGES | $0.00 |
| 4. EXTEND/REPLACE EXISTING CULVERTS | $0.00 |
| **SUBTOTAL:C** | **$685,712.00** |

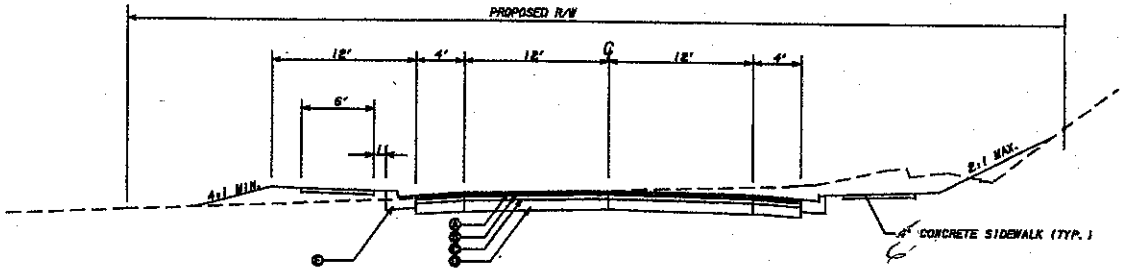
| | |
|---|---|
| **D. GRADING AND DRAINAGE** | |
| 1. EARTHWORK | |
| a. BORROW: (2,000 cu. yd. @ $6.00) | $12,000.00 |
| b. EXCAVATION: (2,500 cu. yd. @ $4.00) | $10,000.00 |
| SUBTOTAL: D-1 | $22,000.00 |
| 2. DRAINAGE | |
| a. SIDE DRAIN PIPE (50 ft of 15 in @) $18) | $3,240.00 |
| b. 15" FES (6 ea @ $300) | $1,800.00 |
| b. Catch Basins (2 ea @ $1800) | $3,600.00 |
| b. 24" TYPE I RIPRAP (20 SY @ $40) | $800.00 |
| SUBTOTAL: D-2 | $9,440.00 |
| **SUBTOTAL: D** | **$31,440.00** |
| | |
| **E. BASE AND PAVING** | |
| 1. AGGREGATE BASE (3650 sq. yd. of 8" @ $8) | $29,200.00 |
| 2. SURFACE AGGREGATE (200 tons @ $15) | $3,000.00 |
| 3. ASPHALT PAVING | |
| a. Surface - 19 mm Superpave (80 tons @ $34.50) | $2,760.00 |
| b. Binder - 25 mm Superpave (710 tons @ $37) | $26,270.00 |
| c. Base - 12.5 mm Superpave (1,260 tons @ $33) | $41,580.00 |
| d. Leveling (85 tons @ $36.50) | $3,100.00 |
| e. Tack Coat (800 gals @ $1) | $800.00 |
| SUBTOTAL: E-3 | $106,710.00 |
| 4. CONCRETE PAVING – Approach Slabs (230 sq. yd. @ $90) | $20,700.00 |
| 5. CURB & GUTTER & SIDEWALK CONCRETE PAVING | $100,000.00 |
| **SUBTOTAL: E** | **$227,410.00** |

| | |
|---|---|
| **F. LUMP ITEMS** | |
| 1. TRAFFIC CONTROL | $100,000.00 |
| 2. CLEARING AND GRUBBING | $12,000.00 |
| 3. GRASSING | $5,000.00 |
| 4. EROSION CONTROL | $15,000.00 |
| 5. REMOVAL OF EXISTING BRIDGE | $125,000.00 |
| **SUBTOTAL: F** | **$257,000.00** |
| | |
| **G. MISCELLANEOUS** | |
| 1. SIGNING | |
| a. SIGNS | $2,000.00 |
| b. POSTS | $500.00 |
| SUBTOTAL: G-1 | $2,500.00 |
| 2. STRIPING | |
| 1. 5 IN WHITE SOLID (3300 ft @ $0.50 ) | $1,650.00 |
| 2. 5 IN YELLOW SOLID (3300 ft @ $0.50 ) | $1,650.00 |
| SUBTOTAL: G-2 | $3,300.00 |
| 3. GUARDRAIL | |
| a. TYPE W (700 ft @ $12) | $8,400.00 |
| b. TYPE T (84 ft @ $35) | $2,940.00 |
| c. TYPE 12 ANCHORS (2 @ $1600 ) | $3,200.00 |
| d. TYPE 1 ANCHORS (2 @ $450) | $900.00 |
| SUBTOTAL: G-3 | $15,440.00 |
| **SUBTOTAL: G** | **$21,240.00** |

| ESTIMATE SUMMARY | | |
|---|---|---|
| | | |
| A. RIGHT-OF-WAY (DOT) | | $ 295,000.00 |
| B. REIMBURSABLE UTILITIES (CSX RR) | | $75,000.00 |
| CONSTRUCTION | | |
| C. MAJOR STRUCTURES | | $685,712.00 |
| D. GRADING AND DRAINAGE | | $31,440.00 |
| E. BASE AND PAVING | | $227,410.00 |
| F. LUMP ITEMS | | $257,000.00 |
| G. MISCELLANEOUS | | $21,240.00 |
| SUBTOTAL CONSTRUCTION COST | | $1,222,802.00 |
| E. & C. (10%) | | $122,280.00 |
| INFLATION (5% PER YEAR) | | $125,337.00 |
| NUMBER OF YEARS | 2 | |
| TOTAL CONSTRUCTION COST | | **$1,470,419.00** |
| | | |
| GRAND TOTAL PROJECT COST | | **$1,804,419.00** |

| STATE | PROJECT NUMBER | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| GA. | BRST-074-6480 | | |

REVISION DATES



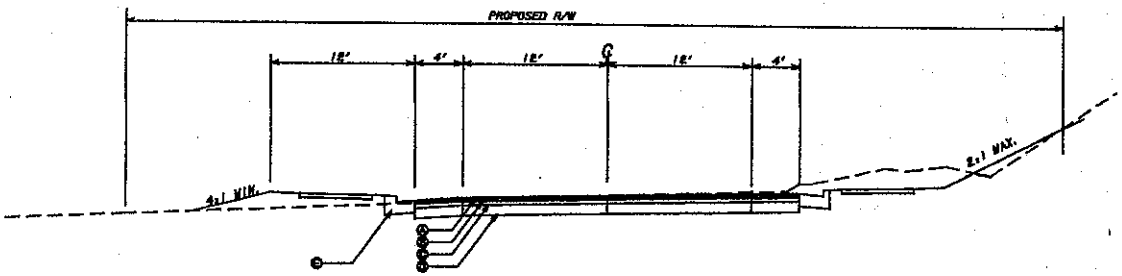

TYPICAL SECTION NO. 1
TANGENT SECTION

STA TO STA
STA TO STA

THIS PROJECT IS SUPERPAVE DESIGN LEVEL "A"

REQUIRED PAVEMENT

- Ⓐ 165 LBS/SY RECYCLED ASPH CONC 12.5 mm SUPERPAVE, GP 2 ONLY, INCL BITUM
- Ⓑ 220 LBS/SY RECYCLED ASPH CONC 19 mm SUPERPAVE, GP 1 OR 2, INCL BITUM
- Ⓒ 440 LBS/SY RECYCLED ASPH CONC 25 mm SUPERPAVE, GP 1 OR 2, INCL BITUM
- Ⓓ GRADED AGGREGATE BASE, 8"
- Ⓔ GA. STD. 9032B-TYPE 2, CURB & GUTTER, 6"x30"




TYPICAL SECTION NO. 2
SUPERELEVATION SECTION

STA TO STA
STA TO STA

| SLOPE CONTROLS | | |
|---|---|---|
| SLOPE | CUT | FILL |
| 4:1 | 0-6' | 0-10' |
| 3:1 | 6'-10' | --- |
| 2:1 | OVER 10' | OVER 10' |

## ALLOWABLE RANGES TABLE

FOR THIS PROJECT, CROSS SLOPES THAT ARE ADJUSTED TO "BEST FIT" EXISTING PAVEMENT SLOPES ARE SUBJECT TO THE FOLLOWING LIMITS:

A. NORMAL CROWN

| SECTION WITH GRADES 0.5% OR GREATER | SECTION WITH GRADES LESS THAN 0.5% |
|---|---|
| 0.0150 FT/FT - MINIMUM | 0.0150 FT/FT - MINIMUM |
| 0.0200 FT/FT - DESIRABLE | 0.0200 FT/FT - DESIRABLE |
| 0.0250 FT/FT - MAXIMUM | 0.0300 FT/FT - MAXIMUM |

B. SUPERELEVATION RATE

S.E. RATE SHOWN ON PLANS OR SE RATE EXISTING IN FIELD, WHICHEVER IS GREATER.

C. SUPERELEVATION TRANSITION LENGTH (LENGTH FROM FLAT POINT TO FULL SE)

| | RATE OF CHANGE | CORRESPONDING DIFFERENCE IN GRADE BETWEEN PIVOT POINT AND EDGE OF PAVEMENT |
|---|---|---|
| MINIMUM | 1:150 | 0.67% |
| DESIRABLE | 1:200 | 0.50% |
| MAXIMUM | 1:300 | 0.33% |

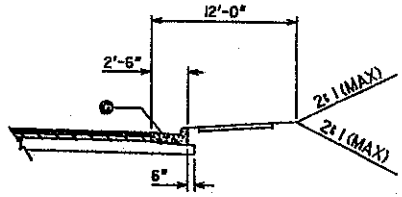
LENGTH SHALL BE SET TO AVOID CREATING A FLAT GUTTER GRADE ON LOW SIDE AND TO AVOID FLAT CROSS SLOPES AT OR NEAR THE LOW POINT OF VERTICAL CURVES.

D. POSITIONING OF SUPERELEVATION TRANSITION LENGTH ON SIMPLE CURVES

50% OF TRANSITION INSIDE CURVE - MAXIMUM
33% OF TRANSITION INSIDE CURVE - DESIRABLE
20% OF TRANSITION INSIDE CURVE - MINIMUM

NOTE: CROWN WIPE-OUT SHALL BE AT THE SAME RATE AS THE SE TRANSITION.

E. SMOOTHING OF BREAKS IN EDGE PROFILE AT BEGIN AND END OF TRANSITION SHALL BE ACCOMPLISHED BY VERTICAL CURVE WITH A MINIMUM LENGTH (IN FEET) EQUAL TO THE SPEED DESIGN (IN MPH).




DETAIL FOR CURB & GUTTER
SEE PLAN FOR LOCATION

J.B. TRIMBLE, INC.
6486 Powers Ferry Road, Suite 100
Atlanta, GA 30339
www.jbtrimble.com

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF CONSULTANT DESIGN

S.R.85 ALT. OVER CSX TRANSPORTATION
TYPICAL SECTIONS

CHANGE No.

K:\TRA\9930 TASK ORDER\WO#16\DGN\ROY\

Department of Transportation
State of Georgia

WO 16

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INTERDEPARTMENT CORRESPONDENCE

FILE BRST-074-1(51), Meriwether County
OFFICE Environment/ Location
P.I.# 333183

DATE February 2, 2000

FROM David E. Studstill, P.E., State Environment/ Location

TO Steve Tiedemann, JB Trimble, Inc.
Cc: Ted Cashin, Office of Consultant Management

SUBJECT SR 85ALT @ CSX RR in Warm Springs, Meriwether County.

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

2024 ADT = 4500
2004 ADT = 3000
K = 9%
D = 60%
T = 7%
24 HR T = 9%
SU = 4%
COMB = 5%

If you have any questions concerning this information please contact Dan Funk at (404) 699- 3474.

August 8, 2001
GDOT Office of Consultant Design
PI 333183 – Concept Mtg.

# PI 333183
## Concept Team Meeting Notes

**Attendees:**

| | |
|---|---|
| Tom Queen – GDOT District 3 Planning & Programming | 706-646-6591 |
| Scott Parker – GDOT District 3 Traffic & Operations | 706-646-6561 |
| Katie Mullins – GDOT Office of Programming | 404-651-7043 |
| Kerry Gore – GDOT District 3 Utilities | 706-646-6552 |
| Gene McKissick – GDOT District 3 Assistant Construction Eng. | 706-646-6571 |
| Edsel Meacham – GDOT District 3 Area 6 Engineer | 706-568-2165 |
| Todd Repass – GDOT District 3 | 706-221-3793 |
| Steve Tiedemann – J.B. Trimble | 770-952-1022 |

Steve Tiedemann of J.B. Trimble, the consultant firm providing the design services for the project, gave a brief overview of the project including a discussion of how the alignment was developed. In general, the proposed bridge will be constructed to the east of the existing bridge, with traffic being maintained on the existing alignment during construction.

Items of discussion included:

A temporary closure with an off-site detour was considered. However, during the development of the concept Mr. Tiedemann had conversations with Meriwether emergency personnel who opposed the closure. The Meriwether County area hospital is on US 27 on the south side of the railroad and just west of this project. Access to the north would basically be cut off by a closure. Specifically, the EMS/911 director for Meriwether County, Mr. Vann Chapman, was opposed to an off-site detour because no viable routes exist in the area that would provide acceptable response times to emergency calls. There are a couple of minor residential streets in the area but they are narrow and unsuitable for emergency vehicles.

Mr. Tiedemann stated that staged construction of the bridge had been considered. Under this scenario, the bridge would be constructed one lane at a time, with one-way traffic across the bridge being controlled with a temporary traffic signal. This was not considered feasible because of the cost of staging over an active rail line and because the bridge is too close to the intersection of SR 85 Alt and US 27. Traffic would probably be backed up into the intersection during peak traffic times.

Mr. Queen stated that a Public Information Hearing should be held even though it isn't required since the project is in the city of Warm Springs. Mr. Tiedemann will prepare the necessary documents and coordinate with Mr. Queen to schedule the meeting.

# NOTICE OF LOCATION AND DESIGN APPROVAL

**Project No. BRST-074-1(51)**
**P.I. No. 333183**

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.

Date of Location Approval: JANUARY 16, 2003

This project is located entirely in Meriwether County on SR 85 Alternate over CSX railroad just north of US 27. It is located in Land District 5, Land Lots 152 and 153.

The project consists of replacing the structurally deficient bridge. The proposed bridge will be located just to the east of the existing bridge. Traffic will be maintained on the existing bridge until the proposed bridge is open.

Drawings and/or map, and/or plats of the proposed project as approved are on file and are available for public inspection at the Georgia Department of Transportation:

Mr. Ken Crabtree
Ken.crabtree@dot.state.ga.us
1107 Hogansville Road
LaGrange, Georgia, 30241
(706) 845-4115

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:

Otis Clark
Office of Consultant Design
Otis.Clark@dot.state.ga.us
No. 2 Capital Square
Atlanta, Georgia 30334
404-463-6265

Any written request or communication in reference to this project or notice MUST include Project and P.I. Numbers as noted at the top of this notice.

# BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION /6

**Structure ID:** 199-0037-0 **Meriwether County** SUFF. RATING: 49.3

## Location & Geography

* Structure I.D. No.: 199-0037-0
200 Bridge Information: 07

* 6A Freature Int.: CSX RAILROAD
* 6B Critical Bridge: 0
* 7A Route Number Carried: SR00085
* 7B Facility Carried: SR 85 ALT
* 9 Location: IN WARM SPRINGS
2 DOT District: 3
207 Year Photo: 1998

* 91 Inspection Frequency: 24 Date: 07/21/1998
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: 80480

* 5 Inventory Route (O/U): 1
Type: 3
Designator: 2
Number: 00085
Direction: 0

* 16 Latitude: 32-53.5
* 17 Longitude: 84 -40.9

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: 004.00

* 208 Inspection Area: 03 Initials: LEM

* Location I.D. No: 199-00085A-004.09N
* XReferen I.D. No: 000-000000-000.000

* 104 Highway System: 0
* 26 Functional Classification: 06
* 204 Federal Route Type: F No: 074-1
* 110 Truck Route: 0
206 School Bus Route: 1
217 Benchmark Elevation: 0.00
218 Datum: 0
* 19 Bypass Length: 5
* 20 Toll: 3
* 21 Maintenance: 01
* 22 Owner: 01
* 31 Design Load: 2
37 Historical Significance: 5
205 Congressional District: 03
* 27 Year Constructed: 1941
106 Year Reconstructed: 0000
33 Bridge Median: 0
34 Skew: 00
35 Structure Flared: 0
38 Navigation Control: N
213 Special Steel Design: 0
267 Type of Paint: 1

* 42 Type Service On: 5
Under: 2
214 Movable Bridge: 00
203 Type Bridge: E-N-M-O
259 Pile Encasement: 3
* 43 Structure Type Main: 3 02
45 No. Spans Main: 003
44 Structure Type Appr: 0 0
46 No. Spans Appr: 0000
226 Bridge Curve Horz: 1 Vert: 0
111 Pier Protection: 0
107 Deck Structure Type: 1

108 Wearing Surface Type: 1
Membrane: 8
Protection: 8

## Signs & Attachments

223 Expansion Joint Type: 02
242 Deck Drains: 0

243 Parapet Location: 0
Height: 0
Width: 0

238 Curb: 0.8 1
239 Handrail: 1 1
* 240 Median Barrier Rail: 0

241 Bridge Median Height: 0
Width: 0

* 230 Guardrail Loc Dir Rear: 3
Fwrd: 3
Oppo Dir Rear: 0
Fwrd: 0

244 Approach Slab: 3
224 Retaining Wall: 0

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

237 Utilities Gas: 00
Water: 21
Electric: 00
Telephone: 00
Sewer: 00

247 Lighting Street: 0
Navigation: 0
Aerial: 0

* 248 County Continuity No: 00

# BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION /6

**Structure ID:** 199-0037-0 **Meriwether County** SUFF. RATING: 49.3

## Programming Data

201 Project No: WPGM-2709-C (1)
202 Plans Available: 0
249 Prop. Proj No: BRST-074-1 (51)
250 Approval Status: 0000
251 P.I. No: 333183
252 Contract Date: 02/01/2003
260 Seismic No: 00000
75 Type Work: 00 0
94 Bridge Imp. Cost: $ 0
95 Roadway Imp. Cost: $ 0
96 Total Imp. Cost: $ 0
76 Imp. Length: 000000
97 Imp. Year: 0000
114 Future ADT: 004500 Year: 2018

## 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: N
216 Water Depth: 00.0 Br Height: 00.0
222 Slope Protection: 0
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: 199-00085A-004.09N
* XReferen I.D. No: 000-000000-000.000

## Measurements

* 29 ADT: 003000 Year: 1998
109 % Trucks: 12
* 28 Lanes On: 02 Under: 00
210 No. Tracks On: 00 Under: 01
* 48 Max. Span Length: 0040
* 49 Structure Length: 115
51 Br. Rdwy. Width: 31.8
52 Deck Width: 39.5
* 47 Tot. Horz. Cl: 31.8
50 Curb/Sdewlk Width: 5.0/0.8
32 Approach Rdwy Width: 030
* 229 Shlder Width:
Rear Lt: 8.0 Type: 8 Rt: 8.0
Fwrd Lt: 8.0 Type: 9 Rt: 6.0
Pvment Width:
Rear: 30.0 Type: 2
Fwrd: 30.0 Type: 2
Intersection Rear: 1 Fwrd: 1
36 Safety Features Br. Rail: 2
Transition: 2
App. G. Rail: 2
App. Rail End: 2
53 Minimum Cl. Over: 99' 99"
Under: R 23' 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: R 17.8
56 Lateral Undercl. Lt: 0.0
* 10 Max Min Vert Cl: 99' 99" Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 7.5
Deck Thick Approach: 0.0
246 Overlay Thickness: 0.0
211 Tons Structural Steel: 35.0
212 Year Last Painted: Sup: 1968 Sub: 1968

3 SPANS STEEL I BEAMS
4 STEEL H PILE BENTS
DECK EL @ 900.0
24' CLEARANCE FROM
TOP OF RAIL TO BOTTOM
CHORD

## Ratings

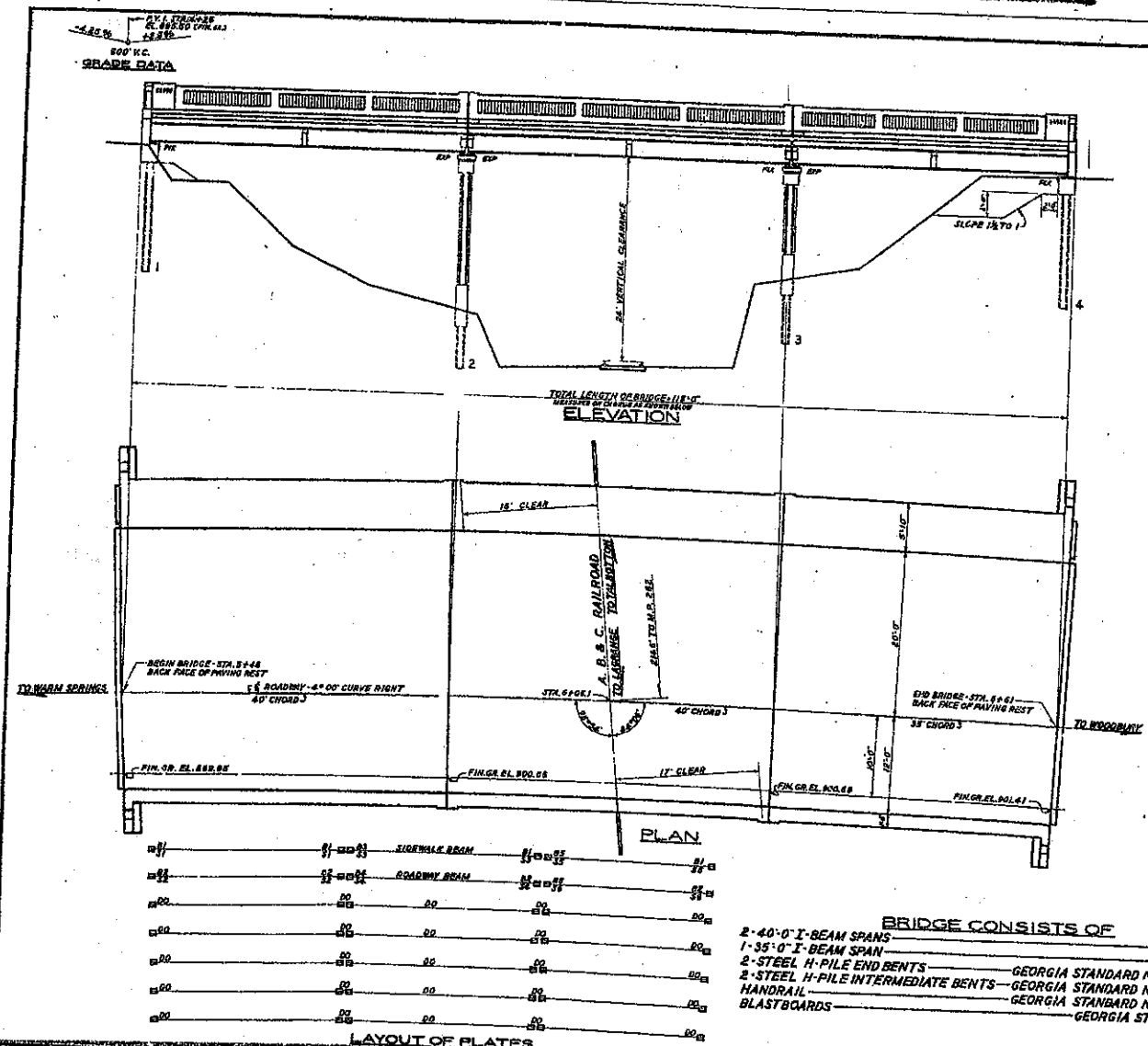
66 Inventory Type: 2 Rating: 13
64 Operating Type: 2 Rating: 29
231 Calculated Loads
H-Modified: 14 1
HS-Modified: 22 1
Type 3: 18 1
Type 3s2: 33 1
Timber: 25 1
Piggyback: 00 0
261 H Inventory Rating: 10
262 H Operating Rating: 15
67 Structural Evaluation: 2
58 Deck Condition: 7
59 Superstructure Condition: 6
* 227 Collision Damage: 0
60A Substructure Condition: 5
60B Scour Condition: N
60C Underwater Condition: N
71 Waterway Adequacy: N
61 Channel Protection Cond: N
68 Deck Geometry: 4
69 UnderClr. Horz/Vert: 7
72 Appr. Alignment: 7
62 Culvert: N

## Posting Data

70 Bridge Posting Required: 3
41 Struct Open, Posted, Cl: P
* 103 Temporary Structure: 0

232 Posted Loads H-Modified: 14
HS-Modified: 22
Type 3: 18
Type 3S2: 33
Timber: 25
Piggyback: 00
253 Notification Date: 0000
253 Fed Notify Date: 0000 2

| FED. AID PROJ. No. | STATE | FINISH SHEET No. | ALTERNATE FINISH No. | TOTAL SHEETS | SHEET No. | NOTES SHEETS |
|---|---|---|---|---|---|---|
| 8 | G.A. | 1972-18 1971-C | | 39 | 9 | 36 |




## SPECIAL NOTES

THE CONTRACTOR SHALL CONTACT THE CHIEF ENGINEER OF THE RAILROAD AND OBTAIN FROM HIM THE APPROVAL OF CONSTRUCTION METHODS TOGETHER WITH MINIMUM CONSTRUCTION CLEARANCES.
BEFORE BIDDING THE CONTRACTOR SHALL DETERMINE FROM THE RAILROAD THE WATCHMAN SERVICE WHICH THE RAILROAD WILL REQUIRE AND SHALL FURNISH SUCH WATCHMAN SERVICE, INCLUDING ITS COST IN PRICES BID FOR CONTRACT ITEMS.

## GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD.
CONCRETE - TO BE CLASS "A". CONCRETE IN POSTS AND RAIL TO BE PAID FOR PER CU.YD. OF CLASS "A" CONCRETE.
REINFORCING STEEL - TO BE OF STEEL BARS.
STRUCTURAL STEEL - THIS ITEM SHALL INCLUDE FURNISHING, PLACING AND PAINTING I-BEAMS, ANCHOR BOLTS, BLAST BOARDS, BEARING PLATES AND WATER MAIN HANGERS.
PAINT - STRUCTURAL STEEL AND BLASTBOARD TO BE PAINTED THUS - ONE SHOP COAT OF RED LEAD IN OIL, TWO FIELD COATS, GREY TO MATCH CONCRETE WHITE LEAD AND ZINC OXIDE.
CHAMFER - CHAMFER ALL EXPOSED EDGES ¾" UNLESS NOTED.
FINISH - SEE STANDARD SPECIFICATIONS. SPECIAL CARE TO BE TAKEN TO SECURE AN EVEN WEARING SURFACE.
ANCHOR BOLTS - CORE 3" HOLES IN CAPS OF SUBSTRUCTURE FOR ANCHOR BOLTS.
EXISTING BRIDGE AND RETAINING WALL SHALL BE REMOVED IN ACCORDANCE WITH SECTION 78 OF THE SPECIFICATIONS. ALL MATERIALS SHALL BE FINALLY REMOVED FROM THE SITE BY STATE HIGHWAY MAINTENANCE FORCES FOR USE IN HIGHWAY WORK.
FOR OTHER GENERAL NOTES SEE GEORGIA STANDARDS NOS. 3234, 3608 AND 8000.

## SUMMARY OF QUANTITIES

175 CU. YDS. CLASS "A" CONCRETE
31,000 LB. BAR REINFORCING STEEL
LUMP STRUCTURAL STEEL (82,000)
1,120 LIN. FT. STEEL H-PILES
2 EACH TEST PILES ●
1 EACH TEST LOADS
0.264 ACRES CLEARING AND GRUBBING (LUMP SUM)
LUMP REMOVAL OF EXISTING BRIDGE ●

● DRIVE 60 FT. TEST PILES IN BENTS 1 AND 5 AND LEAVE IN PLACE AS PERMANENT PILES.
● TO INCLUDE REMOVAL OF RETAINING WALL UNDER BRIDGE.

## DESIGN DATA

TYPICAL H-15 LOADING
IMPACT ALLOWED

## BRIDGE CONSISTS OF

2-40'-0" I-BEAM SPANS — SPECIAL DESIGN
1-35'-0" I-BEAM SPAN — SPECIAL DESIGN
2-STEEL H-PILE END BENTS — GEORGIA STANDARD NO. 3234 (MODIFIED)
2-STEEL H-PILE INTERMEDIATE BENTS — GEORGIA STANDARD NO. 3234 (MODIFIED)
HANDRAIL — GEORGIA STANDARD NO. 3608 (MODIFIED)
BLASTBOARDS — GEORGIA STANDARD NO. 8000

STATE HIGHWAY BOARD OF GEORGIA
BRIDGE DEPARTMENT

PLAN AND ELEVATION
BRIDGE OVER A. B. & C. RAILROAD
STA. 5+48 TO STA. 6+61
MERIWETHER COUNTY - W.P.G.M. 2709-C.
SCALE - 1" = 8'-0"
APRIL 1940
REVISED AND REDRAWN

PREPARED L.S.L.A. | DR. KED K.S.F.
TRACED R.A.K. | CHECKED E.A.W.

NOT HISTORIC

**JB TRIMBLE, INC.**
**6445 Powers Ferry Road**
**Suite 100**
**Atlanta, GA 30339-2933**
**PHONE: (770) 952-1022**

# MEMORANDUM

**Date:** June 29, 2000

**To:** File

**From:** Steve Tiedemann

**Re:** Work Order No. 16
Route Closure During Construction

I met EMC's surveyor, Chip Lowder in Warm Springs today to coordinate the surveying requirements for the bridge on SR 85 Alt over CSX. SR 85 Alt intersects US 27 about 500' south of the bridge. Chip mentioned that Meriwether County Hospital is just west of the intersection on US 27. One of the alternates being considered for the replacement is a temporary closure during construction and replacing the bridge in the same location. This will require a closure of about 9 months. I went to the hospital to verify their emergency routes. I spoke with Vann Chapman, Director of EMS and 911 (706-672-3809) to get his opinion on the closure. There are several neighborhood streets in close proximity to the bridge that allow alternate access to the north side of the railroad. However, if a train was present on the tracks and emergency vehicles cannot get across, response time could be substantially increased. Therefore, Vann was opposed to a closure of any kind.

I also talked to Officer A. Fernandez with the Warm Springs Police Department. With the alternate routes in close proximity, Officer Fernandez was not opposed to a closure and would prefer any method that would get the bridge constructed in the shortest amount of time. The police have jurisdiction only in Warm Springs, which is mostly south of the railroad. Officer Fernandez also indicated that the Fire Department is able to travel on small neighborhood streets with their equipment and probably would not oppose the closure. This was not confirmed with the Fire Department, however, due to the fact that it is a volunteer department and no one was available to question.

**JB TRIMBLE, INC.**
**6445 Powers Ferry Road**
**Suite 100**
**Atlanta, GA 30339-2933**
**PHONE: (770) 952-1022**

# MEMORANDUM

**Date:** December 5, 2000

**To:** File

**From:** Steve Tiedemann

**Re:** Work Order No. 16
CSX Coordination

I spoke to Doug Halpin of CSX Transportation regarding the replacement of the bridge on SR 85 Alt. over CSX railroad. Doug indicated that CSX would be requesting that the proposed bridge be designed to accommodate a future additional track. He also indicated that there is a railroad siding in close proximity to this project that is on the north side of the track and would like to see the additional track accommodated on the north side as well. I told him that we would be coordinating with him as we get further along.