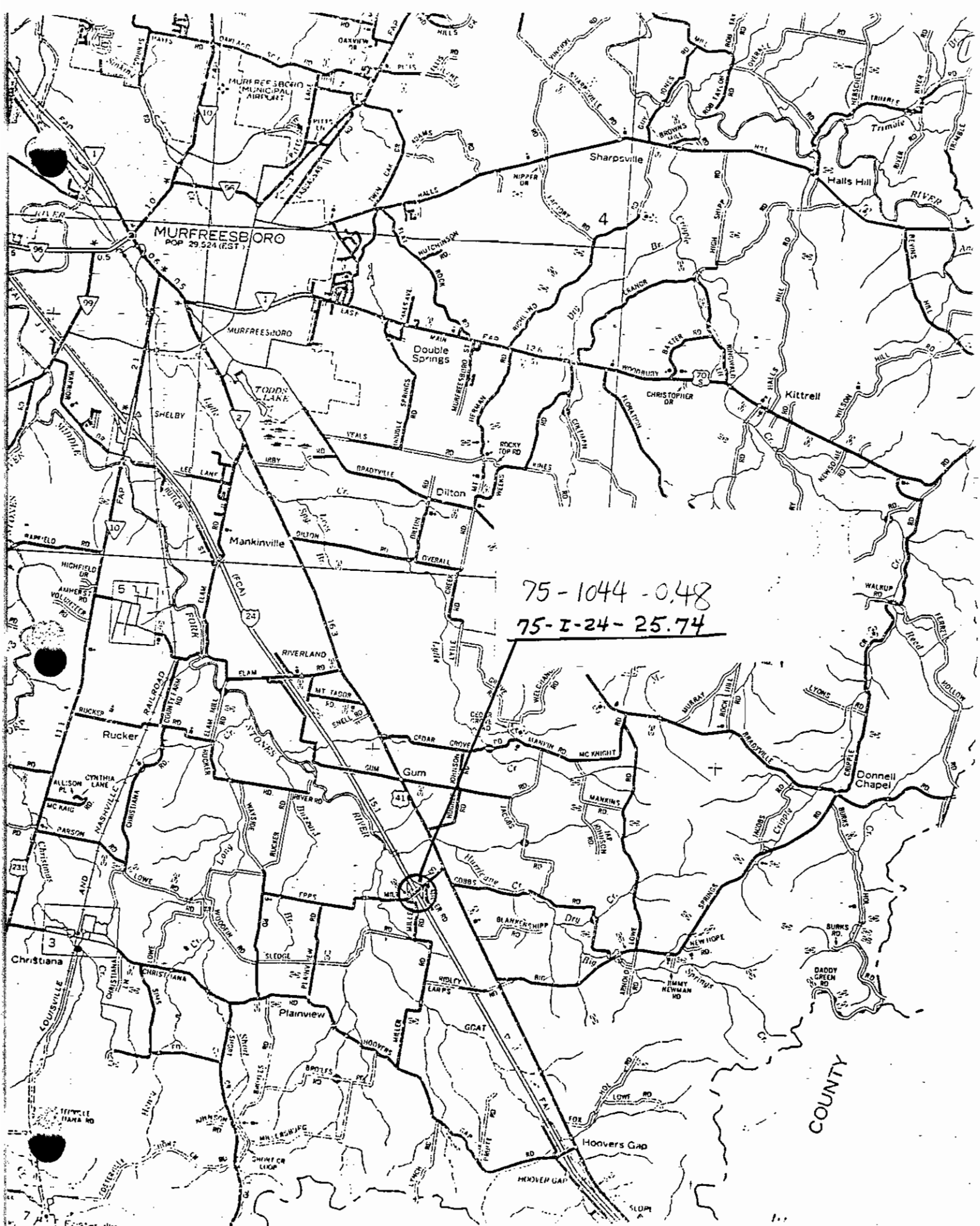

MURFREESBORO
POP 29,524 (EST.)
Sharpsville
Halls Hill
Double Springs
Kittrell
Dilton
Mankinville
Rucker
Gum
Donnell Chapel
Christiana
Plainview
Hoovers Gap
COUNTY
75-1044-0.48
75-I-24-25.74

Bridge Maintenance Recommendations

Bridge Location No.: 75 - 01044 - 0.48
Co. Route Log Mile

Crossing: EPPS MILL RD / I24

Bridge Rating: GOOD

Inspection Cycle: 13

Inspection Date: 7/21/00

Comments: -0-

Bridge Number: 75I00240041
County: Rutherford
Region: 03
District: 34
Maint.Resp.: 01
Spec.Case: 0
Co.Seq: 01

Level of Service:	1	Number Main Spans:	002
Owner:	01	Number Appr Spans:	0000
Appr Rdwy (xxx ft):	190	Bridge Length (xxxxxx ft)	000300
Skew:	80	Curb-to-Curb (xxx.x ft):	0280
Type of Service:	11	Out-to-Out (xxx.x ft):	0325
Main Structure Type:	402	Item 500:	11
Appr Structure Type:	000	Facility Carried By:	NFA 1044 (SA 7516)

Maintenance Recommendations:

Maintenance Completed By / Date

228	**APPROACH GUARDRAILS ARE SUBSTANDARD**
230	**REPAIR APPROACH GUARDRAILS AT APPROACH NO. 0001**
226	**GUARDRAIL TERMINALS AT APPROACH NO. ____ ARE SUBSTANDARD**

BRIDGE MAINTENANCE RECOMMENDATIONS

BRIDGE SEQ. NO. : 75I00240041 BRIDGE NO. : 75 - 01044 - 0048 - N
OVER : EPPS MILL RD / I24

[redacted]TE : 05/20/98 BRIDGE RATING : GOOD COUNTY : Rutherford
CO. SEQ. : 01 INSPECTION CYCLE : 12 MAINT DIST : 34
SPEC. CASE : 1 INSPECTION DATE : 05/20/98 REGION : 03

007 - FACILITY CARRIED BY STRUCT : NFA 1044 (SA 7516)
021 - MAINTENANCE RESPONSIBILITY : 01
022 - OWNER : 01
042 - TYPE OF STRUCTURE : 11
043 - STRUCTURE TYPE, MAIN : 402
044 - STRUCTURE TYPE, APPROACH : 000
045 - SPANS, MAIN UNIT : 002
046 - SPANS, APPROACH : 0000
049 - STRUCTURE LENGTH : 000300
032 - APPROACH ROADWAY WIDTH : 190
034 - SKEW : 80
051 - BRDG RDWY WID, CRB-TO-CRB : 0280
052 - DECK WIDTH, OUT-TO-OUT : 0325
500 - HWY OF THE INVENTORY ROUTE : 11

: MAINTENANCE & REPAIR RECOMMENDATIONS :	: MAINTENANCE COMPLETED :
1 REPAIR APPROACH GUARDRAILS AT APPROACH NO. 0001	1 BY _____ DATE _____
2 GUARDRAIL TERMINALS AT APPROACH NO. ___ ARE SUBSTANDARD	2 BY _____ DATE _____
3 APPROACH GUARDRAILS ARE SUBSTANDARD	3 BY _____ DATE _____

[redacted]COMMENTS FOR BRIDGE SEQ. NO. : 75I00240041 :

COMPLETION NOTIFICATION : RETURN WITHIN 6 MONTHS OF INSPECTION DATE

MAINTENANCE ACTIVITIES ARE
--- COMPLETED (DATE) --------
--- PARTIALLY COMPLETE (DATE) --------
--- INCOMPLETE SCHEDULED FOR (DATE) --------

EXPLANATIONS AND COMMENTS:

[redacted]

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STRUCTURES DIVISION
BRIDGE INSPECTION AND REPAIR OFFICE
SUITE 1200, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TN 37243-1403
(615) 741-0776

BUTCH ELEY
Deputy Governor
Commissioner of Transportation

BILL LEE
GOVERNOR

November 29, 2022

To: Mason Pitt
Tennessee Department Of Transportation
Regional Bridge Engineer

Subject: New Weight Limit Posting Requirement
Bridge Federal ID No. 75I00240041
Bridge Location No. 75 - 01044 - 0.48
Epps Mill Rd. over Epps Mill Rd / I24
Rutherford County

We have completed the most recent evaluation of the subject bridge and have determined that the bridge is now required to be posted for a gross weight limit of 40 tons for all vehicles.

The new weight limit posting signs shall be installed by December 13, 2022. Compliance with the weight limit posting requirements can be confirmed by taking photographs of all the bridge weight posting signs and emailing these photographs to TDOT.BridgeEval@tn.gov. Each photograph must show the face of the sign clearly so that the weight limit values can be confirmed.

Posting signs shall meet the minimum requirements of the MUTCD (Manual of Uniform Traffic Control Devices). See the attached “Tennessee Standard Weight Posting Signs” for additional details.

If structural repairs are completed, the TDOT Regional Bridge Engineer should be notified so a follow-up inspection can be completed. Please email any construction plans or as-built drawings to TDOT.BridgeEval@tn.gov so that we can better evaluate the work performed.

Should you have any questions, please advise.

Sincerely,

Ted A Kniazewycz

Ted Kniazewycz, PE
Director of Structures


WGS84
±15ft 35.72278, -86.31988
ft
±12ft 659
°,T
±17 SW236
WEIGHT
LIMIT
40
TONS
Free version
of GPS
Camera 55


WGS84
±16ft 35.72144, -86.32151
ft
±11ft 686
°,T
±17 NE44
WEIGHT
LIMIT
40
TONS
Free version
of GPS
Camera 55

Sterling Riether

From: Geremy Billingsley
Sent: Thursday, November 10, 2022 11:44 AM
To: Sterling Riether
Subject: RE: Asphalt Measurement 75I00240041

Follow Up Flag: Follow up
Flag Status: Completed

We measured a few different places from the top of the curb to the asphalt. It varied from 4.5" – 5". So there should be about 4" of asphalt. Am I correct?

Thank you,

Geremy Billingsley
Transportation Project Specialist Supervisor 1
Region 3 Bridge Inspection
Building C, Unit 3421
6601 Centennial Blvd., Nashville, TN 37209
p. 615-350-5970 c. 615-339-4968
geremy.billingsley@tn.gov
tn.gov/tdot

From: Sterling Riether <Sterling.Riether@tn.gov>
Sent: Thursday, November 10, 2022 9:58 AM
To: Geremy Billingsley <Geremy.Billingsley@tn.gov>
Subject: RE: Asphalt Measurement 75I00240041

Just to be clear, is that 4" of asphalt? Or 4" from top of curb to top of asphalt?

Thanks,

Sterling Riether, P.E. | Transportation Project Specialist
Structures Division / Bridge Inspection HQ
James K Polk Building, 12th Floor
505 Deaderick St, Nashville, TN 37243-0338
p. 615-741-8388
Sterling.Riether@tn.gov

From: Geremy Billingsley <Geremy.Billingsley@tn.gov>
Sent: Thursday, November 10, 2022 9:56 AM
To: Sterling Riether <Sterling.Riether@tn.gov>
Subject: Re: Asphalt Measurement 75I00240041

We measured 4”.

Geremy Billingsley
Transportation Project Specialist Supervisor 1
Region 3 Bridge Inspection
Building C, Unit 3421
6601 Centennial Blvd., Nashville, TN 37209
p. 615-350-5970 c. 615-339-4968
geremy.billingsley@tn.gov
tn.gov/tdot

On Nov 8, 2022, at 7:51 AM, Sterling Riether <Sterling.Riether@tn.gov> wrote:

That sounds great. No rush.

<image001.png>
Sterling Riether, P.E. | Transportation Project Specialist
Structures Division / Bridge Inspection HQ
James K Polk Building, 12th Floor
505 Deaderick St, Nashville, TN 37243-0338
p. 615-741-8388
Sterling.Riether@tn.gov

From: Geremy Billingsley <Geremy.Billingsley@tn.gov>
Sent: Tuesday, November 8, 2022 7:50 AM
To: Sterling Riether <Sterling.Riether@tn.gov>
Subject: RE: Asphalt Measurement 75I00240041

Sterling,
Give me a few days and we can go out there. I was just out that way Friday but now we are in the opposite part of the county.

Thank you,

<image002.png>
Geremy Billingsley
Transportation Project Specialist Supervisor 1
Region 3 Bridge Inspection
Building C, Unit 3421

6601 Centennial Blvd., Nashville, TN 37209
p. 615-350-5970 c. 615-339-4968
geremy.billingsley@tn.gov
tn.gov/tdot

From: Sterling Riether <Sterling.Riether@tn.gov>
Sent: Tuesday, November 8, 2022 7:46 AM
To: Geremy Billingsley <Geremy.Billingsley@tn.gov>
Subject: Asphalt Measurement 75I00240041

Good Morning Geremy,

I am working on the load rating for bridge 75I00240041 (Epps Mill Rd over I-24) and was hoping you could help me out. The asphalt with our old calculations seems inconsistent with what is in the field. The inspection report says 10" of asphalt, but I think it may be less based on the visibility of the curb. Would you be able to get some measurements from the curb to existing asphalt? The concrete curb is 9" tall.

I have attached the inspection report for reference.
Thank you,
Sterling

<image001.png>
Sterling Riether, P.E. | Transportation Project Specialist
Structures Division / Bridge Inspection HQ
James K Polk Building, 12th Floor
505 Deaderick St, Nashville, TN 37243-0338
p. 615-741-8388
Sterling.Riether@tn.gov

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION AND REPAIR OFFICE
SUITE 1200, JAMES K. POLK BUILDING
NASHVILLE, TENNESSEE 37243-0338

JOHN SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

MEMORANDUM

DATE: May 20, 2015

TO: Mr. Terry Mackie, Transportation Project Specialist Supervisor 2

FROM: Mr. Terry D. Leatherwood, Civil Engineering Manager 1

Re: Additional Asphalt on 75I00240041

We have checked the capacity of the bridge that you requested with an additional 1.5 inches of asphalt. The additional load would result in requiring a weight limit posting of the bridge. We recommend removing all existing asphalt and replacing it with a maximum of 3.25" with a membrane sealant.

TDL:stp

cc: Mr. Phillip Shraybman

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
STRUCTURES DIVISION
BRIDGE INSPECTION & REPAIR OFFICE
SUITE 1200, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-1402
(615) 741-0776

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

April 26, 2013

MEMORANDUM

TO: Mr. Ray McClelland
Regional Bridge Engineer

FROM: Wayne J. Seger, Director of Structures

SUBJECT: Attached is the newly added Repair List the following Interstate bridge in Rutherford County :

Records to be added

Repair List Number	Bridge Loc. Number	Fed. Bridge ID Number	Crossing
1	75-01044-00.48	75I00240041	Epps Mill Rd / I-24

Supplemental Evaluation Findings

Repair List Number	Bridge Loc. Number	Fed. Bridge ID Number	Crossing
1	75-01044-00.48	75I00240041	Epps Mill Rd / I-24

PJS: pjs

cc: Mr. Terry Mackie
Mr. Phillip Shraybman

BRIDGE MAINTENANCE RECOMMENDATIONS

COUNTY: RUTHERFORD
LOCATION: 75-01044-00.48-
CO. SEQ.: 1 SPEC. CASE: 0

TDOT
Tennessee Department of Transportation

CROSSING: EPPS MILL RD / I24
FED. BRIDGE NO.: 75I00240041
MAINT. DIST.: 75

REPAIR LIST NO.: 1
DATE ADDED: 04/26/2013
REVISED:

FACILITY CARRIED:	NFA 1044 (SA 7516)	NUMBER OF MAIN SPANS:	2
HIGHWAY SYSTEM:	11-OTHER COUNTY ROADS	NUMBER OF APPROACH SPANS:	0
BRIDGE WIDTH (CURB TO CURB):	27 FT 10 IN	BRIDGE LENGTH (FT):	300
BRIDGE WIDTH (OUT TO OUT):	32 FT 5 IN	MAXIMUM SPAN LENGTH (FT):	150
APPROACH ROADWAY (W/SHOULDERS):	31 FT 9 IN	SKEW ANGLE (DEGREES):	80

MAINTAINED BY:	STATE HIGHWAY AGENCY
MAIN SPAN MATERIAL:	STEEL CONTINUOUS
MAIN SPAN DESIGN TYPE:	STRINGER/MULTI-BEAM OR GIRDER
APPROACH SPAN MATERIAL:	OTHER OR NOT APPLICABLE
APPROACH SPAN DESIGN TYPE:	OTHER OR NOT APPLICABLE

INSPECTION DATE:	06/26/2012	GENERAL CONDITION:	GOOD
EVALUATION DATE:	07/31/2012	STRUCTURALLY DEFICIENT:	NO
PPRM PIN NUMBER:			
H TRUCK RATING @ INV.:	15 TONS	SUFFICIENCY RATING:	70.1

No.	RECOMMENDATIONS	REPAIR DATE	REPAIRED BY
1.	CLEAN EXPANSION JOINTS AT BOTH ENDS		
2.	MILL/REPLACE A/C WEARING SURFACE		
3.	EXTEND EXPANSION JOINTS OUT BEYOND BRIDGE RAIL		
4.	CLEAN SHOULDERS		

GENERAL COMMENTS:

SUPPLEMENTAL EVALUATION FINDINGS FOR RUTHERFORD COUNTY

Date: Apr 26, 2013 ***Repair List:*** 1

Bridge No.: 75I00240041

Route No.: 01044 (EPPS MILL RD.)

Log Mile: 0.480

Crossing: EPPS MILL RD / I24

Supplemental Recommendation(s):

THIS BRIDGE WAS INSPECTED ON FEB. 19, 2013 FOR COLLISION DAMAGE TO GIRDER "D". A REPAIR CONTRACT TO FIX THE COLLISION DAMAGE IS TENTATIVELY SCHEDULED FOR MAY 24, 2013.

NOTE: This Form is to be used in conjunction with the current Bridge Maintenance Recommendations pertaining to this structure.

TENNESSEE BRIDGE INSPECTION PROGRAM
SUMMARY OF EVALUATION

REV. 03-05-2003

BRIDGE ID NO: 75I00240041 LOCATION NO: 75 - 01044 - 0.48

(6A) CROSSING: EPPS MILL RD / I24

(505) METHOD OF ANALYSIS: LOAD RESISTANCE FACTOR METHOD - RF

(548) RATING BASED ON: AASHTOWARE BRIDGE RATING (4.5" ASPHALT)

LOAD RATINGS IN TONS

INVENTORY (503)	H	19	(518B) HS/HL93	21
OPERATING (504)	H	25	(519) HS/HL93	27
REQ. POSTING:		40		40

(549) EVALUATOR: SJR

(522) EVAL. DATE: 7/14/2022

LAST UPDATED BY: RIETHER

(29) ADT: 3,334 (30) ADT YR: 2021

(100) STRAHNET ROUTE: NO

(19) DETOUR LENGTH: 16 KM

(520) VC OVER RDWY: 99.99 METERS

CONDITION RATINGS

(58) DECK RATING:	6
(59) SUPERSTRUCTURE RATING:	6
(60) SUBSTRUCTURE RATING:	7
(61) CHANNEL PROTECTION:	N
(62) CULVERT RATING:	N
(113A) NBIS SCOUR CODE:	N
(113B) TDOT SCOUR CODE:	

APPRAISAL RATINGS

(67) STRUCTURAL EVALUATION:	5
(68) DECK GEOMETRY:	4
(69) UNDER CLEARANCE:	5
(70) BRIDGE POSTING:	5
(71) WATERWAY ADEQUACY:	N
(72) APPROACH RDWY ALIGNMENT:	8

CODE VALUES

N - NOT APPLICABLE
9 - EXCELLENT CONDITION
8 - VERY GOOD CONDITION
7 - GOOD CONDITION
6 - SATISFACTORY
5 - FAIR CONDITION
4 - POOR CONDITION
3 - SERIOUS CONDITION
2 - CRITICAL CONDITION
1 - FAILURE IS IMMINENT
0 - FAILED CONDITION

OTHER RATING ITEMS

(521) OVERALL CONDITION: F

(513) TEXTURE COAT RATING: N

(514) PAINT CONDITION RATING: 4 05 UK

(41) WEIGHT POSTING CODE: A

(36) TRAFFIC SAFETY FEATURES: 0 1 1 N

(525) REPAIR LIST NO: N

COMMENTS

SEE BARS FILE 75-024.DAT FOR AN ANALYSIS OF THE FIRST INTERIOR GIRDER. THERE IS A 9" CURB. AFTER LOOKING AT THE REPORT AND THE PICTURES, IT APPEARS TO BE APPROXIMATELY 5" BETWEEN THE TOP OF THE CURB AND THE ASPHALT. THEREFORE, USE 4" OF ASPHALT ON THE DECK. ASSUME THE EXTERIOR GIRDERS CARRY 85% OF THE CURB AND BRIDGERAIL WEIGHT. CHECKED THE GIRDER AND THE CONCRETE DECK. THE BRIDGE RATING IS CONTROLLED AT THE 1.40 POINT BY THE GIRDER. THE RATINGS REFLECT UPDATED CALCULATIONS PERFORMED ON 02/14/2012.

IN 2013 THE BRIDGE HAS SUSTAINED A COLLISION DAMAGE TO THE EXTERIOR STEEL GIRDER "D" AND CROSS FRAMES IN SPAN NO.2. REPAIRES HAVE BEEN COMPLETED IN 2013. (PJS)

(502) SUFF. RATING: 60.6

(528) STR. DEFICIENT: NO

(529) FUNC. OBSOLETE: NO

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 09/12/2001

County:	75
Route:	01044
Special Case:	0
County Sequence:	01
Log Mile:	0.48

Bridge Number: (Includes Item 5A): 75I002400411

Feature Intersected: EPPS MILL RD / I24

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	07/21/2000 6/21/02
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
36	TRAFFIC SAFETY FEATURES Br. Rail / Trans. / Appr. Rail / Terminal / SPEED LIMIT 1 / 0 / 0 / 0 / UNKNOWN	
41	STRC OPEN/CLOSED/POSTED A K P	A
58	DECK	7
59	SUPERSTRUCTURE	7
60	SUBSTRUCTURE	7
61	CHANL/CHANL PROTECTION	N
62	CULVERT AND RETAIN WALL	N
71	WATERWAY ADEQUACY	N
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	6 8
521	OVERALL CONDITION (Circle One) GOOD FAIR POOR CRITICAL	

U.C.

TEAM LEADER SIGNATURE

6/21/02
REVIEW DATE

U.C.

U.C.

CONDITION CODING GUIDELINES
(Values for Coding Items 58, 59, 60 and 62)

U.C.

- N NOT APPLICABLE
- 9 EXCELLENT CONDITION
- 8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
- 7 GOOD CONDITION - SOME MINOR PROBLEMS.
- 6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
- 5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
- 4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
- 3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOURSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
- 2 CRITICAL CONDITION - ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.
- 1 "IMMINENT" FAILURE CONDITION - MAJOR DETERIORATION OR SECTION LOSS PRESENT IN CRITICAL STRUCTURAL COMPONENTS OR OBVIOUS VERTICAL OR HORIZONTAL MOVEMENT AFFECTING STRUCTURAL STABILITY. BRIDGE IS CLOSED TO TRAFFIC BUT CORRECTIVE ACTION MAY PUT BACK IN LIGHT SERVICE.
- 0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.

TDOT

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

Revised 09/21/2001

County: 75

Route: I0024

Special Case: 0

County Sequence: 01

Log Mile: 25.73

Bridge Number: (Includes Item 5A) 75I002400412

Feature Intersected: EPPS MILL RD / I24

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE U.C.	07/21/2000 — 6/21/02
10	MINIMUM V.C. OVER ROADWAY (ROADWAY + SHOULDERS)	16 FT. 2 IN. — 16 FT. 3 IN.
520	MINIMUM V.C. OVER ROADWAY (EXCLUDES SHOULDERS)	16 FT. 2 IN. — 16 FT. 3 IN.
47	TOTAL HORIZONTAL UNDERCLEARANCE	99 FT. 99 IN. — ____ FT. ____ IN.
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: (H) R	16 FT. 3 IN.
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: (H) R	36 FT. 02 IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	52 FT. 02 IN.

UNDERPASS SAFETY FEATURES

515 (A) TYPE UNDERPASS BARRIER

None Exists but Needed

Revised Barrier Type

(B)	ADEQUACY OF BARRIER OR RAIL	0
(C)	ADEQUACY OF TRANSITIONS	0
(D)	ADEQUACY OF TERMINALS	0

554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING

99 FT. 99 IN.

____ FT. ____ IN.

521 OVERALL CONDITION (Circle One)

(GOOD) FAIR POOR CRITICAL

HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO [X] N/A [ ]

555 COMMENTS This Structure is Under total Construction.

[signature] 6/21/02

TEAM LEADER SIGNATURE — REVIEW DATE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

County:	75
Route:	01044
Special Case:	0
County Sequence:	1
Log Mile:	0.48

Bridge Number: (Includes Item 5A) 75I002400411

Feature Intersected: EPPS MILL RD / I24

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	5/1/98 07/21/00
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: H R N	H 16 FT. 2 IN. ____ FT. ____ IN.
36	TRAFFIC SAFETY FEATURES	
	Br. Rail / Trans. / Appr. Rail / Appr. Rail Ends	1 / 0 / 0 / 0
41	STRC OPEN/CLOSED/POSTED A K P	A
58	DECK	7
59	SUPERSTRUCTURE	7
60	SUBSTRUCTURE	7
61	CHANL/CHANL PROTECTION	N
62	CULVERT AND RETAIN WALL	N
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	~~6~~ 7

OVERALL CONDITION (Circle One)

GOOD FAIR POOR CRITICAL

J. W. Watts — SIGNATURE

7/21/00 — DATE

COMMENTS

RATINGS FOR CODING ITEMS 58, 59, 60 AND 62

- N NOT APPLICABLE
- 9 EXCELLENT CONDITION
- 8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
- 7 GOOD CONDITION - SOME MINOR PROBLEMS.
- 6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
- 5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
- 4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
- 3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOURSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
- 2 CRITICAL CONDITION - ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.
- 1 "IMMINENT" FAILURE CONDITION - MAJOR DETERIORATION OR SECTION LOSS PRESENT IN CRITICAL STRUCTURAL COMPONENTS OR OBVIOUS VERTICAL OR HORIZONTAL MOVEMENT AFFECTING STRUCTURAL STABILITY. BRIDGE IS CLOSED TO TRAFFIC BUT CORRECTIVE ACTION MAY PUT BACK IN LIGHT SERVICE.
- 0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

County:	75
Route:	I0024
Special Case:	0
County Sequence:	1
Log Mile:	25.74

Bridge Number: (Includes Item 5A) 75I002400412

Feature Intersected: EPPS MILL RD / I24

CODE ONLY THOSE NUMBERS WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE
90	INSPECTION DATE	5/1/98 07/21/00
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	16 FT. 2 IN. ____ FT. ____ IN.
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	16 FT. 2 IN. ____ FT. ____ IN.
47	TOTAL HORIZONTAL UNDERCLEARANCE	99 FT. 99 IN. ____ FT. ____ IN.
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE [H]	36 FT. 5 IN. Circle One: H R N ____ FT. ____ IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	52 FT. 1 IN. ____ FT. ____ IN.

UNDERPASS SAFETY FEATURES

(A) TYPE UNDERPASS BARRIER
None Exists but Needed
Non-Existance
Revised Barrier Type

(B) ADEQUACY OF BARRIER OR RAIL 0

(C) ADEQUACY OF TRANSITIONS 0

(D) ADEQUACY OF TERMINALS 0

VERTICAL CLEARANCE LISTED ON HEIGHT POSTING SIGNS
99 FT. 99 IN.
____ FT. ____ IN.

OVERALL CONDITION (Circle One)
(GOOD) FAIR POOR CRITICAL

HEIGHT POSTED AT BOTH APPROACHES? YES [ ] NO [ ] N/A [-]

NOTE: DESCRIBE ANY PROBLEMS ON BRIDGES THAT THE STATE DOES NOT INSPECT (SUCH AS RAILROAD OR PRIVATE BRIDGES) THAT WOULD AFFECT THE ROADWAY SUCH AS LOOSE MEMBERS, SEVERELY SPALLED OR CRACKED CONCRETE, EXCESSIVE SECTION LOSS ON STEEL, EXCESSIVE TIMBER DECAY, ETC. ALSO, DESCRIBE ANY UNSAFE ITEMS.

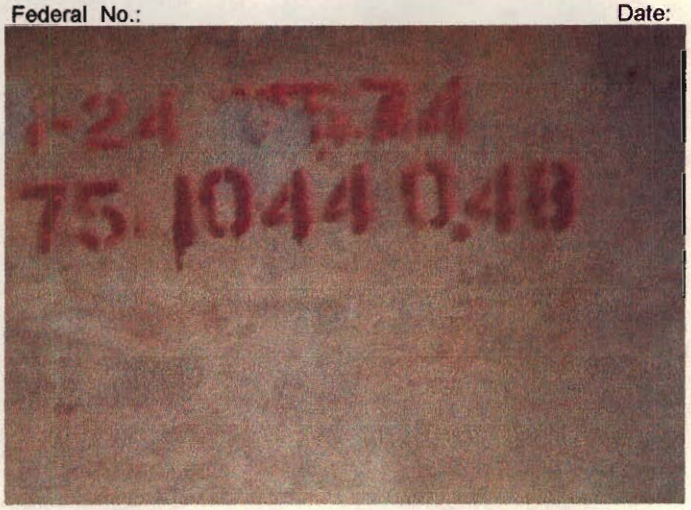
COMMENTS See Summary

J. Watts
SIGNATURE

7/21/00
DATE

Bridge No.: 00075 — I24 — 25.74
Crossing::
Federal No.: Date: July 21, 2000

PIC1



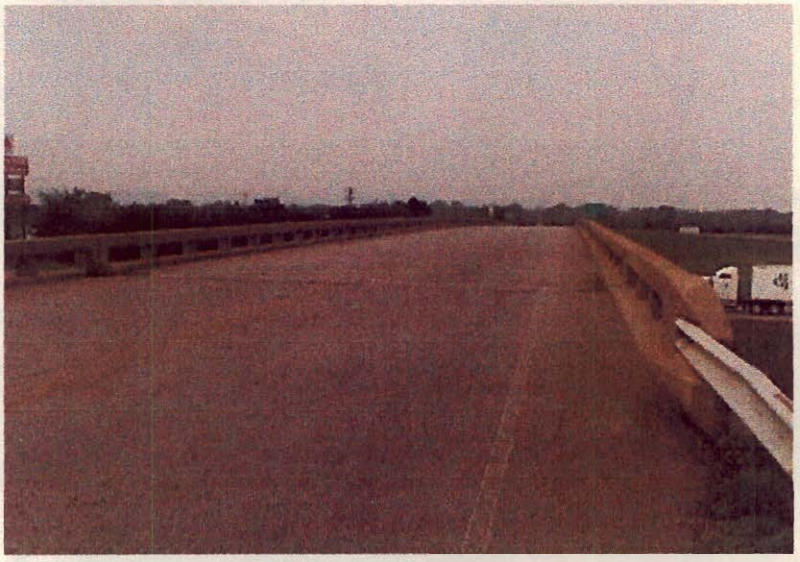
BRIDGE NUMBER

Bridge No.: 75 — I24 ~~-29~~.88RT
Crossing:: 0
Federal No 0 Date: July 21, 2000

PIC2

ELEVATION (WBL)

PIC3



VIEW ACROSS DECK

ROUTINE BRIDGE INSPECTION REPORT

Page No.___

Form BIR 3.0C
(Rev. 9-22-98)
DT-1537

Field Report No. 12 Date 5/20/98
Previous Report No. 13 Date 7.21.00
Plans: yes

Bridge No. 75I00240041 (Eleven Digit No.)
Bridge Location No. 75 - 01044 - 0.48 (Co. Route Log Mile)

_____ (Road Name) over EPPS MILL RD / I24 – 25.74 (Crossing)
Indepth Insp. Req'd: ____ (If yes itemize limits under comment)

Structure Type WPG
FRACTURE CRITICAL: ____

FEATURE CHANGES:

Wearing Surface ____ Type ____ Depth ____ (in.)
Bridge Rail C Describe changes:
Approach Rail C

CLEARANCE CHANGES: (If yes make changes below)

Vertical Clearance over deck ____ (ft.-in.)
Vertical Under Clearance ____ (ft.-in.)
Horizontal Under Clearance ____ (*.* ft.)
Deck Width Curb/Curb ____ (*.* ft.)
Deck Width Rail/Rail ____ (*.* ft.)
Sidewalk Width Rt. ____ Lt. ____

INSPECTORS

Watts
Love
Etheridge

Condition: **GOOD** (If change describe in comments)

		Comments
Approaches	G	
Deck Condition (Item 58)	NV	AC Overlay GOOD, Lgt-Mod Wear
Superstructure (Item 59)	G	
a. Beams	G	
b. Bearings	G	
c. Diaphragms	G	
Substructure (Item 60)	G	
a. Caps/Bridge Seats	G	
b. Columns/Piles	G	
c. Footings	NV	
d. Wing W./Breast W.	G	
Scour/Erosion	NA	
Channel (Item 61)	NA	

UNDERWATER INSPECTION

To Be Performed By: ____
Date Underwater Insp. N/A
BRIDGE is: G

Weight Limit Posted ____
Gross..... ____ Tons
2 Axle..... ____ Tons
3 or more Axles.. ____ Tons

COMMENTS:

Supervising Bridge Inspector: J. Watts

BRIDGE RATING: **GOOD**

SUMMARY
75-1044-0.48
7/21/00

Bucanan Rd./I24
2 Span/Cont. W.P.G.

This bridge was inspected and found to be in good condition. The approach guardrail and terminals are substandard with areas of moderate to heavy collision damage. The bridge rails are good and approved. The asphalt-wearing surface is good. The strip seal joints are in fair condition with moderate debris. All steel has been repainted and is in good condition. The diaphragm at the abutments do show some light loss of section on the flanges, but have new paint. The bent cap and columns are good. There are no underpass safety features.

Jim Watts

BRIDGE INSPECTION REPORT

FORM BIR 3.0
Rev. 3-1-97
DT-0069

FIELD REPORT NO. 12 DATE 5-20-98
PREVIOUS REPORT NO. 11 DATE 6-20-96
PLANS ---- YES [X] NO [ ]

BRIDGE NO. 75I0024004I (ELEVEN DIGIT NO.) BRIDGE LOC. NO. 75 - 1044 - 0.48 ( ) (CO. ROUTE LOG MILE (LOG km))

EPPS MILL RD (ROAD NAME) OVER I24-25.74 (FEATURE INTERSECTED) (STRUCTURE NAME (IF NAMED))

YEAR CONSTRUCTED 1968 (ESTIMATED OR ACTUAL) [ ] [X] COUNTY RUTHERFORD MAINTENANCE DISTRICT NO. 34

YEAR WIDENED (ESTIMATED OR ACTUAL [ ] [ ]) YEAR REHABILITATED (ESTIMATED OR ACTUAL [ ] [ ])

FEATURES

WEARING SURFACE-- CONCRETE [ ] TIMBER [ ] ASPHALT [X] (DEPTH= mm)
FLARED WIDTH --------- YES [ ] NO [X]
NAVIGATIONAL CONTROL-- YES [ ] NO [X]
MEDIAN WIDTH -------- OPEN [ ] NONE [X] CLOSED [ ]

BRIDGE SKEW 80° LT [ ] RT [X]

STRUCTURE TYPE WPG (Main Span) NO. SPANS 2 (Main Span)

STRUCTURE TYPE — (Approach Spans) NO. SPANS — (Approach Spans)

MAXIMUM SPAN LENGTH 45.72 TOTAL LENGTH 91.44

INSPECTORS
1. Furlough
2. Watts
3. Hailey
4. Johnson
5.
6.
7.
8.
9.

WIDTHS (*.**m)
DECK OUT-TO-OUT 9.88
ROADWAY CURB/CURB 8.53
SIDEWALK — RT — LT
*APPROACH ROADWAY 6.10
APPR. SHLD. .91 RT .91 LT
*DOES NOT INCLUDE SHOULDER

CLEARANCES (*.**m)
MIN. VERTICAL OVER DECK —
MIN. VERTICAL UNDER CL. 4.94
MIN. LATERAL UNDER CL 11.00 RT
15.88 LT

UNDERWATER INSPECTION

INSPECTION PERFORMED BY:
DOT FIELD TEAM [ ] DATE
CONTRACT DIVERS [ ] DATE
NONE REQUIRED [X]

(< 7.62 m)
NBIS BRIDGE LENGTH > 7.62 (*.**m)

FRACTURE CRITICAL DETAILS: YES [ ] NO [X]
IF YES, INCLUDE BIR 3.9

CHANGE IN STRUCTURAL CONDITION YES [ ] NO [X]
MAJOR REPAIRS MADE YES [ ] NO [X]

COMMENTS:

Perry Furlough
SUPERVISING BRIDGE INSPECTOR

BRIDGE RATING [X] [ ] [ ] [ ]
GOOD FAIR POOR CRITIC

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

FORM BIR 3.1
Rev. 3-1-97 BRIDGE LOC. NO. 75 -1044 - 0.48 (_____) DATE: _____
DT-0080 CO. ROUTE L.M. (LOG km)

PERFORMANCE EVALUATION

Time of day inspected 10:40 AM Weather conditions Sunny & 80°

Vehicles observed All Types

LIVE LOAD BEHAVIOR	YES	NO	COMMENTS
Substructure			
Horiz. & Vert. Defl. - - -	[ ]	[✓]	
Vibration - - - - - - - - -	[ ]	[✓]	
Superstructure			
Horiz. & Vert. Defl. - - -	[ ]	[✓]	
Vibration - - - - - - - - -	[ ]	[✓]	

APPROACH

Alignment	(G)	F	P	C	
Slab	G	F	P	C	NA
Joints	G	F	P	C	NA
Pavement	(G)	F	P	C	
Embankment	(G)	F	P	C	
Drains	(G)	F	P	C	

TRAFFIC SAFETY FEATURES

					STANDARD	SUB-STANDARD	
Bridgerailing	(G)	F	P	C	[✓]	[ ]	
Transitions	G	(F)	P	C	[ ]	[✓]	Too Low
Guardrail	G	F	(P)	C	[ ]	[✓]	" " & Mod Co.
Guardrail Terminal	G	F	(P)	C	[ ]	[✓]	" " " "

SIGNING

	YES	NO	NEEDED
Paddleboard - - - - - - - - - - - -	[ ]	[✓]	[✓]
Vertical Clearance (< 4.4 m) - - -	[ ]	[✓]	[ ]
Narrow [ ] One Lane Bridge [ ] -	[ ]	[✓]	[ ]

WEIGHT LIMIT POST
YES [ ] NO [✓]

GROSS--_____TC

2 AXLE -_____TC

3 OR MORE
AXLES---_____TC

Other Signs or Plaques _____

Comments Regarding Any Problems With Signing _____

RECOMMENDATIONS

Bridgerail Is Substandard [ ]
Approach Rail Is Substandard [✓]
Install Paddleboard Signs [✓]
Install Post Load Limit Signs
Level Approach

FORM BIR 3.2
Rev. 3-1-97
DT-0081

BRIDGE LOC. NO. 75 (CO.) - 1044 (ROUTE) - 0.48 (L.M.) (_____ (LOG km))

DATE: 5-20-98

DECK		COMMENTS
WEARING SURFACE	(G) F P C	A C overlay
DECK - STRUCTURAL CONDITION	(G) F P C	
CURBS	(G) F P C	
MEDIAN	G F P C	NA
SIDEWALKS	G F P C	NA
PARAPET	G F P C	NA
RAILING	(G) F P C	
PAINT	G F P C	NA
DRAINS	G F P C	NA
LIGHTING STD'S	G F P C	NA
UTILITIES	G F P C	NA
JOINT LEAKAGE	(G) F P C	
EXPANSION JOINTS	G (F) P C	heavy debris in strip seal Typ.

SUPERSTRUCTURE		COMMENTS
BEARING DEVICES	(G) F P C	
GIRDERS OR BEAMS	(G) F P C	
FLOOR BEAMS	G F P C	NA
STRINGERS	G F P C	NA
DIAPHRAGMS	(G) F P C	
BRACING	G F P C	NA
TRUSSES - GENERAL	G F P C	NA
- PORTALS	G F P C	NA
- BRACING	G F P C	NA
PAINT	(G) F P C	
ALIGNMENT OF MEMBERS	(G) F P C	

TEXTURE COAT NA

CONDITION RATING G F P C

OVERALL APPEARANCE G F P C

STAINING G F P C

FADING G F P C

NEEDS SPOT PAINTING? YES [ ] NO [

NEEDS REPAINTING? YES [ ] NO [

COMMENTS: _____

RECOMMENDATIONS _____

_____

SCALING G F P C

CLEAN & SEAL JOINTS [ ]

CLEAN DRAINS [ ]

FORM BIR 3.3
Rev. 3-1-97
DT-0082

BRIDGE LOC. NO. 75 (CO.) - 1044 (ROUTE) - 0.48 (L.M.) (_____ (LOG km)) DATE: 5-20-98

SUBSTRUCTURE

ABUTMENTS

					COMMENTS	PILES TO BE REPLACED PILE(S)	BENT
CAPS	G	F	P	C	NA		
BREASTWALL	(G)	F	P	C			
WINGS	(G)	F	P	C			
BACKWALL	(G)	F	P	C			
PLUMB	(G)	F	P	C			
FOOTING	G	F	P	C	NV		
PILES	G	F	P	C	NA		
EMBANKMENT	(G)	F	P	C			
BEARING#	(G)	F	P	C			
SLOPE PAVING	(G)	F	P	C			

PIERS

CAPS	G	F	P	C			
COLUMNS	G	F	P	C			
PLUMB	G	F	P	C			
FOOTINGS	G	F	P	C			
PILES	G	F	P	C			
BEARINGS	G	F	P	C			

BENTS

CAPS	(G)	F	P	C			
COLUMNS	(G)	F	P	C			
PLUMB	(G)	F	P	C			
FOOTINGS	G	F	P	C	NV		
PILES	G	F	P	C	NA		
BEARING#	(G)	F	P	C			

PILES NEED REPLACEMENT NO [✓] YES [ ]

CUT VEGETATION NO [✓] YES [ ]

CLEAR DRIFT NO [✓] YES [ ]

RECOMMENDATIONS: _____

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

FORM BIR 3.0A
Rev. 3-1-97
DT-1443

CURRENT FIELD REPORT NO. 12 DATE 5-20-98
PREVIOUS FIELD REPORT NO. 11 DATE 6-20-96

INSPECTION REPORT FOR UNDERPASS ROUTE

BRIDGE NO. 75I00240041 (ELEVEN DIGIT NO.) UNDERPASS LOC. NO. 75 - I24 - 25.74 ( ) (CO. ROUTE L.M. (LOG km)

75 - 1044 - 0.48 ( ) OVER 75 - I24 - 25.74 ( ) _____
CO. RTE. L.M. (LOG km) CO. RTE. L.M. (LOG km) STRUCTURE NAME

COUNTY RUTHERFORD

YEAR CONSTRUCTED 1968 YEAR WIDENED _____ YEAR REHABILITATED _____
ESTIMATED [ ] ACTUAL [X]

GEOMETRIC FEATURES UNDER BRIDGE

DIVIDED HIGHWAY - - - - LEFT RDWY [X] RIGHT RDWY [ ] N.A. [ ]
TYPE OF WEARING SURFACE - - - - CONCRETE [ ] ASPHALT [X] GRAVEL [ ]
WIDTH OF APPROACH TRAVELED ROADWAY 7.32 m (DOES NOT INCLUDE SHOULDERS)
WIDTH OF MEDIAN IF DIVIDED HIGHWAY 33.83 m
APPROACH SHOULDER WIDTH 1.22 m (RT.) 3.05 m (LT.)
*HORIZONTAL CLEARANCE UNDER BRIDGE 37.76 m
*DISTANCE BETWEEN PIER PROTECTION GUARDRAIL AND SUBSTRUCTURE N/A m (RT.) N/A m (LT.)
*WIDTH OF SIDEWALK UNDER BRIDGE N/A m (RT.) N/A m (LT.)
MINIMUM VERTICAL CLEARANCE 4.94 m (.**m)

*SHOW ON SKETCH

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE		STANDARD	SUB-STANDARD	
PIER PROTECTION RAILING OR PARAPET	G F P C	[ ]	[ ]	NON EXIST [
APPROACH GUARDRAIL TRANSITIONS	G F P C	[ ]	[ ]	NON EXIST [
APPROACH GUARDRAIL	G F P C	[ ]	[ ]	NON EXIST [
APPROACH GUARDRAIL TERMINAL	G F P C	[ ]	[ ]	NON EXIST [

SIGNING FOR UNDERPASS ROUTE

PADDLEBOARD	YES [ ]	NO [/]	NEEDED [ ]
VERTICAL CLEARANCE (< 4.4 m)	YES [ ]	NO [/]	NEEDED [ ]
NARROW PASSAGE	YES [ ]	NO [/]	NEEDED [ ]
ONE LANE PASSAGE	YES [ ]	NO [/]	NEEDED [ ]

INSPECTORS
1. Furlough
2. Watts
3. Halley
4. Johnson
5. _____
6. _____

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

FORM BIR 3.0A (CONTINUED)
Rev. 3-1-97
DT-1443

UNDERPASS LOC. NO. 75 - I24 - 25.74 (LT LN)
CO. ROUTE L.M. (LOG km)

OTHER SIGNS OR PLAQUES _____

COMMENTS REGARDING ANY PROBLEM WITH SIGNING _____

BRIDGE FEATURES

BRIDGE SKEW 80 ° RT
STRUCTURE TYPE WPG (MAIN SPAN) NO. SPANS 2 (MAIN TYPE)
STRUCTURE TYPE — (APPROACH SPAN) NO. SPANS — (APPROACH TYPE)
MAXIMUM SPAN LENGTH 45.72 m TOTAL LENGTH 91.44 m
WIDTH OF BRIDGE OUT-TO-OUT 9.88 m (RIGHT ANGLE TO CENTERLINE OF BRIDGE)
WIDTH OF BRIDGE ALONG SKEW — m (IF UNABLE TO MEASURE AT RIGHT ANGLE TO CENTERLINE OF BRIDGE)
NUMBER OF LANES/TRACKS ON BRIDGE 2

BRIDGE CONDITION (G) F P C

DOES POTENTIAL EXIST FOR ELEMENTS FROM BRIDGE FALLING ON ROADWAY BENEATH? YES [ ] NO [X]

DOES POTENTIAL EXIST BECAUSE OF DETERIORATED CONDITION OR FAILURE OF MAJOR MEMBERS? YES [ ] NO [X]

COMMENT ON ANY CONDITIONS OF BRIDGE THAT WOULD EFFECT ROADWAY BENEATH _____

NOTE: IF UNDERPASS ROUTE IS DIVIDED HIGHWAY, USE TWO (2) OF THESE FORMS, ONE FOR EACH ROADWAY.

MINIMUM PICTURES REQUIRED

1. ELEVATION VIEW OF BRIDGE ON BOTH SIDES SHOWING UNDERPASS
2. VIEW SHOWING BOTH APPROACHES TO BRIDGE
3. VIEW SHOWING SAFETY FEATURES
4. VIEW SHOWING ANY PROBLEMS

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

FORM BIR 3.0A
Rev. 3-1-97
DT-1443

CURRENT FIELD REPORT NO. 12 DATE 5-20-98
PREVIOUS FIELD REPORT NO. 11 DATE 6-20-96

INSPECTION REPORT FOR UNDERPASS ROUTE

BRIDGE NO. 75I00240041 (ELEVEN DIGIT NO.) UNDERPASS LOC. NO. 75 (CO.) - I24 (ROUTE) - 25.74 (L.M.) (____ LOG km)

75 (CO.) - 1044 (RTE.) - 0.48 (L.M.) (____ LOG km) OVER 75 (CO.) - I24 (RTE.) - 25.74 (L.M.) (____ LOG km) ____ STRUCTURE NAME

COUNTY RUTHERFORD

YEAR CONSTRUCTED 1968 YEAR WIDENED ____ YEAR REHABILITATED ____
ESTIMATED [ ] ACTUAL [X]

GEOMETRIC FEATURES UNDER BRIDGE

DIVIDED HIGHWAY - - - - LEFT RDWY [ ] RIGHT RDWY [X] N.A. [ ]
TYPE OF WEARING SURFACE - - - - CONCRETE [ ] ASPHALT [X] GRAVEL [ ]
WIDTH OF APPROACH TRAVELED ROADWAY 7.32 m (DOES NOT INCLUDE SHOULDERS)
WIDTH OF MEDIAN IF DIVIDED HIGHWAY 33.83 m
APPROACH SHOULDER WIDTH 3.05 m (RT.) 1.22 m (LT.)
*HORIZONTAL CLEARANCE UNDER BRIDGE 37.58 m
*DISTANCE BETWEEN PIER PROTECTION GUARDRAIL AND SUBSTRUCTURE N/A m (RT.) N/A m (LT.)
*WIDTH OF SIDEWALK UNDER BRIDGE N/A m (RT.) N/A m (LT.)
MINIMUM VERTICAL CLEARANCE 4.94 m (.**m)

*SHOW ON SKETCH

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE		STANDARD	SUB-STANDARD	
PIER PROTECTION RAILING OR PARAPET	G F P C	[ ]	[ ]	NON EXIST [+]
APPROACH GUARDRAIL TRANSITIONS	G F P C	[ ]	[ ]	NON EXIST [+]
APPROACH GUARDRAIL	G F P C	[ ]	[ ]	NON EXIST [
APPROACH GUARDRAIL TERMINAL	G F P C	[ ]	[ ]	NON EXIST [

SIGNING FOR UNDERPASS ROUTE

PADDLEBOARD	YES [ ]	NO [✓]	NEEDED [ ]
VERTICAL CLEARANCE (< 4.4 m)	YES [ ]	NO [✓]	NEEDED [ ]
NARROW PASSAGE	YES [ ]	NO [✓]	NEEDED [ ]
ONE LANE PASSAGE	YES [ ]	NO [✓]	NEEDED [ ]

INSPECTORS
1. Furlough
2. Watts
3. Hailey
4. Johnson
5. ____
6. ____

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

FORM BIR 3.0A (CONTINUED)
Rev. 3-1-97
DT-1443

UNDERPASS LOC. NO. 75 (CO.) - I24 (ROUTE) - 25.74 (L.M.) (RT ON) (LOG km)

OTHER SIGNS OR PLAQUES _____

COMMENTS REGARDING ANY PROBLEM WITH SIGNING _____

BRIDGE FEATURES

BRIDGE SKEW 80 ° RT

STRUCTURE TYPE WPG (MAIN SPAN) NO. SPANS 2 (MAIN TYPE)

STRUCTURE TYPE — (APPROACH SPAN) NO. SPANS — (APPROACH TYPE)

MAXIMUM SPAN LENGTH 45.72 m TOTAL LENGTH 91.44 m

WIDTH OF BRIDGE OUT-TO-OUT 9.88 m (RIGHT ANGLE TO CENTERLINE OF BRIDGE)

WIDTH OF BRIDGE ALONG SKEW — m (IF UNABLE TO MEASURE AT RIGHT ANGLE TO CENTERLINE OF BRIDGE)

NUMBER OF (LANES)/TRACKS ON BRIDGE 2

BRIDGE CONDITION (G) F P C

DOES POTENTIAL EXIST FOR ELEMENTS FROM BRIDGE FALLING ON ROADWAY BENEATH? YES [ ] NO [X]

DOES POTENTIAL EXIST BECAUSE OF DETERIORATED CONDITION OR FAILURE OF MAJOR MEMBERS? YES [ ] NO [X]

COMMENT ON ANY CONDITIONS OF BRIDGE THAT WOULD EFFECT ROADWAY BENEATH _____

NOTE: IF UNDERPASS ROUTE IS DIVIDED HIGHWAY, USE TWO (2) OF THESE FORMS, ONE FOR EACH ROADWAY.

MINIMUM PICTURES REQUIRED

1. ELEVATION VIEW OF BRIDGE ON BOTH SIDES SHOWING UNDERPASS
2. VIEW SHOWING BOTH APPROACHES TO BRIDGE
3. VIEW SHOWING SAFETY FEATURES
4. VIEW SHOWING ANY PROBLEMS

NOTE: UNLESS OTHERWISE NOTED, MEASUREMENTS ARE TO BE TAKEN TO TWO (2) DECIMAL PLACES IN METERS.

FORM BIR 3.0A
12-14-84

CURRENT FIELD REPORT NO. 9 DATE 7/24/91
PREVIOUS FIELD REPORT NO. 8 DATE 7/12/89

DT -1443
STATE FORM #

INSPECTION REPORT FOR UNDERPASS ROUTE

UNDERPASS LOCATION NO. 75 - I24 - 25.74 (CO. - RTE. - L.M.)
OVERHEAD BRIDGE NO. 75 - 1044 - 0.48 (CO. - RTE. - L.M.)

EPPS MILL RD.
NFA 1044 OVER I 24
TYPE OF SERVICE

—
STRUCTURE NAME (IF NAMED)

COUNTY RUTHERFORD

YEAR CONSTRUCTED 1968 ESTIMATED [ ] ACTUAL [X]
YEAR WIDENED —
YEAR REHABILITATED —

GEOMETRIC FEATURES UNDER BRIDGE

DIVIDED HIGHWAY --- LEFT RDWY [X] RIGHT RDWY [ ] N.A. [ ]
TYPE OF WEARING SURFACE --- CONCRETE [ ] ASPHALT [X] GRAVEL [ ]
WIDTH OF APPROACH TRAVELED ROADWAY 24' FT. (DOES NOT INCLUDE SHOULDERS)
WIDTH OF MEDIAN IF DIVIDED HIGHWAY 111' FT.
APPROACH SHOULDER WIDTH 4' FT.(RT.) 10' FT.(LT.)
*HORIZONTAL CLEARANCE UNDER BRIDGE 123' FT. 10" IN.
*DISTANCE BETWEEN PIER PROTECTION GUARDRAIL AND SUBSTRUCTURE N/A FT.(RT.) N/A FT.(LT.)
WIDTH OF SIDEWALK UNDER BRIDGE N/A FT.(RT.) N/A FT.(LT)
*MINIMUM VERTICAL CLEARANCE 16 FT. 11 IN.

* SHOW ON SKETCH

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

					ACCEPTABLE	UNACCEPTABLE	
APPROACH GUARDRAIL	G	F	P	C	[ ]	[ ]	NONE EXIST [X]
APPROACH GUARDRAIL TERMINAL	G	F	P	C	[ ]	[ ]	NONE EXIST [X]
APPROACH GUARDRAIL TRANSITIONS	G	F	P	C	[ ]	[ ]	NONE EXIST [X]
PIER PROTECTION RAILING OR PARAPET	G	F	P	C	[ ]	[ ]	NONE EXIST [X]

SIGNING FOR UNDERPASS ROUTE

PADDLEBOARD	YES [ ]	NO [X]	NEEDED [ ]
BRIDGE NUMBER	YES [X]	NO [ ]	NEEDED [ ]
VERTICAL CLEARANCE (< 14')	YES [ ]	NO [X]	NEEDED [ ]
NARROW PASSAGE	YES [ ]	NO [X]	NEEDED [ ]
ONE LANE PASSAGE	YES [ ]	NO [X]	NEEDED [ ]
CURVE	YES [ ]	NO [X]	NEEDED [ ]
SPEED LIMIT	YES [ ]	NO [X]	NEEDED [ ]

DT-1443
STATE FORM #

OTHER SIGNS OR PLAQUES _____

COMMENTS REGARDING ANY PROBLEM WITH SIGNING _____

BRIDGE FEATURES

BRIDGE SKEW 80° RT
STRUCTURE TYPE W P.G. (MAIN SPAN) NO. SPANS 2 (MAIN TYPE)
STRUCTURE TYPE _____ (APPROACH SPAN) NO. SPANS _____ (APPROACH TYPE)
MAXIMUM SPAN LENGTH 150' FT. TOTAL LENGTH 300' FT.
WIDTH OF BRIDGE OUT TO OUT 32'5" FT. (RT. ⟩ TO ℄ OF BRIDGE)
WIDTH OF BRIDGE ALONG SKEW — FT. (IF UNABLE TO MEASURE AT RT. ⟩ TO ℄ OF BRIDGE)
NUMBER OF LANES/TRACKS ON BRIDGE 2

BRIDGE CONDITION G (F) P C

DOES POTENTIAL EXIST FOR ELEMENTS FROM BRIDGE FALLING ON ROADWAY BENEATH --- YES [ ]
NO [X]
DOES POTENTIAL EXIST BECAUSE OF DETERIORATED CONDITION FOR FAILURE OF MAJOR MEMBERS ---
YES [ ]
NO [X]

COMMENT ON ANY CONDITIONS OF BRIDGE THAT WOULD EFFECT ROADWAY BENEATH _____

NOTE: IF UNDERPASS ROUTE IS DIVIDED HIGHWAY, USE TWO (2) OF THESE FORMS, ONE FOR EACH ROADWAY.

MINIMUM PICTURES REQUIRED

1. ELEVATION VIEW OF BRIDGE ON BOTH SIDES SHOWING UNDERPASS
2. VIEW SHOWING BOTH APPROACHES TO BRIDGE
3. VIEW SHOWING SAFETY FEATURES
4. VIEW SHOWING ANY PROBLEMS

FORM BIR 3.0A
12-14-84

CURRENT FIELD REPORT NO. 9 DATE 7-24-91
PREVIOUS FIELD REPORT NO. 8 DATE 7-12-89

DT-1443
STATE FORM #

INSPECTION REPORT FOR UNDERPASS ROUTE

UNDERPASS LOCATION NO. 75 (CO.) - I24 (RTE.) - 25.74 (L.M.)

OVERHEAD BRIDGE NO. 75 (CO.) - 1044 (RTE.) - 4.48 (L.M.)

EPPS MILL RD.
NFA 1044 (TYPE OF SERVICE) OVER I 24 (STRUCTURE NAME (IF NAMED))

COUNTY RUTHERFORD

YEAR CONSTRUCTED 1968 ESTIMATED [ ] ACTUAL [X]
YEAR WIDENED —
YEAR REHABILITATED —

GEOMETRIC FEATURES UNDER BRIDGE

DIVIDED HIGHWAY --- LEFT RDWY [ ] RIGHT RDWY [X] N.A. [ ]
TYPE OF WEARING SURFACE --- CONCRETE [ ] ASPHALT [X] GRAVEL [ ]
WIDTH OF APPROACH TRAVELED ROADWAY 24' FT. (DOES NOT INCLUDE SHOULDERS)
WIDTH OF MEDIAN IF DIVIDED HIGHWAY 111' FT.
APPROACH SHOULDER WIDTH 10' FT.(RT.) 4' FT.(LT.)
*HORIZONTAL CLEARANCE UNDER BRIDGE 123' FT. 4" IN.
*DISTANCE BETWEEN PIER PROTECTION GUARDRAIL AND SUBSTRUCTURE N/A FT.(RT.) N/A FT.(LT.)
*WIDTH OF SIDEWALK UNDER BRIDGE N/A FT.(RT.) N/A FT.(LT)
*MINIMUM VERTICAL CLEARANCE 16 FT. 04 IN.

* SHOW ON SKETCH

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

					ACCEPTABLE	UNACCEPTABLE	
APPROACH GUARDRAIL	G	F	P	C	[ ]	[ ]	NONE EXIST [X]
APPROACH GUARDRAIL TERMINAL	G	F	P	C	[ ]	[ ]	NONE EXIST [X]
APPROACH GUARDRAIL TRANSITIONS	G	F	P	C	[ ]	[ ]	NONE EXIST [X]
PIER PROTECTION RAILING OR PARAPET	G	F	P	C	[ ]	[ ]	NONE EXIST [X]

SIGNING FOR UNDERPASS ROUTE

PADDLEBOARD	YES [ ]	NO [X]	NEEDED [ ]
BRIDGE NUMBER	YES [X]	NO [ ]	NEEDED [ ]
VERTICAL CLEARANCE (< 14')	YES [ ]	NO [X]	NEEDED [ ]
NARROW PASSAGE	YES [ ]	NO [X]	NEEDED [ ]
ONE LANE PASSAGE	YES [ ]	NO [X]	NEEDED [ ]
CURVE	YES [ ]	NO [X]	NEEDED [ ]
SPEED LIMIT	YES [ ]	NO [X]	NEEDED [ ]

DT-1443
STATE FORM #

OTHER SIGNS OR PLAQUES _____

COMMENTS REGARDING ANY PROBLEM WITH SIGNING _____

BRIDGE FEATURES

BRIDGE SKEW 80° RT.
STRUCTURE TYPE 44 P.G. (MAIN SPAN) NO. SPANS 2 (MAIN TYPE)
STRUCTURE TYPE — (APPROACH SPAN) NO. SPANS _____ (APPROACH TYPE)
MAXIMUM SPAN LENGTH 150' FT. TOTAL LENGTH 300' FT.
WIDTH OF BRIDGE OUT TO OUT 32'5" FT. (RT. ℄ TO ℄ OF BRIDGE)
WIDTH OF BRIDGE ALONG SKEW _____ FT. (IF UNABLE TO MEASURE AT RT. ℄ TO ℄ OF BRIDGE)
NUMBER OF LANES/TRACKS ON BRIDGE 2

BRIDGE CONDITION G (F) P C

DOES POTENTIAL EXIST FOR ELEMENTS FROM BRIDGE FALLING ON ROADWAY BENEATH --- YES [ ] NO [X]

DOES POTENTIAL EXIST BECAUSE OF DETERIORATED CONDITION FOR FAILURE OF MAJOR MEMBERS --- YES [ ] NO [X]

COMMENT ON ANY CONDITIONS OF BRIDGE THAT WOULD EFFECT ROADWAY BENEATH _____

NOTE: IF UNDERPASS ROUTE IS DIVIDED HIGHWAY, USE TWO (2) OF THESE FORMS, ONE FOR EACH ROADWAY.

MINIMUM PICTURES REQUIRED

1. ELEVATION VIEW OF BRIDGE ON BOTH SIDES SHOWING UNDERPASS
2. VIEW SHOWING BOTH APPROACHES TO BRIDGE
3. VIEW SHOWING SAFETY FEATURES
4. VIEW SHOWING ANY PROBLEMS

SUMMARY
75-1044-0.48
5-20-98

Bucanan Rd/I24
2 Span/Cont. W.P.G.

This bridge was inspected and found to be in **good** condition. The approach guardrail and terminals are substandard with areas of moderate to heavy collision damage. The bridge rail are good and approved. The asphalt wearing surface is good. The strip seal joints are in fair condition with moderate debris. All steel has been repainted and is in good condition. The diaphragm at the abutments do show some light loss of section on the flanges, but have new paint. The bent cap and columns are good. There are no underpass safety features.

Ray Furlough

75-1044-0.48

BR. # 75-I-24-25.74

DATE: 7-24-91

INSPECTOR: _____

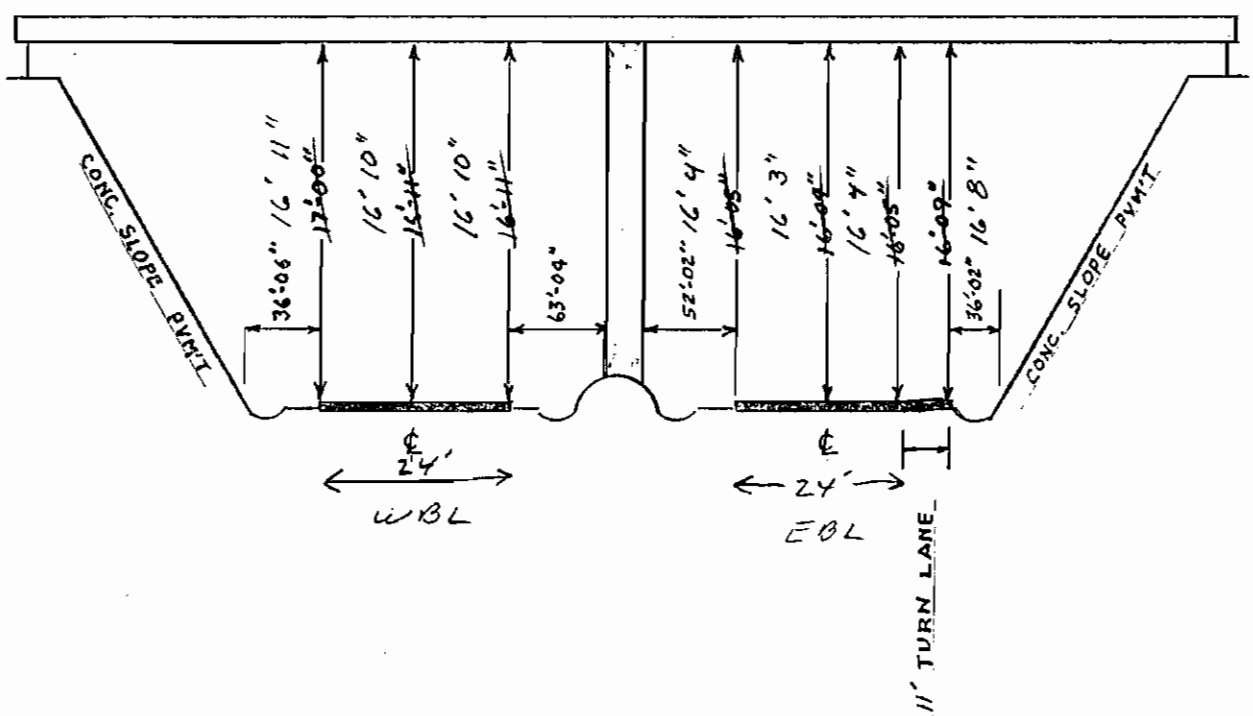
7-3-96
A

5.20.98
JW

7.21.00 JW

VERTICAL & LATERAL CLEARANCE

1044, EPPS MILL ROAD OVER I-24



LOOKING EAST, MIM. UNDER BEAM "A"

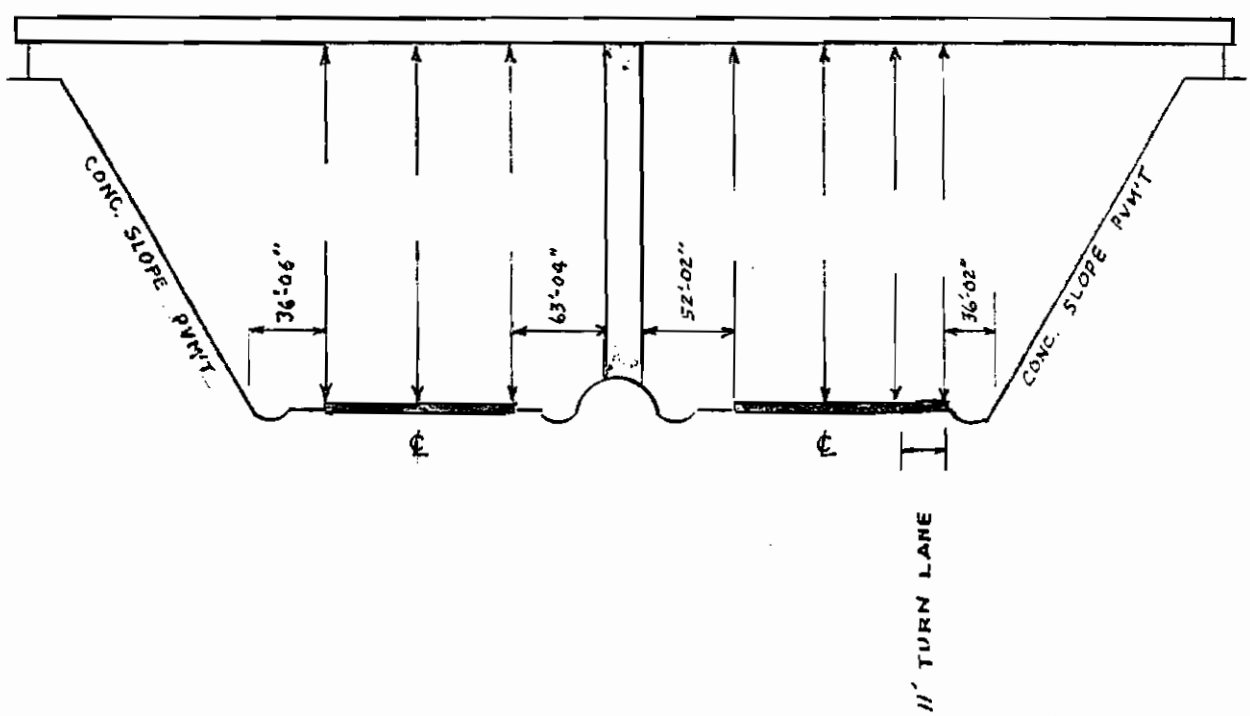
BR. # 75-I-24-25.74

DATE:

INSPECTOR:

VERTICAL & LATERAL CLEARANCE

1044, EPPS MILL ROAD OVER I-24

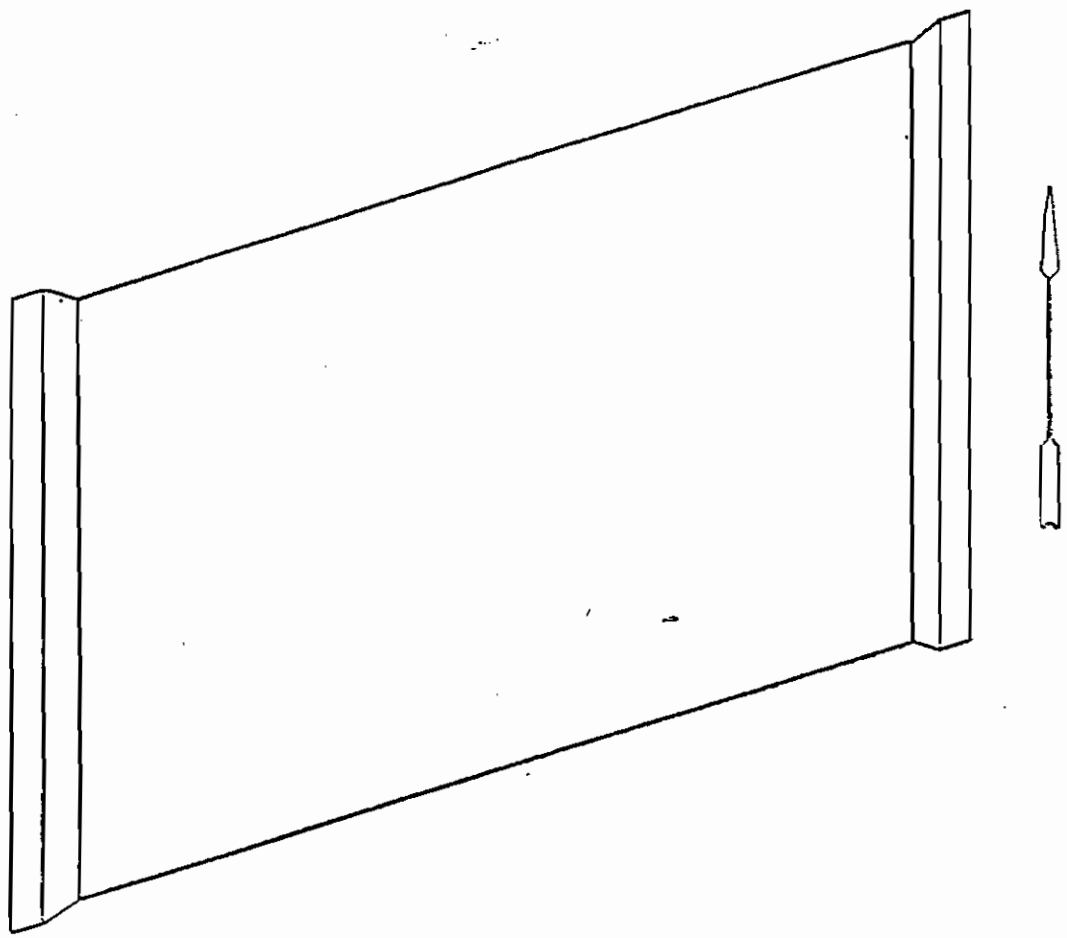


LOOKING EAST, MIM. UNDER BEAM "A"

BRIDGE NO: 75-I-24-25.74 DATE: 5.20.98

INSPECTOR: TW

TOP DECK NO: 1



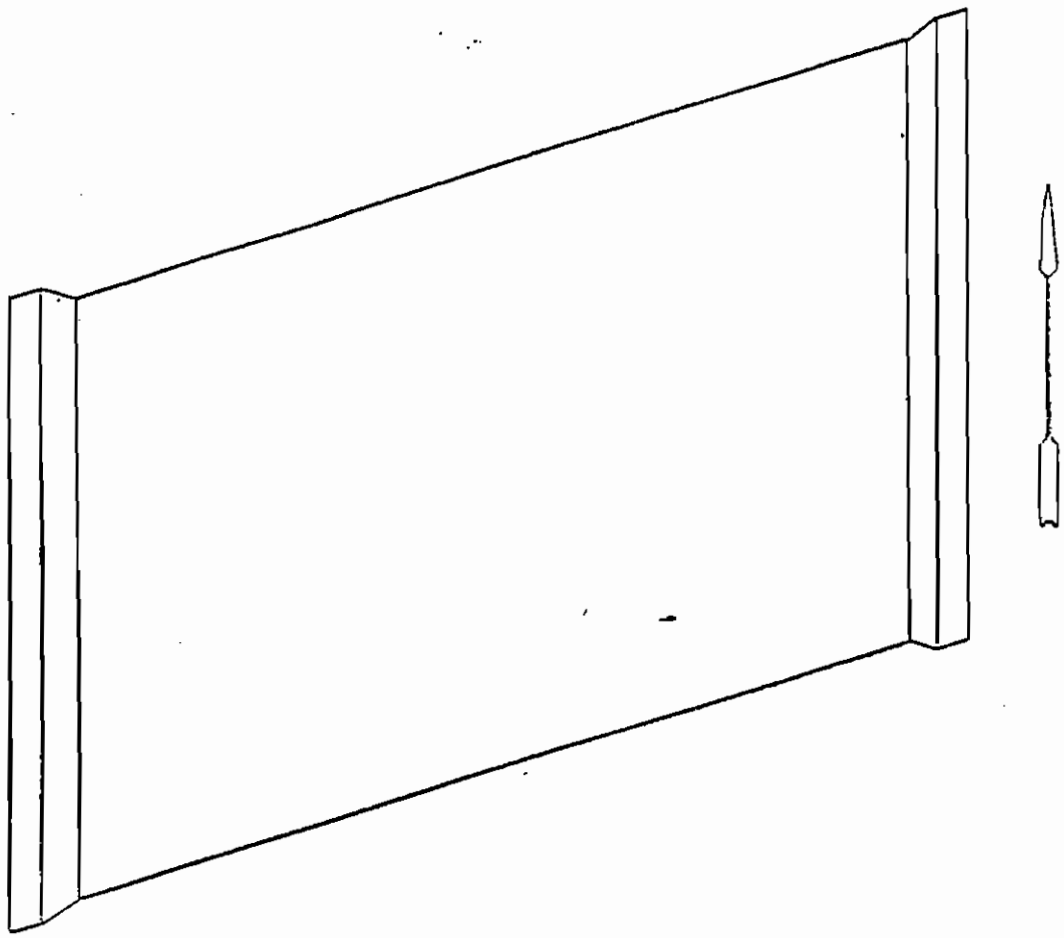
ELEMENT	RATING	COMMENTS
SURFACE	G	AC Overlay (G)
CURBS	G	Mod. Weathering
BRIDGERAILS	G	Mod. Weathering
DRAINS	N/A	
JOINTS	G-F	Strip Seal 80% Debris Build up
OTHER		

BRIDGE NO: 75 - I-24 - 25.74

DATE: 5.20.98

INSPECTOR: JTW

TOP DECK NO: 2

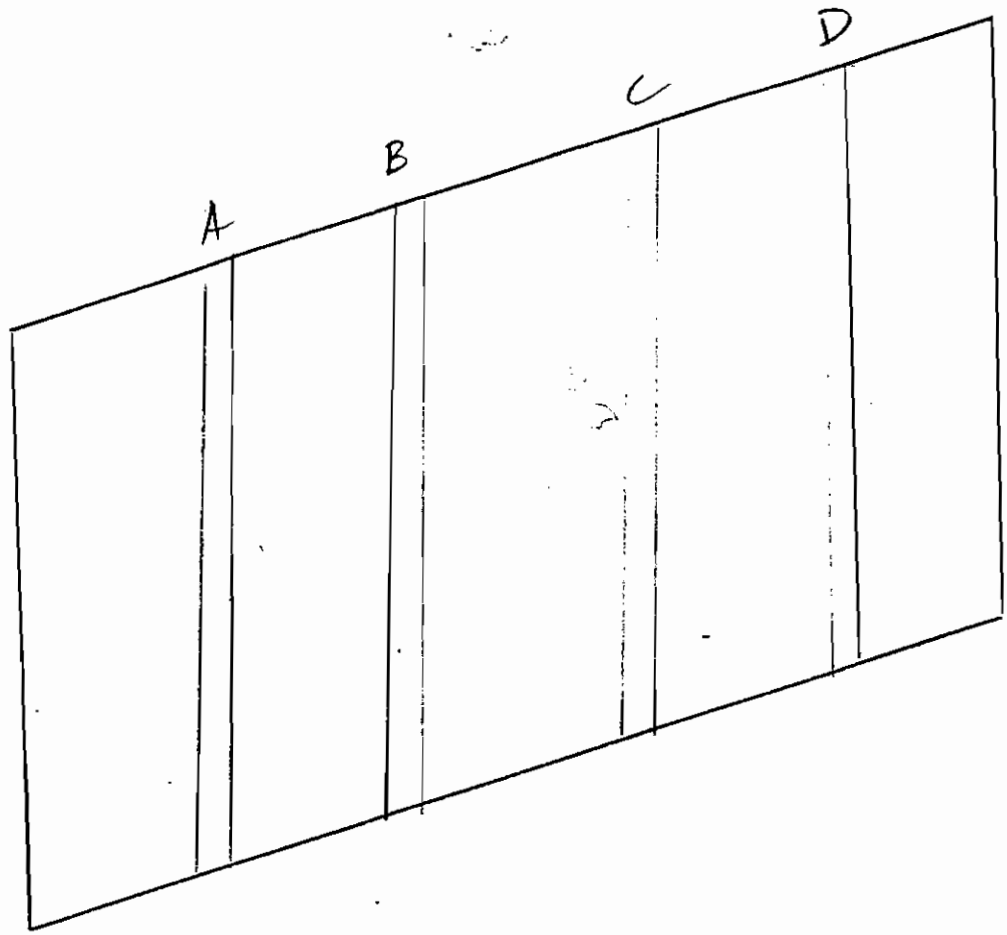


ELEMENT	RATING	COMMENTS
SURFACE	~~F~~ G	AC Overlay (G)
CURBS	G	Mod. Weathering
BRIDGERAILS	G	Mod. Weathering
DRAINS	NA	
JOINTS	~~E~~ F	Strip Seal 100% Debris Blo. Up
OTHER		

BRIDGE NO: 75-I24-25.74
75-104-.J-4.8

DATE: 5-20-98
INSPECTOR: [illegible]

BOTTOM DECK NO: 1



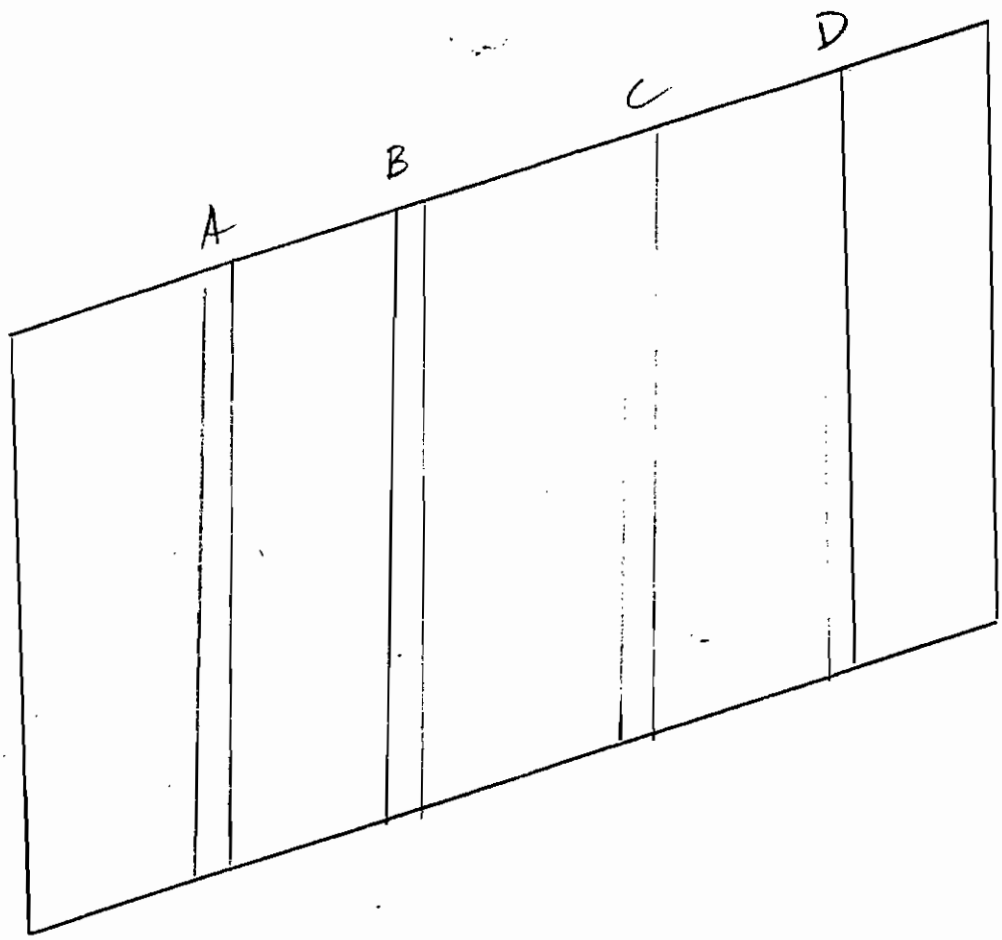
ELEMENT	RATING	COMMENTS
DECK	6	[illegible]
BEAMS	6	
DIAPHRAGMS	6	
BRACING	6	
ALIGNMENT	6	

BRIDGE NO: 75-124-25.74
75-1044-0.48

DATE: 5-20-98

INSPECTOR: CH

BOTTOM DECK NO: 2



ELEMENT	RATING	COMMENTS
DECK	7	
BEAMS	7	
DIAPHRAGMS	7	
BRACING	6	
ALIGNMENT	6	

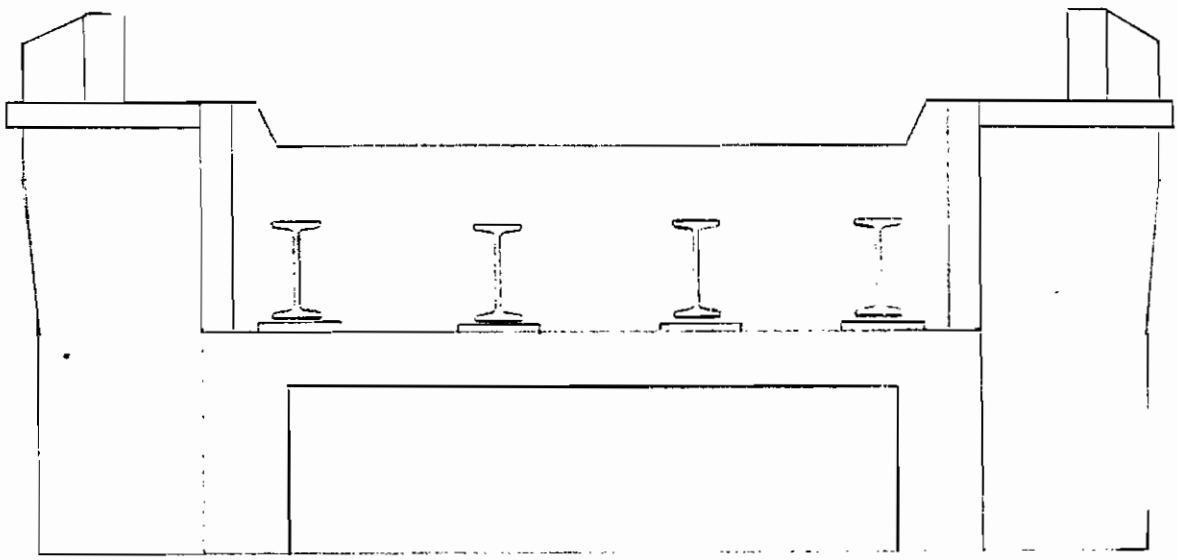
75-1044-0.48

BRIDGE NO. ~~75-124-35.74~~

DATE: 5-20-98 DJ

ABUTMENT

ABT. NO. 1



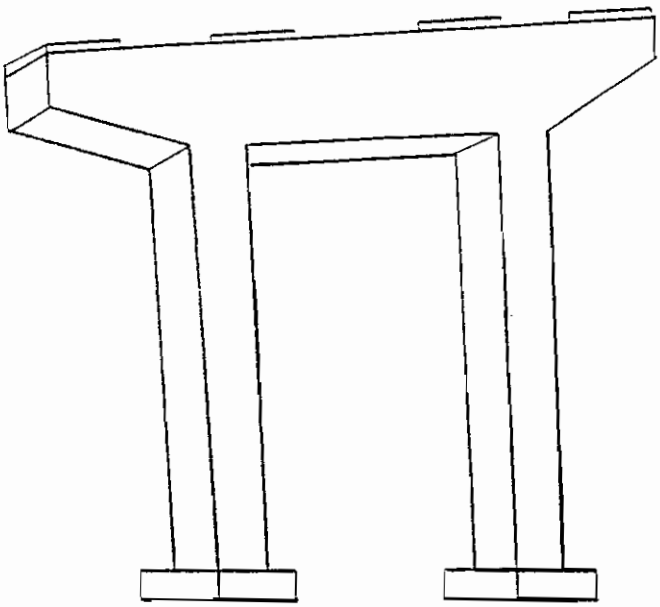
WINGS	G	
WALL	G	
CAP	G	
FOOTING	NV	
BEARINGS	G	

BRIDGE NO: 75-1044-0.48 ~~75-124-25.74~~

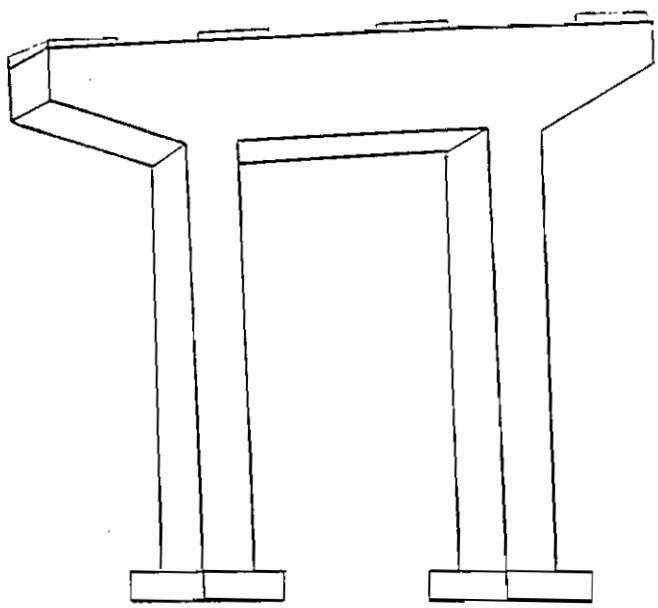
BENT NO: 1

DATE: 5-20-98

INSPECTOR: DJ.



FRONT



BACK

ELEMENT	RATING	COMMENTS
CAP	G	
COLUMNS	G	
FOOTINGS	NV	
BEARINGS	G	
PLUMB	G	
SCOUR	N/A	

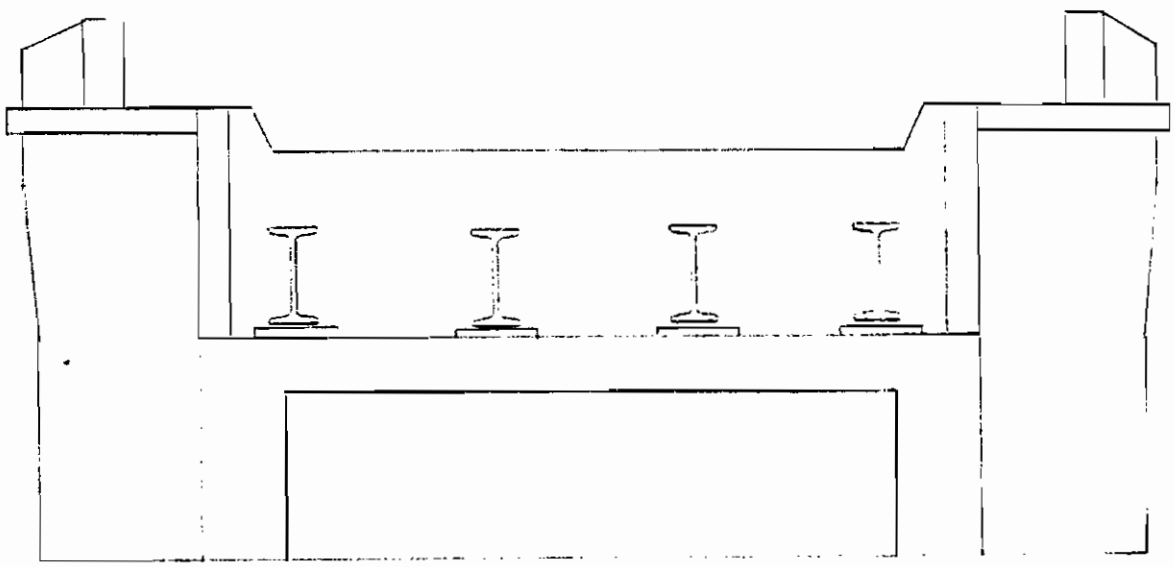
75-1044-0.48

BRIDGE NO. ~~75 I24 35.74~~

DATE: 5-20-98 DJ.

ABUTMENT

ABT. NO. 2

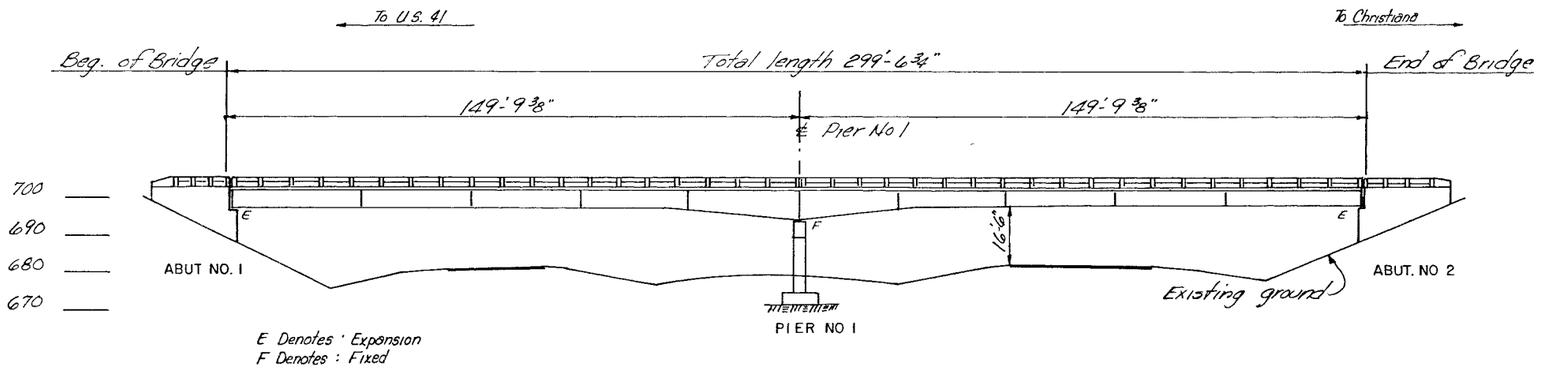


WINGS	G	
WALL	G	
CAP	G	
FOOTING	NV	
BEARINGS	G	

PROJECT NO	YEAR	SHEET NO
75001-4162-04	1995	

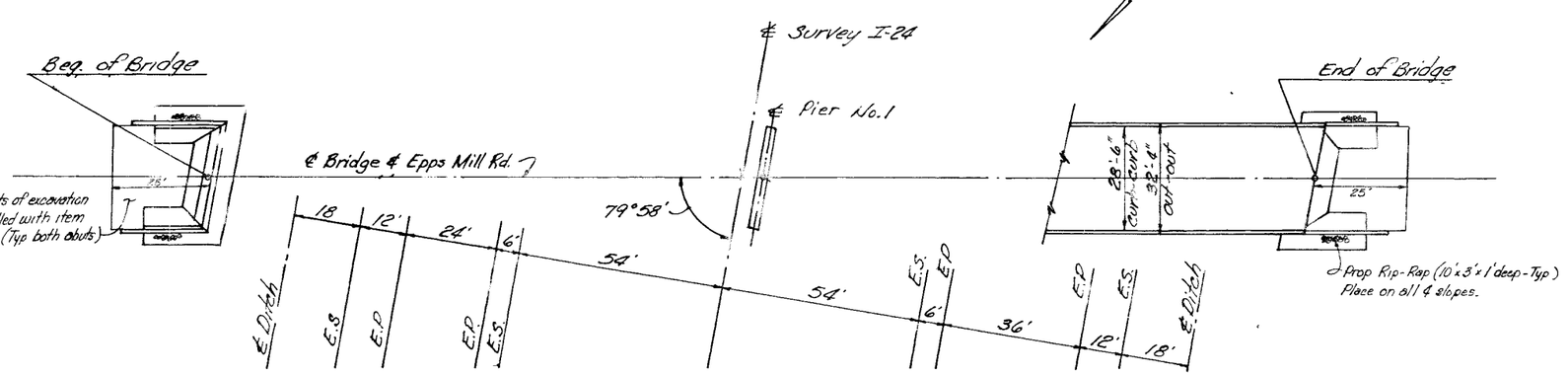
REVISIONS

NO	DATE	BY	BRIEF DESCRIPTION
1	10-9-95	T.Q.	Revised List of Drawings



E Denotes : Expansion
F Denotes : Fixed

ELEVATION



PLAN

GENERAL SCOPE OF WORK

1 REMOVE EXISTING 4-1/2"± ASPHALT SURFACE FROM ENTIRE LENGTH AND WIDTH OF BRIDGE, AND FOR AN ADDITIONAL 25' TRANSITIONAL LENGTH BEYOND EACH END SEE DETAIL, DWG NO 3

2 REPAIR CONCRETE SLAB IN AREAS OF PARTIAL DEPTH DECK REPAIR WITHIN LIMITS DESIGNATED BY THE ENGINEER, SEE DETAIL SHT NO BR-17-38

3 REPAIR BACKWALLS AND WINGWALLS ON BOTH ABUTMENTS SEE DETAILS, DWG NOS BR-17-39 & BR-17-40

4 INSTALL TYPE "A" STRIP SEAL EXPANSION JOINTS AT BOTH ABUTMENTS SEE STD DWG NOS BR-2-115, BR-2-116, BR-2-117 AND DWG NO BR-17-38

5 RESET BEARINGS AT BOTH ABUTMENTS, SEE DETAIL, DWG NO BR-17-37.

6 PLACE RIP-RAP ALONG WINGWALLS AT ALL FOUR CORNERS OF ABUTMENTS

7 REMOVE AND REPLACE GUARDRAIL AT BRIDGE ENDS

8 RE-PAVE BRIDGE AND APPROACHES

9 REPAIR CRACKS IN PIER WITH EPOXY INJECTION

⚠1 LIST OF BRIDGE DRAWINGS

DWG NO	LAST REV DATE	DESCRIPTION
BR-17-35	10-9-95	LAYOUT OF BRIDGE
BR-17-36	10-9-95	GENERAL NOTES AND ESTIMATED BRIDGE QUANTITIES
BR-17-37		SUPERSTRUCTURE
BR-17-38		SUPERSTRUCTURE DETAILS
BR-17-39		CONCRETE DETAILS - ABUTMENTS 1 & 2
BR-17-40		REINFORCING DETAILS - ABUTMENTS 1 & 2
BR-17-41		BILL OF STEEL

LIST OF REFERENCE DRAWINGS

(TO BE PRINTED WITH PLANS)

DWG NO	DESCRIPTION
K-70-89	LAYOUT OF BRIDGE
K-70-90	SUPERSTRUCTURE
K-70-91	STRUCTURAL STEEL DETAILS
K-70-92	ABUTMENTS NO 1 & 2
K-70-93	ABUTMENT DETAILS
K-70-95	BILL OF STEEL

LIST OF STANDARD DRAWINGS

DWG NO.	LAST REV. DATE	DESCRIPTION
BR-2-115	7-29-92	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT CONSTRUCTION TYPES "A" THRU "J"
BR-2-116	7-29-92	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT CONSTRUCTION TYPES "A" THRU "J"
BR-2-117	7-29-92	STRIP SEAL EXPANSION JOINTS - REPLACEMENT CONSTRUCTION DETAILS TYPES "A" AND "B"
STD-12-1	11-12-93	GUARDRAIL ATTACHMENT AND TRANSITION DETAILS - 1987

* DENOTES DRAWING TO BE PRINTED WITH PLANS

LIST OF SPECIAL PROVISIONS

NO	LAST REV DATE	REGARDING
100	XX	REVISIONS AND ADDITIONS TO STANDARD SPECIFICATIONS
105A	XX	APPROVAL OF SHOP DRAWINGS
209	XX	EROSION AND SILTATION CONTROL
604	XX	CONCRETE STRUCTURES
604S	XX	STRIP SEAL EXPANSION JOINTS
604CX	XX	CONTRACTOR MIX DESIGN AND TESTING STRUCTURAL CONCRETE
709	XX	MACHINED RIP-RAP
907A	XX	EPOXY COATED REINFORCING STEEL

XX DENOTES CURRENT REVISION DATE AS PER CONTRACT DOCUMENTS

DESIGNED BY C. Rogers DATE
DRAWN BY C. Rogers DATE
SUPERVISED BY DATE
CHECKED BY DATE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

LAYOUT OF BRIDGE

DANIEL K. MOSS REGISTERED ENGINEER No. 16417 STATE OF TENNESSEE 9/29/94

BRIDGE NO – 75-1044-0.48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

BR-17-35

TENNESSEE DEPARTMENT OF TRANSPORTATION
DESIGN DIVISION
FILE NO K-18

ESTIMATED BRIDGE QUANTITIES

	ITEM NO.	DESCRIPTION	QUANTITY	UNIT
(1)	602-10 01	STRUCTURAL STEEL REPAIRS	1	L.S.
⚠1 (8)	604-03.01	CLASS "A" CONCRETE (BRIDGES)	60	C Y.
(2)	604-10 14	REMOVE EXISTING WEARING SURFACE	1	L.S.
	604-10 18	REINFORCING STEEL (REPAIRS)	4,845	LBS
(5)	604-10 32	EXPANSION JOINT REPAIRS (TYPE "A")	64	L.F.
	604-1050	BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB)	75	S Y
(7)(3)	604-10 62	EPOXY INJECTION REPAIR (COMPLETE AND IN PLACE)	25	L F
(6)(4)	604-10 90	MISCELLANEOUS BRIDGE ITEMS	1	L S
	617-01	BRIDGE DECK SEALANT	933	S.Y
(9)	709-05 07	MACHINED RIP-RAP (CLASS A-2)	8	TONS

FOOTNOTES

(1) INCLUDES RE-SETTING BEARINGS, SEE DETAILS, DWG NO

(2) INCLUDES APPROXIMATELY 834 SQ YDS SURFACE REMOVED, APPROX 4-1/2" THICK, WITHIN LIMITS OF BRIDGE ONLY

(3) INCLUDES ALL LABOR AND MATERIALS TO EPOXY INJECT CRACKS AT PIER

(4) INCLUDES TEMPORARY SHEET PILING AT ABUTMENTS

(5) INCLUDES ALL LABOR AND MATERIALS TO INSTALL NEW STRIP SEAL EXPANSION JOINTS AT ABUTMENTS 1 & 2

(6) INCLUDES ANY INCIDENTAL EXCAVATION NECESSARY TO REPAIR ABUTMENTS

(7) ITEM SHALL BE BID AS A CONTINGENCY AND MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER

(8) INCLUDES ALL CONCRETE FOR REPAIRS TO ABUTMENTS 1 & 2, INCLUDING BACKWALLS

(9) TO BE PLACED AT WINGWALLS, ALL FOUR CORNERS

DESIGNED BY C. Rogers DATE 7/26/94
DRAWN BY C. Rogers DATE
SUPERVISED BY DATE
CHECKED BY DATE

217001

GENERAL NOTES

SPECIFICATIONS STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH 1981 EDITION)

DESIGN SPECIFICATIONS AASHTO 1992 EDITION WITH ADDENDA

STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270 GRADE 36 (ASTM A709 GRADE 36) UNLESS OTHERWISE NOTED

REINFORCING STEEL TO BE ASTM A615 GRADE 60 STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL SPACING DIMENSIONS ARE CENTER TO CENTER AND C VER DIMENSIONS ARE CLEAR DISTANCE UNLESS OTHERWISE NOTED PLACING TOLERANCES ARE ± 1/2" FOR SPACING AND - 1/8" OR + 3/8" FOR COVER (THE SUFFIX E FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT) SEE SPECIAL PROVISION NO 907A

MECHANICAL BAR SPLICERS MUST BE APPROVED BY THE DIVISION OF MATERIALS AND TESTS A SPLICED SAMPLE OF EACH SIZE BAR APPROXIMATELY TWO FEET (2) IN LENGTH SHALL BE SUBMITTED TO THE DIVISION OF MATERIALS AND TESTS THE SAMPLES MUST BE MADE IN THE PRESENCE OF THE ENGINEER BY THE SAME PERSONNEL AND EQUIPMENT THAT WILL BE MAKING THE PRODUCTION SPLICES THE BAR SPLICER SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR MECHANICAL CONNECTION WHEN EPOXY COATING IS REQUIRED, THE EXPOSED THREADS SHALL BE REPAIRED AFTER SPLICING ACCORDING TO SPECIAL PROVISION 907A THE COST OF FURNISHING THE BAR SPLICERS, (AND EPOXY COATING WHEN REQUIRED) INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO 604-10 18, LBS OR 604-10.32, L F

SHOP DRAWINGS SHALL BE SUBMITTED ACCORDING TO SPECIAL PROVISION NO 105A, EXCEPT SHOP DRAWINGS SHALL BE SUBMITTED TO THE HEADQUARTERS BRIDGE INSPECTION AND REPAIR OFFICE IN LIEU OF THE DIVISION OF STRUCTURES

CONCRETE TO BE CLASS "A" CONCRETE IN ACCORDANCE WITH SPECIAL PROVISION NO 604CX

CONCRETE CURING ALL CONCRETE IN REPAIR AREAS SHALL BE CURED ACCORDING TO SPECIAL PROVISION NO 604

NON-PAY ITEMS ONLY ITEMS SHOWN ON THE PROPOSAL AS PAY ITEMS WILL BE PAID FOR COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS FOR THE ENTIRE CONTRACT SHALL BE INCLUDED IN THE PRICE FOR PAY ITEMS

FOR ADDITIONAL GENERAL NOTES APPLICABLE TO STRIP SEAL EXPANSION JOINTS, SEE STANDARD DRAWING NO BR-2-115 ALSO SEE SPECIAL PROVISION NO 604S REGARDING STRIP SEAL JOINTS

CLEANING AND PAINTING BEARINGS SHOULD BE BLASTCLEANED AND PAINTED PAINT SYSTEM SHALL BE ONE (1) COAT EPOXY PRIMER AT FOUR MILS DRY FILM THICKNESS FOR ACCEPTABLE BRANDS OF EPOXY PRIMERS SEE TENNESSEE DEPARTMENT OF TRANSPORTATION, MATERIALS AND TEST QUALIFIED PRODUCTS LIST

GROUTED BARS IN DRILLED HOLES HORIZONTALLY DRILLED HOLES SHALL BE DRILLED 1/2" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH NON-SHRINK GROUT AND BAR DRIVEN TO ITS SEAT VERTICALLY DRILLED HOLES SHALL BE DRILLED 1/4" IN DIAMETER LARGER THAN THE BAR, CLEANED, PACKED WITH EPOXY GROUT AND BAR DRIVEN TO ITS SEAT ALL GROUTING MATERIAL SHALL BE APPROVED BY T D O T MATERIALS AND TESTS

PROJECT NO.	YEAR	SHEET NO.
75001-4162-04	1995	2

REVISIONS

NO	DATE	BY	BRIEF DESCRIPTION
1	10-9-95	T.Q.	Revised est. quantity

DANIEL K MOSS REGISTERED ENGINEER No. 15,410 STATE OF TENNESSEE
9/29/94

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES AND ESTIMATED QUANTITIES

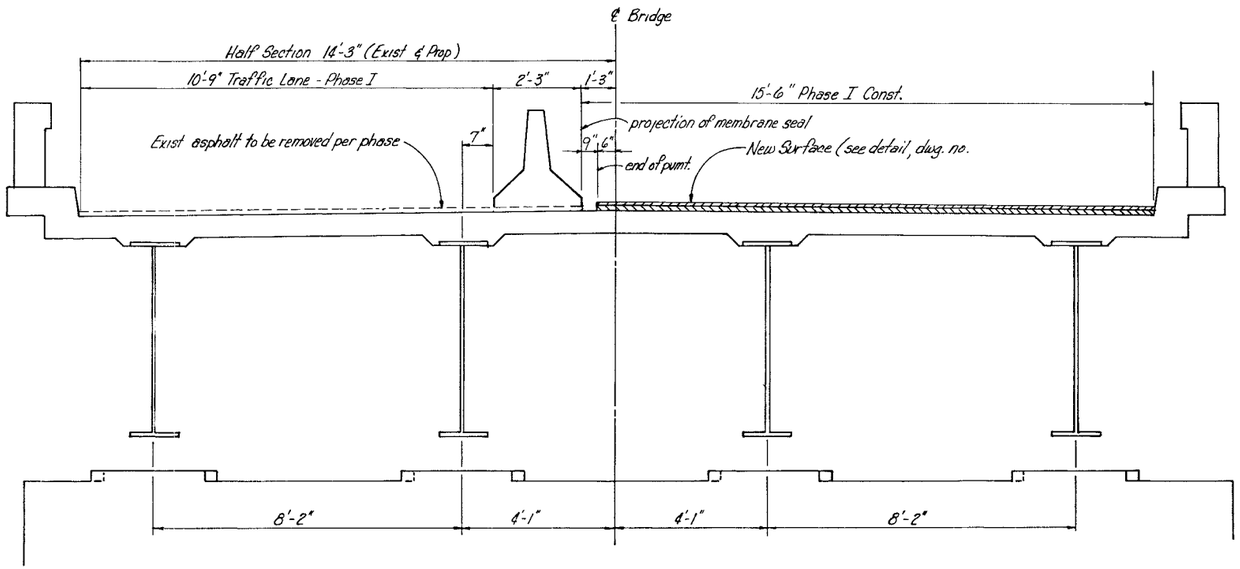
BRIDGE NO – 75 – 1044 – 0.48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

BR-17-36

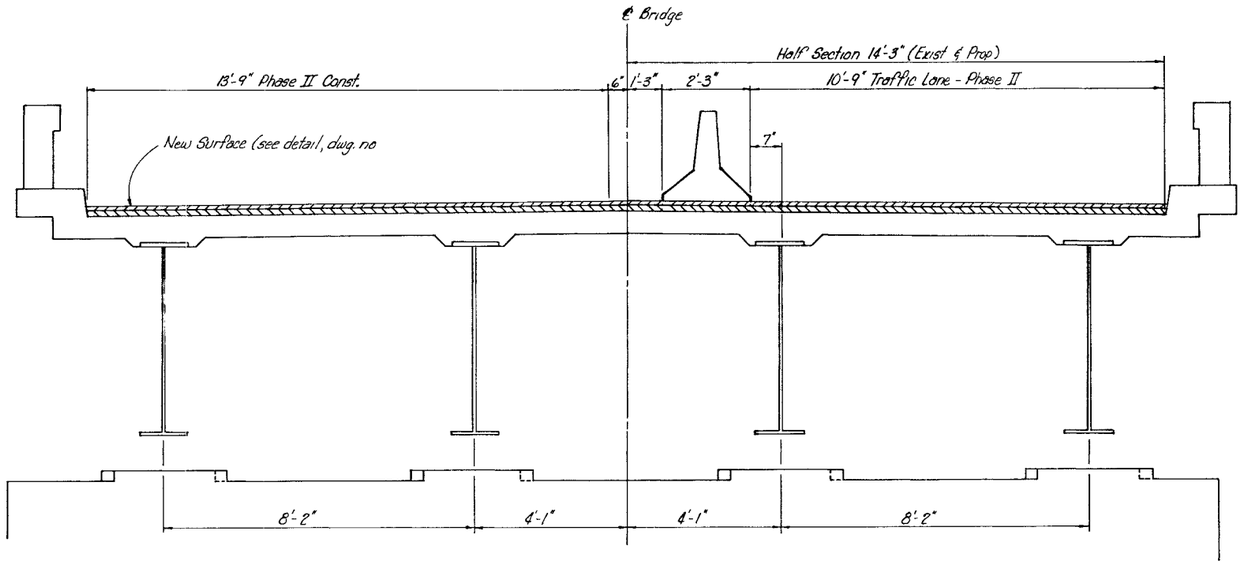
PROJECT NO	YEAR	SHEET NO.
75001-4162-04	1995	

REVISIONS

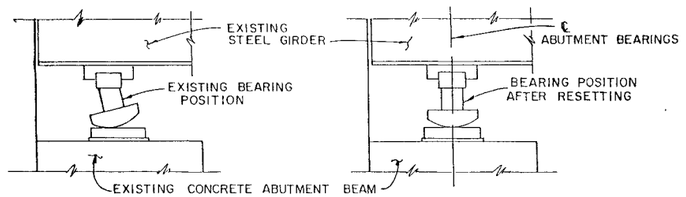
NO	DATE	BY	BRIEF DESCRIPTION



TYPICAL CROSS SECTION- PHASE I CONSTRUCTION



TYPICAL CROSS SECTION- PHASE II CONSTRUCTION



EXISTING EXPANSION BEARING RESET EXPANSION BEARING

NOTE BEARING DEVICES ARE TO BE RESET TO A VERTICAL POSITION AT 60 DEGREES FAHRENHEIT AT TEMPERATURES OTHER THAN 60 DEGREES FAHRENHEIT, BEARING SHALL BE SET AS INSTRUCTED BY THE ENGINEER TEMPERATURE SHALL BE THE BEAM TEMPERATURE ALL WORK SHALL MEET WITH THE FULL SATISFACTION OF THE ENGINEER

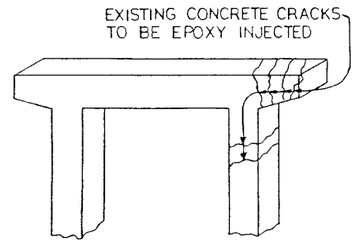
NOTE COST OF RESETTING EXPANSION BEARINGS INCLUDING ALL JACKING, REMOVING THE EXISTING SOLE PLATE AND REWELDING TO THE BOTTOM FLANGE OF THE GIRDER, LABOR, SURFACE PREPARATION AND PAINTING, AND ANY MISCELLANEOUS MATERIALS NEEDED TO COMPLETE THE REPAIRS TO BE PAID FOR UNDER ITEM NO 602-10 01, STRUCTURAL STEEL REPAIRS L S

GENERAL NOTES AND SPECIFICATIONS FOR
EPOXY INJECTION OF EXISTING STRUCTURAL CRACKS

NOTE ALL CRACKS SMALLER THAN 1/4" SHALL BE INJECTED WITH AN APPROVED EPOXY RESIN ADHESIVE. ALL CRACKS 1/4" OR LARGER SHALL BE INJECTED WITH AN APPROVED EPOXY RESIN ADHESIVE OF THE GEL TYPE

EXTREME CAUTION SHALL BE TAKEN WHEN SELECTING A PRESSURE NECESSARY TO COMPLETE THE EPOXY INJECTION CRACK REPAIR SO AS NOT TO DAMAGE THE STRUCTURE BY CAUSING ADDITIONAL CRACKING IF ADDITIONAL DAMAGE OCCURS, THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY. ALL EPOXY INJECTION WORK SHALL MEET WITH THE FULL APPROVAL OF THE ENGINEER

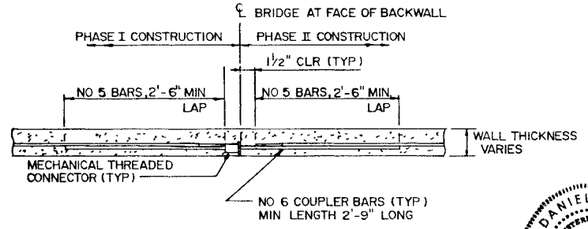
NOTE ALL EPOXY INJECTION CONTRACTORS AND\OR SUBCONTRACTORS SHALL BE APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TEST



NOTE COST OF ALL LABOR AND MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE EPOXY INJECTION REPAIRS TO EXISTING CONCRETE CRACKS SHALL BE INCLUDED UNDER ITEM NO. 604-10 62, EPOXY INJECTION REPAIRS, (COMPLETE AND IN PLACE) L F.

NOTE: THE ENGINEER SHALL DESIGNATE ALL AREAS OF REPAIR

ELEVATION - PIER NO. I



TYPICAL DETAIL AT CONSTRUCTION JOINT

NOTE THE COST OF MECHANICAL THREADED CONNECTORS AND THE COST OF THREADING THE COUPLER BARS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO 604-10.18, REINFORCING STEEL (REPAIRS), LBS

DANIEL K MOSS REGISTERED ENGINEER No. 16472 STATE OF TENNESSEE 9/29/94

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SUPERSTRUCTURE

BRIDGE NO - 75-1044-0.48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

DESIGNED BY C. Rogers DATE
DRAWN BY C. Rogers DATE
SUPERVISED BY DATE
CHECKED BY DATE

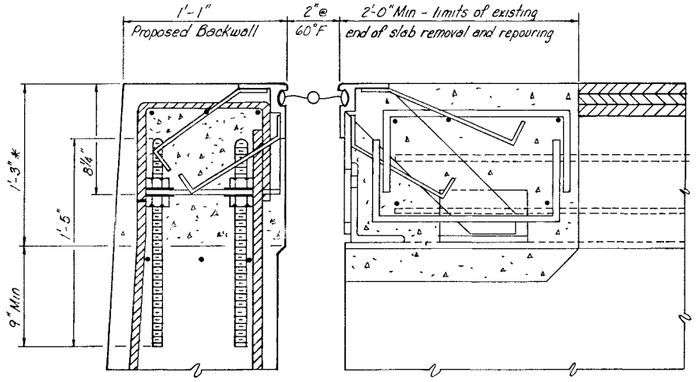
BR-17-37

PROJECT NO	YEAR	SHEET NO.
75001-4162-04	1995	

REVISIONS

NO	DATE	BY	BRIEF DESCRIPTION

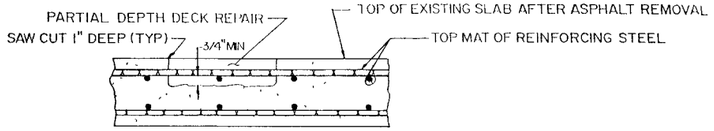
* Denotes : Concrete within these limits shall be paid for under item no 604-10.32, L.F.



TYPICAL SECTION AT ABUTMENT BACKWALL

TYPICAL SECTION AT END OF BRIDGE SLAB

TYPICAL ABUTMENTS NO. 1 AND NO. 2



DETAIL SHOWING PARTIAL DEPTH DECK REPAIR

CONCRETE FOR DECK REPAIR SHALL BE HIGH EARLY STRENGTH CONCRETE, f'c = 3500 psi AT 28 DAY STRENGTH TRAFFIC SHALL NOT BE PERMITTED ON ANY OF THE REPAIRED AREAS UNTIL TEST SPECIMENS ATTAIN A COMPRESSIVE STRENGTH OF 3000 psi MINIMUM AND THE CONCRETE HAS BEEN IN PLACE A MINIMUM OF TEN (10) DAYS

REMOVE CONCRETE IN ALL DELAMINATED AREAS TO A DEPTH OF 3/4" BELOW THE TOP BAR OF THE TOP MAT OF REINFORCING STEEL ALL REINFORCING STEEL IN AREAS OF DECK REPAIR SHALL BE BLAST CLEANED AREAS OF CONCRETE REMOVAL SHALL BE DESIGNATED BY PERSONNEL FROM THE HEADQUARTERS, BRIDGE INSPECTION AND REPAIR OFFICE DECK REPAIR WILL BE PAID FOR UNDER ITEM NO 604-10 50, BRIDGE DECK REPAIR (PARTIAL DEPTH OF SLAB) POWER DRIVEN HAND TOOLS USED FOR THE REMOVAL OF UNSOUND CONCRETE IN MAKING PARTIAL DEPTH REPAIRS ARE SUBJECT TO THE FOLLOWING RESTRICTIONS 1) PNEUMATIC HAMMERS HEAVIER THAN NOMINAL 35 POUND CLASS SHALL NOT BE USED 2) CHIPPING HAMMERS OF THE 15 POUND CLASS SHALL BE USED TO REMOVE CONCRETE FROM BENEATH ANY REINFORCING STEEL

NOTE ITEM NO 604-10 50 SHALL BE BID WITH THE CONTINGENCY THAT THIS ITEM MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY THE ENGINEER

NOTES

1 EXPANSION JOINT REPLACEMENT DETAILS SHOWN ON THIS SHEET ARE FOR GENERAL INFORMATION ONLY FOR COMPLETE DETAILS AND NOTES, SEE STD DWGS BR-2-115, BR-2-116 AND BR-2-117, ALSO SEE SPECIAL PROVISION 604S

2 EXPANSION JOINT REPLACEMENT SHALL BE CONSTRUCTED IN PHASES AS SHOWN ON DWG NO BR-17-37.THE STEEL PORTIONS OF THE EXPANSION DEVICE SHALL BE FABRICATED IN SECTIONS IN ORDER TO MAINTAIN ONE (1) TRAFFIC LANE AT ALL TIMES THE SECTIONS ARE TO BE CONNECTED WITH A FULL PENETRATION BUTT WELD THE ELASTOMERIC SEAL SHALL BE ONE PIECE FOR FULL LENGTH OF EXPANSION JOINT INCLUDING CURB FACE PROJECTIONS

3 EXPANSION JOINT OPENING SHALL BE SET ACCORDING TO TEMPERATURE CHART SHOWN ON APPROVED EXPANSION JOINT SHOP DRAWINGS

4 PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE THE VERTICAL ALIGNMENT OF THE NEW STEEL EXTRUSION AND CONCRETE HEADER SURFACES CONFORM TO THE EXISTING ROADWAY PROFILE

5 PROVISIONS SHALL BE MADE DURING CONCRETE REMOVAL TO PROTECT THE EXISTING REINFORCING STEEL FROM DAMAGE THE EXISTING REINFORCING STEEL SHALL BE COMPLETELY CLEANED, REALIGNED AND INCORPORATED INTO THE NEW CONSTRUCTION

6 THE COST OF REMOVING PORTIONS OF THE EXISTING SLAB WITHIN THE LIMITS SHOWN, COMPLETELY CLEANING EXISTING REINFORCING STEEL, CLASS "A" CONCRETE, EPOXY COATED REINFORCING STEEL, FORMING, AND ALL MISCELLANEOUS MATERIAL NECESSARY FOR CONSTRUCTING THE NEW SECTIONS AS SHOWN SHALL BE INCLUDED IN PRICE BID FOR ITEM NO 604-10 32, EXPANSION JOINT REPAIR, (TYPE "A") L F

7 NO 5 'A' BARS IN THE EXPANSION JOINT REPAIR AREA SHALL BE SPLICED USING MECHANICAL THREADED CONNECTORS SEE SIMILAR DETAIL AS SHOWN ON DWG NO BR-17-37 COST OF MECHANICAL THREADED CONNECTORS IN THE EXPANSION JOINT AREA SHALL BE PAID FOR UNDER ITEM NO 604-10 32, L F

DESIGNED BY _____ DATE _____
DRAWN BY C. Rogers DATE _____
SUPERVISED BY _____ DATE _____
CHECKED BY _____ DATE _____

317081

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAILS

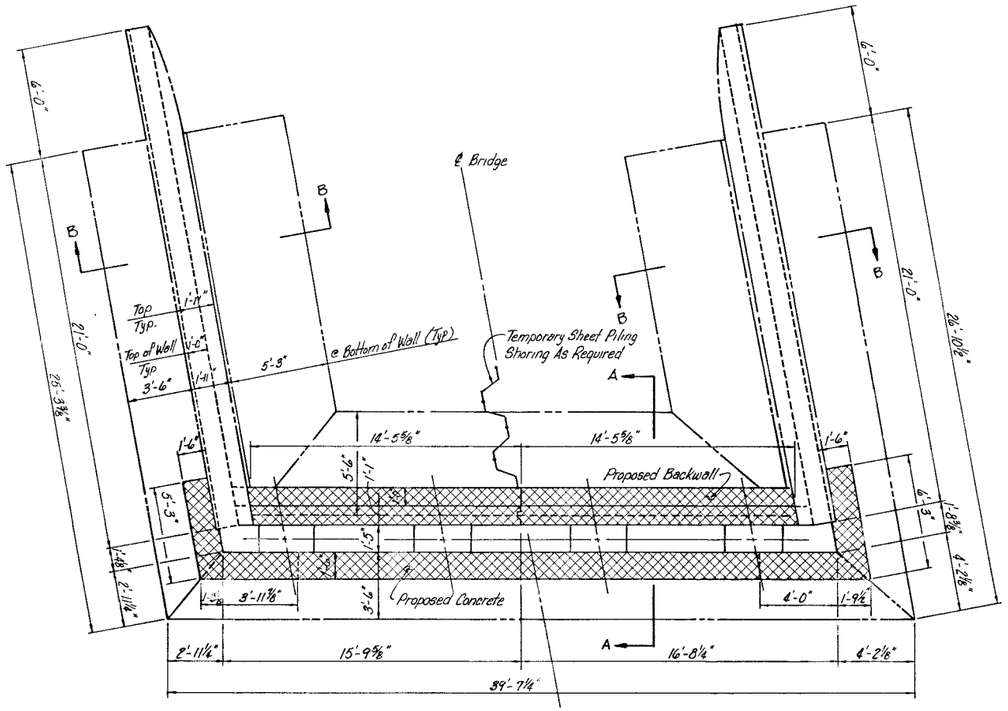
BRIDGE NO 75-1044-0 48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

BR-17-38

PROJECT NO	YEAR	SHEET NO
75001-4162-04	1995	

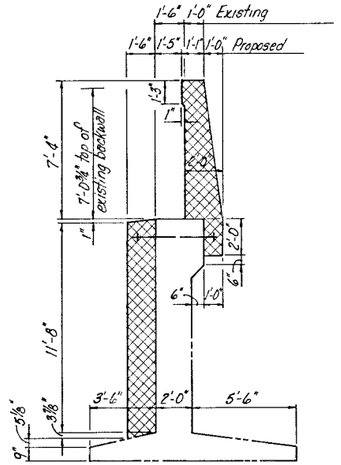
REVISIONS

NO	DATE	BY	BRIEF DESCRIPTION

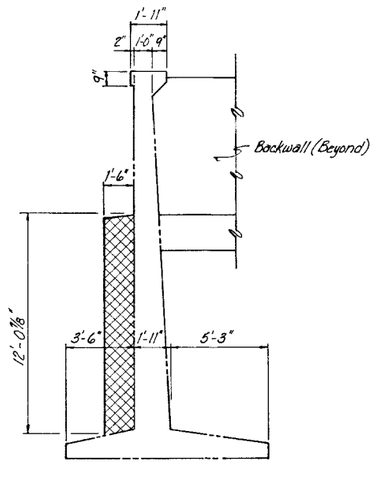


PLAN

ELEVATION



SECTION A-A



SECTION B-B

Notes

The cost of concrete for abutments shall be included in item no. 604-03.01, Class "A" Concrete (Bridges)

The cost of reinforcing steel shall be included in item no. 604-10.18, Reinforcing Steel (Repairs)

LEGEND

Indicates New Concrete

DESIGNED BY D Moss DATE
DRAWN BY C. Rogers DATE
SUPERVISED BY DATE
CHECKED BY DATE

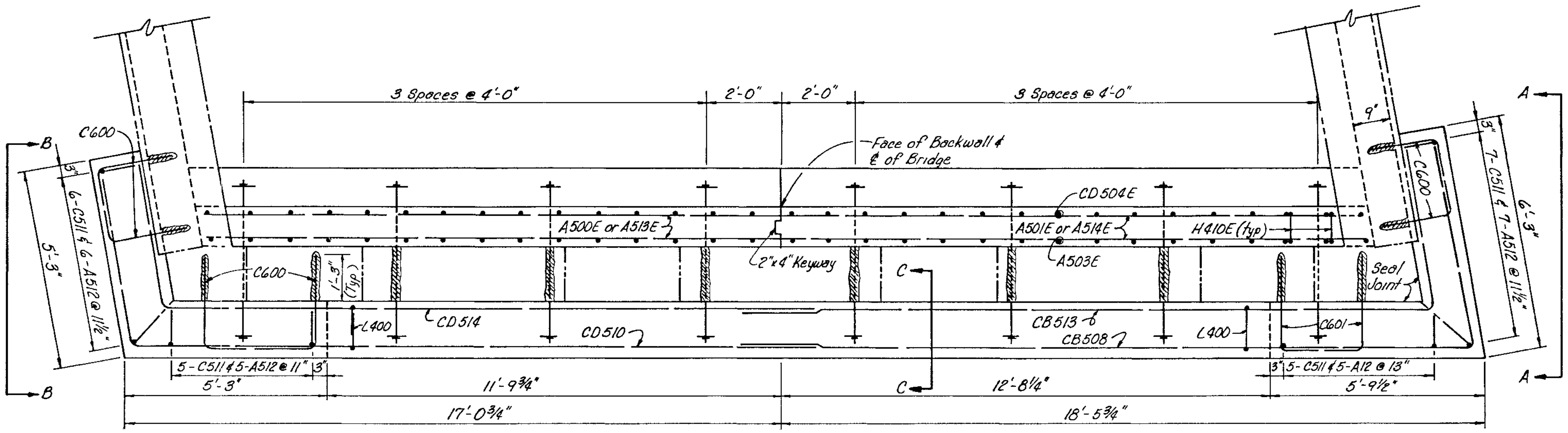
DANIEL K. MOSS REGISTERED ENGINEER No. 16470 STATE OF TENNESSEE 9/29/94

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

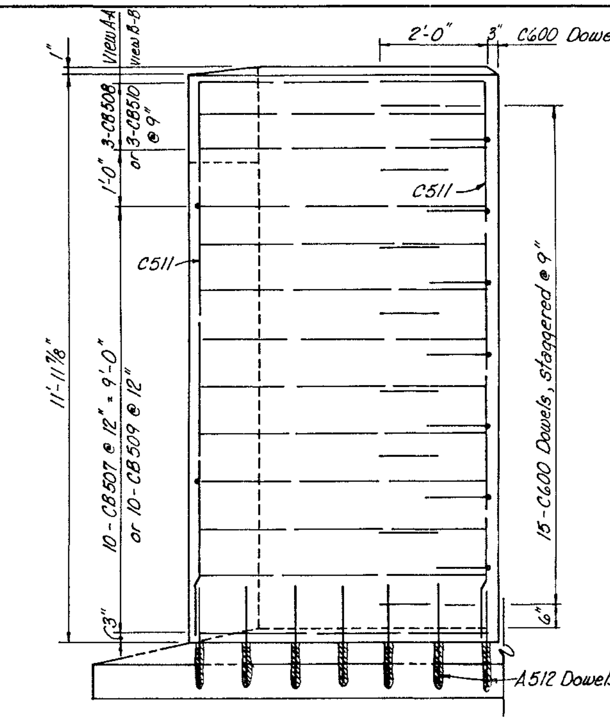
CONCRETE DETAILS ABUTMENTS 1 & 2

BRIDGE NO – 75-1044-0.48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

BR-17-39

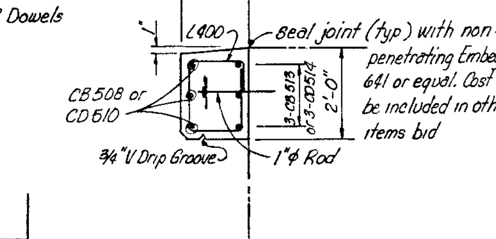


PARTIAL PLAN

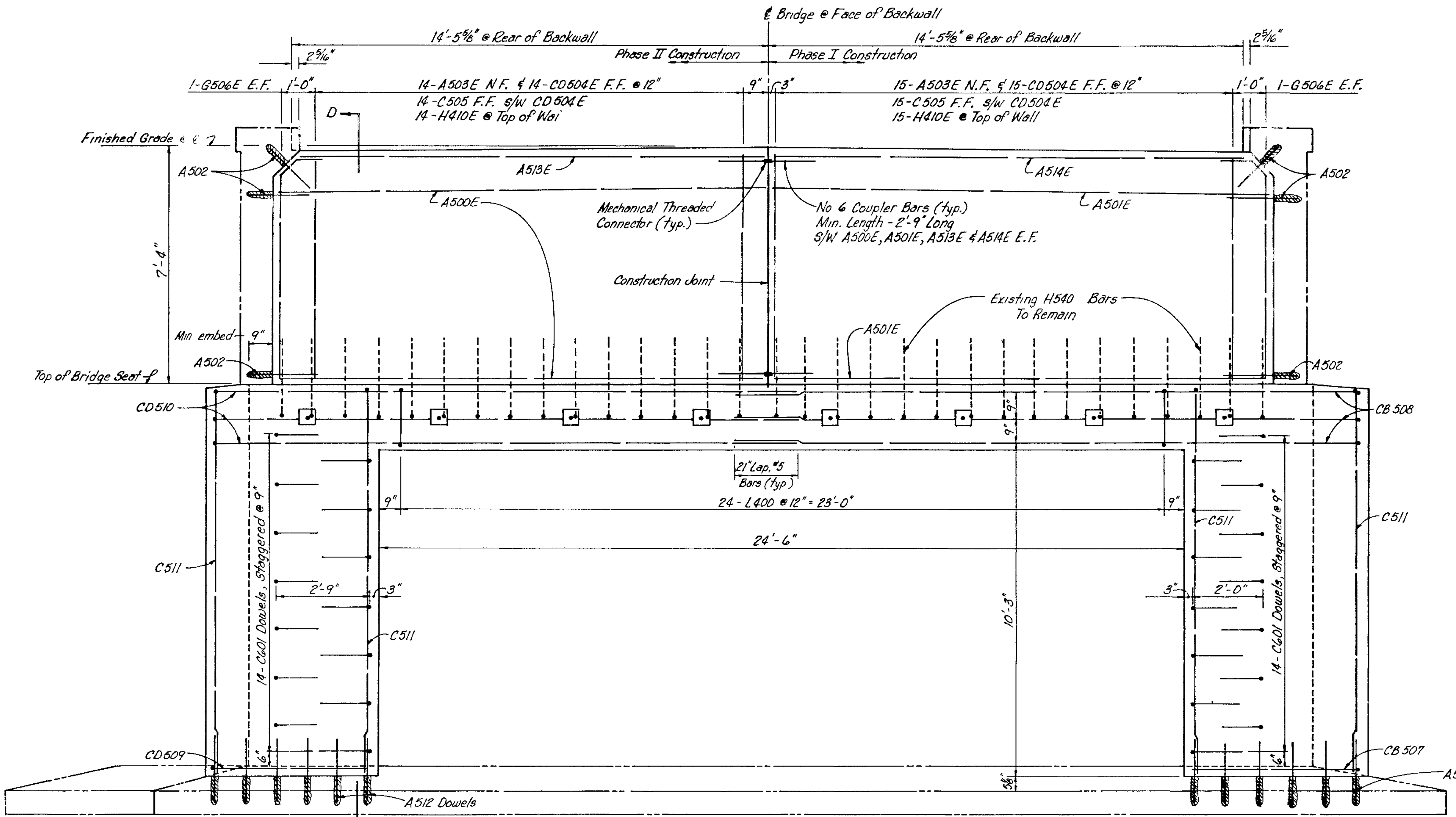


VIEW A-A

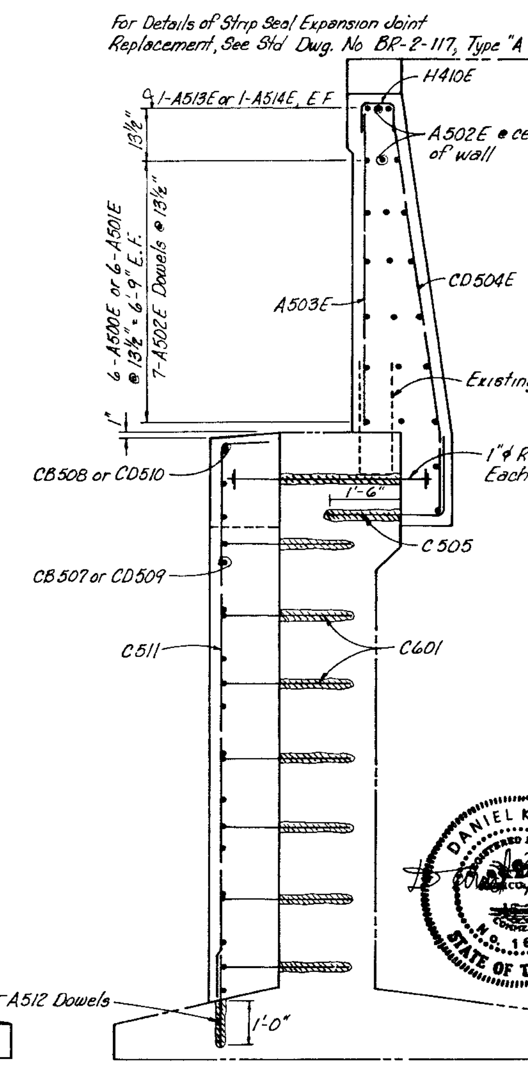
View B-B similar and as noted



PARTIAL SECTION C-C



PARTIAL ELEVATION



SECTION D-D

PROJECT NO.	YEAR	SHEET NO.
75001-4162-04	1995	

REVISIONS

NO	DATE	BY	BRIEF DESCRIPTION

Notes

Cost of concrete for abutments shall be included in item no. 604-03 01, Class "A" Concrete (Bridges).

Cost of reinforcing steel and mechanical couplers shall be included in item no 604-10 18, Reinforcing Steel (Repairs)

Holes for grouted bars shall be drilled with a high speed drill capable of drilling through existing reinforcing steel and concrete. All work shall meet with the full satisfaction of the Engineer.

DANIEL K MOSS
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 16,470
STATE OF TENNESSEE
[illegible] 9/29/94

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

REINFORCING DETAILS
ABUTMENTS 1&2

BRIDGE NO – 75 – 1044 – 0.48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

DESIGNED BY D. Moss DATE
DRAWN BY C. Rogers DATE
SUPERVISED BY DATE
CHECKED BY DATE

317891

BR-17-40

BILL OF STEEL

Abutments 1 & 2

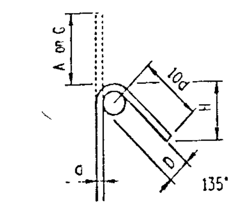
BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS A	B	C	D	LENGTH
L400	Top/Front of Abut.	4	48	1'-2"	1'-0"	1'-7"		6'-6"
H410E	Top of Backwall	4	58	0'-8"	1'-3"			3'-2"
A500E	Backwall	5	24	15'-0"				15'-0"
A501E	Backwall	5	24	15'-3"				15'-3"
A502E	Backwall (Dowels)	5	28	2'-0"				2'-0"
A503E	Backwall	5	58	7'-0"				7'-0"
CD504E	Backwall	5	58	7'-1"	1'-9"	0'-3"		8'-10"
C505E	Backwall (Dowels)	5	58	2'-3"	1'-9"			4'-0"
G506E	Backwall	5	8	6'-4"	1'-6"	0'-6"		8'-7"
CB507	Abutment Wall	5	20	5'-4"	5'-9"	1'-0"		11'-1"
CB508	Abutment Wall	5	6	19'-0"	5'-9"	1'-0"		24'-9"
CD509	Abutment Wall	5	20	4'-9"	4'-9"	0'-10"		9'-6"
CD510	Abutment Wall	5	6	18'-0"	4'-9"	0'-10"		22'-9"
C511	Abutment Wall	5	46	11'-6"	1'-8"			13'-6"
A512	Abut. Wall (Dowels)	5	46	2'-6"				2'-6"
A513E	Abutment Wall	5	4	14'-3"				14'-3"
A514E	Abutment Wall	5	4	14'-6"				14'-6"
C600	Abut. Wall (Dowels)	6	60	2'-0"	1'-0"			3'-0"
C601	Abut. Wall (Dowels)	6	56	2'-9"	1'-0"			3'-9"
	Coupler Bars	6	48	2'-9"				2'-9"
	Mechanical Couplers		24					

CONST. NO.

PROJECT NO.	YEAR	SHEET NO.
75001-4162-04	1995	

REVISIONS

NO	DATE	BY	BRIEF DESCRIPTION



BAR SIZE	D (IN.)	135° HOOK: HOOK A or G	H APPROX.
#3	1½	5	3½
#4	2	6½	4½
#5	2½	8	5½
#6	4½	10¼	6½
#7	5¼	1-0¼	7¼
#8	6	1-2¼	9

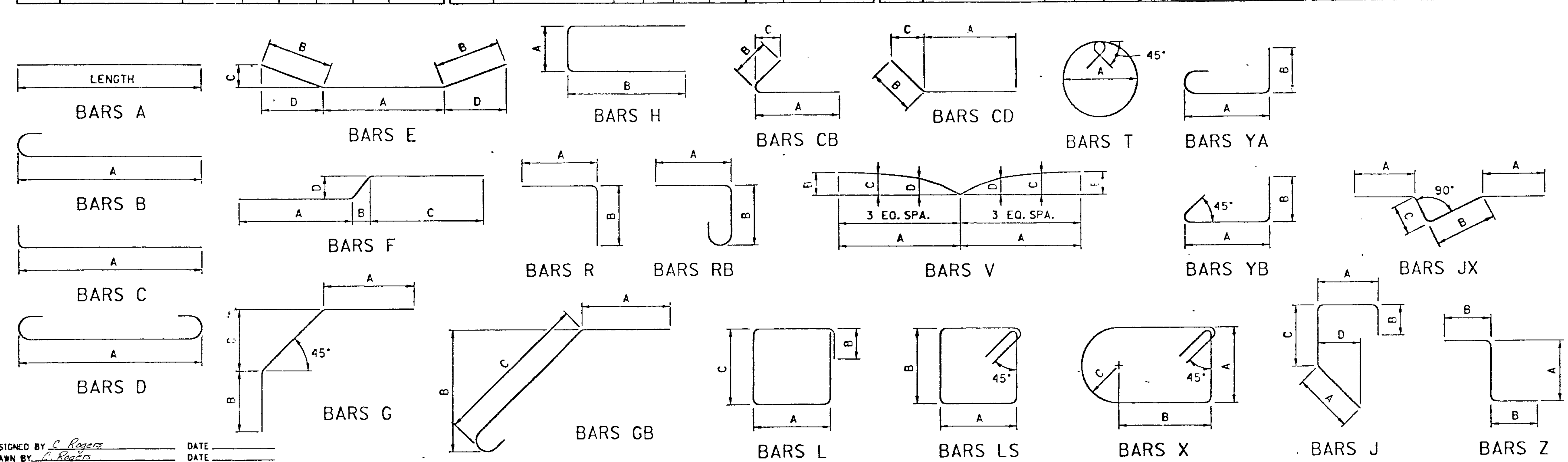
135° SEISMIC STIRRUP/TIE HOOK DIMENSIONS (ALL GRADES)

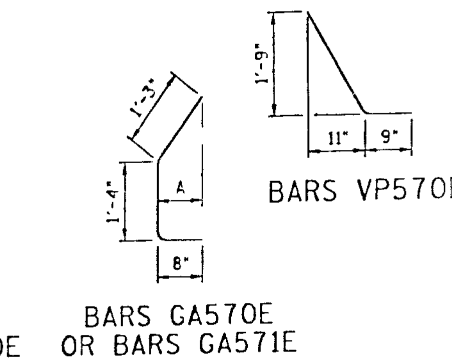
REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE OUTSIDE TO OUTSIDE OF BAR. STANDARD C.R.S.I. HOOK DETAILS SHALL APPLY, EXCEPT AS NOTED.

NOTE: THE SUFFIX E, FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT.





STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
BILL OF STEEL

BRIDGE NO – 75–1044–0.48
EPPS MILL ROAD
OVER I-24
RUTHERFORD COUNTY
1995

DANIEL K MOSS
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 16,470
STATE OF TENNESSEE

[illegible]
9/29/94

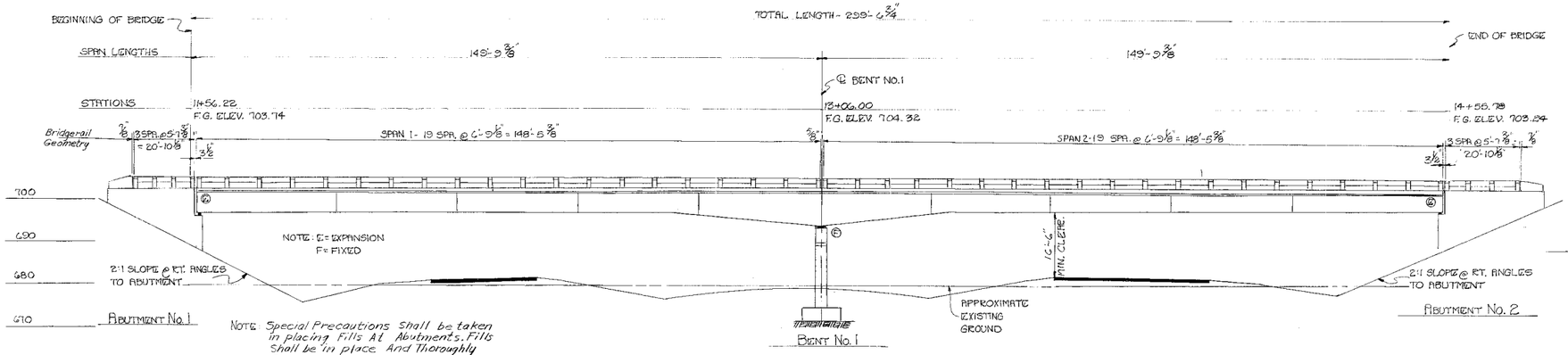
DESIGNED BY C. Rogers DATE
DRAWN BY C. Rogers DATE
SUPERVISED BY DATE
CHECKED BY DATE

BR-17-41

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	I-24(1)83	19		

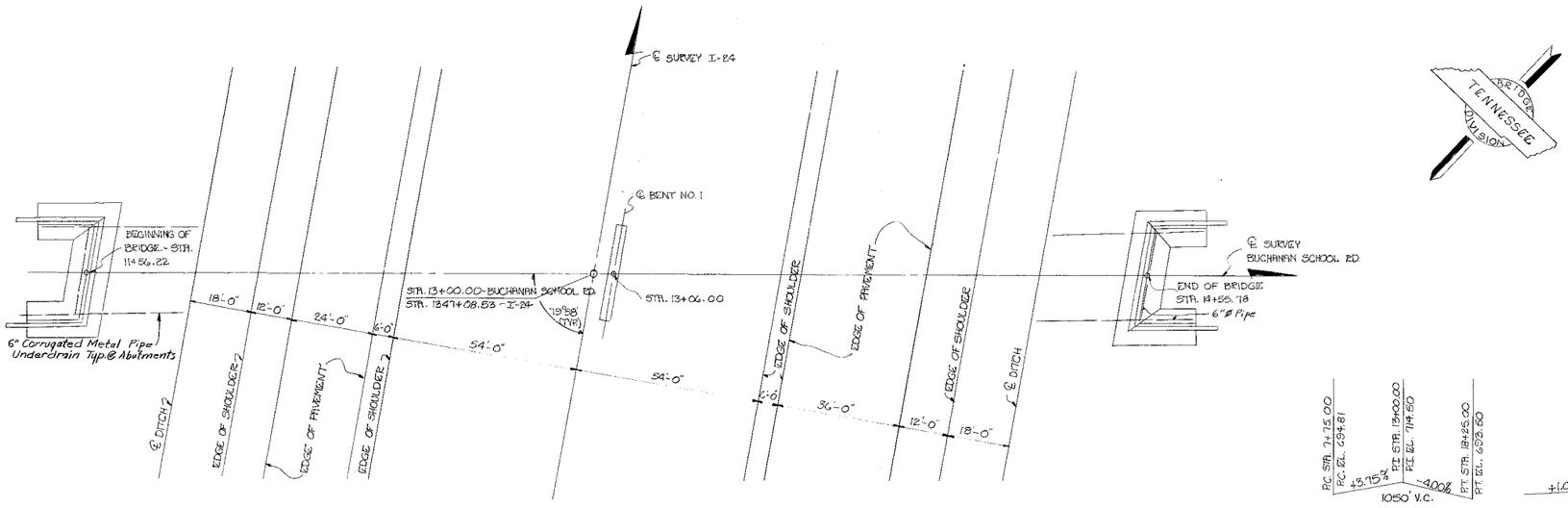
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-23-68	Jett	Notes & Quant.
2	5-27-68	Litton	Quantities



NOTE: *Special Precautions Shall be taken in placing Fills At Abutments. Fills Shall be in place And Thoroughly Compacted Before Excavation For Abutment.*

ELEVATION AT RIGHT ANGLES TO BUCHANAN SCHOOL ROAD

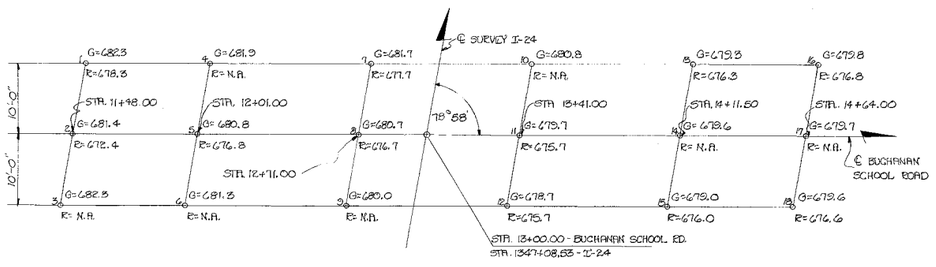


PLAN

BUCHANAN SCHOOL ROAD I-24

SKETCH SHOWING GRADES

NOTE: GRADES SHOWN, ARE BASED ON FINISHED GRADE.



SOUNDING SKETCH

G = GROUND
R = ROCK
N.A. = NOT AVAILABLE

ESTIMATED QUANTITIES ⚠1 ⚠2

ITEM	EXCAVATION CU. YDS. DRY	EXCAVATION CU. YDS. ROCK	CONCRETE CLASS 'A' CU. YDS.③	REINFORCING STEEL LBS.	STEEL STRUCTURES	CONCRETE BRIDGERAIL LIN. FT.	LINSEED OIL TREATMENT SQ. YDS.	ROCK DRILLING LIN. FT.
SUPERSTRUCTURE			238.2	58,721				
ABUTMENT NO.1	252		114.0	18,055				
BENT NO. 1	55	42	42.9	7689				
ABUTMENT NO.2	252		114.0	18,055				
TOTALS	559	42	509.1	102,520	LUMP SUM④	678	1446	6

⚠1 NOTE: COST OF 6" ø PERFORATED CORRUGATED METAL 18 GAUGE PIPE UNDERDRAIN & POROUS BACKFILL MATERIAL TO BE INCLUDED IN THE COST OF ITEMS BID ON.

③: CAST-IN-PLACE

⚠2 ④: LUMP SUM: TOTAL ESTIMATED WEIGHT OF STRUCTURAL STEEL = 360,426 LBS, INCLUDING SHEAR CONNECTORS, BOLTS, LEAD R's

3. SPECIAL PROVISIONS ON LINSEED OIL TREATMENT DOES NOT APPLY TO BENT CAPS.
4. EXCAVATION BASED ON LOWER ROAD PROFILE

GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD & BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS.
LOADING: H S20-44
CONCRETE: TO BE CLASS "A"
REINFORCING STEEL: TO BE INTERMEDIATE OR HARD GRADE, STANDARD HOOK DETAILS AS RECOMMENDED BY C.R.S.I. SHALL APPLY UNLESS OTHERWISE NOTED.
DESIGN SPECIFICATIONS: A.A.S.H.O 1965
STRUCTURAL STEEL: SEE NOTES ON DWG. K-70-90
WELDING: SEE SPECIAL PROVISION REGARDING WELDED STRUCTURES.
HIGH STRENGTH BOLTS: SEE NOTES ON DWG. K-70-90

RADIOGRAPHIC AND MAGNETIC PARTICLE INSPECTION: SEE SPECIAL PROVISIONS REGARDING WELDED STRUCTURES & NOTES ON DWG. K-70-91.
PAINT: BASIC LEAD SILICO CHROMATE. SEE SPECIAL PROVISIONS REGARDING SECTION 152 STEEL STRUCTURES (PAINTING).
SHOP INSPECTION OF STEEL STRUCTURES: THE CONTRACTOR AS SOON AS HE RECEIVES HIS WORK ORDERS, SHALL NOTIFY THE BRIDGE ENGINEER, IN WRITING, WHO WILL SUPPLY THE STRUCTURAL STEEL & THE LOCATION OF THE PLANT WHERE IT WILL BE FABRICATED.
APPROVAL OF MATERIALS: NO FABRICATION SHALL BE STARTED UNTIL MATERIALS INVOLVED HAVE BEEN APPROVED BY THE TENNESSEE HIGHWAY DIVISION OF TESTS.
STUD SHEAR CONNECTORS: SEE AASHO SPECIFICATIONS 1.7.98, 1.7.101, 2.10.3A & 2.10.23.
IDENTITY OF MAIN MATERIALS: HEAT NOS. ON MAIN MATERIALS MUST BE PRESERVED OR TRANSFERRED DURING FABRICATION & SHOP PAINTING SO THAT THEY WILL BE INDENTIFIABLE IN THE FIELD.

BRIDGERAIL NOTE:

BUILD BRIDGERAIL ACCORDING TO STANDARD DWG. K-38-151, & USE BRIDGERAIL GEOMETRY AS SHOWN IN ELEVATION THIS DWG. ALSO USE WINGPOST AS SHOWN ON DWG. K-70-93.

FOUNDATION NOTE:

AFTER EXCAVATION TO ROCK FOR FOOTINGS HAS BEEN COMPLETED, HOLES 6 FT. DEEP SHALL BE DRILLED @ POINTS DESIGNATED BY THE ENGINEER. FROM THE RESULTS OBTAINED, THE ENGINEER SHALL DETERMINE THE FINAL FOOTING ELEVATION. NO SUBSTRUCTURE STEEL SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN ESTABLISHED.

LIST OF DRAWINGS

ESTIMATED 1985 A.D.T: 200

30'-0 ROADWAY WITH 9' BRUSH CURBS

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

LAYOUT OF BRIDGE
BUCHANAN SCHOOL ROAD OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY
1968

DESIGNED BY LITTON DATE
DRAWN BY SUMMERS DATE
TRACED BY DATE
CHECKED BY Litton DATE

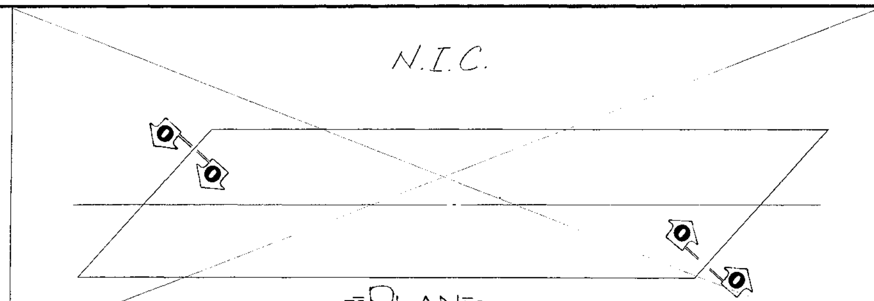
CORRECT — BRIDGE ENGINEER
APPROVED — STATE HIGHWAY ENGINEER

K-70-89

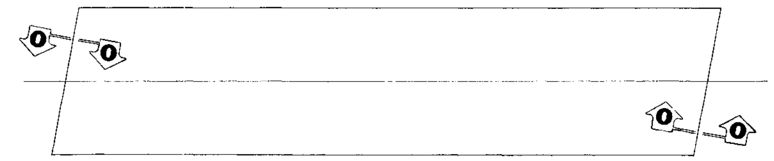
PROJECT NO.	YEAR	SHEET NO.
I-24-1(031)79	1976	3

REVISIONS

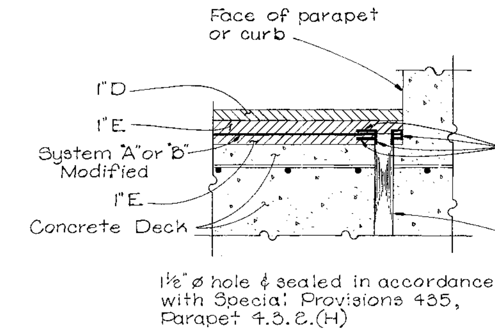
NO.	DATE	BY	BRIEF DESCRIPTION
	6-18-76		COMPLETED DRAWING



PLAN
(State Route 10 Over Interstate 24)

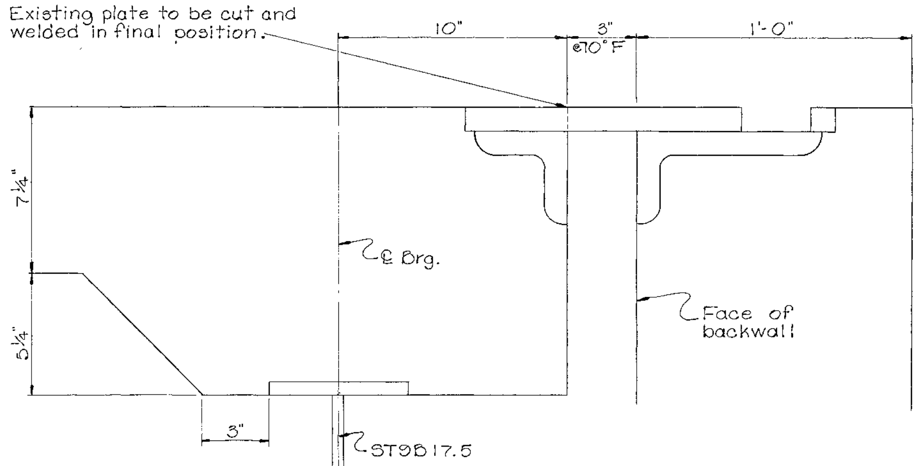


PLAN
(Buchanan School Road Over Interstate 24)

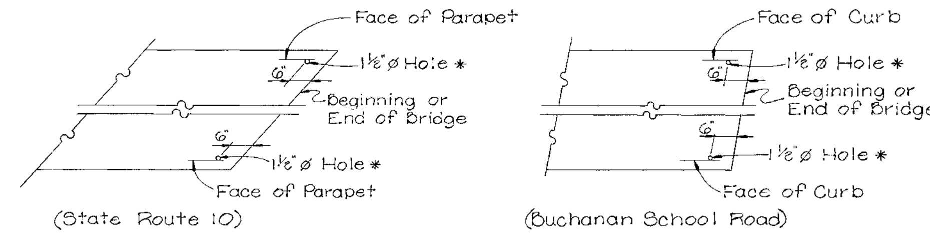


● Mastic, as recommended by manufacturer of membrance. See Special Provision 435, Paragraphs 4.3.2.(C) and 4.3.2.(D)

DECK SEALANT DETAILS



DETAIL OF EXISTING EXPANSION JOINT



PART-SLAB PLAN
* Put these at low points on slab

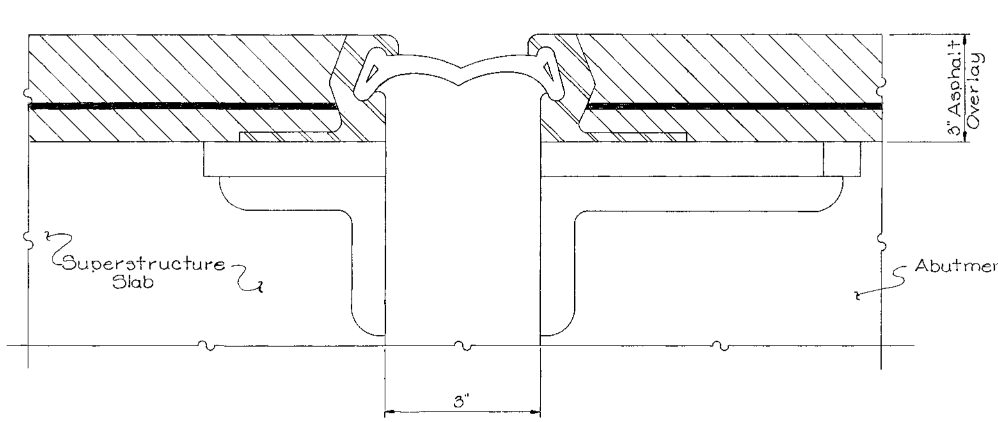
GENERAL NOTES

SPECIFICATIONS: Standard Road and Bridge Specifications of the Tennessee Department of Highways. (1968 Edition)

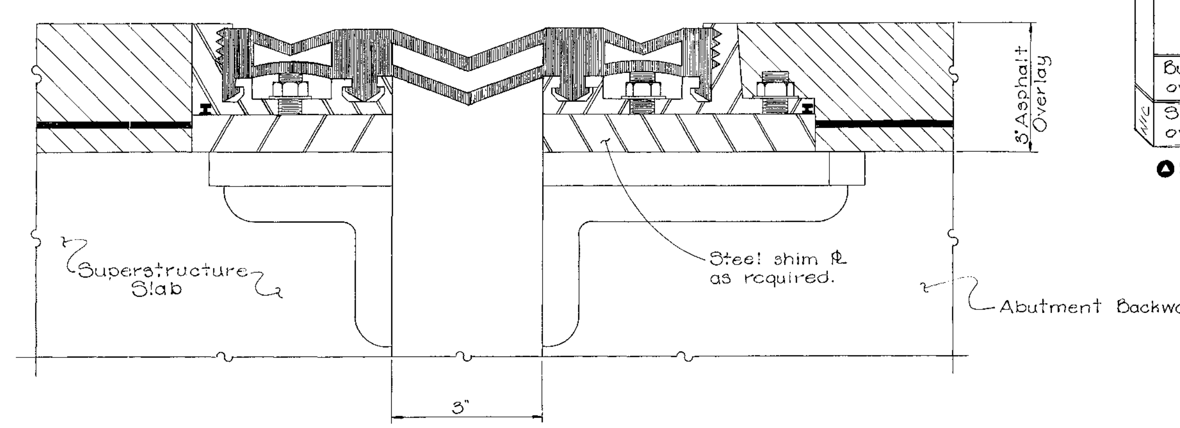
BRIDGE DECK SEALANT: The bridge deck and reinforced approach slab shall be sealed in accordance with Special Provision No. 435 System A or B (Modified) Special Provision Regarding Bridge Deck Sealant, dated April 1, 1976. Deck Sealant shall be paid for under a roadway item. (3,800 S.Y. Required).

LIST OF DRAWINGS

LIST OF DRAWINGS		DWG. NO'S.
	Bridge Expansion Joint & Deck Sealant Details	K-70-89A
Reference Drawings	Layout of Bridge - Buchanan School Rd. over I-24	K-70-89
	Superstructure - Buchanan School Rd. over I-24	K-70-90
	~~Layout of Bridge - State Route 10 over I-24~~ N.I.C.	~~K-83-137~~
	~~Superstructure - State Route 10 over I-24~~	~~K-83-138~~



SECTION O-O
(Showing Watson Bowman Strip Type SB300)



SECTION O-O
(Showing D.S. Brown DeElastoflex MT300)

NOTE: Old North Onflex 45 may be substituted for either the Watson Bowman Strip Type SB300 or the D.S. Brown DeElastoflex MT300.

ESTIMATED QUANTITIES

Item No.	▲ 920-01.11	Sys. "A" 604-03.12 Sys. "B" 604-03.13
Item	Roadway Expansion Device Lin. Ft.	Bridge Deck Sealant System "A" or "B" (Mod.) S.Y.
Buchanan School Rd. over I-24	58	962
N.I.C. ~~State Route 10 over I-24~~	~~202~~	~~2,838~~

▲ Note: Cost of cutting steel plates, welding in new position, furnishing and installing Watson Bowman's Strip Type SB300, D.S. Brown DeElastoflex MT300, or Old North Onflex 45, furnishing and installing steel shim plates as required to be included in cost of item 920-01.11.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

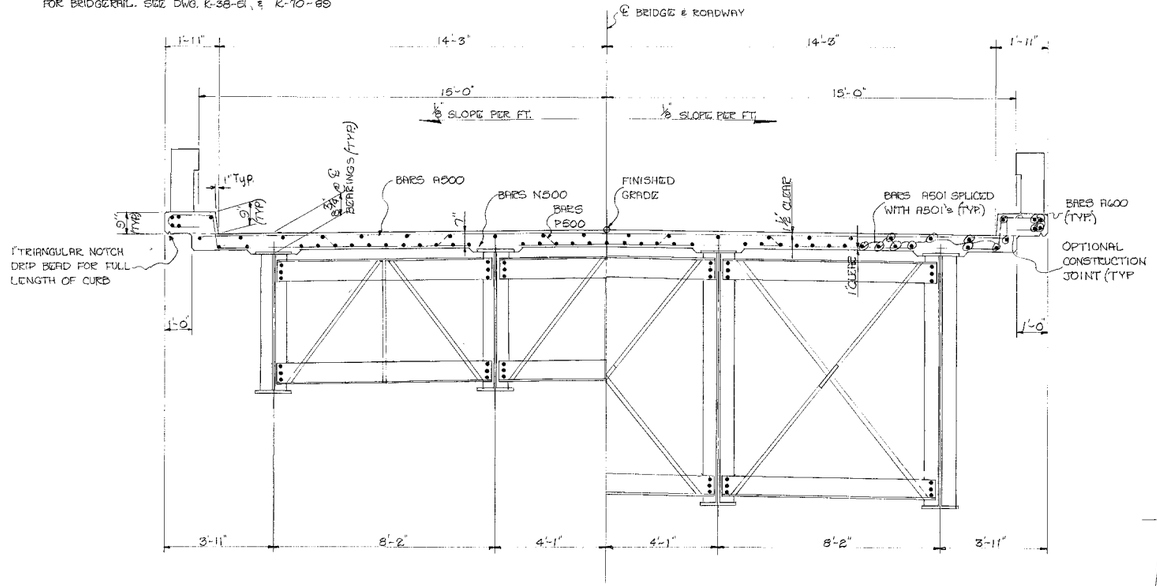
BRIDGE EXPANSION JOINT AND DECK SEALANT DETAILS
PROJECT NO. 75001-8130-44
RUTHERFORD COUNTY
1976

CORRECT [illegible]
ENGINEER OF STRUCTURES
APPROVED [illegible]
DIRECTOR OF HIGHWAYS

DESIGNED BY ______ DATE ______
DRAWN BY Jimmy "Smokey" Mason DATE June -76
SUPERVISED BY ______ DATE ______
CHECKED BY ______ DATE ______

K-70-89A

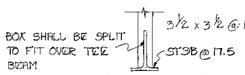
NOTE: WHEN POURING CURBS, PROVISIONS SHALL BE MADE FOR SETTING STEEL FOR BRIDGE RAIL. SEE DWG. K-38-61 & K-70-89



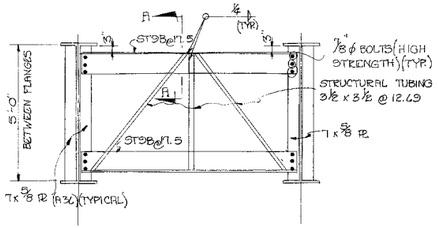
TYPICAL END DIAPHRAGM

TYPICAL DIAPHRAGM AT SUPPORT

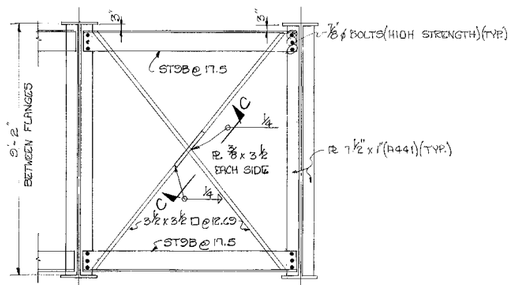
TYPICAL CROSS SECTION ⚠1



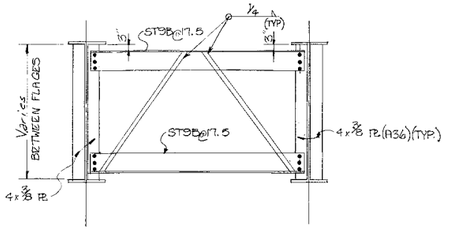
SECTION A-A



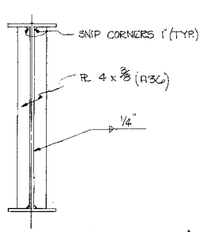
DETAILS-END DIAPHRAGMS ⚠1



DETAILS-SUPPORT DIAPHRAGM ⚠1

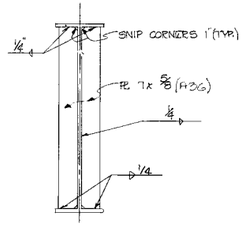


DETAILS-INTERMEDIATE DIAPHRAGM ⚠1

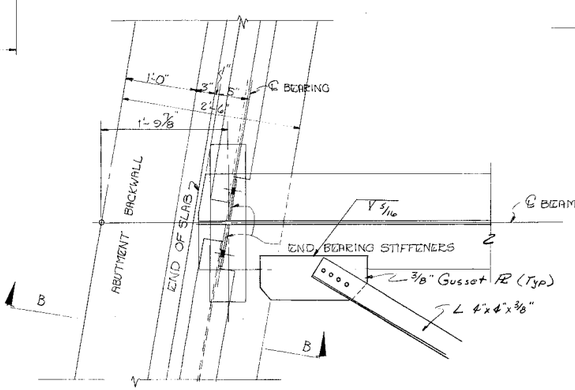


TYPICAL INTERMEDIATE STIFFENER ⚠1

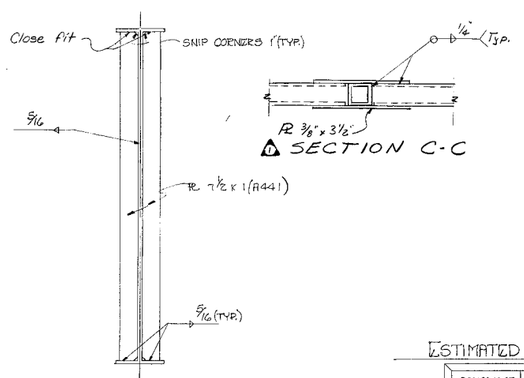
NOTE: SEE DWG. K-70-90 FOR STIFFENER WELDING & LOCATION. A CLOSE FIT TO FLANGE IS REQUIRED AT END NOT WELDED.



TYPICAL END STIFFENER ⚠1

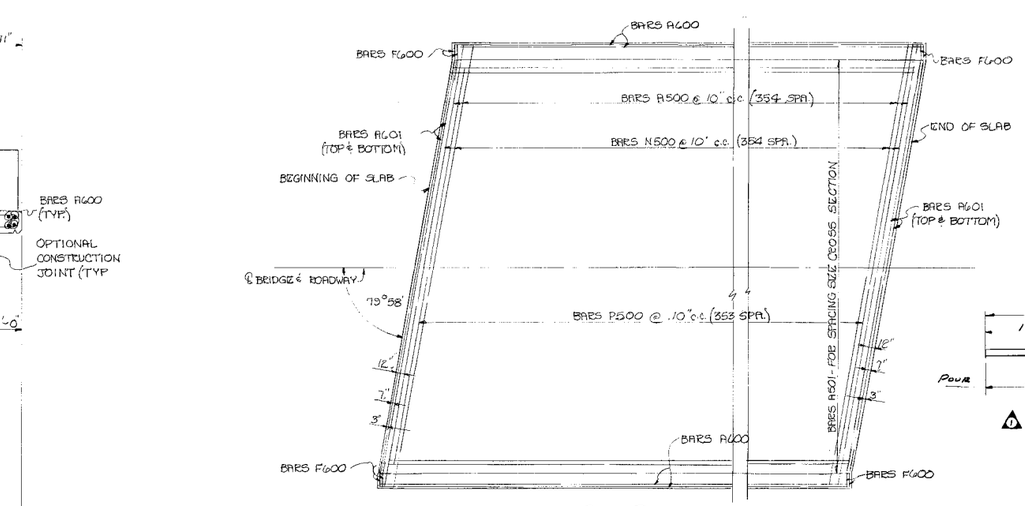


PLAN END DIAPHRAGM ⚠1

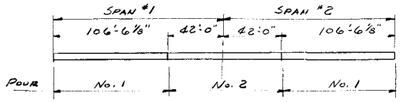


⚠1 SECTION C-C

TYPICAL SUPPORT STIFFENER ⚠1



SLAB PLAN



⚠1 POURING SEQUENCE

NOTES:

PAINT: BASIC LEAD SILICA CHROMATE. SEE SPECIAL PROVISIONS REGARDING SECTION 132 STEEL STRUCTURES (PAINTING). NO PAINT SHALL BE APPLIED TO THE TOP SURFACES OF THE TOP FLANGES. GIRDER SPLICES AND OTHER FIELD CONNECTIONS SHALL BE CLEANED AND PRIMED BEFORE FORMING SLAB.

CONCRETE DECK: THE CONCRETE DECK SHALL NOT BE POURED UNTIL ALL STRUCTURAL STEEL IS ERECTED AND ALL BOLTING IS COMPLETE.

CAMBER: GIRDERS SHALL BE CAMBERED TO COMPENSATE FOR DEAD LOAD DEFLECTION AND VERTICAL CURVE. SEE DETAILS ON DWG. NO. K-70-91 FOR DEAD LOAD DEFLECTION DIAGRAM.

BEARING: SEE DRAWING NO. K-70-91

ROADWAY EXPANSION DEVICES: SEE DRAWING NO. K-56-34

FOR OTHER STRUCTURAL STEEL DETAILS, SEE DRAWING K-70-91

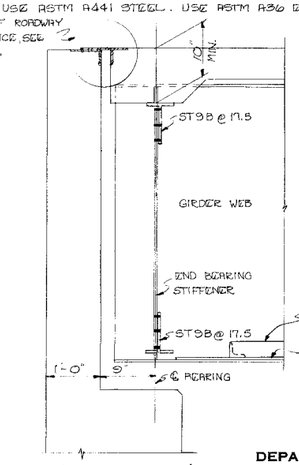
⚠1 RADIOGRAPHIC & MAGNETIC PARTICAL INSPECTION: SEE SPECIAL PROVISION REGARDING WELDED GIRDER STRUCTURES. THE COST OF ALL RADIOGRAPHIC INSPECTION IS TO BE INCLUDED IN THE PRICE BID FOR STRUCTURAL STEEL.

FOR GENERAL NOTES SEE DWG. K-70-89

FIELD CONNECTIONS SHALL BE ⅞" HIGH TENSILE STRENGTH BOLTS ASTM-A325 UNLESS OTHERWISE SHOWN. SEE AASHO SPECS., ART. 2.10.20. ALL FIELD CONNECTIONS ARE FRICTION TYPE.

STRUCTURAL STEEL TO BE AS FOLLOWS: FOR FLANGES, WEB AND BEARING STIFFENERS @ HAUNCH REGION USE ASTM A441 STEEL. USE ASTM A36 ELSE WHERE.

FOR DETAILS OF ROADWAY EXPANSION DEVICE, SEE DWG. K-56-34.



SECTION B-B ⚠1

⚠1 ADDITIONAL SHOP SPLICE NOTE

Shop splices necessary due to length or size of material involved may be located by the fabricator, subject to approval by the Engineer.

ESTIMATED QUANTITIES ⚠1

CONCRETE CLASS "A" CU. YDS.	REINFORCING STEEL LBS.
238.2	58,721

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	124(7)83	19		

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
⚠1	2-26-68	Jett	Welds Notes, Details & Quant. Weld Sizes & Weld Symbols

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

SUPERSTRUCTURE
BUCHANAN SCHOOL ROAD OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY
1968

DESIGNED BY LITTON DATE
DRAWN BY SUMMERS DATE
TRACED BY DATE
CHECKED BY LITTON DATE

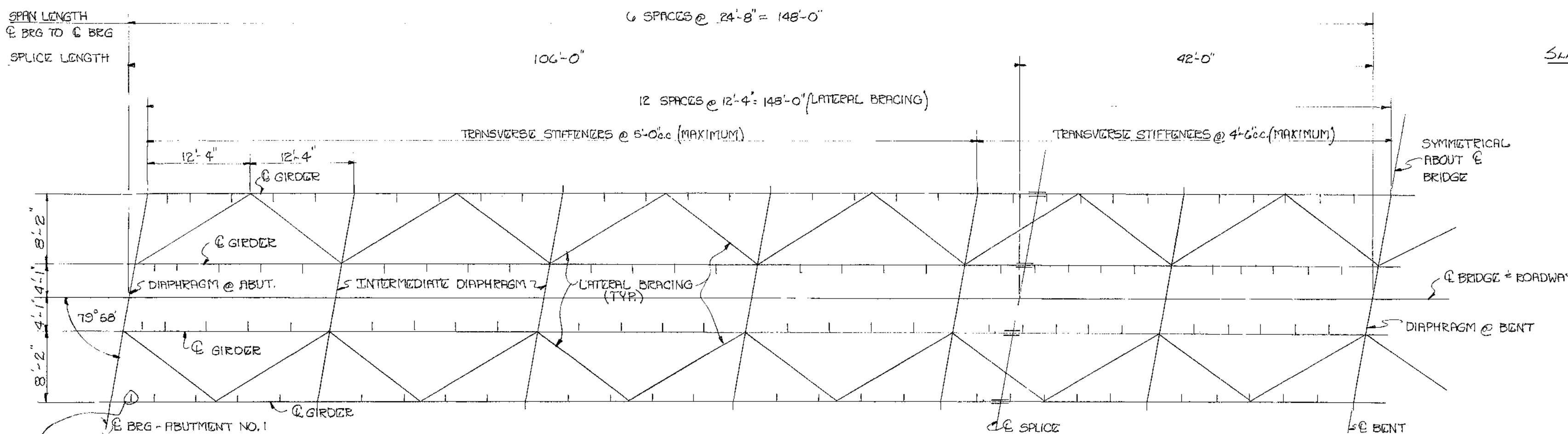
CORRECT _____ BRIDGE ENGINEER
APPROVED _____ STATE HIGHWAY ENGINEER

K-70-90

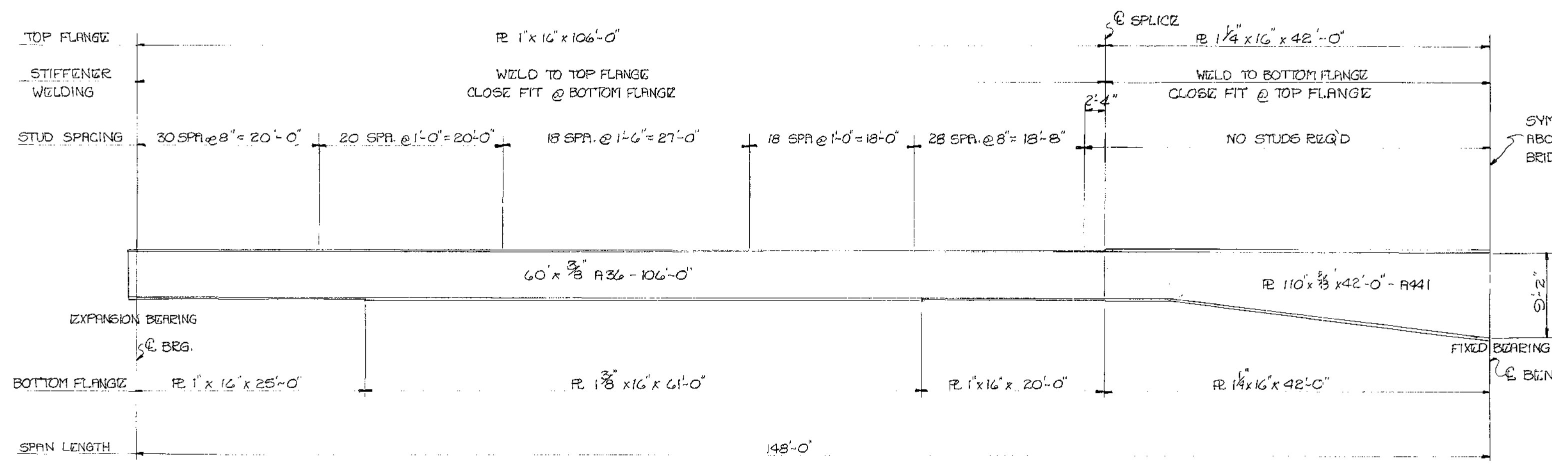
FED ROAD DIST NO	STATE	FED AID PROJ NO.	FISCAL YEAR	SHEET NO	TOTAL SHEETS
3	TENN	I-24-1( )183	19		

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-26-68	Jett	Notes, Details & Table
			Stiffener Added & Symbols Change

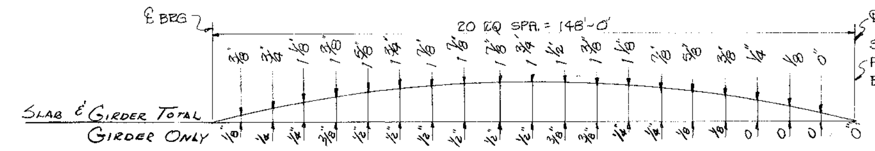


FRAMING PLAN (1)



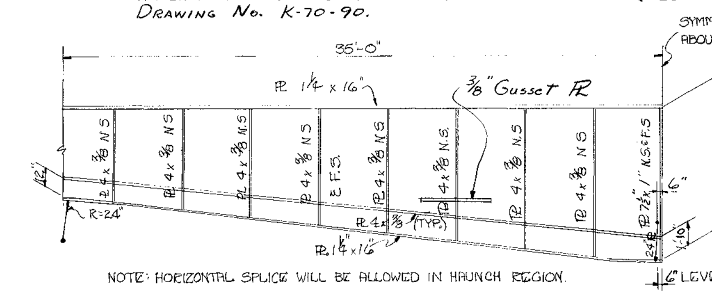
TYPICAL GIRDER ELEVATION - SAME FOR ALL GIRDERS (1)

NOTE: STIFFENERS NOT SHOWN
NOTE: STIFFENER @ OUTSIDE OF FACIA GIRDERS AND BEARING STIFFENERS TO BE VERTICAL.



DEAD LOAD DEFLECTION DUE TO SLAB & GIRDER (1)

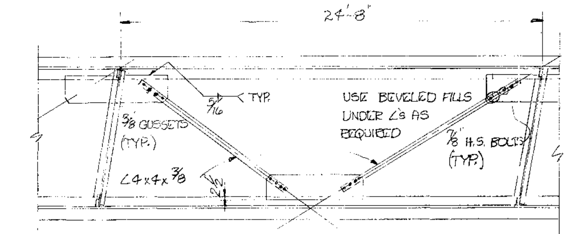
NOTE: SEE CAMBER NOTE ON DWG K-70-90. CAMBER ALL GIRDERS SAME.
NOTE: POURS SHALL BE MADE IN NUMERICAL SEQUENCE. POURS WITH THE SAME NUMBER DESIGNATION MAY BE MADE SIMULTANEOUSLY. (SEE DRAWING No. K-70-90.



NOTE: HORIZONTAL SPLICE WILL BE ALLOWED IN HAUNCH REGION.

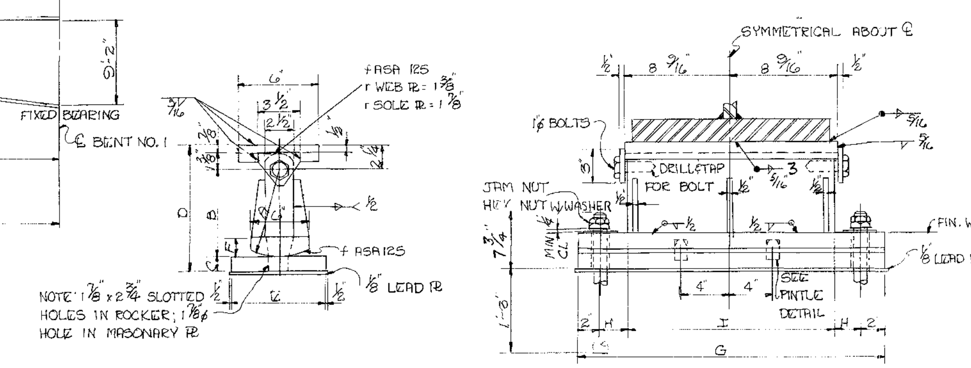
HAUNCH DETAIL (1)

NOTE: VIEWING INSIDE OF GIRDERS, LATERAL BRACING NOT SHOWN, TYPICAL FOR ALL GIRDERS.
NOTE: N.S. = NEAR SIDE
F.S. = FAR SIDE



TYPICAL LATERAL DETAILS (1)

SEE EXCEPTION BELOW



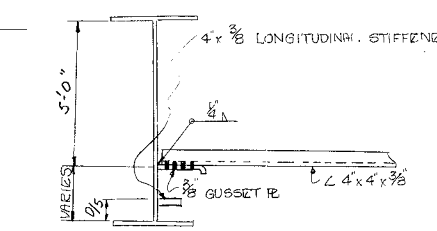
NOTE: 1⅞" x 2¾" SLOTTED HOLES IN ROCKER; 1⅞ϕ HOLE IN MASONARY PL

EXPANSION BEARING (1)

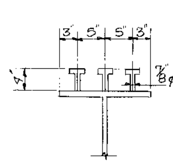
8 REQ'D

DIMENSIONS

A	7"
B	7"
C	2"
D	11¼"
E	6"
F	2"
G	2'-2"
H	2½"
I	1'-5"



SECTION A-A (1)

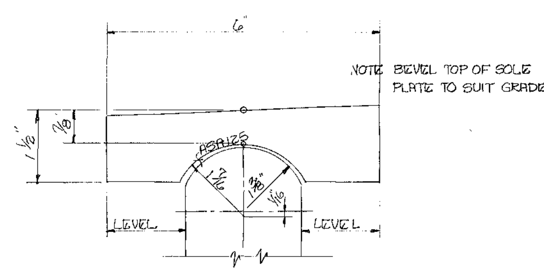


STUD DETAIL (1)

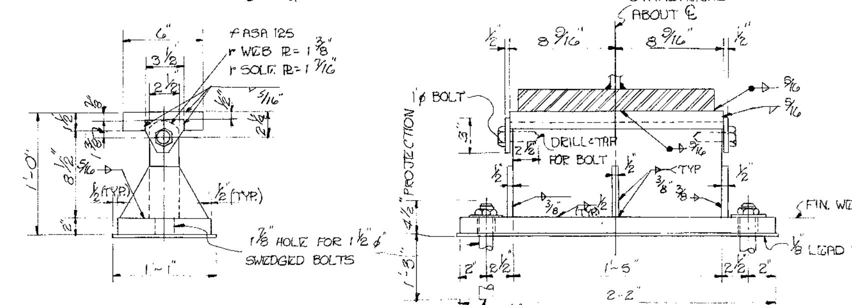
NOTE: STUDS SHALL BE PLACED IN SETS OF 3 AND SPACED AS SHOWN THIS SHEET. STUDS SHALL BE SOLID OR GRANULAR FLUXED AND AUTOMATICALLY END WELDED TO THE BEAM

MATERIAL THICKNESS IN.	MIN. SIZE FILLET WELD IN.
TO ¾ INCLUDED	¼"
OVER ¾ TO 1½	5/16
OVER 1½ TO 2¼	3/8
OVER 2¼ TO 6	½

TABLE FOR GIRDER WELDING (1)

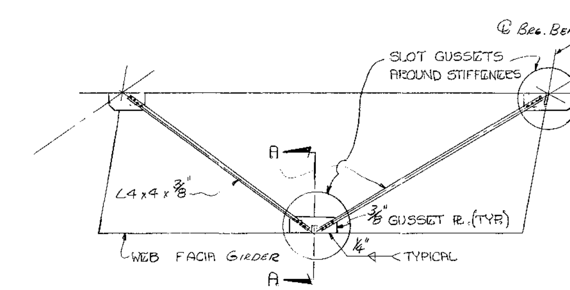


TOP BEARING DETAIL



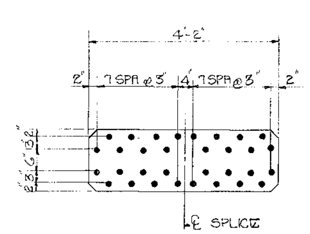
FIXED BEARING (1)

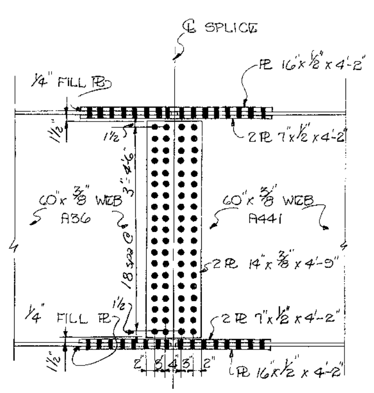
4 REQ'D



LATERAL DETAILS (1)

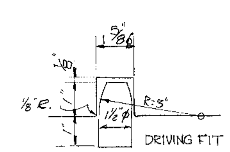
For BAYS ADJACENT TO BENT ONLY



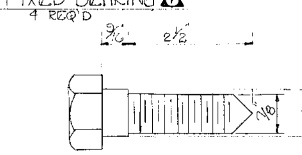


SPLICE DETAIL (1)

NOTE: HOLES TO BE SUB-PUNCHED OR SUB-DRILLED ¼" SMALLER, REAMED TO SIZE AND MATCHED WHILE ASSEMBLED IN THE SHOP. USE FILL PLs AS REQ'D.



PINTLE DETAIL (1)



BOLT DETAIL

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

STRUCTURAL STEEL DETAILS
BUCHANAN SCHOOL ROAD OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY
1968

DESIGNED BY LITTON DATE
DRAWN BY SUMMERS DATE
TRACED BY DATE
CHECKED BY LITTON DATE

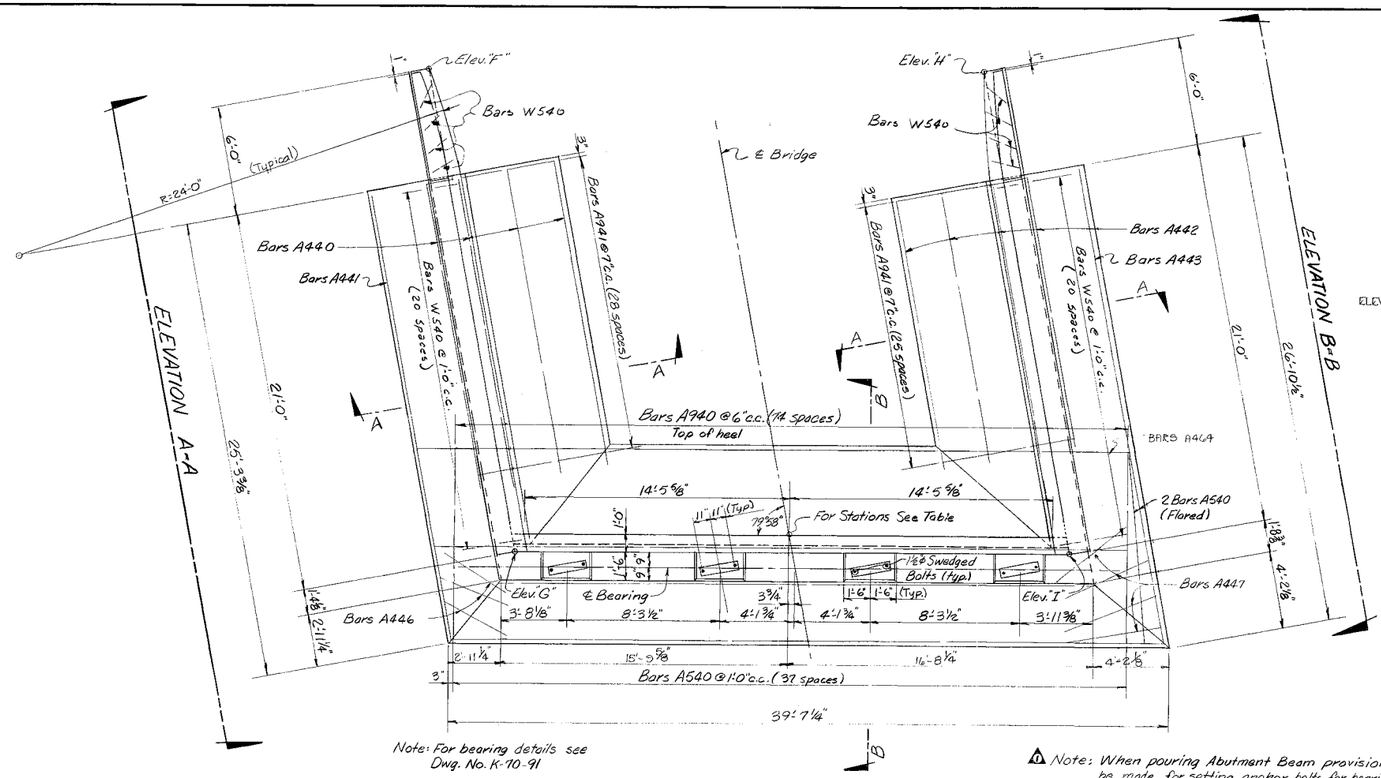
CORRECT [signature] BRIDGE ENGINEER
APPROVED [signature] STATE HIGHWAY ENGINEER

K-70-91

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	I-24-1( )83	19		

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-26-68	Jeff	Reinf. & Quantities, Mk's & Bolt projection.
2	5-27-68	Litton	Estimated Quantities



ESTIMATED QUANTITIES

Item	Concrete Class 'A' Cu. Yds.	Reinforcing Steel Lbs.
Abut. No.1	114	18,055 ① ②
Abut. No.2	114	18,055 ① ②

① 3-5/8"ø x 7½" A307 ANCHOR BOLTS WITH HEX NUTS AND WASHER REQ'D EACH WING. (GALVANIZED TO ASTM A153.)

TABLE OF STATIONS & ELEVATIONS

Item	Stations	Elevations "A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	"K"
Abut. No.1.	1+56.22	696.85	696.95	696.96	696.89	696.68	704.04	704.32	704.10	704.37	703.74	683.43
Abut. No.2	14+55.78	696.34	696.45	696.46	696.40	696.17	703.40	703.78	703.48	703.85	703.24	682.92

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

ABUTMENTS No.1&2
BUCHANAN SCHOOL ROAD
OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY
1968

DESIGNED BY Ken Litton DATE
DRAWN BY Jim Fields DATE 1-68
TRACED BY DATE
CHECKED BY K.L. DATE

CORRECT
BRIDGE ENGINEER
APPROVED
STATE HIGHWAY ENGINEER

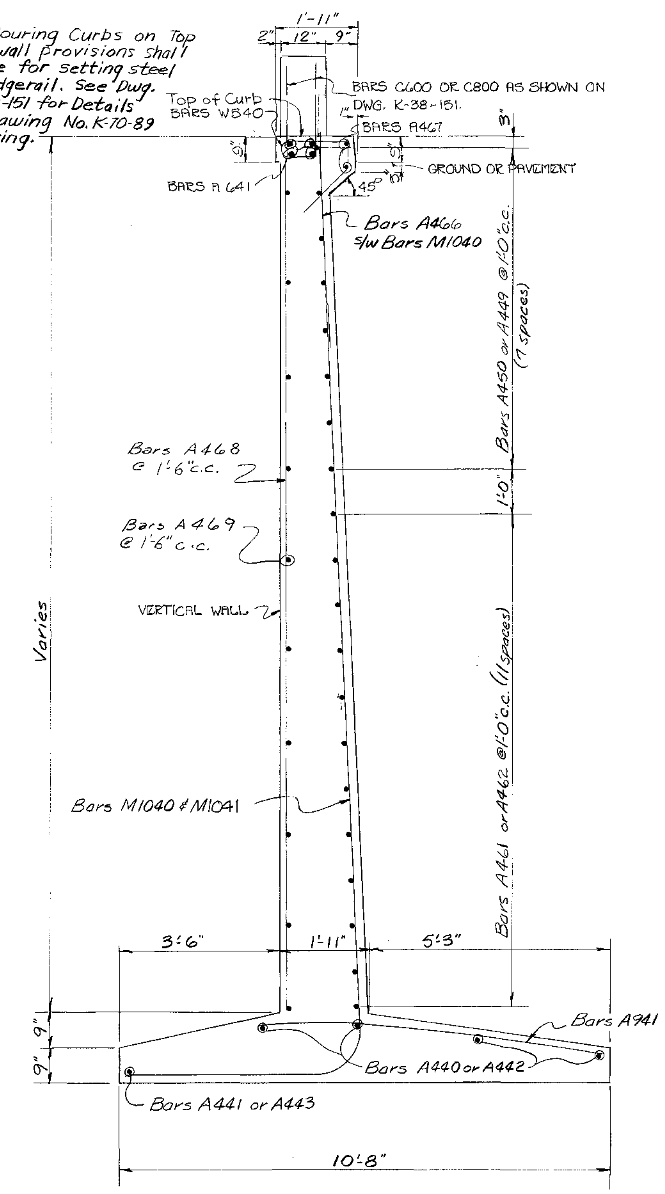
K-70-92

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	I-24-1( )83	19		

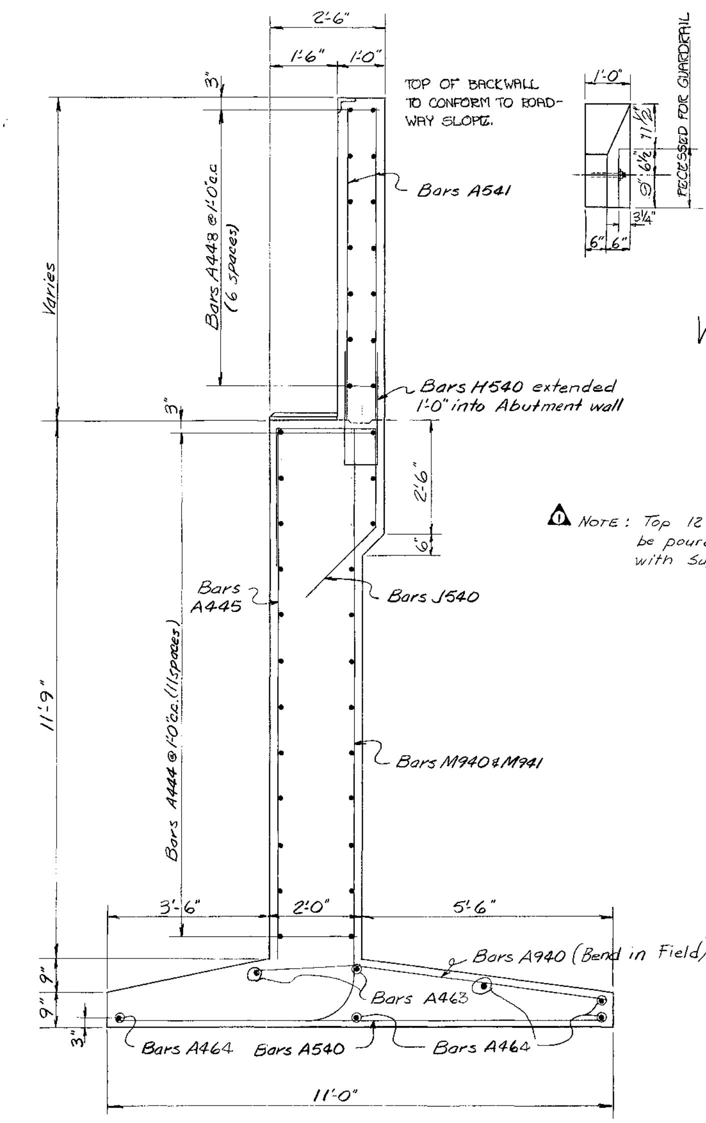
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-27-68	Jeff	Reinf. & Note, MKS
2	5-27-68	Litton	Spacing Changed (Section A-A)

NOTE: When Pouring Curbs on Top of Wingwall Provisions shall be made for setting steel for Bridgerail. See Dwg. No. K-38-151 for Details And Drawing No. K-70-89 For Spacing.

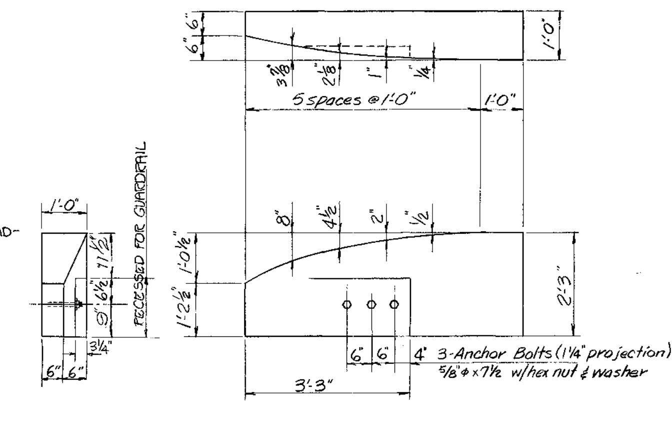


1 2 SECTION A-A

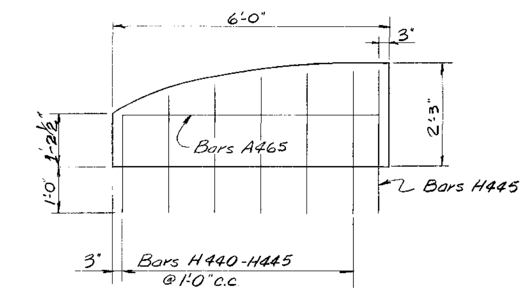


1 SECTION B-B

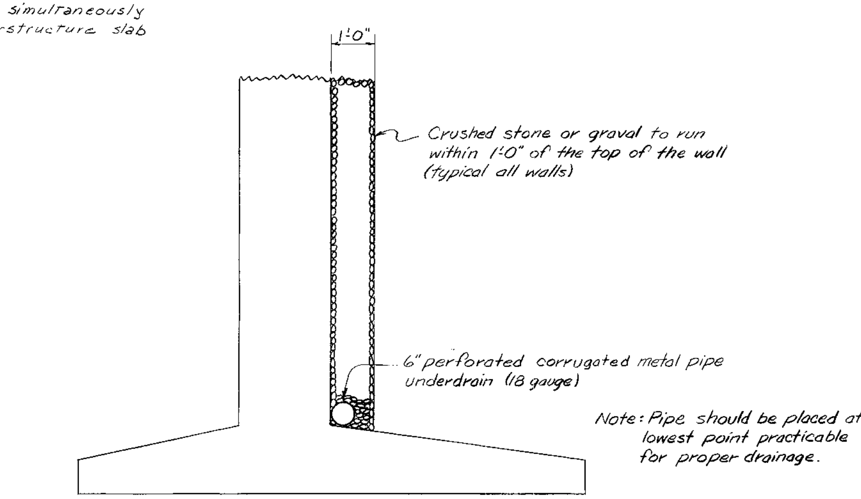
1 Note: Top 12" of Backwall to be poured simultaneously with Superstructure slab



WINGPOST DETAILS



1 DETAIL SHOWING WINGPOST REINFORCEMENT



DRAINAGE DETAIL

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

ABUTMENT DETAILS
BUCHANAN SCHOOL ROAD
OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY
1968

DESIGNED BY Ken Litton DATE
DRAWN BY Jim Fields DATE 1-68
TRACED BY DATE
CHECKED BY K.L. DATE

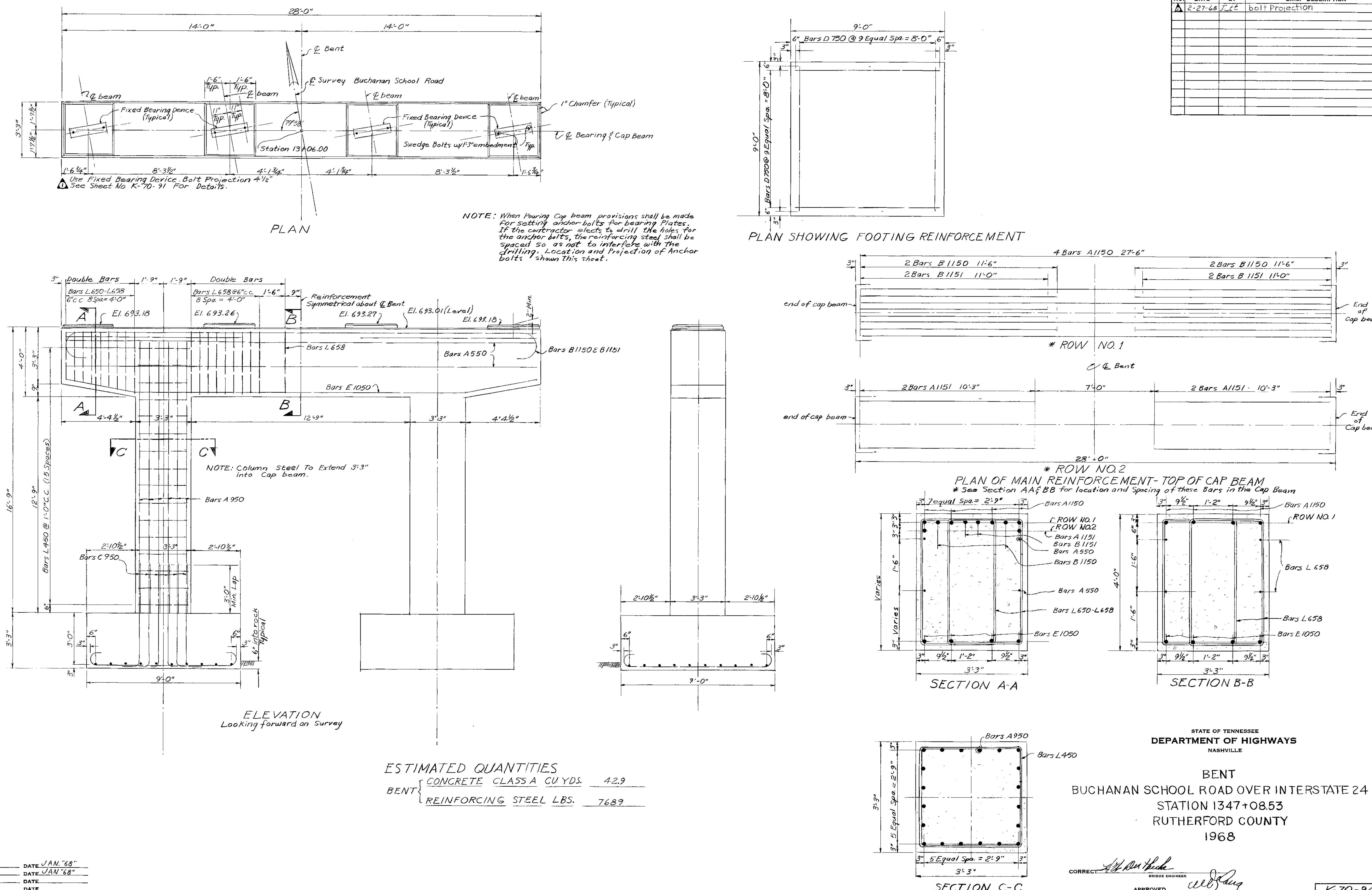
CORRECT [signature] BRIDGE ENGINEER
APPROVED [signature] STATE HIGHWAY ENGINEER

K-70-93

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	I-24-1( )83	19		

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-27-68	J.E.E.	bolt Projection



NOTE: When Pouring Cap beam provisions shall be made for setting anchor bolts for bearing Plates. If the contractor elects to drill the holes for the anchor bolts, the reinforcing steel shall be spaced so as not to interfere with the drilling. Location and Projection of Anchor bolts shown this sheet.

ESTIMATED QUANTITIES

BENT	CONCRETE CLASS A CU YDS.	42.9
	REINFORCING STEEL LBS.	7689

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

BENT
BUCHANAN SCHOOL ROAD OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY
1968

CORRECT: [signature] BRIDGE ENGINEER
APPROVED: [signature] STATE HIGHWAY ENGINEER

DESIGNED BY Ken Litton DATE JAN. "68"
DRAWN BY Ken Litton DATE JAN "68"
TRACED BY DATE
CHECKED BY DATE

K-70-94

BILL OF STEEL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.	I-24-1(83)	19		

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION
1	2-27-68	L. Jett	Location & Reinf. added
2	5-27-68	Litton	Reinforcement Added

SUPERSTRUCTURE

BAR	LOCATION	SIZE	NO REQ'D	BENDING DIMENSIONS a	b	c	d	LENGTH
A500	Slab	5	355					30'-4"
A501	Slab	5	472					38'-6"
A600	Curb	6	64					38'-6"
A601	Slab	6	8					30'-3"
F600	Curb & Slab	6	8	2'-3"	1½"	1'-6"	1'-1½"	5'-6"
N500	Slab	5	355	32'-5"	1'-6"	29'-2"	1'-1½"	35'-7"
P500	Slab	5	354	30'-4	4'-8"	3'-10"	3'-10"	30'-5"

ABUTMENT NO. 1 & 2

BAR	LOCATION	SIZE	NO. REQ'D	BENDING DIMENSIONS a	b	c	d	LENGTH
A440	Footing	4	8					17'-0"
A441	"	4	2					24'-9"
A442	"	4	8					15'-0"
A443	Footing	4	2					26'-5"
A444	Abutment Wall	4	48					32'-0"
A445	" "	4	66					11'-6"
A446	Footing	4	6					4'-0"
A447	"	4	8					5'-3"
A448	Backwall	4	28					30'-0"
A449	Wingwalls	4	16					15'-11"
A450	"	4	16					15'-6"
A451	"	4	8					12'-0"
A452	"	4	8					3'-2"
A453	"	4	8					4'-2"
A454	"	4	8					5'-2"
A455	"	4	8					6'-2"
A456	"	4	8					7'-2"
A457	"	4	8					6'-11"
A458	"	4	4					6'-9"
A459	"	4	4					5'-9"
A460	"	4	4					4'-9"
A461	"	4	24					21'-10"
A462	"	4	24					22'-2"
A463	Abut. Footing	4	4					32'-0"
A464	Abut. Footing	4	10 ⚠1					39'-1"
A465	Wingpost	4	8					5'-6"
A466	Wingwall	4	84					5'-0"
A467	Curb	4	8					26'-6"
A540	Footing	5	80					10'-6"
A541	Abutment wall	5	124					6'-9"
A640	Wingwall	6	24					12'-0"
A641	Curb ⚠1	6	16					26'-6"
A940	Footing	9	150					7'-9"
A941	Footing	9	110					7'-6"
H440	Wingpost	4	4	6"				4'-10"
H441	"	4	4	6"				5'-8"
H442	"	4	4	6"				6'-2"
H443	"	4	4	6"				6'-6"
H444	"	4	4	6"				6'-8"
H445	Wingpost	4	8	6"				6'-10"
H446		4	4	7"	8'-6			17'-9"
H447	Wingwall	4	4	7"	7'-6"			15'-7"
H540	Abut. Wall & Backwall	5	62	8	2'-6"			5'-8"
J540	Abutment Wall	5	62	1'-0"	2'-2"	2'-2"	2'-2"	7'-6"
M940	Footing & walls	9	64	7'-4"	5'-2"			12'-3"
M941	" "	9	66	12'-10"	5'-2"			17'-9"
M1040	Footing & walls	10	84	16'-10"	5'-1"			21'-6"
M1041	" "	10	88	7'-10"	5'-1"			12'-6"
W540	Curb	5	100	1'-6"	6"	1'-0"		3'-11"
A468 ⚠1 ⚠2	Wing walls	4	56					18'-9"
A469 ⚠1 ⚠2	Wing walls	4	52					20'-6"

BENT

BAR	LOCATION	SIZE	NO REQ'D	BENDING DIMENSIONS a	b	c	d	LENGTH
A550	Cap Beam	5	4					27'-6"
A950	Column	9	40					16'-0"
A1150	Cap Beam	11	4					27'-6"
A1151	" "	11	4					10'-3"
B1150	Cap Beam	11	4	11'-6"				13'-4"
B1151	" "	11	4	11'-0"				12'-10"
C950	Footing	9	40	6'-1"				7'-6"
D750	Footing	7	40	8'-6"				10'-2"
E1050	Cap Beam	10	4	11'-3"	4'-1"	9"		27'-5"
L450	Column	4	32	2'-11½"	1'-0"	2'-11½"		12'-8"
L650	Cap Beam	6	4	2'-3"	1'-0"	3'-0½"		11'-7"
L651	"	6	4	2'-3"	1'-0"	3'-1½"		11'-9"
L652	"	6	4	2'-3"	1'-0"	3'-2½"		11'-11"
L653	"	6	4	2'-3"	1'-0"	3'-4"		12'-2"
L654	"	6	4	2'-3"	1'-0"	3'-4½"		12'-3"
L655	"	6	4	2'-3"	1'-0"	3'-6"		12'-6"
L656	"	6	4	2'-3"	1'-0"	3'-7"		12'-8"
L657	"	6	4	2'-3"	1'-0"	3'-8"		12'-10"
L658	Cap Beam	6	44	2'-3"	1'-0"	3'-9"		13'-0"

REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

NOTE Dimensions shown on this sheet are outside to outside of bar
Standard C R S I. Hook Details Shall Apply, Except As Noted.

BARS A

BARS E

BARS H

SEE DETAIL "A"

BARS N

SEE DETAIL "A"

BARS W

BARS B

BARS F

SEE DETAIL "A"

BARS K

BARS L.

BARS M

4½" Typical

BARS P

BARS C

BARS D

BARS J

BARS S

BARS V

DETAILS SHOWING HOOK ON F, W, or BARS N

DETAIL "A"

DESIGNED BY Ken Litton DATE
DRAWN BY Jim Fields DATE 1-68
TRACED BY DATE
CHECKED BY K.L. DATE

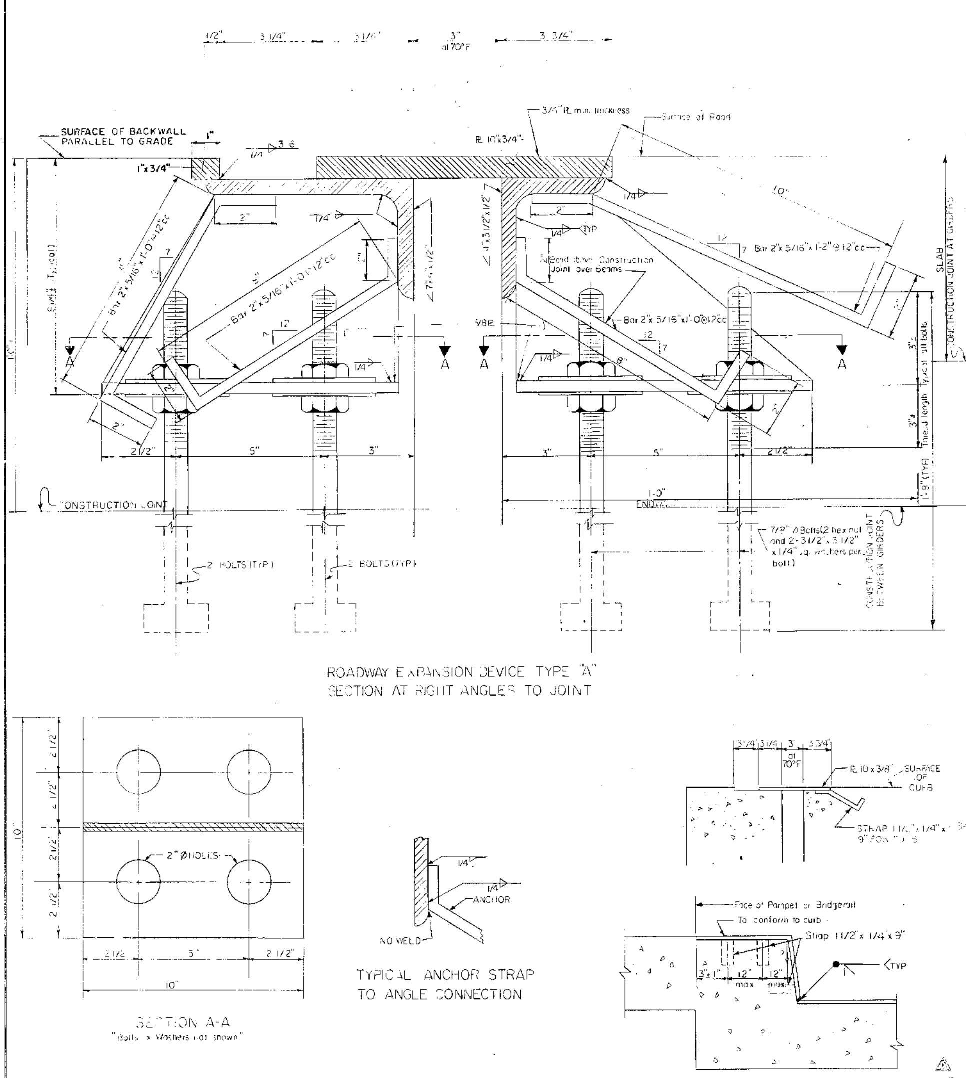
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
BILL OF STEEL

BUCHANAN SCHOOL ROAD
OVER INTERSTATE 24
STATION 1347+08.53
RUTHERFORD COUNTY

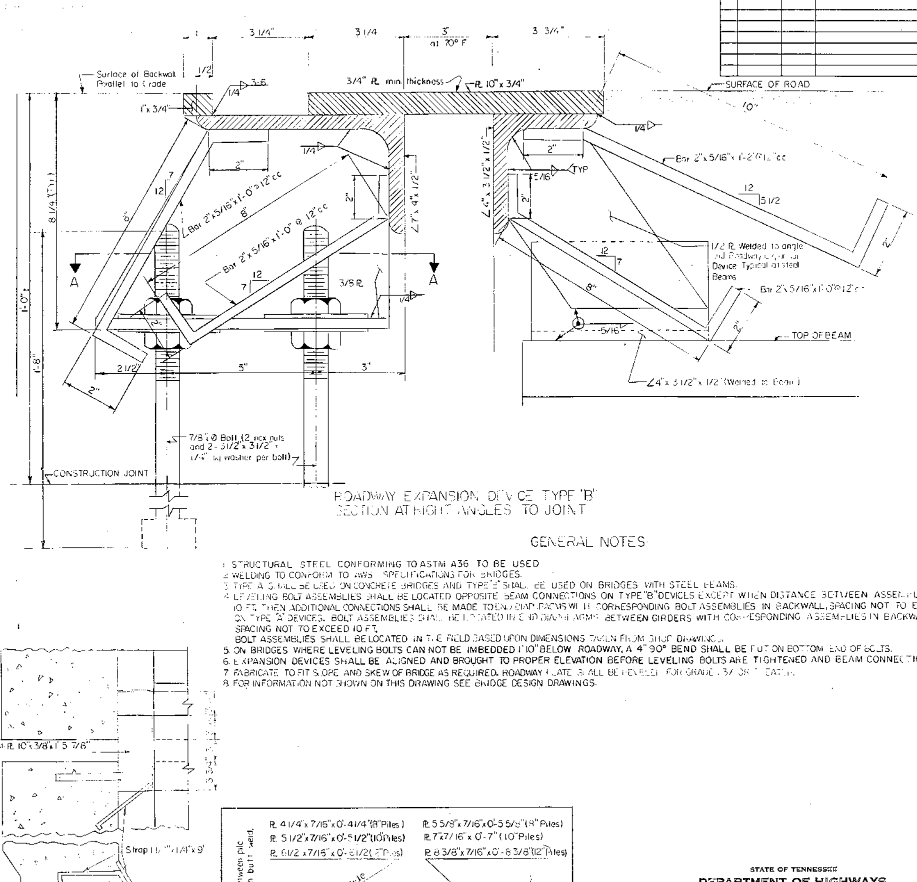
CORRECT _____ 1968
BRIDGE ENGINEER

APPROVED _____
STATE HIGHWAY ENGINEER

K-70-95



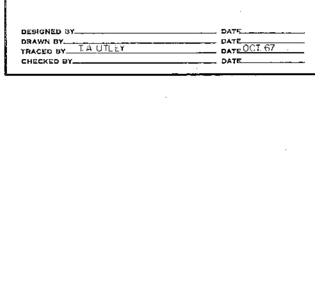
ROADWAY EXPANSION DEVICE TYPE "A"
SECTION AT RIGHT ANGLES TO JOINT



ROADWAY EXPANSION DEVICE TYPE "B"
SECTION AT RIGHT ANGLES TO JOINT

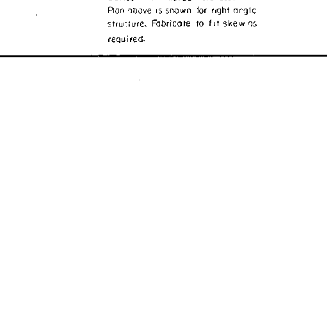
GENERAL NOTES

1. STRUCTURAL STEEL CONFORMING TO ASTM A36 TO BE USED.
2. WELDING TO CONFORM TO AWS SPECIFICATIONS FOR BRIDGES.
3. TYPE "A" SHALL BE USED ON CONCRETE BRIDGES AND TYPE "B" SHALL BE USED ON BRIDGES WITH STEEL BEAMS.
4. LEVELING BOLT ASSEMBLIES SHALL BE LOCATED OPPOSITE BEAM CONNECTIONS ON TYPE "B" DEVICES EXCEPT WHEN DISTANCE BETWEEN ASSEMBLIES EXCEEDS 10 FT. THEN ADDITIONAL CONNECTIONS SHALL BE MADE TO END DIAPHRAGMS WITH CORRESPONDING BOLT ASSEMBLIES IN BACKWALL, SPACING NOT TO EXCEED 10 FT. ON TYPE "A" DEVICES, BOLT ASSEMBLIES SHALL BE LOCATED IN END DIAPHRAGMS BETWEEN GIRDERS WITH CORRESPONDING ASSEMBLIES IN BACKWALL AT A SPACING NOT TO EXCEED 10 FT.
   BOLT ASSEMBLIES SHALL BE LOCATED IN THE FIELD BASED UPON DIMENSIONS TAKEN FROM SHOP DRAWINGS.
5. ON BRIDGES WHERE LEVELING BOLTS CAN NOT BE IMBEDDED 1'10" BELOW ROADWAY, A 4" 90° BEND SHALL BE PUT ON BOTTOM END OF BOLTS.
6. EXPANSION DEVICES SHALL BE ALIGNED AND BROUGHT TO PROPER ELEVATION BEFORE LEVELING BOLTS ARE TIGHTENED AND BEAM CONNECTIONS WELDED.
7. FABRICATE TO FIT SLOPE AND SKEW OF BRIDGE AS REQUIRED. ROADWAY PLATE SHALL BE BEVELED FOR GRADE [illegible]
8. FOR INFORMATION NOT SHOWN ON THIS DRAWING SEE BRIDGE DESIGN DRAWINGS.



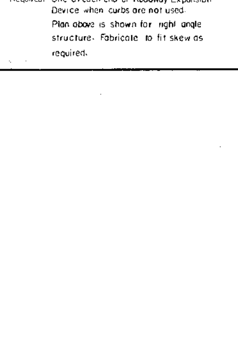
SECTION A-A
(Bolts & Washers not shown)

TYPICAL ANCHOR STRAP
TO ANGLE CONNECTION



DETAIL CURB EXPANSION DEVICE

Required: One at each end of Roadway Expansion Device when curbs are used. Plan above is shown for right angle structure. Fabricate to fit skew as required.



DETAIL PARAPET EXPANSION DEVICE

Required: One at each end of Roadway Expansion Device when curbs are not used. Plan above is shown for right angle structure. Fabricate to fit skew as required.

NOTE: Structural steel conforming to ASTM-A7 or ASTM-A36 will be acceptable.

STANDARD PILE SPLICE DETAIL

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19		

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

STANDARD

ROADWAY EXPANSION DEVICE

STEEL PILE SPLICE

1967

CORRECT: [signature] BRIDGE ENGINEER

APPROVED: [signature] STATE HIGHWAY ENGINEER

DESIGNED BY ____ DATE ____
DRAWN BY ____ DATE ____
TRACED BY T.A. UTLEY DATE OCT. 67
CHECKED BY ____ DATE ____

K-56-34