

35.19203, -90.00825

CONDITION

41 - Structure Open/Posted/Closed	A - Open, no restriction
58 - Deck	7 - GOOD CONDITION - some minor problems.
59 - Superstructure	7 - GOOD CONDITION - some minor problems.
60 - Substructure	7 - GOOD CONDITION - some minor problems.
61 - Channel/Channel Protection	N - Not applicable.
62 - Culverts	N - Not applicable. Used if structure is not a culvert.
521 - Overall Bridge Cond	G - Good

Load Rating / Post

548 - Ratings Based On	AASHTOWare BrR (4" asphalt)
505 - TDOT rating method	LRFR-RF - LOAD & RESISTANCE FACTOR RATING (RF) - HL93
65 - Inventory Rating Method	8 - Load and Resistance Factor Rating (LRFR) rating reported by rating factor (RF) method using HL-93 loadings
66 - Inventory Rating	30.46
NBI_066A	0.94
63 - Operating Rating Method	8 - Load and Resistance Factor Rating (LRFR) rating reported by rating factor (RF) method using HL-93 loadings
64 - Operating Rating	48.28
NBI_064A	1.49
516B - Single Unit Posting	
517B - Multi Unit Posting	
70 - Bridge Posting	5 - Equal to or above legal loads
534 - Posting Log Note	
552 - Posting Closure Comp	

Notes

Wearing Surf. thickness in load rating	4.00
ADTT used in Load rating	5000
Approved for Reach-All use	
547 - evaluation sheet note	

Load Rating Assumptions and QA Checklist - Consultant Calculations

Bridge ID	Bridge Location		
Load Rating Date	Inspection Date	Current ADTT	Considered
Plans Set			
Consultant			
Assumptions		QA	<div>APPROVED By Rebecca Hayworth, P.E. at 8:24 am, Jul 03, 2024</div> <div>REVIEWED By Rebecca Hayworth, P.E. at 3:43 pm, May 24, 2024</div>
Dimensions match plans & field conditions			
Cross section Checked			
Framing plan Checked			
Material Properties Checked			
Condition Assumed for Load rating			
Deterioration/Damage Captured			
Shear Considered			
Rails Distribution			
Asphalt Thickness (inches)			
Asphalt Considered Field Verified			
Distribution Factors Calc Method			
Impact Factor			
AASHTO Trucks & TDOT Trucks Rated			
Comments			

Page 1 of 1

Over/Under Pass No. 79 - 02806 - 0344

Bridge Number: 79I00400070

Maintenance Completed: by/date

EXPLANATIONS AND COMMENTS:

Bridge Maintenance Recommendations

Page No. _____

Page 1 of 1

Bridge Location No.: **79 - I0040 - 0576 L**Over/Under Pass No.: **79 - 02806 - 0344**

Co. Route Log Mile

Bridge Number: **79I00400070**

Crossing:

Region: 04

Road Name:

District: 45 Spec. Case: 0

Road Name #2: **NORTH WATKINS ST.**

Maint. Resp.: 01 Co. Seq: 01

Bridge Rating: **FAIR**

Inspection Cycle: 15

County: **Shelby**@ ' x '
Barrels Length Width

Inspection Date: 9/11/01

City:

Comments:

Maintenance Recommendations:**Maintenance Completed
by/date**

228	APPROACH GUARDRAILS ARE SUBSTANDARD
226	GUARDRAIL TERMINALS AT APPROACH NO. 1 & 2 ARE SUBSTANDARD
001	LEVEL APPROACH NO. _1 & 2
009	CLEAN DRAINS AT APPROACH NO. _2
069	REPAIR TEXTURE COAT ON SPAN NO. _ALL (NEEDS REPAINTING)
233	UNDERPASS SUBSTRUCTURE PROTECTION GUARDRAILS ARE NON-EXISTENT

COMPLETION NOTIFICATION: RETURN WITHIN 6 MONTHS OF INSPECTION DATE.

INITIAL AND DATE RECOMMENDATIONS WHEN COMPLETED.

MAINTENANCE ACTIVITIES ARE COMPLETED (DATE) _____ BY _____

MAINTENANCE ACTIVITIES ARE PARTIALLY COMPLETED (DATE) _____ BY _____

MAINTENANCE ACTIVITIES ARE INCOMPLETE, SCHEDULED FOR (DATE) _____

EXPLANATIONS AND COMMENTS:



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 09/12/2001

Bridge Number: 791004000701
(Includes Item 5A)

Feature Intersected: I40-LL / N WATKINS ST

County: 79

Route: 10040

Special Case: 0

County Sequence: 01

Log Mile: 5.76

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	CONDITION CODING GUIDELINES (Values for Coding Items 58, 59, 60 and 62)
90	INSPECTION DATE	<u>09/11/2001</u> <u>8/11/2003</u>	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.	9 EXCELLENT CONDITION
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
36	TRAFFIC SAFETY FEATURES		7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Br. Rail Trans. Appr. Rail Terminal SPEED LIMIT		6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
	1 0 0 <u>1</u> 55		5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
41	STRC OPEN/CLOSED/POSTED	A	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
	A K P		3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOUSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
58	DECK	7	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.
59	SUPERSTRUCTURE	6	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.
60	SUBSTRUCTURE	7	0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
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)	8	
521	OVERALL CONDITION (Circle One)		
	GOOD <u>FAIR</u> POOR CRITICAL		

TEAM LEADER SIGNATURE

REVIEW DATE

8/11/2003



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

Revised 09/21/2001

Bridge Number: 79I004000702
(Includes Item 5A)

Feature Intersected: I40-LL / N WATKINS ST

County: 79

Route: 02806

Special Case: 0

County Sequence: 01

Log Mile: 3.44

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>09/11/2001</u> <u>8/11/2003</u>	515 (A) TYPE UNDERPASS BARRIER None Exists but Needed
10	MINIMUM V.C. OVER ROADWAY (ROADWAY + SHOULDERS)	<u>16</u> FT. <u>11</u> IN. ____ FT. ____ IN.	Revised Barrier Type
520	MINIMUM V.C. OVER ROADWAY (EXCLUDES SHOULDERS)	<u>16</u> FT. <u>11</u> IN. ____ FT. ____ IN.	(B) ADEQUACY OF BARRIER OR RAIL <u>0</u>
47	TOTAL HORIZONTAL UNDERCLEARANCE	<u>51</u> FT. <u>10</u> IN. <u>52</u> FT. <u>0</u> IN.	(C) ADEQUACY OF TRANSITIONS <u>0</u>
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: <u>H</u> R <u>16</u> FT. <u>11</u> IN.		(D) ADEQUACY OF TERMINALS <u>0</u>
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: <u>H</u> R <u>0</u> FT. <u>0</u> IN.		554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING <u>99</u> FT. <u>99</u> IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u>0</u> FT. <u>0</u> IN.	____ FT. ____ IN.
521	OVERALL CONDITION (Circle One) GOOD <u>FAIR</u> POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [] NO <u>X</u> N/A []

555 COMMENTS _____

TEAM LEADER SIGNATURE

8/11/2003
REVIEW DATE



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Bridge Condition Coding Form

Revised 06/15/2000

Bridge Number: 79I004000701
(Includes Item 5A)

Feature Intersected: I40-LL / N WATKINS ST

County: 79

Route: 10040

Special Case: 0

County Sequence: 01

Log Mile: 5.76

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	CONDITION CODING GUIDELINES (Values for Coding Items 58, 59, 60 and 62)
90	INSPECTION DATE	<u>01/19/2000</u> <u>91 11 2001</u>	N NOT APPLICABLE
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.	9 EXCELLENT CONDITION
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	99 FT. 99 IN. ____ FT. ____ IN.	8 VERY GOOD CONDITION - NO PROBLEMS NOTED.
36	TRAFFIC SAFETY FEATURES		7 GOOD CONDITION - SOME MINOR PROBLEMS.
	Br. Rail Trans. Appr. Rail Appr. Rail Ends		6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.
	1 0 0 0		5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.
41	STRC OPEN/CLOSED/POSTED A K P	A	4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.
58	DECK	7	3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOUSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.
59	SUPERSTRUCTURE	6	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.
60	SUBSTRUCTURE	7	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.
61	CHANL/CHANL PROTECTION	N	0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORRECTIVE ACTION.
62	CULVERT AND RETAIN WALL	N	
71	WATERWAY ADEQUACY	N	
72	APPROACH RDWY ALIGNMENT (USE VALUES OF 3, 6, OR 8)	8	
521	OVERALL CONDITION (Circle One)		
	GOOD <u>FAIR</u> POOR CRITICAL		

TEAM LEADER SIGNATURE

REVIEW DATE

91 11 2001



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

Underpass Condition Coding Form

Revised 06/15/2000

Bridge Number: 79I004000702
(Includes Item 5A)

Feature Intersected: I40-LL / N WATKINS ST

County: 79
Route: 02806
Special Case: 0
County Sequence: 01
Log Mile: 3.44

CODE ONLY THOSE VALUES WHICH HAVE CHANGED

ITEM #	DESCRIPTION	VALUE	UNDERPASS SAFETY FEATURES
90	INSPECTION DATE	<u>01/19/2000</u> <u>9/11/2001</u>	515 (A) TYPE UNDERPASS BARRIER <u>None Exists but Needed</u>
10	MINIMUM V.C. OVER DECK (ROADWAY + SHOULDERS)	<u>17</u> FT. <u>0</u> IN. <u>16</u> FT. <u>11</u> IN.	Revised Barrier Type
520	MINIMUM V.C. OVER DECK (EXCLUDES SHOULDERS)	<u>17</u> FT. <u>0</u> IN. <u>16</u> FT. <u>11</u> IN.	(B) ADEQUACY OF BARRIER OR RAIL <u>0</u>
47	TOTAL HORIZONTAL UNDERCLEARANCE	<u>51</u> FT. <u>10</u> IN. <u>52</u> FT. <u>0</u> IN.	(C) ADEQUACY OF TRANSITIONS <u>0</u>
54	MINIMUM VERTICAL UNDERCLEARANCE (EXCLUDES SHOULDERS) Circle One: <u>(H)</u> R	<u>16</u> FT. <u>11</u> IN.	(D) ADEQUACY OF TERMINALS <u>0</u>
55	MINIMUM LATERAL UNDERCLEARANCE ON RIGHT SIDE Circle One: <u>(H)</u> R	<u>0</u> FT. <u>0</u> IN.	554 VERTICAL CLEARANCE LISTED ON HEIGHT POSTING <u>99</u> FT. <u>99</u> IN.
56	MINIMUM LATERAL UNDERCLEARANCE ON LEFT SIDE	<u>0</u> FT. <u>0</u> IN.	<u> </u> FT. <u> </u> IN.
521	OVERALL CONDITION (Circle One) GOOD <u>FAIR</u> POOR CRITICAL		HEIGHT POSTED AT BOTH APPROACHES? YES [] NO <u>[X]</u> N/A []

555 COMMENTS _____

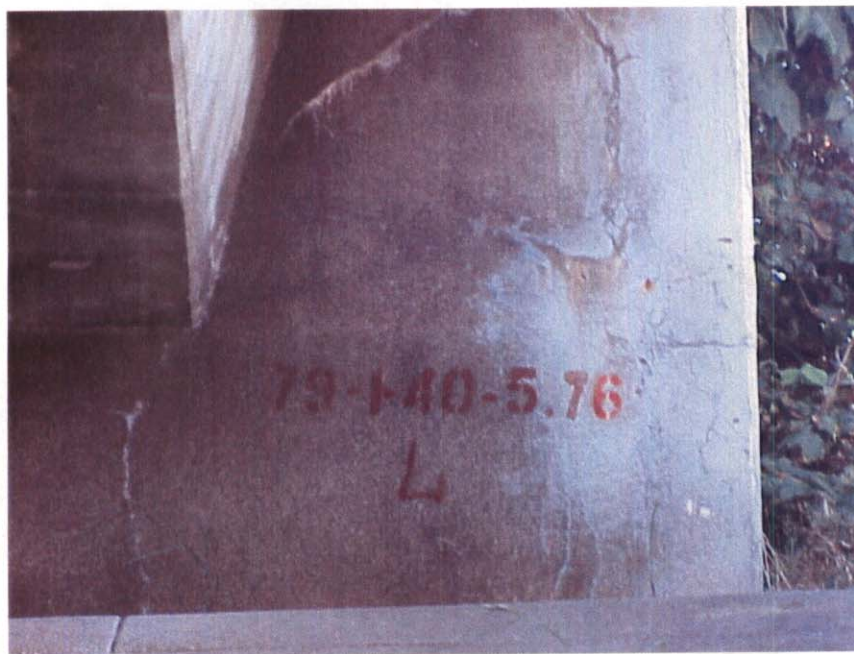
TEAM LEADER SIGNATURE

9/11/2001
REVIEW DATE

Bridge Loc. No: 79 - I0040 - 05.76 - L Date: 08-11-03



SPAN #2, BOTTOM OF DECK



BRIDGE NO. ON ABUTMENT #1

Bridge Loc. No: 79 - I0040 - 05.76 - L Date: 08-11-03



LOOKING AHEAD ON ROUTE



VIEW ACROSS TOP OF DECK

Bridge Loc. No: 79 - I0040 - 05.76 - L Date: 08-11-03



LOOKING BACK ON ROUTE



APPROACH #2 WITH ASPHALT SPALLING

Bridge Loc. No: 79 - I0040 - 05.76 - L Date: 08-11-03



COLUMN BENT



ABUTMENT #1

Bridge Loc. No: 79 - I0040 - 05.76 - L Date: 08-11-03



ABUTMENT #2

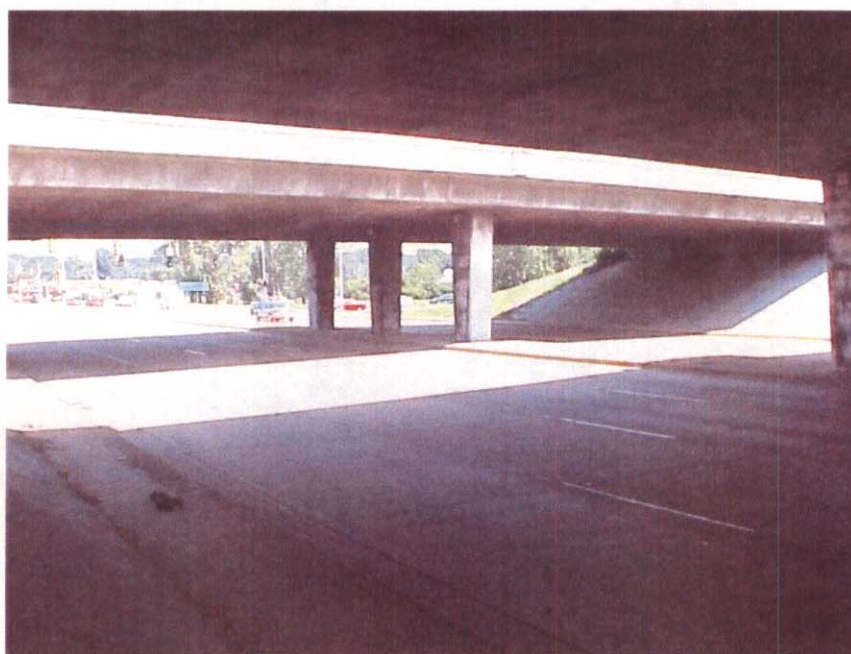


ELEVATION LEFT SIDE

Bridge Loc. No: 79 - I0040 - 05.76 - L Date: 08-11-03



ELEVATION RIGHT SIDE



ELEVATION RIGHT SIDE

BRIDGE INSPECTION REPORT

AUG 11 2003

Form BIR 3.0
(Rev. 9-22-98)
DT-0069

Field Report No. 16 Date 8-11-03
Previous Report No. 15 Date 9-11-01
Plans: YES () NO ()

Bridge No. 79I00400070 Bridge Location No. 79 - I0040 - 0576 L 79 - 02806 - 0344
Eleven Digit No. Co. Route Log Mile OVER/UNDER PASS

_____ over _____
Road Name Crossing CITY
Year Constructed _____ County Shelby Maintenance District 45
Year Widened _____ Year Rehabilitated _____

FEATURES

Wearing Surface Concrete () Timber () Asphalt ☒ Depth 4 (in.)
Flared Width Yes () No ☒ Median Width Open ☒ None () Closed ()
Navigational Control Yes () No ☒ Bridge Skew 80L ° LT () RT ()
Structure Type (Main Span) CONC. BOX BEAM
Structure Type (Appr.Spans) _____
No. Main Spans 2 No. Approach Spans _____
Maximum Span Length 106.0 (**.ft.)
Total Length 196.0 (**.ft.)

Structure Name (If Named)

INSPECTORS

1. GREEK
2. LOVE
3. ADAMS
4. BYRD
5. REEVES
6. _____
7. _____
8. _____

WIDTHS (**.ft.)

Deck Out-to-Out 74.0
Roadway Curb/Curb 72.0
Roadway Rail/Rail _____
Sidewalk Rt. _____ Lt. _____
*Approach Roadway 48
*(Does Not Include Shoulders)
Approach Shoulder Rt. 12'
Lt. 12'

CLEARANCES

Min. Vertical Clearance over Deck _____ (ft.-in.)
Min. Vertical Under Clearance 16' 11" (ft.-in.)
Min. Lateral Under Clearance Rt. 6' (*.ft.)
Min. Lateral Under Clearance Lt. 5' (*.ft.)

FRACTURE CRITICAL: _____
(If Yes, Include BIR 3.9)

NBIS Bridge Length (<25 ft.) _____ (ft.-in.)

UNDERWATER INSPECTION

To Be Performed By: _____ Date _____
DOT FIELD TEAM () CONTRACT DIVERS () NONE REQUIRED ☒

Change in Structural Condition: Yes () No ☒ Major Repairs Made: Yes () No ☒

COMMENTS

N035 ° 11 ' 31.3 "

W090 ° 00 ' 29.7 "

G.P.S. Location

BRIDGE RATING: () ☒ () ()
GOOD FAIR POOR CRITICAL

Supervising Bridge Inspector: Greer

Form BIR 3.1
(Rev. 9-22-98)
DT-0080

Bridge Location No. 79 - 10040 - 5.76 L
Co. Route Log Mile

Date _____

PERFORMANCE EVALUATION

Time of Day Inspected 1:00 Weather Conditions SUNNY 88°
Vehicles Observed ALL TYPES

LIVE LOAD BEHAVIOR

Substructure	YES	NO	Comments
Horiz./ Vert. Defl.	()	(X)	
Vibration	()	(X)	
Superstructure			
Horiz./ Vert. Defl.	()	(X)	
Vibration	()	(X)	

APPROACH

	Rating	Comments
Alignment	G F P C	
Slab	G F P C	N/A
Joints	G F P C	L1
Pavement	G F P C	APPROACH #2 AC SPALLING (00)
Embankment	G F P C	WASHING BELOW BACKUNDER DRAIN (00)
Drains	G F P C	BROKEN, SETTLED AND FILLED WITH DEBRIS (00)

TRAFFIC SAFETY FEATURES

	Rating	STANDARD/ SUB-STANDARD	Comments
Bridgerailing	G F P C	(X) ()	
Transitions	G F P C	() (X)	
Guardrail	G F P C	() (X)	
Guardrail Terminal	G F P C	(X) ()	

SIGNING

	YES	NO	NEEDED	Weight Limit Posted
Paddleboards	()	(X)	()	YES () NO (X)
Vertical Clearance (<14'-6")	()	(X)	()	Gross..... Tons
NARROW ()	()	(X)	()	2 Axle..... Tons
ONE LANE BRIDGE ()	()	(X)	()	3 or more Axles.. Tons

Other Signs or Plaques: _____

Comments Regarding any

Problems with Signing: OVER HEAD SIGN ON SPAN #1 LEFT SIDE

Form BIR 3.2
(Rev. 9-22-98)
DT-0081

Bridge Location No. 79 - 10040 - 5.76 L
Co. Route Log Mile

AUG 11 2003
Date

DECK

	Rating	Comments
Wearing Surface	G <u>F</u> P C	
Deck - Structural Condition	G <u>F</u> P C	
Curbs	G F P C	
Median	G F P C	
Sidewalks	G <u>F</u> P C	
Parapet	G <u>F</u> P C	
Railing	G F P C	
Paint	G F P C	
Drains	G F P C	
Lighting Standards	G F P C	
Utilities	G F P C	
Joint Leakage	G F P C	
Expansion Joints	G F P C	

SUPERSTRUCTURE

Bearing Devices	G F P C	
Beams <i>Box</i>	G <u>F</u> P C	
Girders	G F P C	
P C C S	G F P C	
BOLTS (PCCS)	G F P C	
Floor Beams	G F P C	
Stringers	G F P C	
Diaphragms	G F P C	
Bracing	G F P C	
Trusses - General	G F P C	
Portals	G F P C	
Bracing	G F P C	
Paint	G F P C	
Alignment of Members	<u>G</u> F P C	

TEXTURE COAT

Condition Rating G F P C *0691*
Overall Appearance G F P C
Staining Rating G F P C

Fading G F P C
Needs Spot Painting YES () NO (X)
Needs Repainting YES (X) NO ()

Comments

Scaling Rating G F P C
CLEAN SEAL JOINTS ()
CLEAN DRAINS ()

RECOMMENDATIONS:

Bridge Location No. 79 - 10040 - 5.76 L
Co. Route Log Mile

Date _____

SUBSTRUCTURE

ABUTMENTS

	Rating	Comments	PILES TO BE REPLACED	
			PILE(S)	ABUTMENT
Caps	G <u>F</u> P C			
Breastwall	G F P C			
Wings	G <u>F</u> P C			
Backwall	G F P C			
Plumb	<u>G</u> F P C			
Footing	G F P C			
Piles	G F P C			
Embankment	<u>G</u> F P C			
Bearing	G F P C			
Slope Paving	G <u>F</u> P C			
Rip Rap	G F P C			
Earthquake Devices	G F P C			

PIERS

			PILE(S)	PIER
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			
Bearing	G F P C			
Web	G F P C			
Earthquake Devices	G F P C			

BENTS

			PILE(S)	BENT
Caps	G F P C			
Columns <i>STEM</i>	G <u>F</u> P C			
Plumb	<u>G</u> F P C			
Footings <i>LEGHS</i>	<u>G</u> F P C			
Piles	G F P C			
Bearing	G F P C			
Bracing	G F P C			
Earthquake Devices	G F P C			

Piles Need Replacement: NO ☒ YES ()

CUT VEGETATION NO ☒ YES ()

CLEAR DRIFT NO ☒ YES ()

RECOMMENDATIONS:

INSPECTION REPORT FOR UNDERPASS ROUTEPage No. 10Form BIR 3.0A
(Rev. 9-22-98)
DT-1443Field Report No. 16 Date _____
Previous Report No. 15 Date 9-11-01Bridge No. 79100400070
Eleven Digit No.Underpass Location No. 79 - 10040 - 0576 L-0- or - - over/
Railroad/Walkway Co. Route Log MileCo. Route Log Mile
79 - 02806 - 0344
Co. Route Log MileCounty Shelby

Structure Name (If Named) _____

Year Constructed _____

Year Widened _____ Year Rehabilitated _____

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)

Divided Highway LEFT RDWY () RIGHT RDWY (X) N.A. ()

①
BETWEEN
A-1 + B-1

Type of Wearing Surface CONCRETE () ASPHALT (X) GRAVEL ()

Width of Approach Traveled Roadway 46' ft. (Does Not Include Shoulders)Width of Median if Divided Highway 14' ft.

Approach Shoulder Width _____ ft. Right _____ ft. Left

*Horizontal Clearance Under Bridge 40 ft. 0 in.*Distance Between Pier Protection
Guardrail and Substructure _____ ft. Right _____ ft. Left*Width of Sidewalk Under Bridge 6.0' ft. Right 5.5' ft. Left*Minimum Vertical Clearance: 16 ft. 11 in.

*Show on Sketch

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

	STANDARD	SUB-STANDARD	NON EXIST
Pier Protection Railing or Parapet	G F P C ()	()	(X)
Approach Guardrail Transitions	G F P C ()	()	(X)
Approach Guardrail	G F P C ()	()	(X)
Approach Guardrail Terminal	G F P C ()	()	(X)

SIGNING FOR UNDERPASS ROUTE

Paddleboards YES () NO (X) NEEDED ()

Vertical Clearance (<14'-6") YES () NO (X) NEEDED ()

Narrow Passage YES () NO (X) NEEDED ()

One Lane Passage YES () NO (X) NEEDED ()

Other Underpass Signs Needed

None**INSPECTORS**

- LEEVE
- BYRD
- _____
- _____
- _____
- _____

INSPECTION REPORT FOR UNDERPASS ROUTE

AUG 11 2001

Page No. _____

Form BIR 3.0A

(Rev. 9-22-98)

DT-1443

Field Report No. 16

Date _____

Previous Report No. 15Date 9-11-01Bridge No. 79100400070

Eleven Digit No.

Underpass Location No. 79 - 10040 - 0576 L

-0-

or

-

over/
under

Railroad/Walkway

Co.

Route

Log Mile

Co.

Route

Log Mile

79

- 02806

- 0344

Co.

Route

Log Mile

County Shelby

Structure Name (If Named) _____

Year Constructed _____

Year Widened _____

Year Rehabilitated _____

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)

Divided Highway LEFT RDWY (X) RIGHT RDWY () N.A. ()

Type of Wearing Surface CONCRETE () ASPHALT (X) GRAVEL ()

Width of Approach Traveled Roadway 52' ft. (Does Not Include Shoulders)Width of Median if Divided Highway 14 ft.Approach Shoulder Width 1 ft. Right ft. Left*Horizontal Clearance Under Bridge 52 ft. 0 IN.*Distance Between Pier Protection Guardrail and Substructure ft. Right ft. Left*Width of Sidewalk Under Bridge 12.0' ft. Right 5.0' ft. Left*Minimum Vertical Clearance: 16 ft. 11 in.

*Show on Sketch

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE**STANDARD SUB-STANDARD NON EXIST**

Pier Protection Railing or Parapet G F P C () () (X)

Approach Guardrail Transitions G F P C () () (X)

Approach Guardrail G F P C () () (X)

Approach Guardrail Terminal G F P C () () (X)

SIGNING FOR UNDERPASS ROUTE

Paddleboards YES () NO (X) NEEDED ()

Vertical Clearance (<14'-6") YES () NO (X) NEEDED ()

Narrow Passage YES () NO (X) NEEDED ()

One Lane Passage YES () NO (X) NEEDED ()

Other Underpass Signs Needed

NONE**INSPECTORS**

1. REEVES
2. BYRD
3. _____
4. _____
5. _____
6. _____

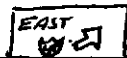
Form BIR 3.0A (Continued)
(Rev. 9-22-98)
DT-1443

Page No. _____

Date _____

Underpass Location No. 79 - 10040 - 0576 L
Co. Route Log Mile

Other Signs or Plaques:



RT. ROADWAY LT. SIDE BRIDGE

Comments Regarding any
Problems with Signing:

NONE

BRIDGE FEATURES (*. * ft.)Bridge Skew 80° LtStructure Type (Main Span) Box BeamNo. Main Spans 2

Structure Type (Appr. Spans) _____

No. Appr. Spans _____

Maximum Span Length 106' (ft.)Total Length 196' (ft.)Width of Bridge Out-to-Out 74' (ft.)

Right Angle to Centerline of Bridge

Width of Bridge Along Skew _____ (ft.)

(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 (☒)

Does Potential Exist Because of Deteriorated Condition or Failure of Major Member

YES () NO (☒)

Comment on any Conditions of Bridge that would Effect Roadway Beneath:

NONE

Note: If Underpass Route is Divided Highway, Use Two 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

Inspection Team's Summary

Bridge Location No. 79 -I0040 05.76L -

Inspection Date 08-11-03

Bridge Rating FAIR

This two span solid concrete box beam bridge with concrete substructure is in fair condition. Standard type bridge rails and terminals but substandard guardrails. Approach #2 A.C. spalling & cracking. Approach #2 left drain broken, settled and filled with debris. Embankment washing below and backunder drain on approach #2 left. Min. vertical 16'11".

Randy Love

INSPECTOR

CROSS SECTION: YES () NO (X) PONTIS: YES () NO (X)

AUG 11 2003

2003

<u>79I00400070</u>	<u>79</u>	<u>I0040</u>	<u>0576</u>	<u>L</u>	SKEW:	<u>80L</u>
BRIDGE NO.:	CO.	ROUTE	L.M.	L/R		

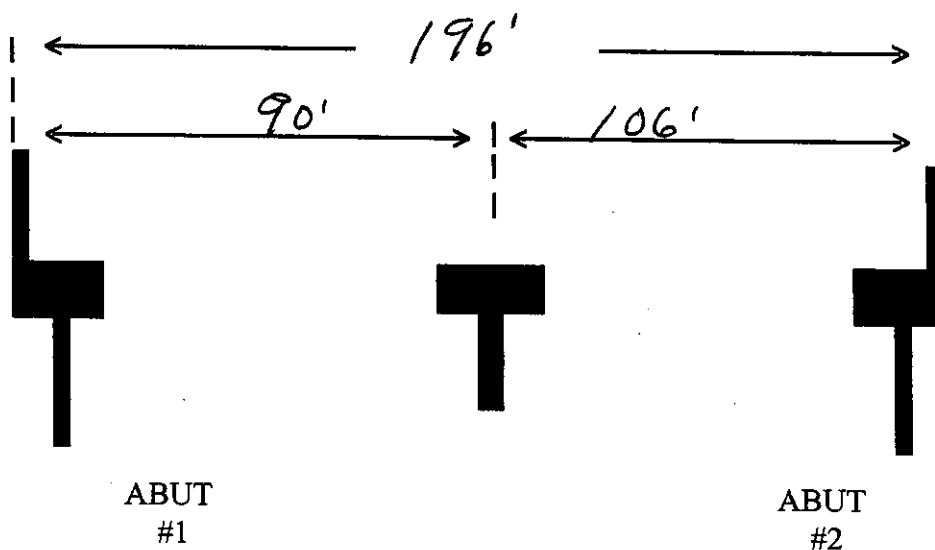
Direction of Route



PLAN VIEW

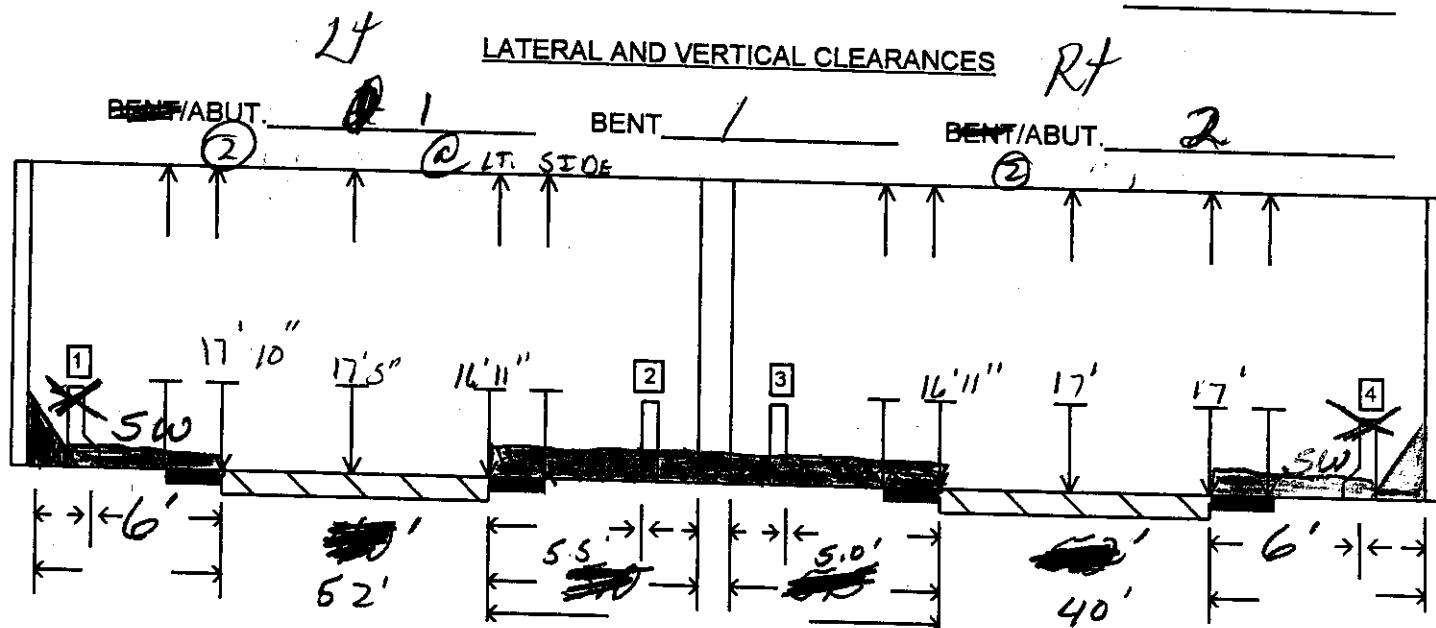
REQUIRED DATA

1. F = FIXED
E = EXPANSION
2. S = SIMPLE
C = CONTINUOUS



BRIDGE LOC. NO. 79 10040 0576 L
CO. ROUTE L. M. L/R

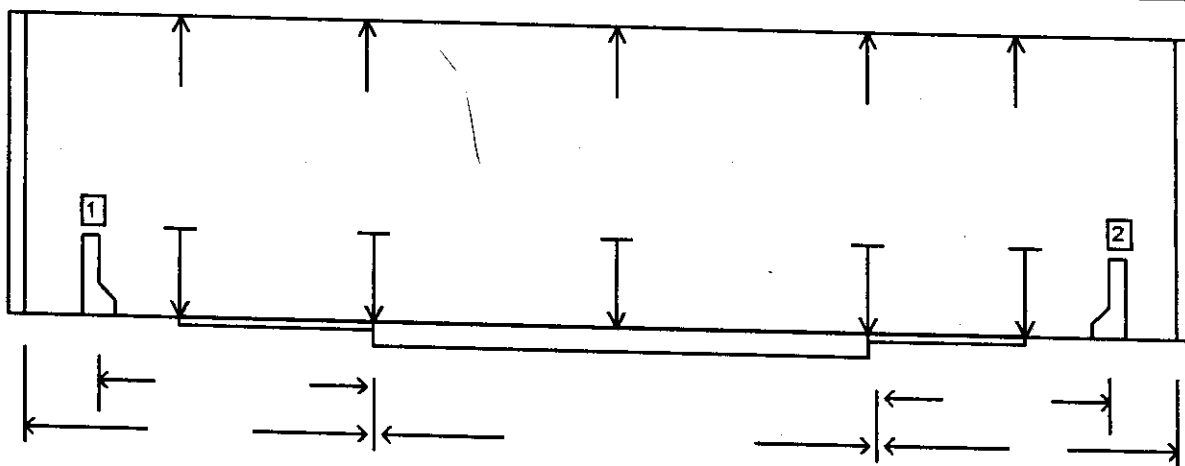
DATE: 2003



- | | | | | | | |
|-----------------------|---------|-----|---------------|-----|------|-----|
| 1. RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | [X] |
| 2. RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | [X] |
| 3. RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | [X] |
| 4. RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | [X] |

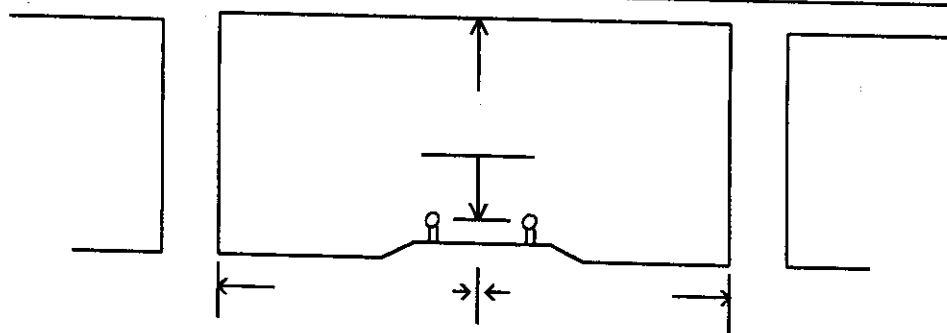
BENT/ABUT. _____

BENT/ABUT. _____

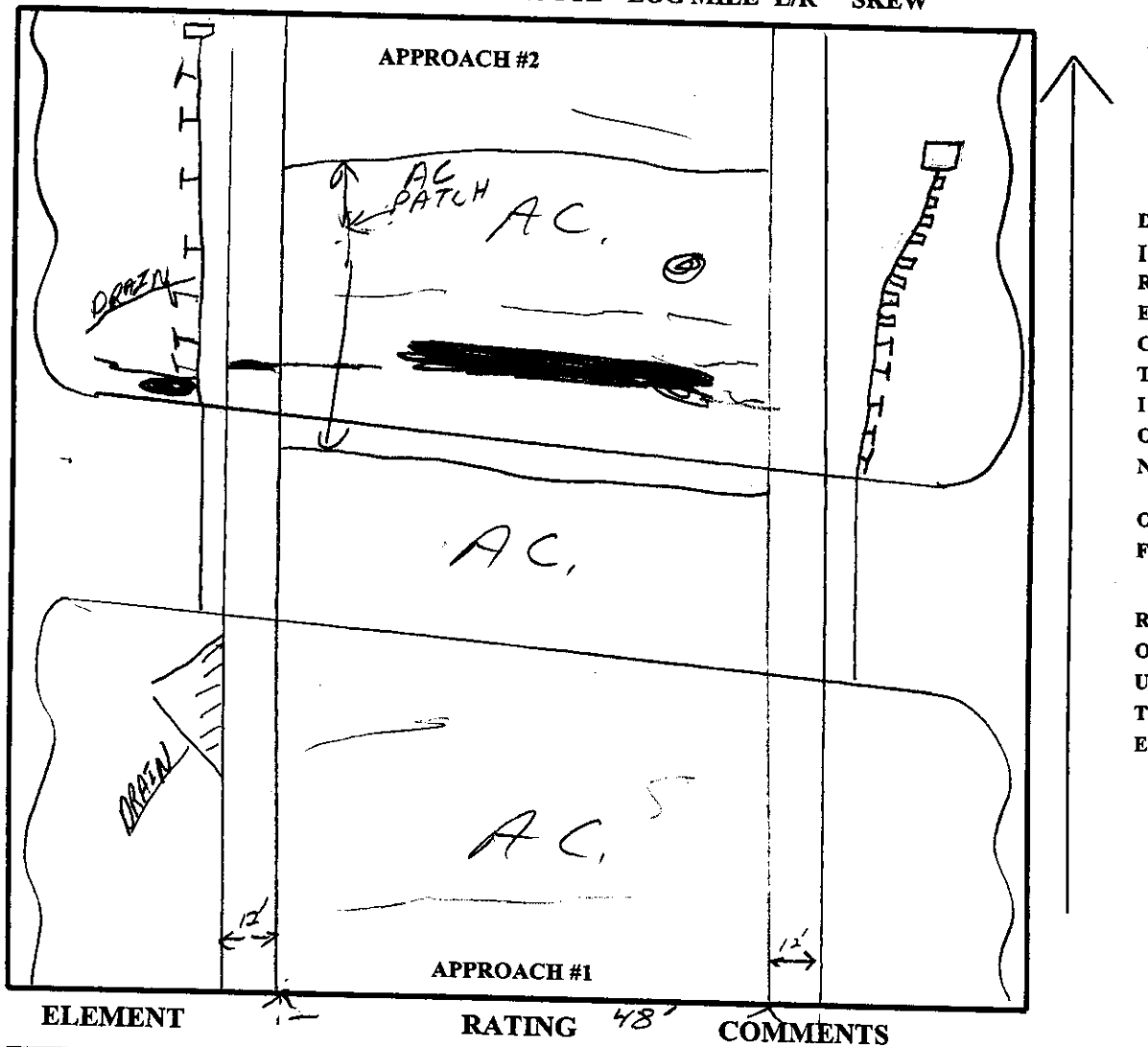


BENT/ABUT. _____

BENT/ABUT. _____



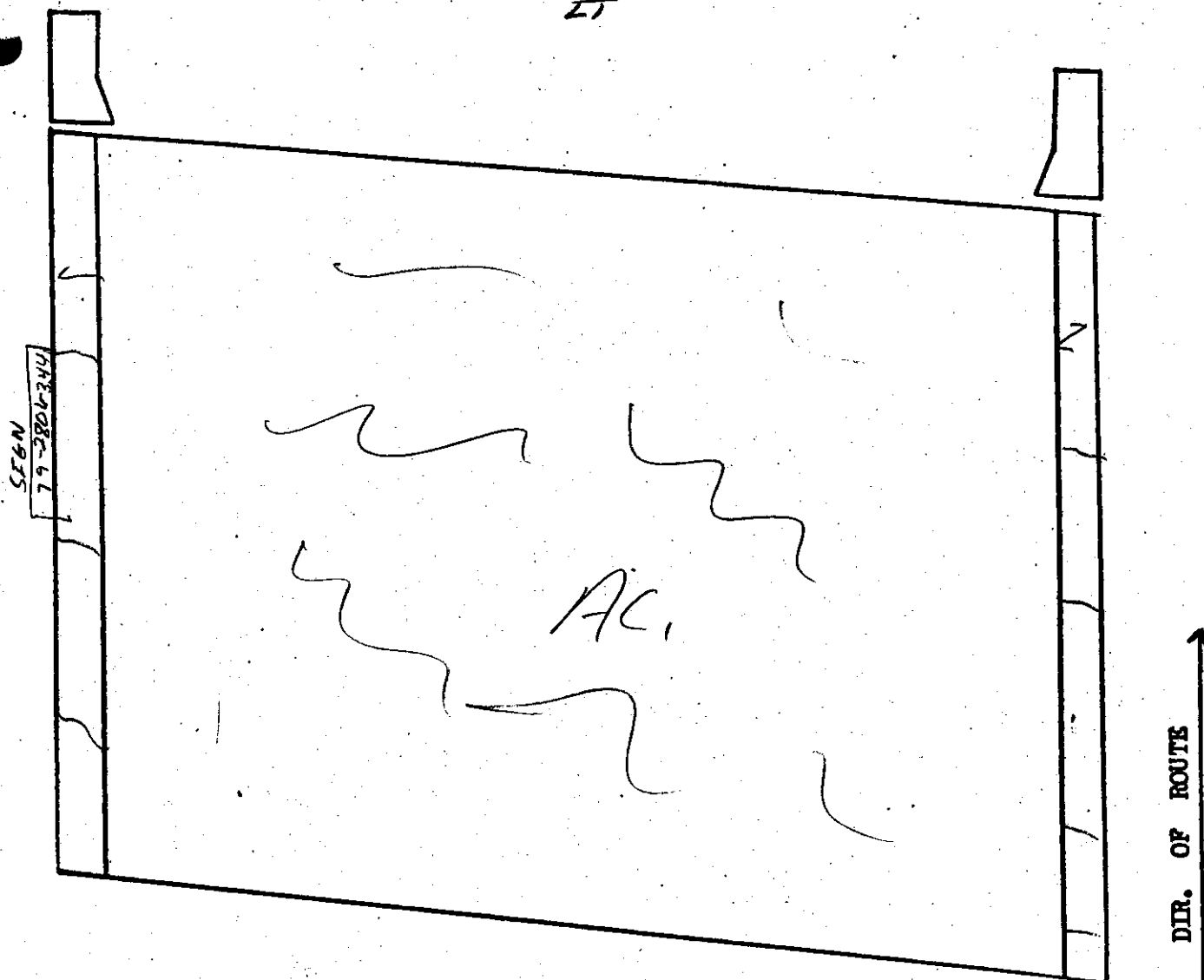
BRIDGE NO.: 79I00400070 79 I0040 0576 L 80L DATE: _____
CO. ROUTE LOG MILE L/R SKEW



ELEMENT	RATING	COMMENTS
ALIGNMENT	G F P C	
APPROACH PAVEMENT	G F P C	AC SPALLING 12' X 2' X 3" APP#2
APPROACH SLAB	G F P C	IVA D
APPROACH GUARDRAIL	G F P C	APPROACH#2 RIGHT RAIL HAS COLLISION DAMAGE
EMBANKMENT	G F P C	EMBANKMENT NEXT TO DRAIN APPROACH#2
DRAINS	G F P C	BROKEN & SETTLED 4" AND FILLED WITH DIRT 2' X 3' X 3'
APPROACH JOINT	G F P C	N/A
SIGNS	G F P C	NONE

BRIDGE NO. 79 I-40 576
~~6-240~~ ~~225~~ SK. 80° LT.
 IT

AUG 11 2002 W.B.L.
 SPAN NO 1



DECK
 PARAPET
 DRAINS
 JOINTS
 RAILS

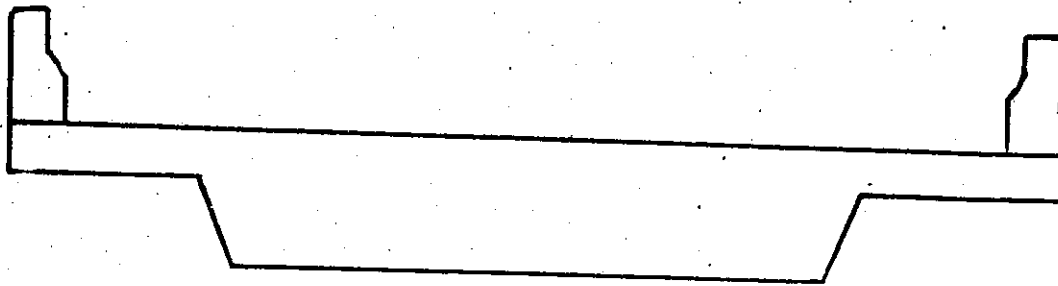
G F P C
 G F P C
 G F P C
 G F P C
 G F P C

SCATTERED FINE CRACKS
 N/A

BRIDGE NO. 79 I-240 3-2-6 SK. 800 LT. SPAN NO. 1

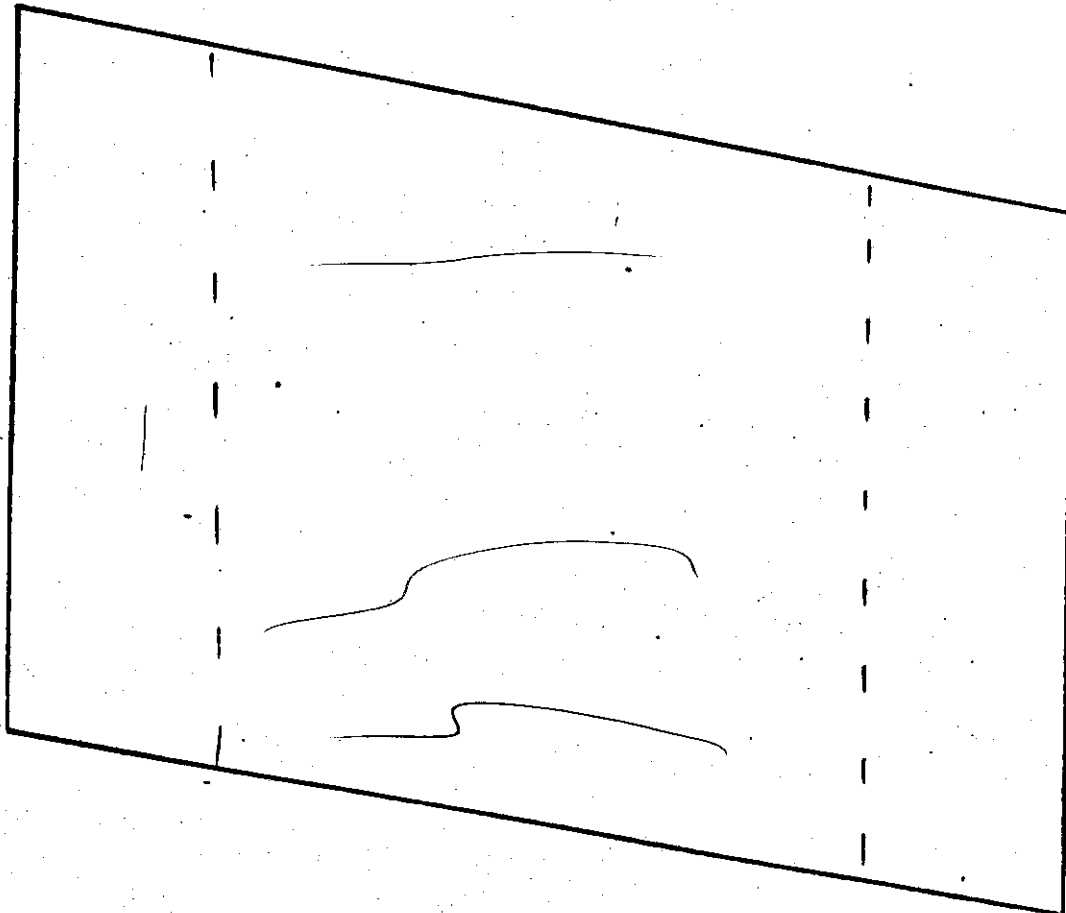
I40 5.76
ET

W.B.



[Handwritten signature]

DIR. ROUTE ↑

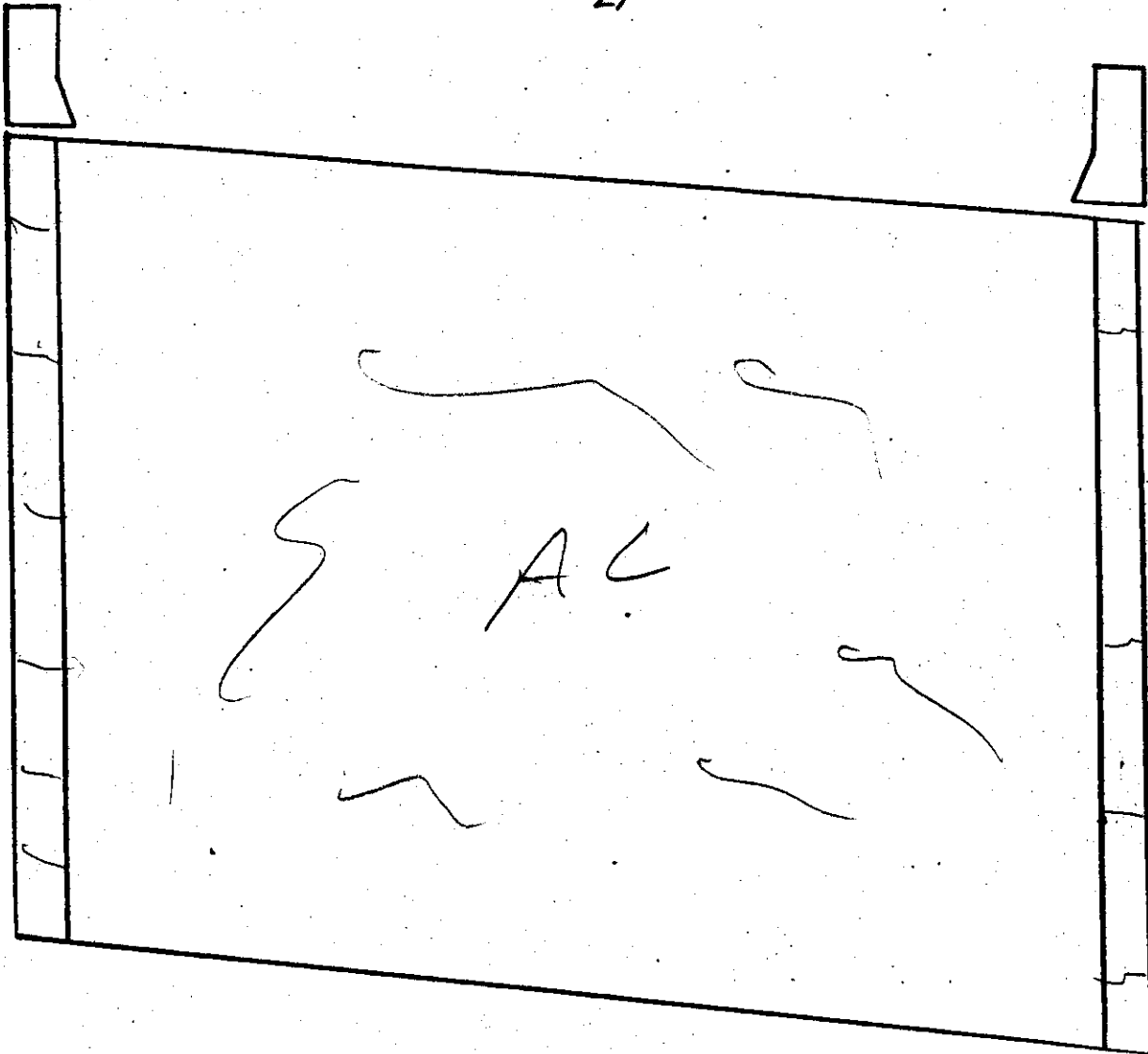


ELEMENT	RATING	COMMENTS
BOTTOM DECK	G (F) P C	FINE CRACKS

AUG 11 2003 W.B.C

BRIDGE NO. 79 I.40 5.76 SK. 80° 47'
27

SPAN NO 2



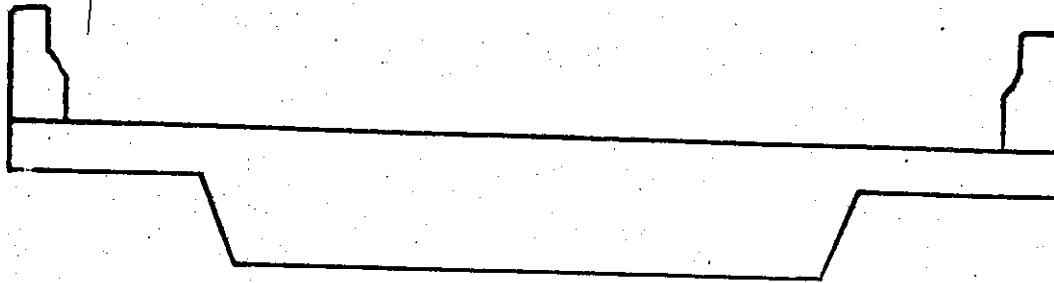
DECK
PARAPET
DRAINS
JOINTS
RAILS

G (F) P C
G (F) P C'
~~G F P C~~
~~G F P C~~
~~G F P C~~

SCATTERED FINE CRACKS
⚡ ⚡

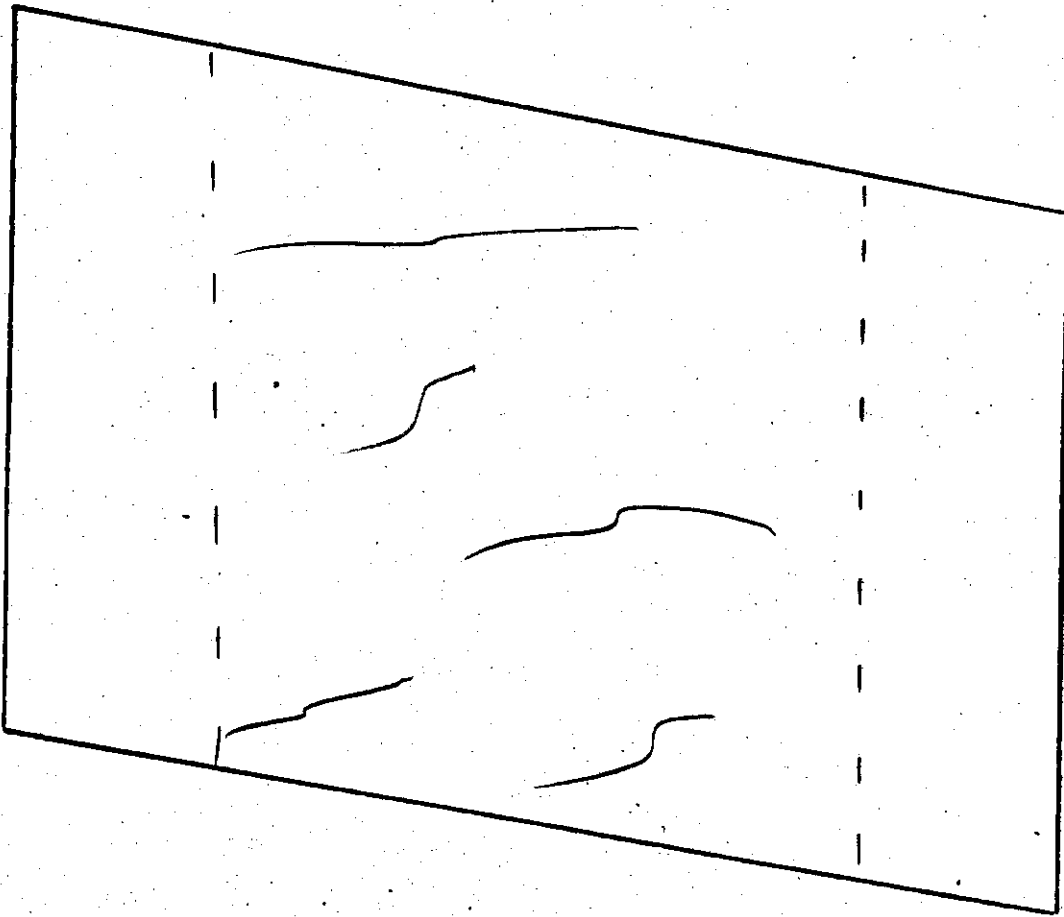
AUG 11 2012 W. B. L

BRIDGE NO. 79-I-240 ^{I40} ^{5.76} ~~3.26~~ SK. 80' LT SPAN NO. 2
 LT



(Handwritten signature)

↑
DIR. ROUTE



ELEMENT	RATING	COMMENTS
BOTTOM DECK	G/F P C	FINE CRACK)

BRIDGE

NO.

79

I-40

5.70

AUG

2012

ABUT. NO.

1

W.B.L.

LOOKING BACK

SLOPE PAV.

MENT	RATING	COMMENTS
------	--------	----------

BEARING

G F P C

N/A

PAINT

G F P C

CAP

G F P C

FINE CRACKS

WINGS

G F P C

EMB.

G F P C

VEG.

G F P C

LIGHT GROWTH

RIP-RAP

G F P C

N/A

SLOPE PAV.

G F P C

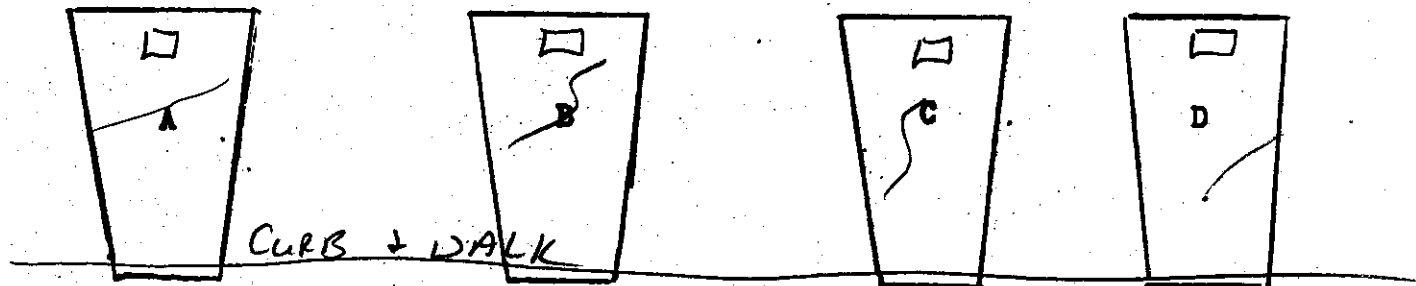
FINE CRACKS

BACKWALL

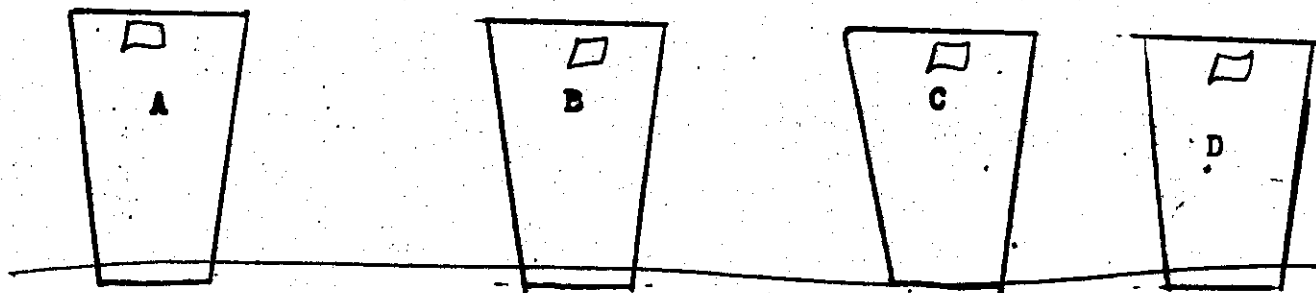
G F P C

BRIDGE NO. 79 ^{I-40 5.70} ~~I-240-326~~ _{ET}

BENT NO. L ... ^{AUG 11 2011} W.B.C.



FRONT



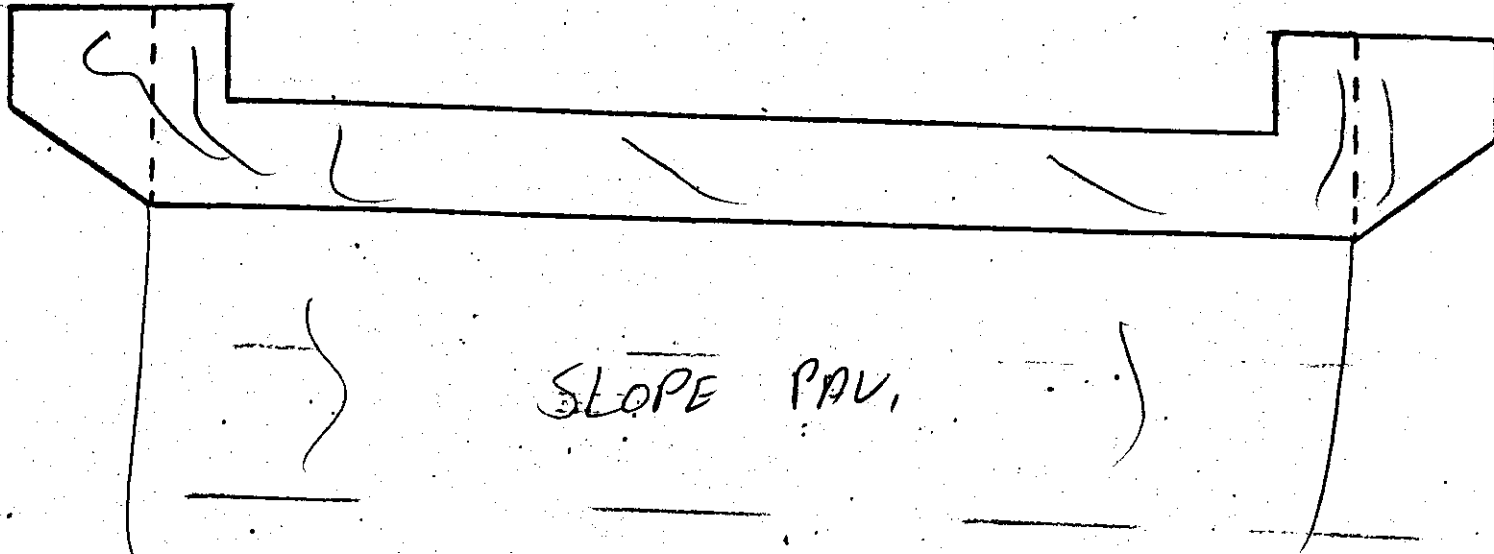
REAR

ELEMENT		RATING	COMMENT
LEM	A	G <u>F</u> P C	FINE CRACKS
	B	G <u>F</u> P C	
	C	G <u>F</u> P C	
	D	G <u>F</u> P C	
LIGHTS		<u>G</u>	

BRIDGE NO. 79-~~7240~~-326
 I-40 5.76
 LT

AUG 2002
 ABUT. NO. 2
 W.B.L

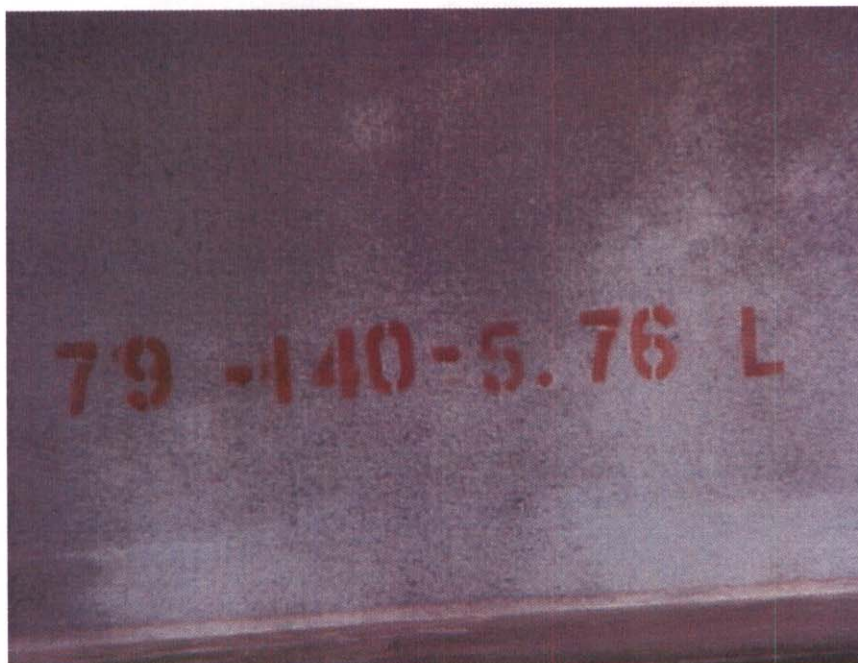
LOOKING Ahead



SLOPE PAV.

MENT	RATING	COMMENTS
BEARING	G F P C	NIL
PAINT	G F P C	
CAP	G F P C	FINE CRACKS
WINGS	G F P C	
EMB.	G F P C	
VEG.	G F P C	
RIP-RAP	G F P C	
SLOPE PAV.	G F P C	FINE CRACKS
BACKWALL	G F P C	

Bridge Loc. No: 79 - I0040 - 05.76 Date: 09-11-01



BRIDGE NO.



ELEVATION LEFT SIDE

Bridge Loc. No: 79 - I0040 - 05.76 Date: 09-11-01



ELEVATION LEFT SIDE



BENT #1

Bridge Loc. No: 79 - I0040 - 05.76 Date: 09-11-01

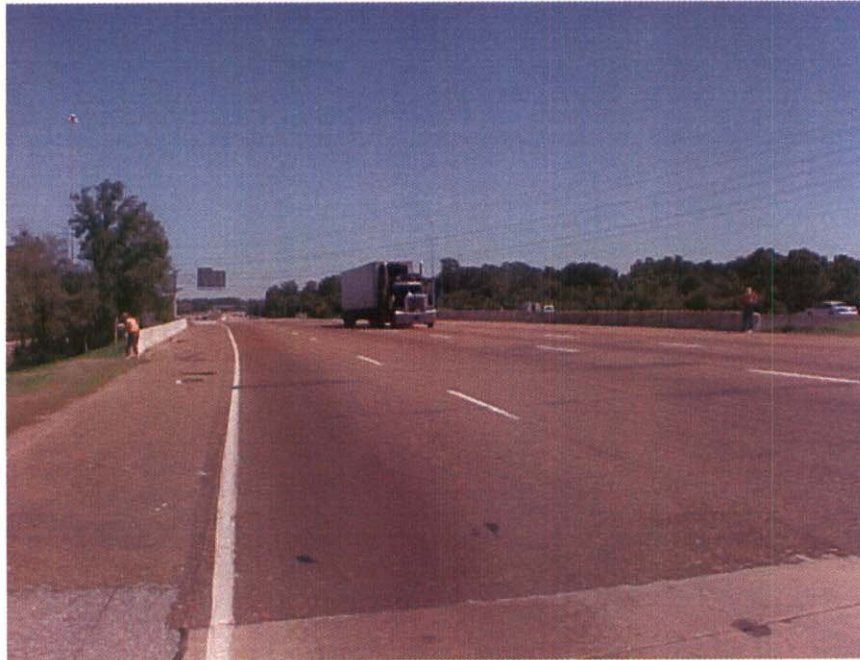


ABUTMENT #1



SPAN #1, BOTTOM OF DECK

Bridge Loc. No: 79 - I0040 - 05.76 Date: 09-11-01



LOOKING AHEAD ON ROUTE



VIEW ACROSS TOP OF DECK

Bridge Loc. No: 79 - I0040 - 05.76 Date: 09-11-01



APPROACH #1 PAVEMENT CRACKING & SPALLING



APPROACH #1 PAVEMENT CRACKING & SPALLING

Bridge Loc. No: 79 - I0040 - 05.76 Date: 09-11-01



APPROACH #2 PAVEMENT CRACKING & SPALLING



APPROACH #2 PAVEMENT CRACKING & SPALLING

Bridge Loc. No: 79 - I0040 - 05.76

Date: 09-11-01



APPROACH #2, LEFT DRAIN SETTLED

BRIDGE INSPECTION REPORT

SEP 11 2001

Form BIR 3.0
(Rev. 9-22-98)
DT-0069

Field Report No. 15 Date 9-11-01
Previous Report No. 14 Date 1-19-00
Plans: YES () NO ()

Bridge No. 79I00400070 Bridge Location No. 79 - I0040 - 5.76 L 79 - 02806 - 0344
Eleven Digit No. Co. Route Log Mile OVER/UNDER PASS

_____ over -0- _____
Road Name Crossing Structure Name (If Named)
Year Constructed _____ County Shelby Maintenance District 45
Year Widened _____ Year Rehabilitated _____

FEATURES

Wearing Surface Concrete () Timber () Asphalt (X) Depth 2" (in.)
Flared Width Yes () No (X) Median Width Open (X) None () Closed ()
Navigational Control Yes () No (X) Bridge Skew 80L° LT (X) RT ()
Structure Type (Main Span) CONC. BOX BEAM
Structure Type (Appr. Spans) _____
No. Main Spans 2 No. Approach Spans _____
Maximum Span Length 106' (**. ft.)
Total Length 196.0 (**. ft.)

INSPECTORS

1. COLLINS
2. ADAMS
3. BYRD
4. ROBINSON
5. _____
6. _____
7. _____
8. _____

WIDTHS (**. ft.)

Deck Out-to-Out 74.0
Roadway Curb/Curb 72.0
Roadway Rail/Rail _____
Sidewalk Rt. _____ Lt. _____
*Approach Roadway 48'
*(Does Not Include Shoulders)
Approach Shoulder Rt. 12'
Lt. 12'

CLEARANCES

Min. Vertical Clearance over Deck N/A (ft.-in.)
Min. Vertical Under Clearance 16'-11" (ft.-in.)
Min. Lateral Under Clearance Rt. 6.0 (**. ft.)
Min. Lateral Under Clearance Lt. 6.0 (**. ft.)

FRACTURE CRITICAL: N/A
(If Yes, Include BIR 3.9)

NBIS Bridge Length (<25 ft.) N/A (ft.-in.)

UNDERWATER INSPECTION

To Be Performed By: _____

Date _____

DOT FIELD TEAM () CONTRACT DIVERS () NONE REQUIRED (X)

Change in Structural Condition: Yes () No (X)

Major Repairs Made: Yes () No (X)

COMMENTS:

N - 35° 11' 31.3"
W 90° 00' 29.7"

BRIDGE RATING: () (X) () ()
GOOD FAIR POOR CRITICAL

Supervising Bridge Inspector: [Signature]

Form BIR 3.1
(Rev. 9-22-98)
DT-0080

Bridge Location No. 79 - I0040 - 5.76 L
Co. Route Log Mile

Date _____

PERFORMANCE EVALUATION

Time of Day Inspected 1:00

Weather Conditions Cloudy 85°

Vehicles Observed ALL TYPES

LIVE LOAD BEHAVIOR

Substructure	YES	NO	Comments
Horiz./ Vert. Defl.	()	(X)	
Vibration	()	(X)	
Superstructure			
Horiz./ Vert. Defl.	()	(X)	
Vibration	()	(X)	

APPROACH

	Rating	Comments
Alignment	(G) F P C	
Slab	G F P C	N/K
Joints	G F P C	N/K
Pavement	G F (P) C	APPH'Z PATCHED SPALLING (001)
Embankment	(G) F P C	
Drains	G F (P) C	APPH'Z - LT SETTLED - OPENING BLOCKED (009)

TRAFFIC SAFETY FEATURES

	Rating	STANDARD/ SUB-STANDARD	Comments
Bridgerailing	G (F) P C	(X) ()	
Transitions	(G) F P C	() (X)	
Guardrail	(G) F P C	() (X)	
Guardrail Terminal	(G) F P C	() (X)	

SIGNING

	YES	NO	NEEDED	Weight Limit Posted
Paddleboards	()	(X)	()	YES () NO (X)
Vertical Clearance (<14'-6")	()	(X)	()	Gross..... Tons
NARROW ()	()	(X)	()	2 Axle..... Tons
ONE LANE BRIDGE ()	()	(X)	()	3 or more Axles.. Tons

Other Signs or Plaques: OVERHEAD ATTACHED TO SPAN #1 AT

Comments Regarding any
Problems with Signing: NONE

NO → 79-2806-3.44

SEP 11 2001

Form BIR 3.2
(Rev. 9-22-98)
DT-0081

Bridge Location No. 79 - 10040 - 5.76 L
Co. Route Log Mile

Date _____

DECK

	Rating	Comments
Wearing Surface	G <u>F</u> P C	
Deck - Structural Condition	G F P C	
Curbs	G F P C	
Median	G F P C	
Sidewalks	G F P C	
Parapet	G <u>F</u> P C	
Railing	G F P C	
Paint	G F P C	
Drains	G F P C	
Lighting Standards	<u>G</u> F P C	ON STEMS
Utilities	<u>G</u> F P C	
Joint Leakage	G F P C	
Expansion Joints	G F P C	CMT PLATE

SUPERSTRUCTURE

Bearing Devices	G F P C	
Beams <i>Box Solid</i>	G <u>F</u> P C	
Girders	G F P C	
P C C S	G F P C	
BOLTS (PCCS)	G F P C	
Floor Beams	G F P C	
Stringers	G F P C	
Diaphragms	G F P C	
Bracing	G F P C	
Trusses - General	G F P C	
Portals	G F P C	
Bracing	G F P C	
Paint	G F P C	
Alignment of Members	<u>G</u> F P C	

TEXTURE COAT

(069) *TOP & Bottom*

Condition Rating	G F <u>P</u> C	Fading	G F <u>P</u> C
Overall Appearance	G F <u>P</u> C	Needs Spot Painting	YES () NO (✓)
Staining Rating	G F <u>P</u> C	Needs Repainting	YES (✓) NO ()

Comments _____ Scaling Rating G F P C

RECOMMENDATIONS: _____ CLEAN SEAL JOINTS ()

_____ CLEAN DRAINS ()

SEP 14 2000

Form BIR 3.3
(Rev. 9-22-98)
DT-0082

Bridge Location No. 79 - 10040 - 5.76 L
Co. Route Log Mile

Date _____

SUBSTRUCTURE

PILES TO BE
REPLACED

ABUTMENTS

	Rating	Comments	PILE(S)	ABUTMENT
Caps	G <u>F</u> P C			
Breastwall	G <u>F</u> P C			
Wings	G <u>F</u> P C			
Backwall	G <u>F</u> P C			
Plumb	<u>G</u> F P C			
Footing	G F P C			
Piles	G F P C			
Embankment	<u>G</u> F P C			
Bearing	G F P C			
Slope Paving	G F P C			
Rip Rap	G <u>F</u> P C			
Earthquake Devices	G F P C	<u>N/A</u>		

PIERS

	Rating	Comments	PILE(S)	PIER
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			
Bearing	G F P C			
Web	G F P C			
Earthquake Devices	G F P C			

BENTS

	Rating	Comments	PILE(S)	BENT
Caps	G F P C	<u>N/A</u>		
Columns	G F P C			
Plumb	<u>G</u> F P C			
Footings	G F P C			
Piles <u>STEMS</u>	<u>G</u> F P C			
Bearing	G F P C			
Bracing <u>LIGHTS</u>	<u>G</u> F P C			
Earthquake Devices	G F P C			

Piles Need Replacement: NO X YES ()

CUT VEGETATION NO X YES ()

CLEAR DRIFT NO X YES ()

RECOMMENDATIONS:

INSPECTION REPORT FOR UNDERPASS ROUTE

Form BIR 3.0A
(Rev. 9-22-98)
DT-1443

Field Report No. _____ Date _____
Previous Report No. _____ Date _____

Bridge No. 79I00400070
Eleven Digit No.

Underpass Location No. 79 - I0040 - 0576 L

-0- or - - -
Railroad/Walkway Co. Route Log Mile

over/
under
Co. Route Log Mile
79 - 02806 - 0344

County Shelby

Structure Name (If Named) _____

Year Constructed _____

Year Widened _____ Year Rehabilitated _____

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)

Divided Highway LEFT RDWY () RIGHT RDWY ☒ N.A. ()

Type of Wearing Surface CONCRETE () ASPHALT () GRAVEL ()

Width of Approach Traveled Roadway 52 ft. (Does Not Include Shoulders)

Width of Median if Divided Highway 14 ft.

Approach Shoulder Width N/A ft. Right N/A ft. Left

*Horizontal Clearance Under Bridge 52 ft. 0 IN.

*Distance Between Pier Protection
Guardrail and Substructure N/A ft. Right N/A ft. Left

*Width of Sidewalk Under Bridge 6.0 ft. Right N/A ft. Left

*Minimum Vertical Clearance: 17' ft. _____ in.

*Show on Sketch

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

		STANDARD	SUB-STANDARD	NON EXIST
Pier Protection Railing or Parapet	G F P C	()	()	(X)
Approach Guardrail Transitions	G F P C	()	()	(X)
Approach Guardrail	G F P C	()	()	(X)
Approach Guardrail Terminal	G F P C	()	()	(X)

SIGNING FOR UNDERPASS ROUTE

Paddleboards YES () NO ☒ NEEDED ()
Vertical Clearance (<14'-6") YES () NO ☒ NEEDED ()
Narrow Passage YES () NO ☒ NEEDED ()
One Lane Passage YES () NO ☒ NEEDED ()
Other Underpass Signs Needed _____

INSPECTORS

1. PELVES
2. _____
3. _____
4. _____
5. _____
6. _____

SEP 11 2001

Page 1 of 2

INSPECTION REPORT FOR UNDERPASS ROUTE

Page No. _____

Form BIR 3.0A
(Rev. 9-22-98)
DT-1443Field Report No. _____ Date _____
Previous Report No. _____ Date _____Bridge No. 79100400070
Eleven Digit No.Underpass Location No. 79 - 10040 - 0576 L-0- _____ or _____
Railroad/Walkway

Co. _____ Route _____ Log Mile _____

over/
under
Co. _____ Route _____ Log Mile _____County Shelby

Structure Name (If Named) _____

Year Constructed _____

Year Widened _____

Year Rehabilitated _____

GEOMETRIC FEATURES UNDER BRIDGE (*. * ft. unless otherwise noted)Divided Highway LEFT RDWY ☒ RIGHT RDWY () N.A. ()

Type of Wearing Surface CONCRETE () ASPHALT () GRAVEL ()

Width of Approach Traveled Roadway 40 ft. (Does Not Include Shoulders)Width of Median if Divided Highway 14 ft.Approach Shoulder Width N/A ft. Right N/A ft. Left*Horizontal Clearance Under Bridge 40 ft. 0 in.*Distance Between Pier Protection
Guardrail and Substructure N/A ft. Right N/A ft. Left*Width of Sidewalk Under Bridge N/A ft. Right 6.0 ft. Left*Minimum Vertical Clearance: 11 ft. 11 in.

*Show on Sketch

TRAFFIC SAFETY FEATURES FOR UNDERPASS ROUTE

		STANDARD	SUB-STANDARD	NON EXIST
Pier Protection Railing or Parapet	G F P C ()	()	()	(X)
Approach Guardrail Transitions	G F P C ()	()	()	(X)
Approach Guardrail	G F P C ()	()	()	(X)
Approach Guardrail Terminal	G F P C ()	()	()	(X)

SIGNING FOR UNDERPASS ROUTE

Paddleboards YES () NO (X) NEEDED ()

Vertical Clearance (<14'-6") YES () NO (X) NEEDED ()

Narrow Passage YES () NO (X) NEEDED ()

One Lane Passage YES () NO (X) NEEDED ()

Other Underpass Signs Needed _____

INSPECTORS

1. REGGIE
2. _____
3. _____
4. _____
5. _____
6. _____

SEP 11 2001

Page No. _____

Page 2 of 2

Form BIR 3.0A (Continued)
(Rev. 9-22-98)
DT-1443

Date _____

Underpass Location No. 79 - 10040 - 0576 L
Co. Route Log Mile

Other Signs or Plaques: _____

Comments Regarding any Problems with Signing: _____

BRIDGE FEATURES (*.* ft.)

Bridge Skew 80° Lt
Structure Type (Main Span) Box Beam No. Main Spans 2
Structure Type (Appr. Spans) _____ No. Appr. Spans _____
Maximum Span Length 106' (ft.) Total Length 196' (ft.)
Width of Bridge Out-to-Out 74' (ft.) Right Angle to Centerline of Bridge
Width of Bridge Along Skew _____ (ft.) (If Unable to Measure at Right Angle to Centerline of Bridge)
Number of Lanes/Tracks on Bridge _____

BRIDGE CONDITION:

G ☒ F ☐ P ☐ C

Does Potential Exist for Elements from Bridge Falling on Roadway Beneath YES () NO ☒

Does Potential Exist Because of Deteriorated Condition or Failure of Major Member YES () NO ☒

Comment on any Conditions of Bridge that would Effect Roadway Beneath:

Note: If Underpass Route is Divided Highway, Use Two 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

Inspection Team's Summary

SEP 11 2001

Bridge Location No. 79 - 10040 - 5.76 L

Inspection Date 9-11-01

Bridge Rating FAIR

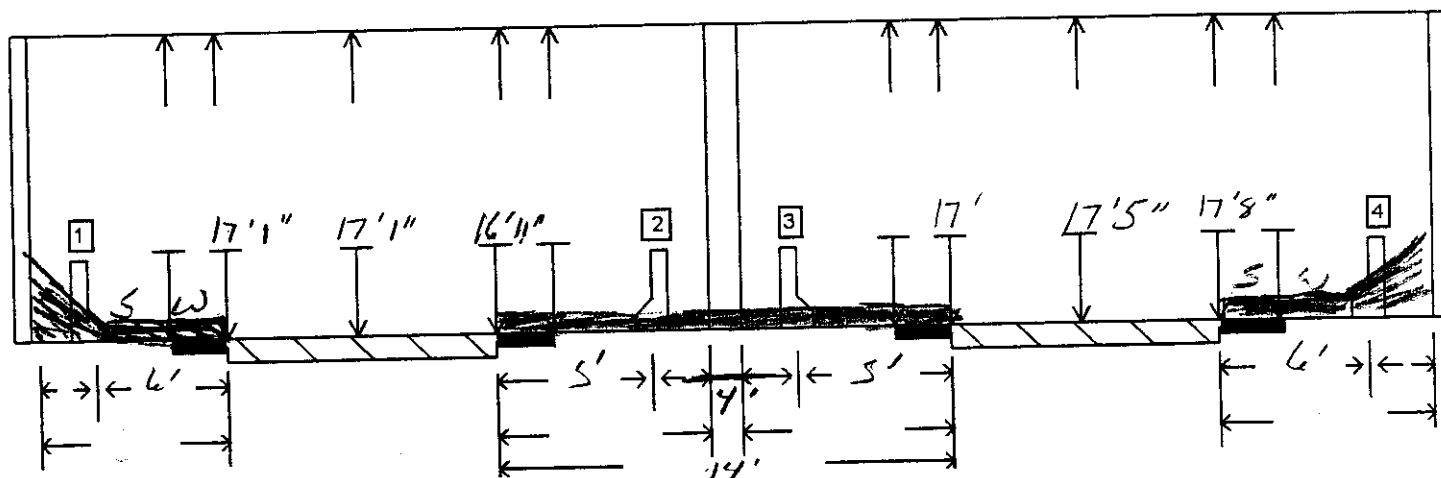
THIS TWO SPAN CONC. BOX BEAM WITH
CONC. SUBSTRUCTURE BRIDGE IS IN FAIR
CONDITION. ALL TRAFFIC SAFETY FEATURES ARE
PRESENT. APP. #1 & #2 PAVEMENT IS SPALLING,
CRACKING, & SETTLED. APP. #1 & #2 LT. DRAINS ARE
100% FILLED WITH DEBRIS. APP. #2 LT. DRAIN
IS SETTLED UP TO 2". THE MINIMUM VERT.
CLEARANCE IS 16'11".

Derek Byrd

Cross Section: yes () no (X)

Pontis: yes () no (X)

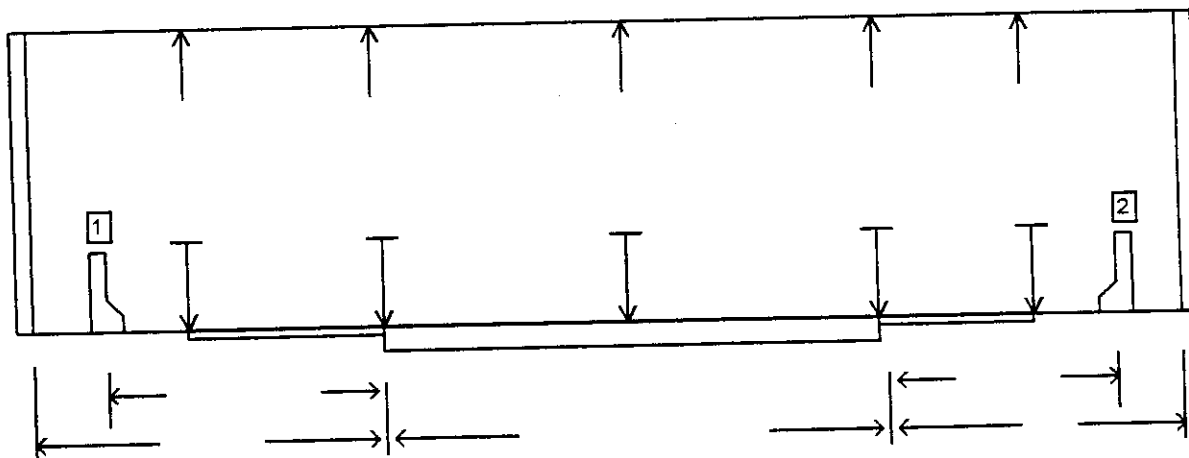
~~BENT~~/ABUT. 2 BENT 1 ~~BENT~~/ABUT. 1



- | | | | | | | | |
|----|--------------------|---------|-----|---------------|-----|------|-------------------------------------|
| 1. | RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | <input checked="" type="checkbox"/> |
| 2. | RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | <input checked="" type="checkbox"/> |
| 3. | RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | <input checked="" type="checkbox"/> |
| 4. | RAIL/BARRIER TYPE: | W-SHAPE | [] | CONC. BARRIER | [] | NONE | <input checked="" type="checkbox"/> |

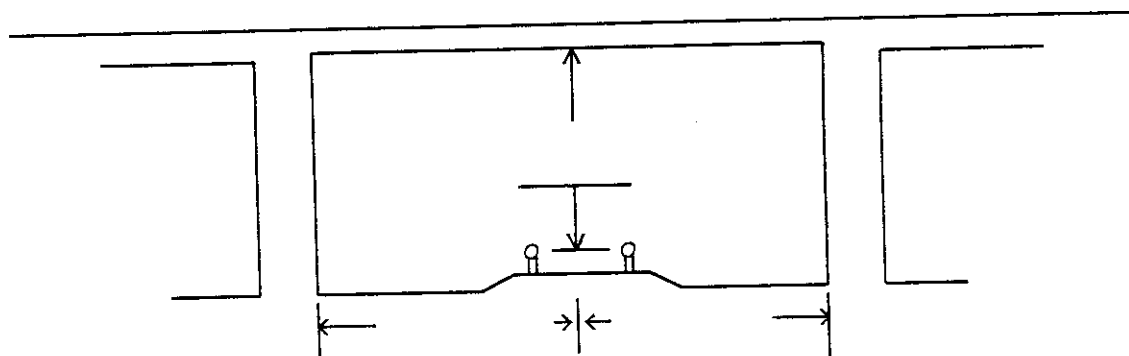
BENT/ABUT. _____

BENT/ABUT. _____



BENT/ABUT. _____

BENT/ABUT. _____



BRIDGE NO. 79 ^{I-40 5.76}
~~F-240 - 326~~

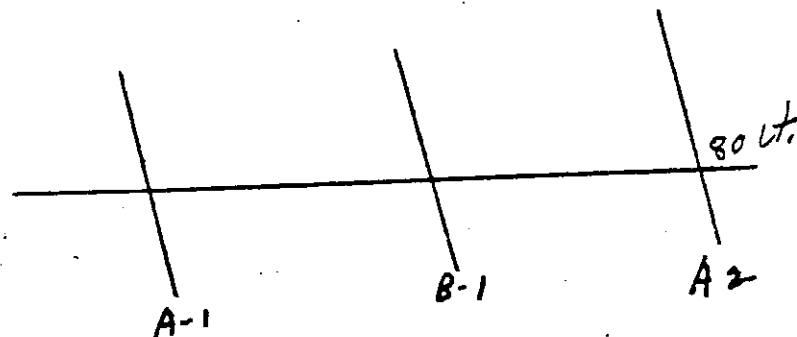
SKEN 80°41'

2001

DIR. OF ROUTE →

ET

W. B. L

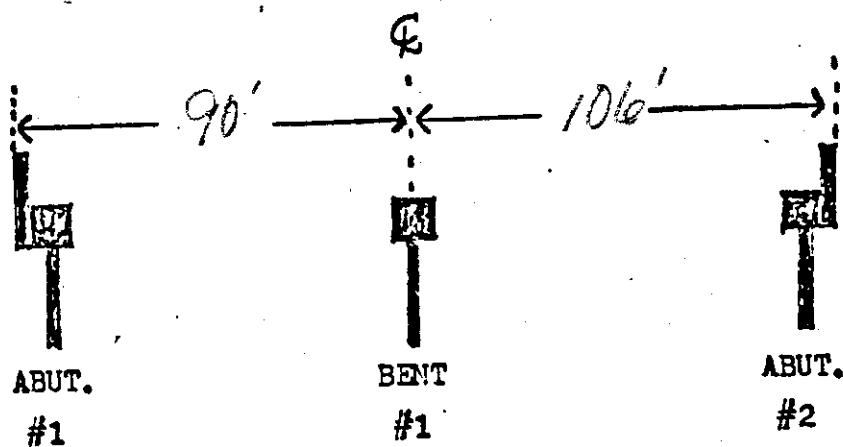


PLAN VIEW

REQUIRED DATA.

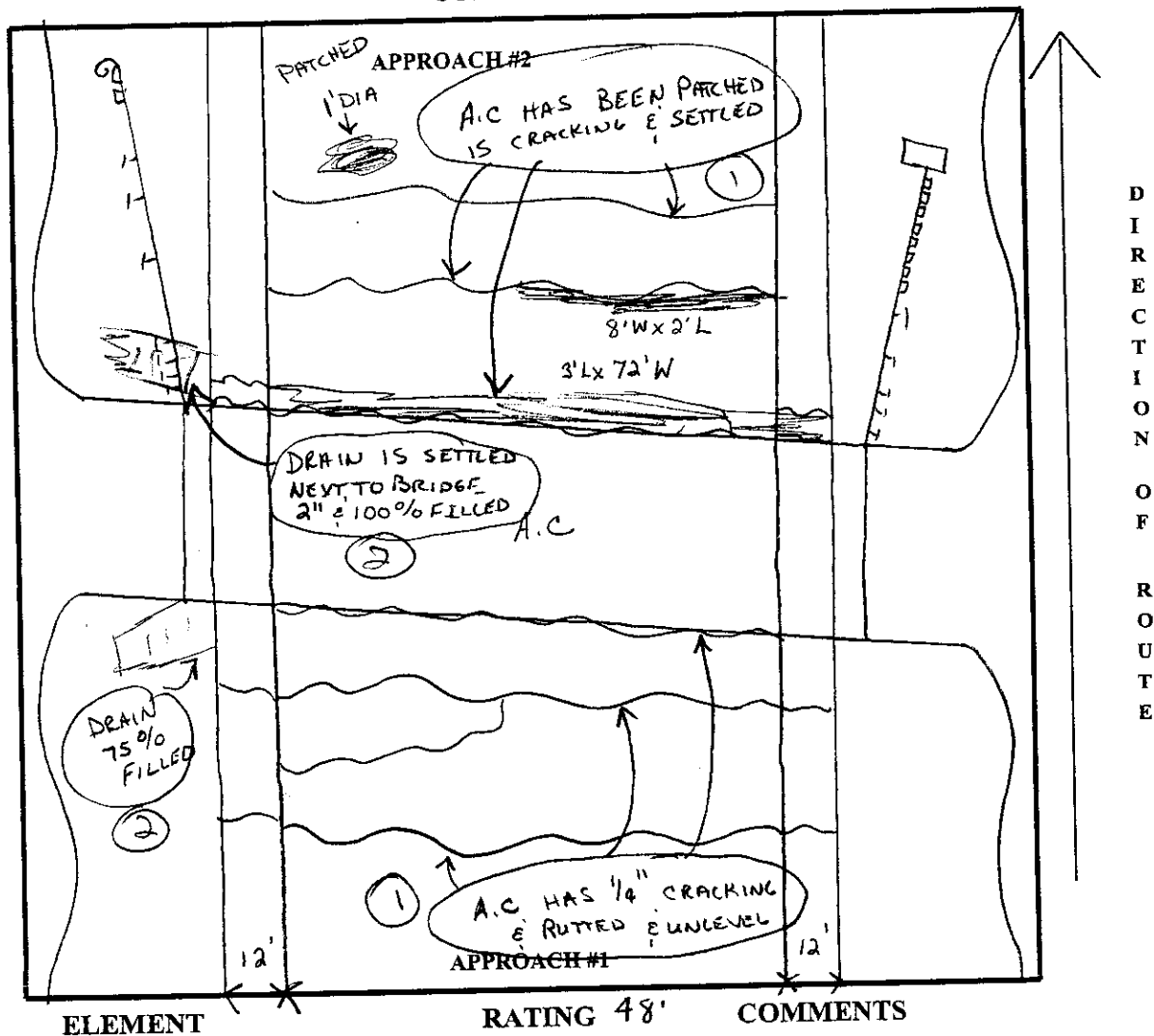
1 F = FIXED
E = EXPANSION

2 S = SIMPLE SUPPORTED
C = CONTINUOUS SUPPORT



SEP 11 2001

BRIDGE NO.: 79I00400070 79 I0040 0576 L 80L DATE: _____
CO. ROUTE LOG MILE L/R SKEW

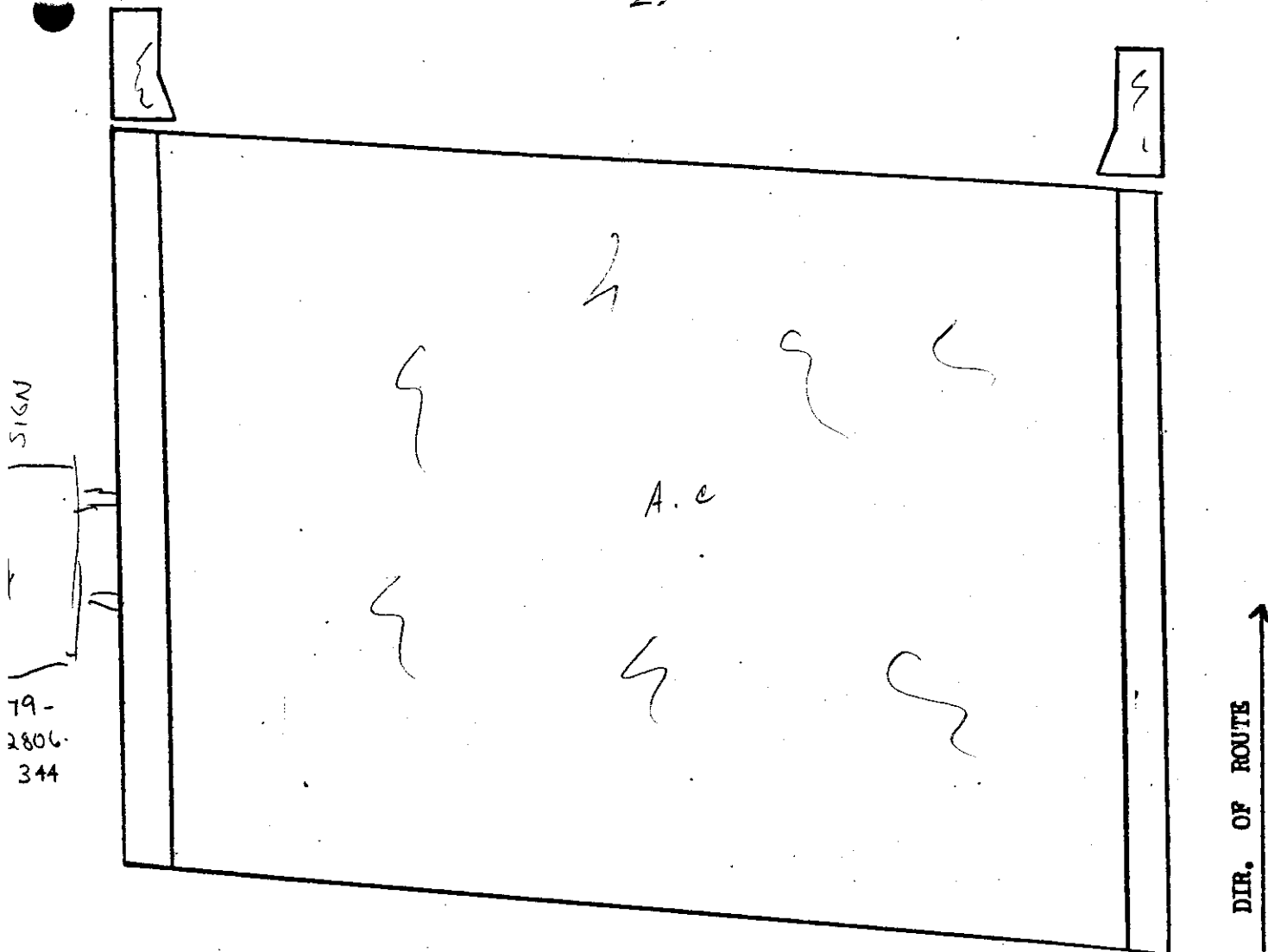


ALIGNMENT	(G) F P C	
APPROACH PAVEMENT	G F (P) C	APP. # 1 & 2 - SEE (1)
APPROACH SLAB	G F P C	N/V
APPROACH GUARDRAIL	(G) F P C	
EMBANKMENT	(G) F P C	
DRAINS	G F (P) C	SEE (2)
APPROACH JOINT	G F P C	N/V
SIGNS	G F P C	N/A

SEP 17 2006 W.B.L

BRIDGE NO. 79 I-40 5.76
~~I-240~~ ~~2.25~~ SK. 80° LT.
 IT

SPAN NO 1



DECK

G (F) P C

SCATTERED FINE CRACKS

PARAPET

G (F) P C

" " "

DRAINS

G F P C

N/A

ENTS

G F P C

N/A

RAILS

G F P C

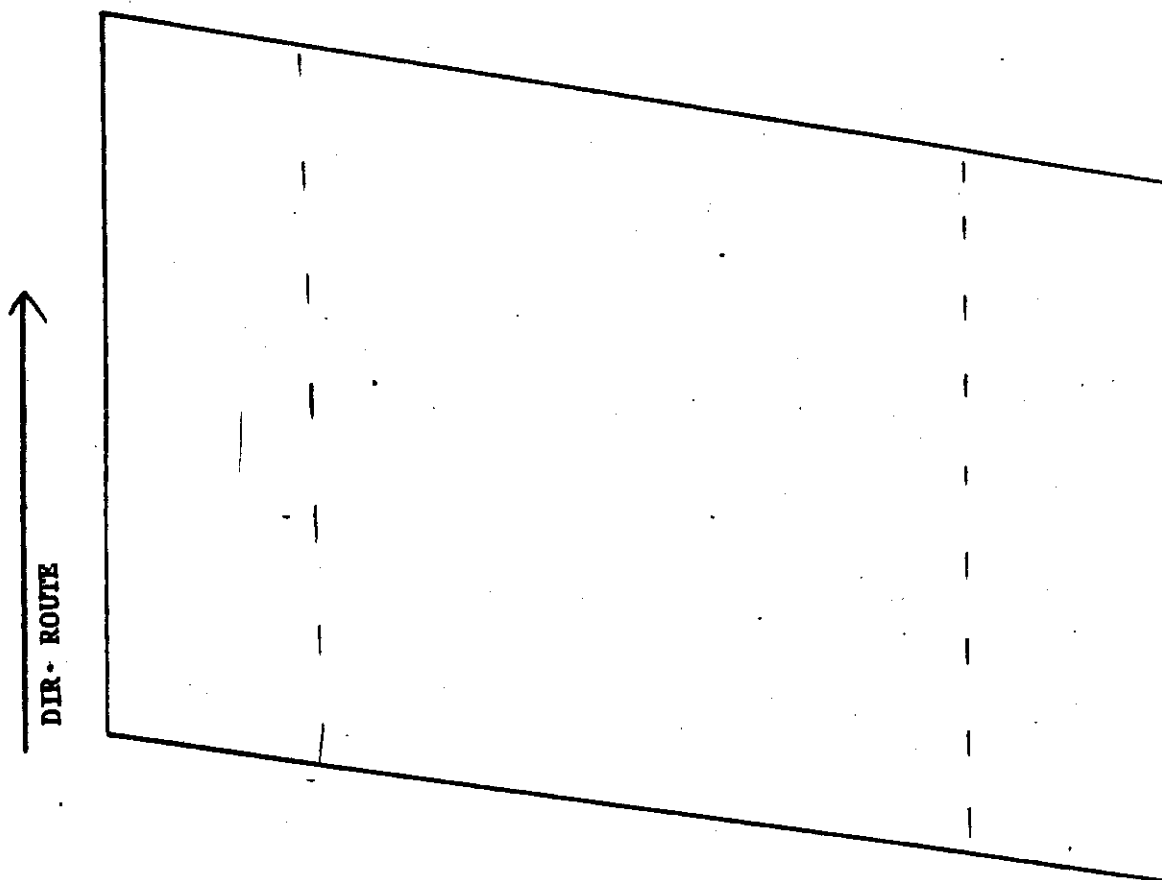
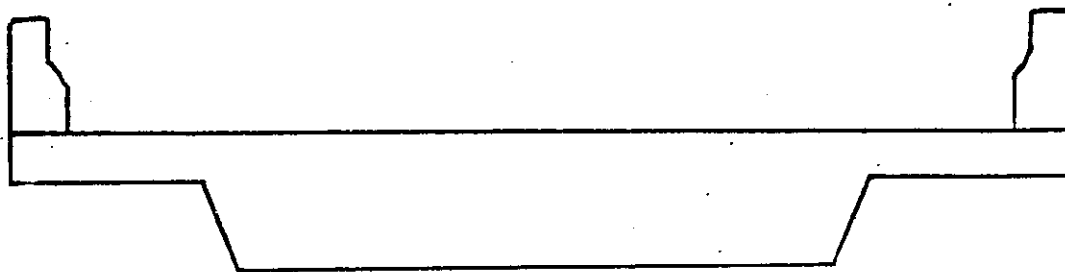
N/A

SIGN

(G)

SEP 11 2001 W.E.L.

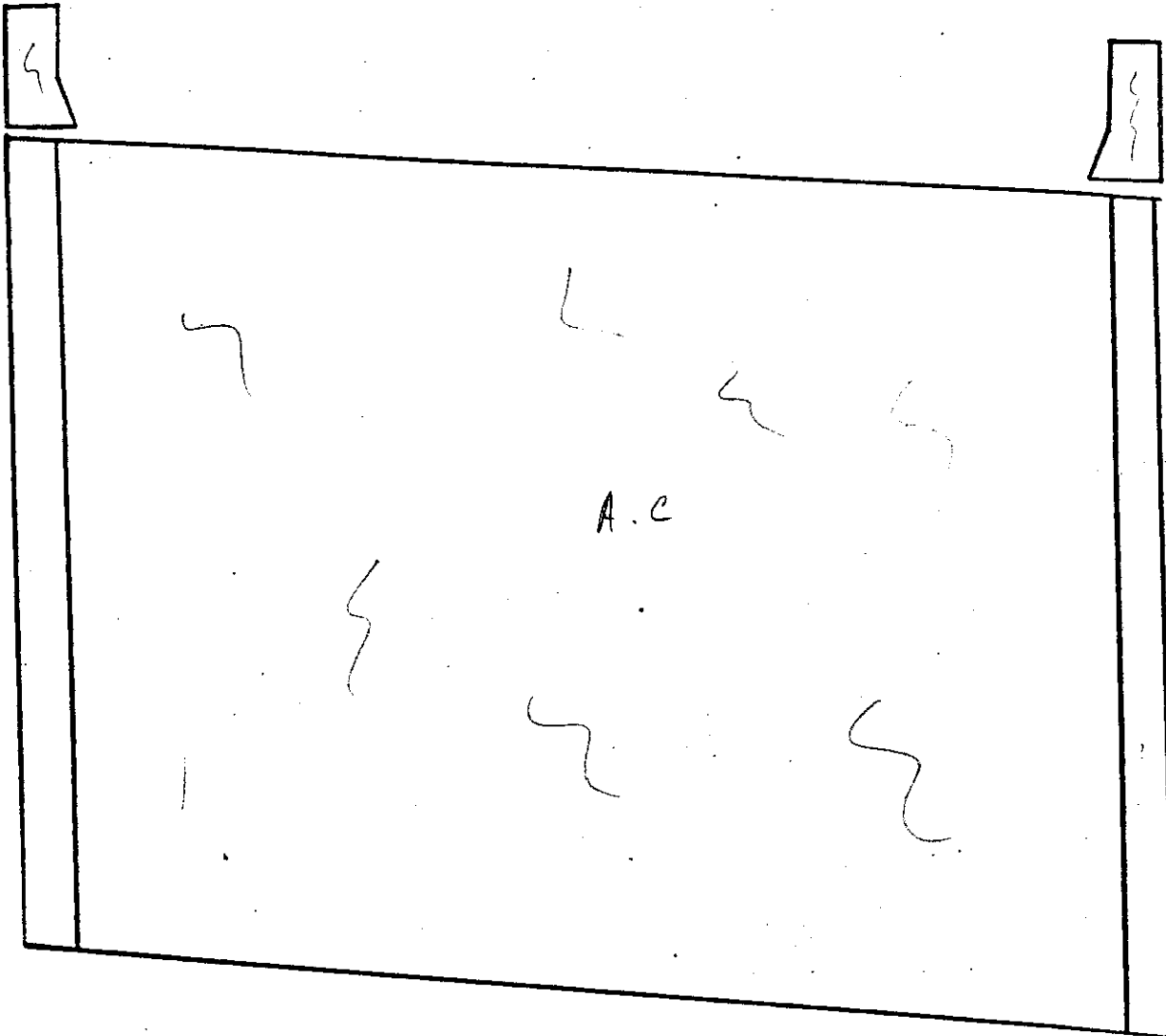
BRIDGE NO. 79 I-240 3.26 SK. 80° LX SPAN NO. 1
 I40 5.76
 ET



ELEMENT	RATING	COMMENTS
BOTTOM DECK	G P C	FINE CRACKS
UTILITY	G	

BRIDGE NO. 79 I.40 5.76 SK. 80° LT

SPAN NO 2



DECK

G (F) P C

SCATTERED FINE CRACKS

PARAPET

G (F) P C

" " "

DRAINS

G F P C

N/A

POINTS

G F P C

N/A

RAILS

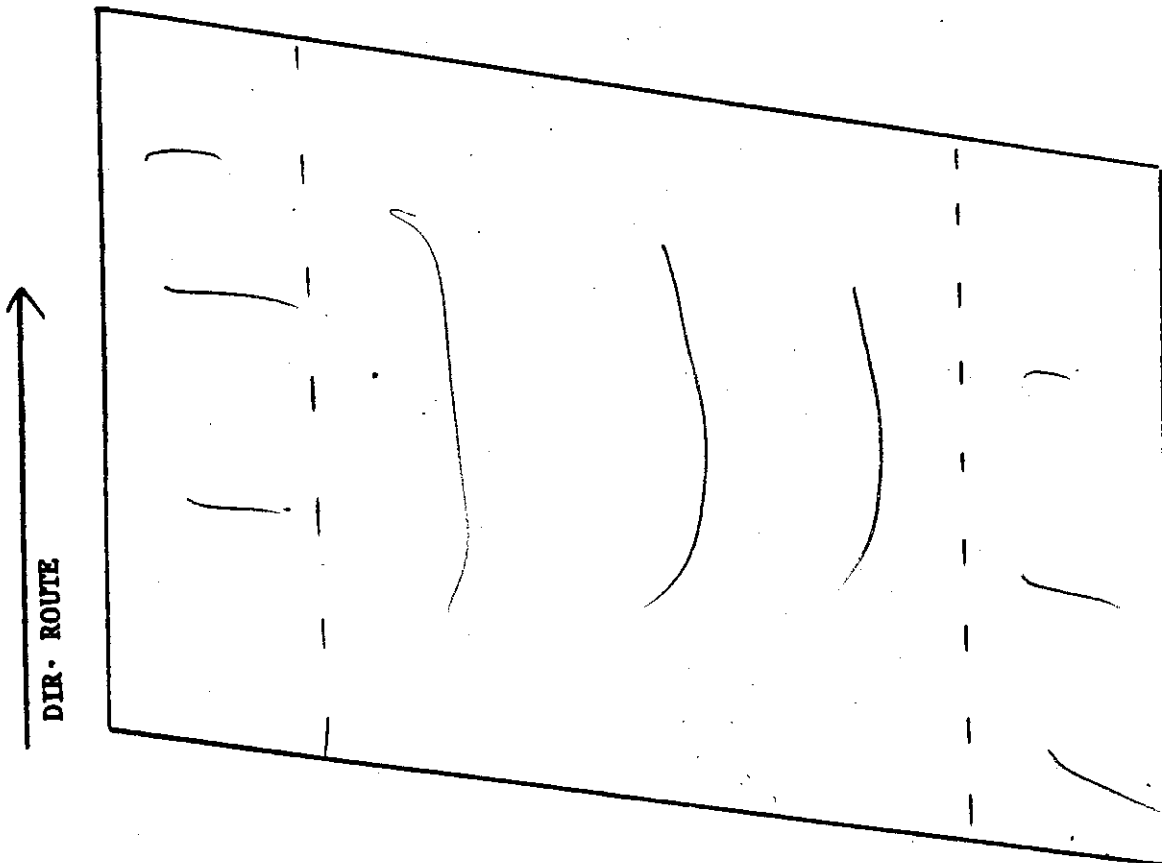
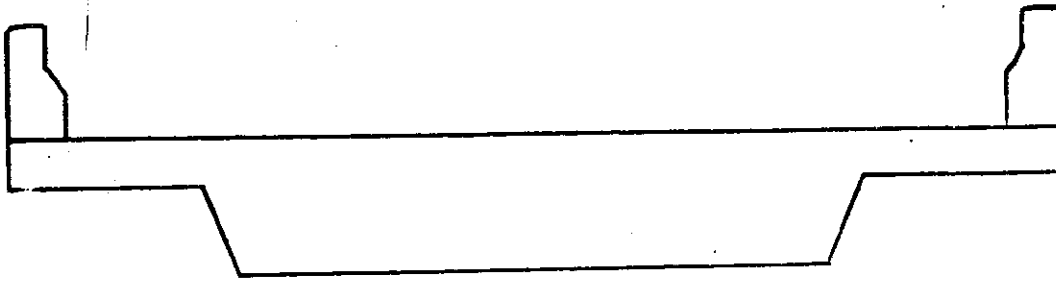
G F P C

N/A

BRIDGE NO. 79 - I-40 5.76 SK. 80° LT SPAN NO. 2
~~326~~
 LT

SEP 11 2001

W. B. L

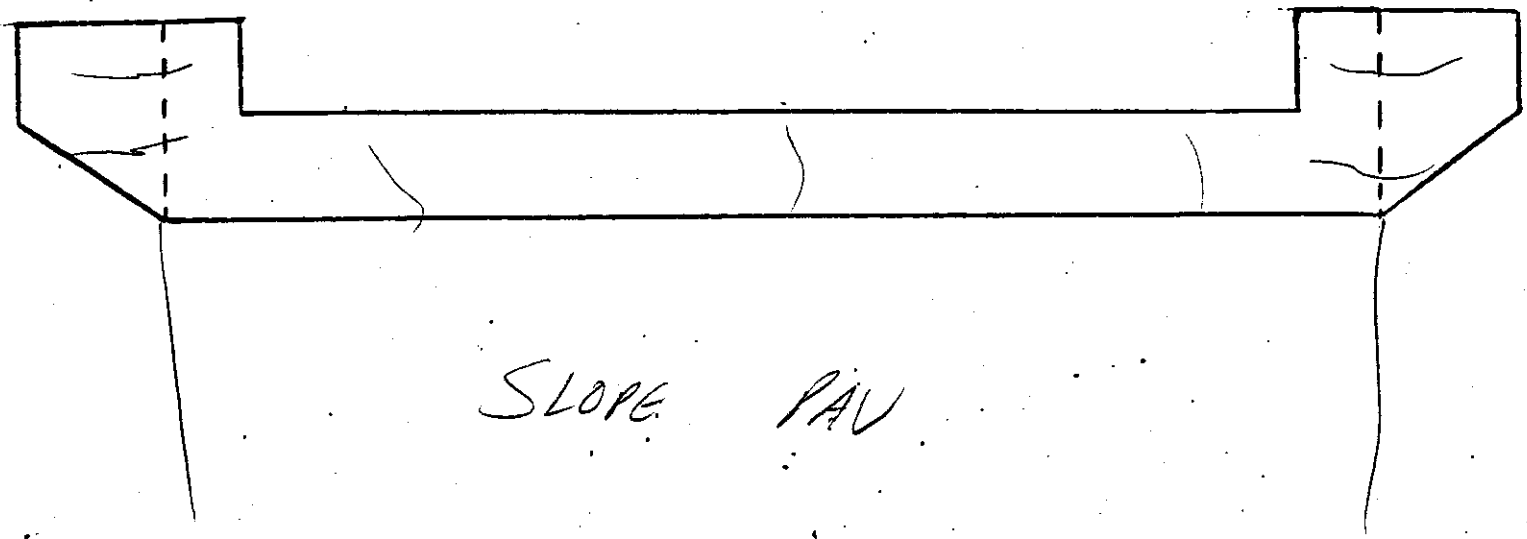


ELEMENT	RATING	COMMENTS
BOTTOM DECK	G (F) P C	FINE CRACKS

BRIDGE NO. 79 ^{I-40 5.76}
~~7-24-32~~
 2T

ABUT. NO. 1 ^{SEP 7 4 46 PM}
 W. 24

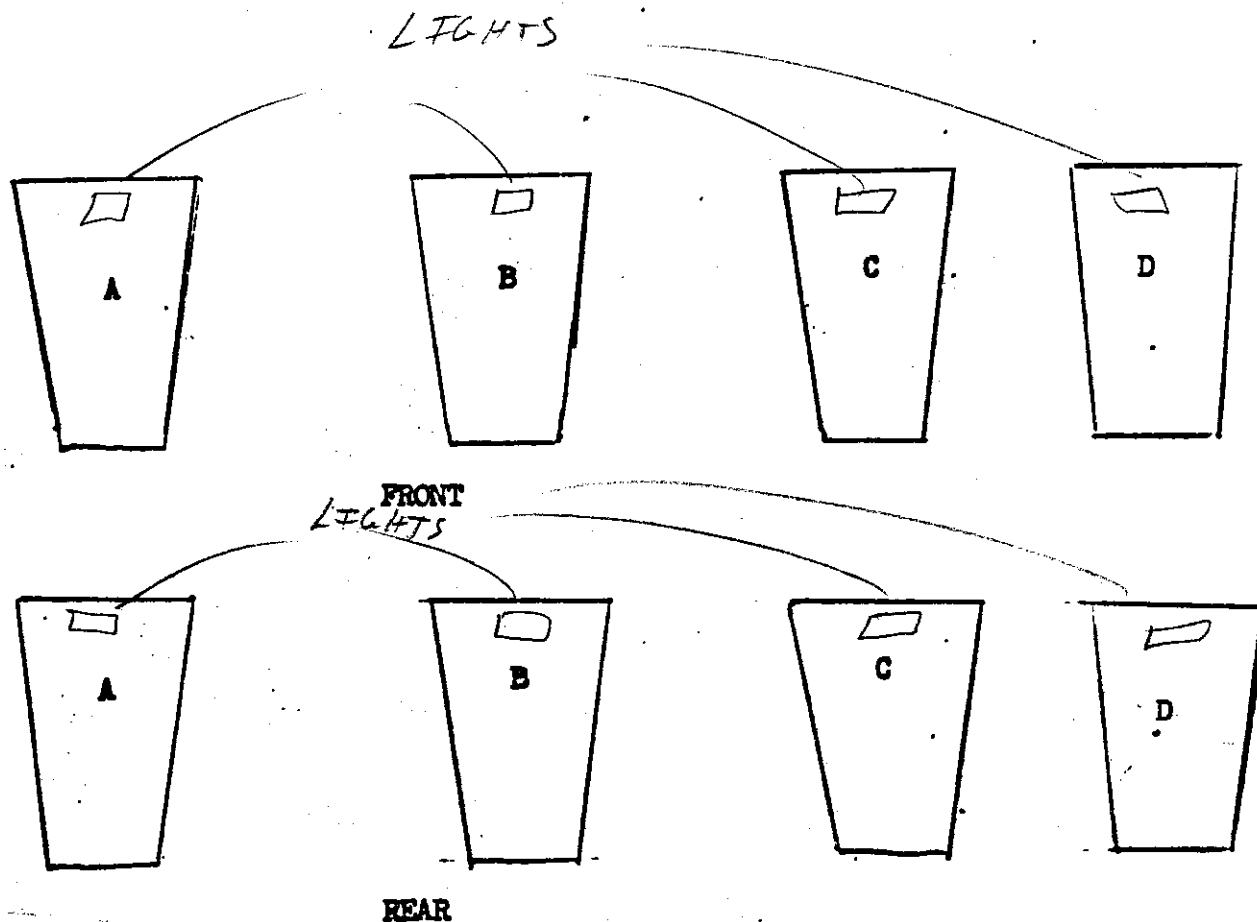
LOOKING BACK



MENT	RATING	COMMENTS
BEARING	G F P C	N/A
PAINT	G F P C	
CAP	G F P C	FINE CRACKS
WINGS	G F P C	
EMB.	G F P C	
VEG.	G F P C	
RIP-RAP	G F P C	N/A
SLOPE PAV	G F P C	
BACKWALL	G F P C	FINE CRACKS

BRIDGE NO. 79 ^{I-40 5.76}
~~I-240-325~~
 LT

BENT NO. L W.B.L

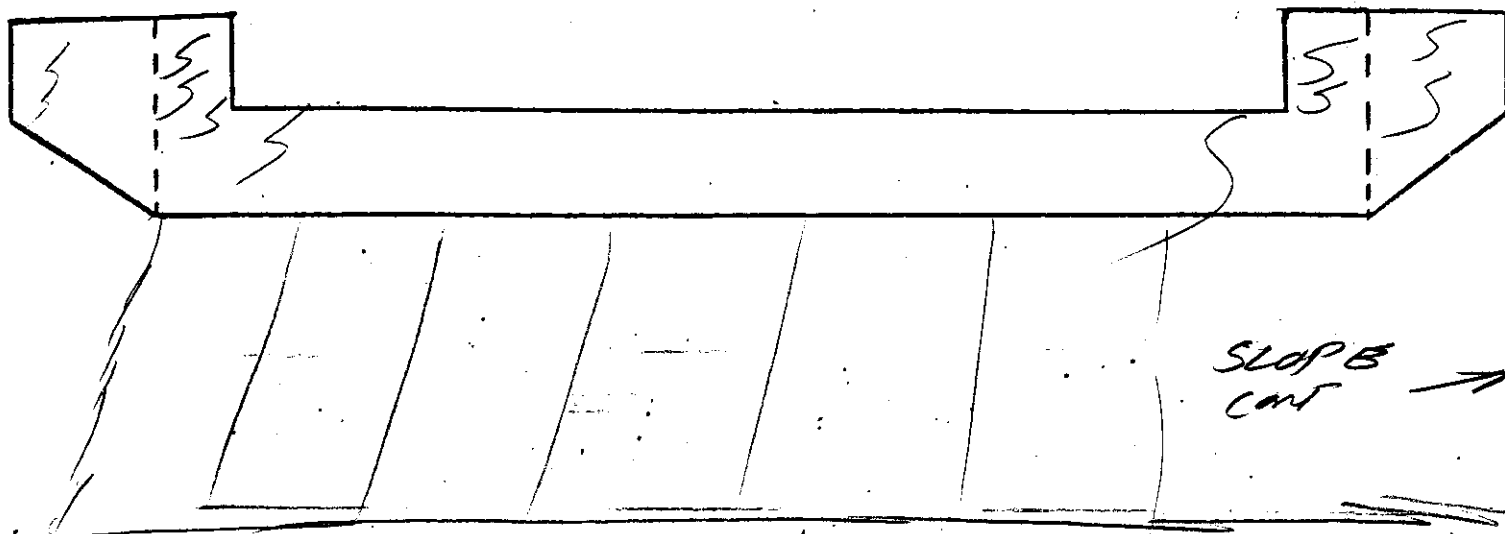


ELEMENT	RATING	COMMENT
LEM A	G F P C	
B	G F P C	
C	G F P C	
D	G F P C	
LIGHTS	G	

BRIDGE NO. I-40 5.76
~~78-#340-326~~
 LT

ABUT. NO. 2 W.R.C.

LOOKING AWAY



MENT	RATING	COMMENTS
BEARING	G F P C	N/A
PAINT	G F P C	N/A
CAP	G F P C	FINE CRACKS
WINGS	G F P C	
EMB.	G F P C	
VEG.	G F P C	
RIP-RAP	G F P C	
SLOPE PAW.	G F P C	
BACKWALL	G F P C	



PLAN BRIDGE NO. 4
I-40 OVER HOLLYWOOD STREET
BRIDGE NO. 79-I40-7.60



PLAN BRIDGE No. 5
I-40 OVER WATKINS STREET
BRIDGE NO. 79-I40-5.77

NOTE: "E" DENOTES EXPANSION
"F" DENOTES FIXED
"I" DENOTES INTEGRAL

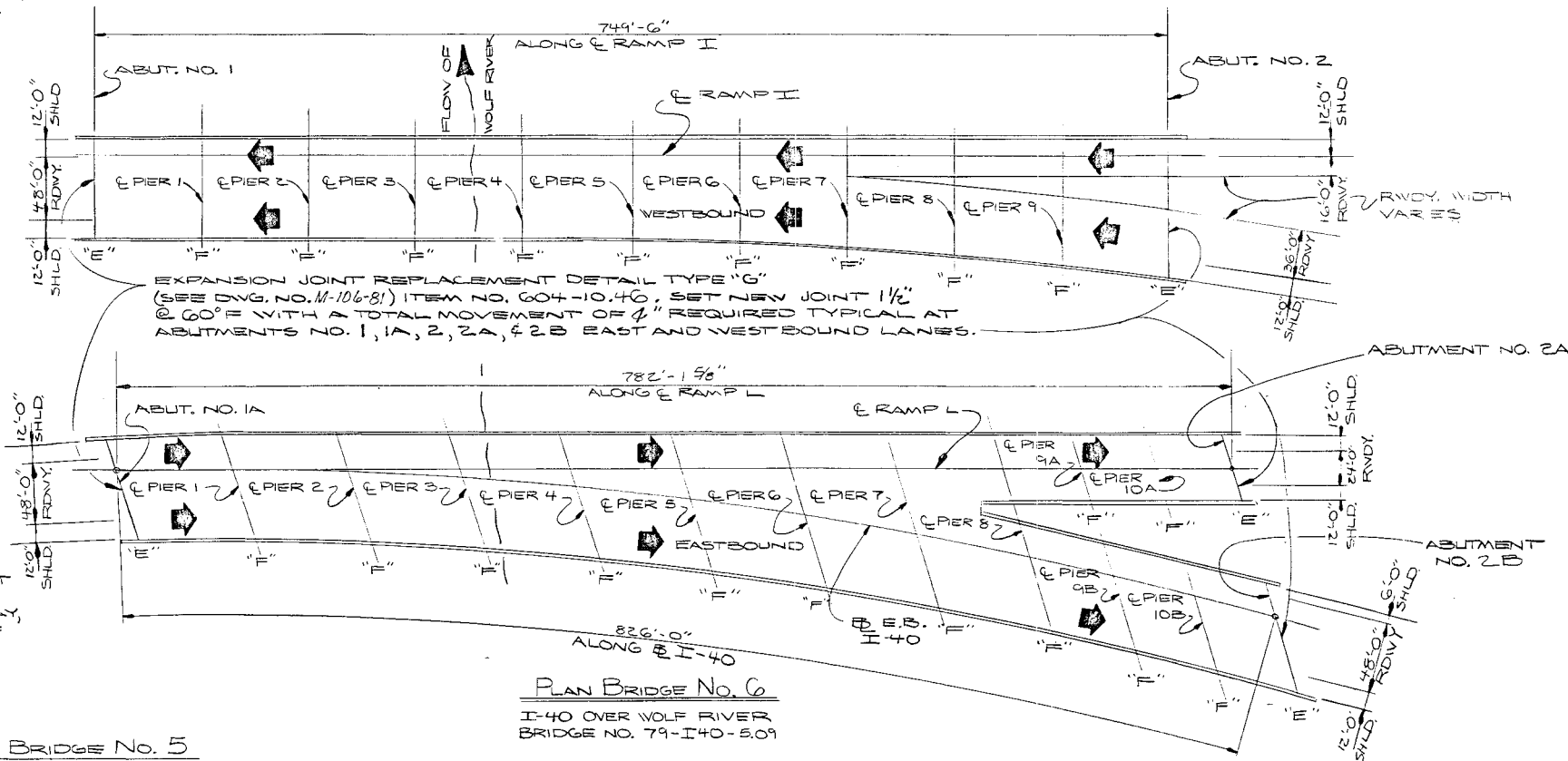
SCOPE OF WORK (GENERAL) BRIDGE NO. 4

- A. REMOVE AND REPLACE EXISTING PREFORMED ELASTIC STRIP SEAL AT ABUTMENT NO. 2, BOTH EAST & WESTBOUND LANES AS SHOWN IN DETAILS TYPE "E" ON DWG. NO. M-106-80.
- B. REPAVE THE EXISTING EAST AND WESTBOUND BRIDGE DECKS INCLUDING THE APPROACHES WITH NEW 1 1/2" THICK ASPHALT OVERLAY AS SHOWN IN DETAILS ON DWG. NO. M-106-75.

NOTE TO CONTRACTOR: ABUTMENT NO. 1 IS INTEGRAL. ABUTMENT NO. 2 HAS AN EXISTING PREFORMED ELASTIC STRIP SEAL THAT IS TO BE REMOVED AND REPLACED WITH THE EXPANSION JOINT REPLACEMENT DETAIL TYPE "E" (SEE DWG. NO. M-106-80.) ITEM NO. 604-10+1. SET NEW JOINT @ 2' E 60° F WITH A TOTAL MOVEMENT OF 4" REQUIRED AT ABUTMENTS NO. 2 ONLY, EAST- AND WESTBOUND LANES.

SCOPE OF WORK (GENERAL) BRIDGE No. 6

- A. REMOVE AND REPAIR EXISTING EXPANSION JOINTS AT ABUTMENTS NO. 1 & 2 BOTH EAST AND WESTBOUND LANES AS SHOWN IN DETAILS TYPE "G" ON DWG. NO. M-106-81.
- B. REMOVE THE EXISTING EAST AND WESTBOUND BRIDGE DECKS INCLUDING THE APPROACHES WITH NEW 1 1/2" THICK ASPHALT OVERLAY AS SHOWN IN DETAILS ON DWG. NO. M-106-75.



PLAN BRIDGE No. 6
I-40 OVER WOLF RIVER
BRIDGE NO. 79-I40-5.09

SCOPE OF WORK (GENERAL) BRIDGE No. 5

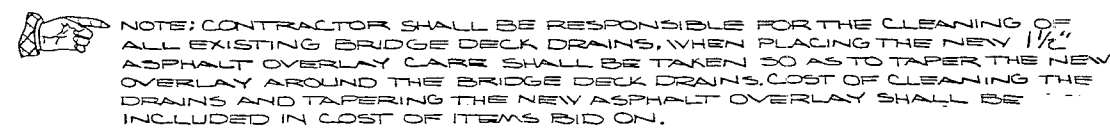
- A. REPAVE THE EXISTING EAST AND WESTBOUND BRIDGE DECKS INCLUDING THE APPROACHES WITH NEW 1 1/2" THICK ASPHALT OVERLAY AS SHOWN IN DETAILS ON DWG. NO. M-106-75.

[illegible]

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
BRIDGE REPAIR FOR BRIDGES
NO. 4 THRU 6.
INTERSTATE 40
SHELBY COUNTY
1985

CORRECT Chellan L Lovell
ENGINEER OF STRUCTURES
APPROVED Lewis Evans
DIRECTOR OF HIGHWAYS

M-106-74

[illegible]

GENERAL NOTES

DESIGN SPECIFICATION: AASHTO 1983 EDITION.

SPECIFICATIONS: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH, 1981 EDITION).

SECTION SHOWING PAVING AND EXPANSION JOINT REPLACEMENT DETAILS

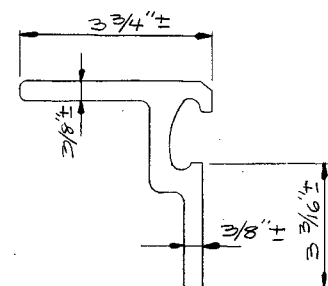
ESTIMATED QUANTITIES

[illegible]

- ① DENOTES ITEMS FOR NEW 1 1/2" ASPHALT OVERLAY ON BRIDGES NO. 4 THRU 6. SEE PAVING DETAILS ABOVE AND PLAN OF BRIDGES ON DWG. NO. M-106-74
- ② DENOTES EXPANSION JOINT REPAIR ON BRIDGES NO. 4, 6. SEE DETAILS AND NOTES ON DWG. NO'S. M-106-76, M-106-77, M-106-80, M-106-81, AND SEE SPECIAL NOTE BELOW...

Special Note Concerning Expansion Joint Repair Bid Item No's. 604-10.41, and 604-10.46.

The contractor shall inspect 450± Feet (22 individual pieces) of steel extrusions that are stored at the State Construction Office, located on Centennial Blvd. in Nashville, prior to submitting a bid for items no. 604-10.41 and 604-10.46. These extrusions are state property. The successful bidder on this project shall make provisions for picking up the extrusions and utilizing as much of the 450± Feet as reasonably possible in the fabrication of the expansion joints specified in items no. 604-10.41 and 604-10.46, shop drawings for the expansion joints shall show each individual piece of these extrusions and where they are used. See detail below for configuration of extrusions that are stock piled at the State Construction Office.



Extrusion Detail
STOCK FILLED BY STATE

DESIGNED BY _____ DATE _____
DRAWN BY GLASGOW & ROSS DATE 6 - 8-85
SUPERVISED BY GENTRY & MEINTURE DATE 6 - 8-85
CHECKED BY GRAVES & HALL DATE 6 - 8-85

LIST OF DRAWINGS

DRAWING	DWG. NO.	DATE

BRIDGE REPAIR DETAILS -- M-106 - 74
BRIDGE REPAIR AND
ESTIMATED QUANTITIES -- M-106 - 75

REFERENCE DRAWINGS

三三三三三三三三三三 4
 三三三三三三三三三三 5
 三三三三三三三三三三 6

M-44-33, 37, 38, 41
 M-44-19, 210
 M-44-70, 72, 73, 81, 91, 94, 108
 109, 110, 111

LIST OF DRAWINGS TO BE PRINTED WITH PLANS

DRAWING DWG. NO. LAST REV. DATE

STRIP SEAL EXPANSION JOINTS
REPLACEMENT CONSTRUCTION
TYPE "E" M-106-80

STRIP SEAL EXPANSION JOINTS
REPLACEMENT CONSTRUCTION
TYPE "G" M-106-81

GENERAL NOTES FOR EXPANSION
JOINT REPLACEMENT CONSTRUCTION
TYPES "A" THRU "J" M-106-70

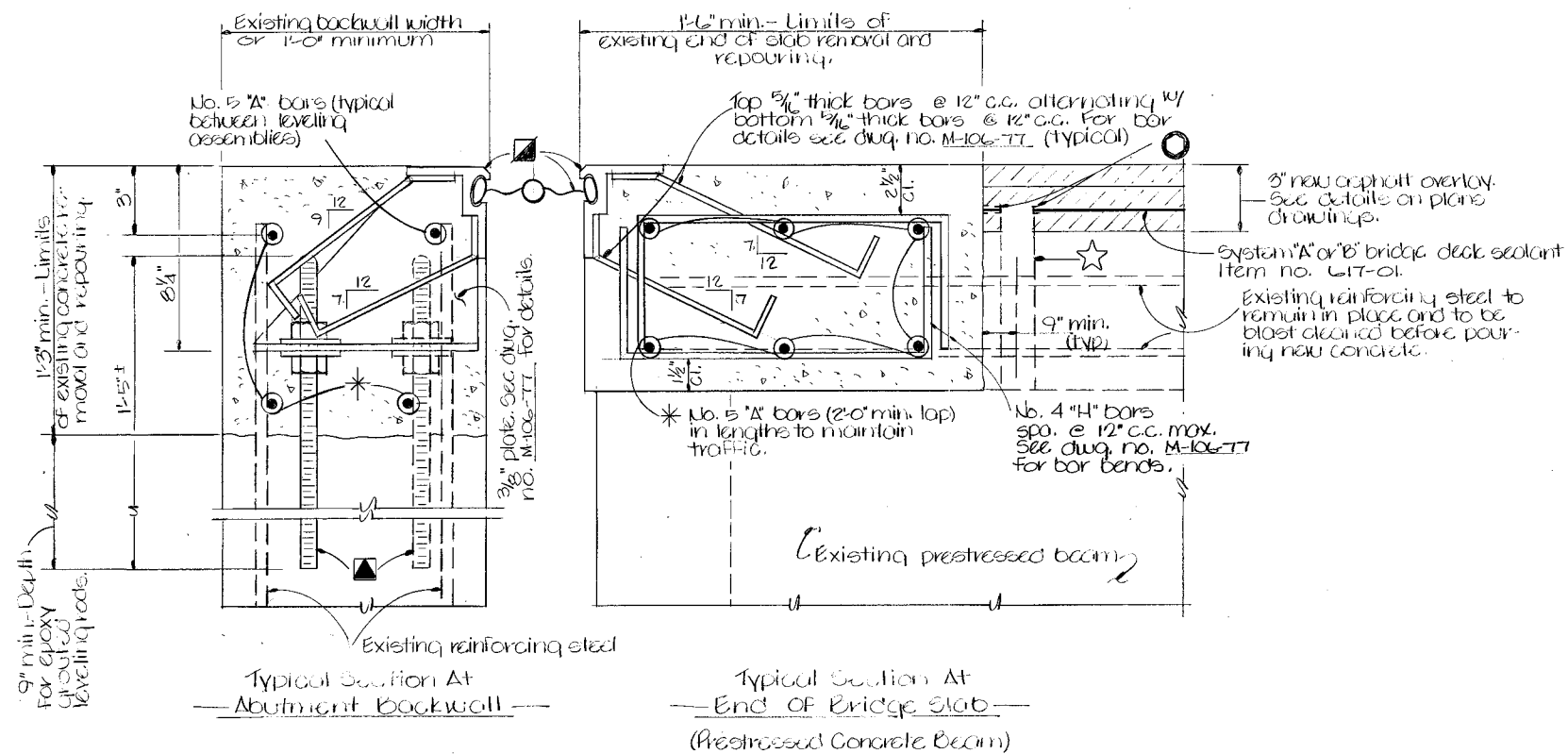
EXPANSION JOINT REPLACEMENT
CONSTRUCTION DETAILS
TYPE "A" THRU "D" M-106-77

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGE REPAIR AND ESTIMATED
QUANTITIES FOR BRIDGES
NO. 4 THRU 6
INTERSTATE 40
SHELBY COUNTY
1985

CORRECT Clifton L. Lovell
ENGINEER OF STRUCTURES
APPROVED David Evans
DIRECTOR OF HIGHWAYS

M-106-75



★ Note: Contractor to drill a 1 1/2" hole near face of concrete curb or parapet at low point each side of bridge. Cost to be included in item no. 617-01.

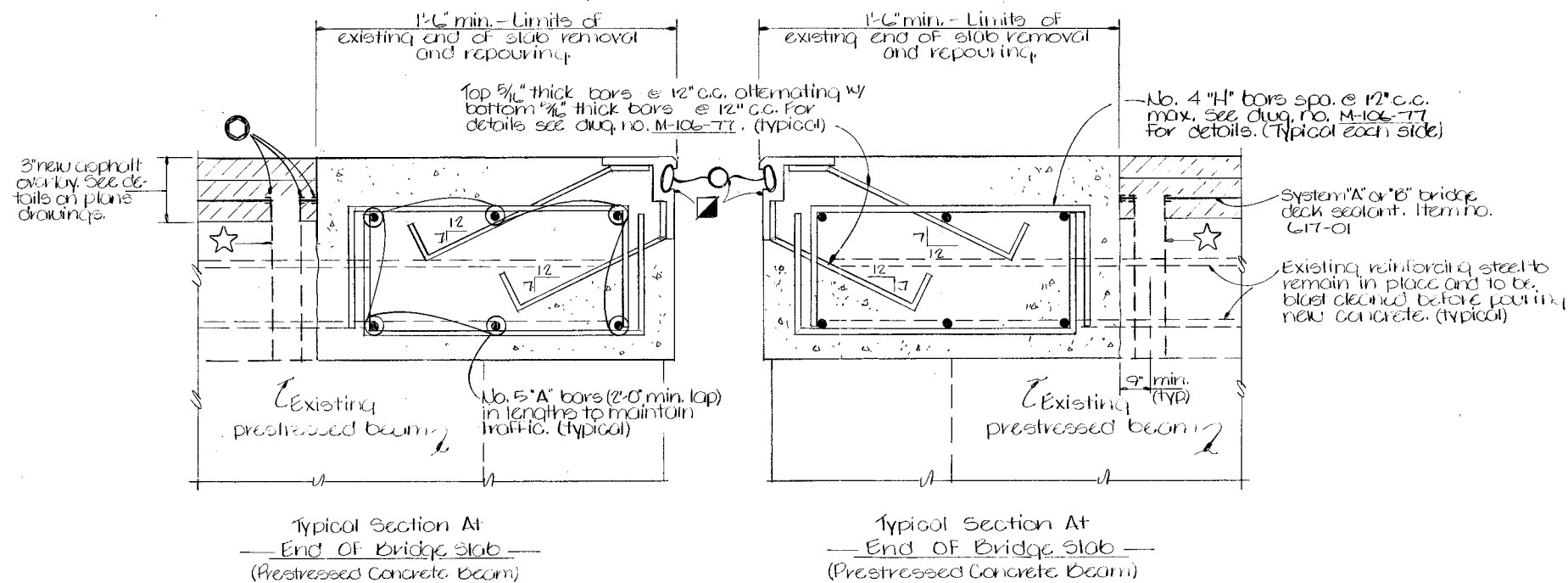
▲ Expansion Joint Leveling Assemblies: Two (2) 1/2" dia threaded rods, ASTM A36, (2 hex nuts and 2- 3/4" x 3/4" square washer per bolt), located on top of each beam. Drill and epoxy grout threaded rods 9" into existing abutment backwall. For other expansion joint leveling assembly details see diag. no. M-106-77.

■ Denotes: Type "X" retainers with elastomeric seal. See details on diag. no. M-106-77.

○ Denotes: Mastic as recommended by manufacturer of membrane. See Standard Specifications, Article 906.04.

PROJECT NO.		YEAR	SHEET NO.
		1985	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	8-12-85	RBC	General revisions
2	8-15-85	RBC	General revisions

▲▲ Expansion Joint Replacement Details - Type "G" - Bid under item no. 604-10.46, Expansion Joint Repair, Linear Feet



★ Note: Contractor to drill a 1 1/2" hole near face of concrete curb or parapet at low point each side of bridge. Cost to be included in item no. 617-01.

■ Denotes: Type "X" retainers with elastomeric seal. See diag. no. M-106-77 for details.

○ Denotes: Mastic as recommended by manufacturer of membrane. See Standard Specifications, Article 906.04.

▲▲ Expansion Joint Replacement Details - Type "H" - Bid under item no. 604-10.47, Expansion Joint Repair, Linear Feet

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

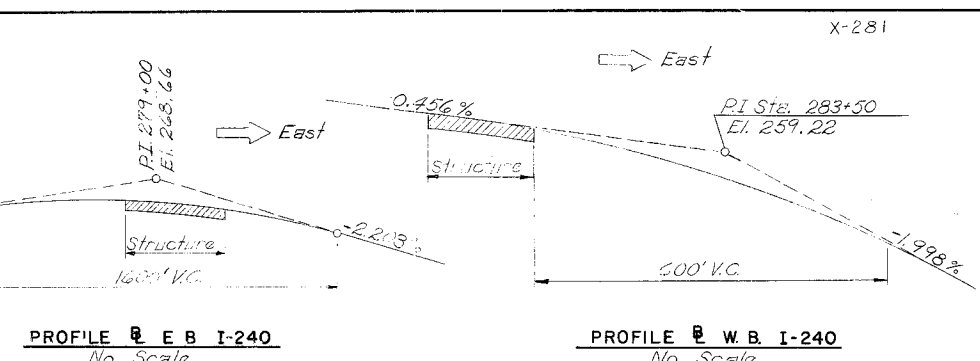
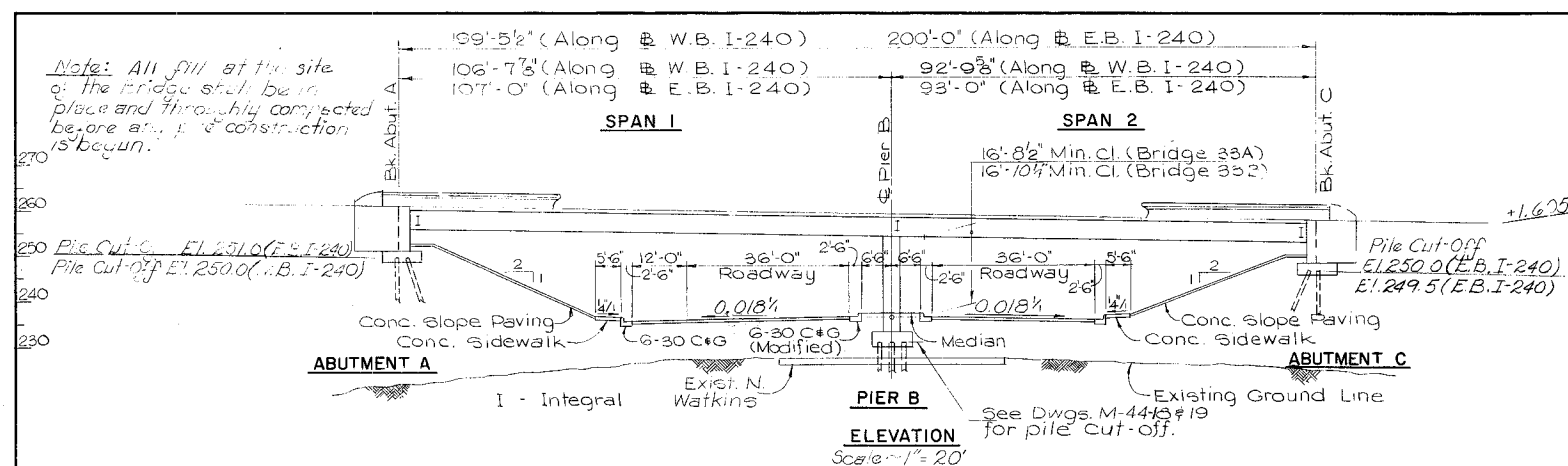
Strip Seal Expansion Joints - Replacement Construction
Type "G" and Type "H"
1985

DESIGNED BY Denise C. Anderson
DRAWN BY Denise C. Anderson
SUPERVISED BY Courtney E. McInnis
CHECKED BY Courtney E. McInnis
DATE 6/85
DATE 6/85
DATE 6/85
DATE 6/85

CORRECT *Colleen L. Forewell*
ENGINEER OF STRUCTURES
APPROVED *David Evans*
DIRECTOR OF HIGHWAYS

M-106-81

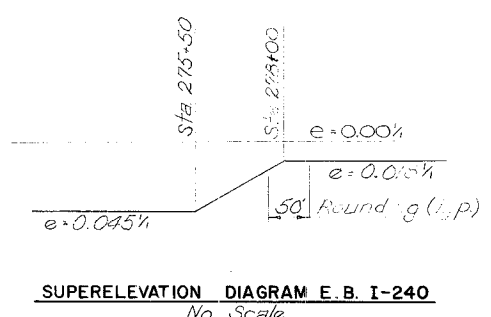
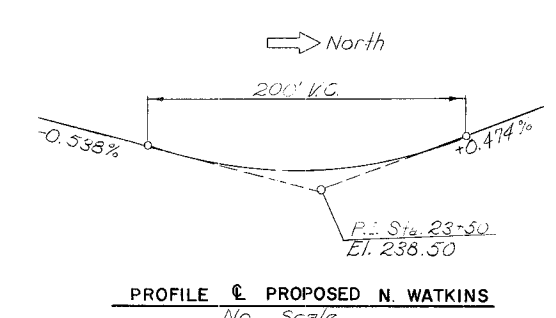
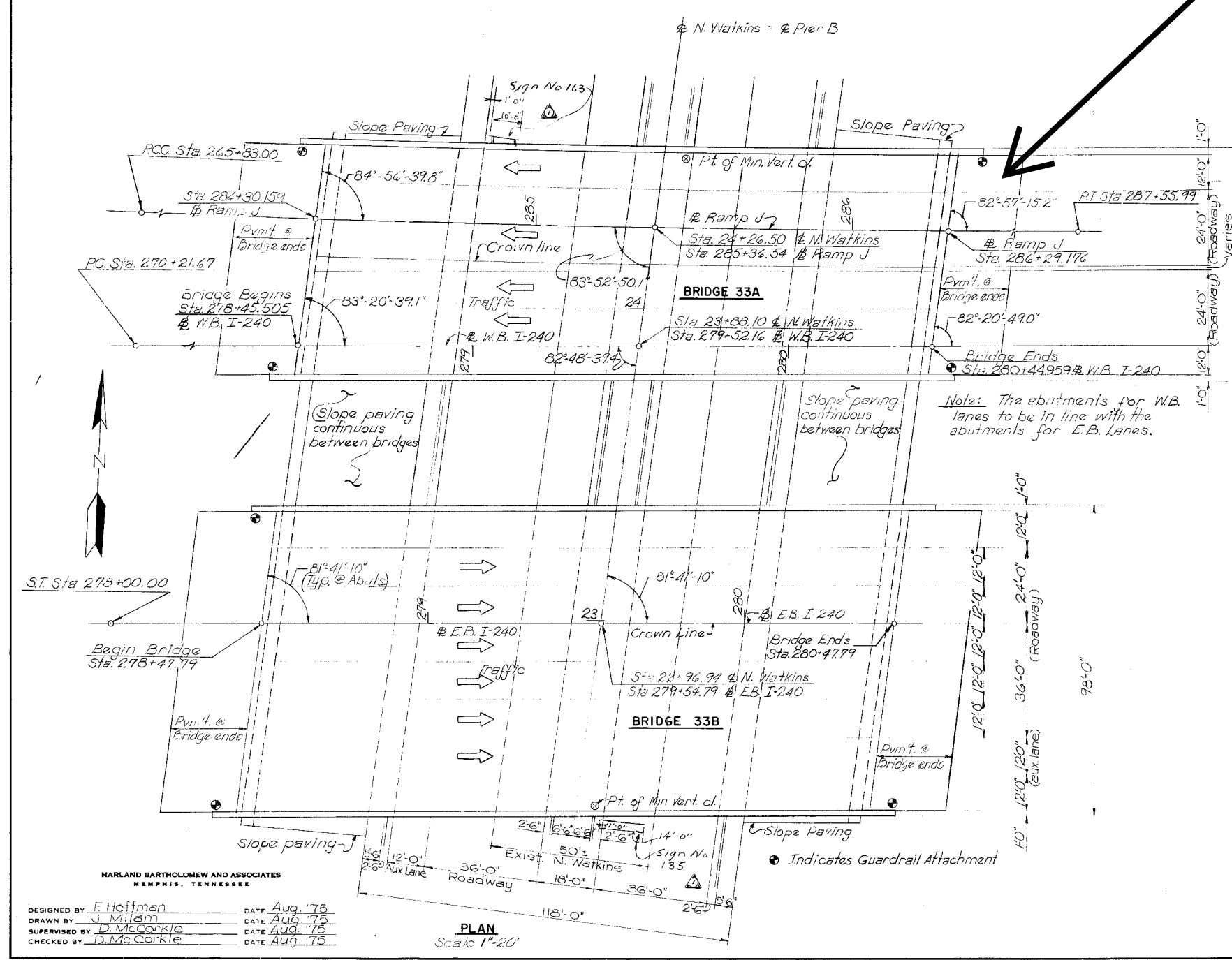
Use this drawing with drawings no. M-106-76 and M-106-77.



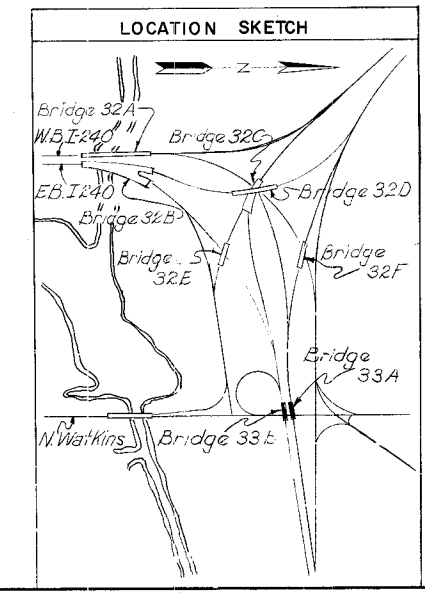
PROJECT NO.		YEAR	SHEET NO.
ACT 41-10326		1975	
79007-3125-44			

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	5/24/78	ELO	showed sign locations

BRIDGE NO. 79I00400070



CURVE DATA	
W.B. I-240	Ramp J
PI Sta. 295+99.88	PI Sta. 276+82.71
Δ = 5°-46'-38.1"	Δ = 21°-43'-47.6"
Dc = 0'-30'-00"	Dc = 1'-00'-00"
R = 11459.156'	R = 5729.578'
Lc = 1155.45'	Lc = 2172.99'
T = 578.21'	T = 1099.71'



INDEX TO DRAWINGS	
Dwg. No.	Title
M-44-1	Bridge Layout
M-44-2	General Notes & Summary of Estimated Quantities
M-44-3	Abutment A & C - E.B. Lanes
M-44-4	Abutment A - W.B. Lanes
M-44-5	Abutment C - W.B. Lanes
M-44-6	Pier B - E.B. Lanes
M-44-7	Pier B Details - E.B. Lanes
M-44-8	Pier B - W.B. Lanes
M-44-9	Typical Section - E.B. Lanes
M-44-10	Typical Section - W.B. Lanes
M-44-11	End Diaphragm Details
M-44-12	Top Slab Plan - E.B. Lanes
M-44-13	Top Slab Plan - W.B. Lanes
M-44-14	Bottom Slab Plan - E.B. Lanes
M-44-15	Bottom Slab Plan - W.B. Lanes
M-44-16	Post-Tensioning Details
M-44-17	Screeed Elevations
M-44-18	Foundation Data - E.B. Lanes
M-44-19	Foundation Data - W.B. Lanes
M-28-1	Bridge Railing - Concrete Parapet
K-80-14	Reinforcing Bar Support Details
K-86-144	Reinforced Concrete Pavement at Bridge Ends
H-5-111	Standard Pile Details
P-6-9A	Standard Apron Spillway at Bridge Ends
K-85-150	Misc. Abutment and Drainage Details
M-8-149	Light Standard Support Details

Notes:
1. See Dwg. M-44-2 for General Notes and Summary of Estimated Quantities.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.

BRIDGE LAYOUT
STA. 279+50

SHELBY COUNTY

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

DESIGNED BY: F. Hoffman
DRAWN BY: J. Milam
SUPERVISED BY: D. McCorkle
CHECKED BY: D. McCorkle

DATE: Aug. '75
DATE: Aug. '75
DATE: Aug. '75
DATE: Aug. '75

CORRECT: _____
ENGINEER OF STRUCTURES

APPROVED: _____
DIRECTOR OF HIGHWAYS

M-44-1

Class "A" Grading "D" 153 Cu Yds. Bridge Deck Sealant 4625 Sq Yds.

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

3. DESIGN SPECIFICATIONS: 1973 AASHTO and Addendo.

4. CAST-IN-PLACE CONCRETE: To be class "A", f'c 4000 psi for superstructure; f'c 3000 psi for substructure and parapets. See Special Provision Regarding Section 604 Concrete Structures.

5. **REINFORCING STEEL:** To be ASTM A615 Grade 60. Standard CRSI hook details apply unless otherwise noted on Bill of Steel. Bending dimensions shown are based on Grade 60 Steel. Spacing dimensions are center to center unless otherwise noted on detail drawings.

G. BRIDGE RAIL: Build bridge rail in accordance with Tenn. Std. Dwg. M-28-1

7. FINISHING CONCRETE SURFACES: Concrete finishing shall be in accordance with Section 604.22 of the Tennessee Standard Specifications except as modified by the Special Provision Regarding Section 604. Concrete Structures. A Textured Coated Finish, shall be used in lieu of a Class 2 Finish. The color of the finish shall be similar to Federal Specification No. (See Detail) Federal Color Standard 596a, and a color sample shall be submitted to the Engineer of Structures for approval. All exposed concrete surfaces, including concrete parapets and wingposts, piers and abutments above grade (but not including bridge slab), shall receive a textured coat finish.

B. FOUNDATION NOTE: FRICTION PILES: After excavating to the proposed footing elevations, a test pile shall be driven at each substructure of the location indicated on drawing, numbered 1 through 4. The test pile will then be applied to the test pile on Pier 1. The load test shall be in accordance with "Special Provision Regarding Load Test For Friction Piles." From the results of the load test the Engineer of Structures will determine final pile tip elevations. For pile design loads, cut-off elevations and pile tip elevations see table on p.w.g. No. M-44-13 & M-44-15.

9. Alternate Piles: The contractor may use piling of a different material or configuration from that shown on the plans provided the substitution meets minimum design standards and specifications is approved by the Engineer, and conforms to conditions established by the Special Provision No. 131, Regarding Section 606, Piling dated October 1, 1975.

11. LOADING TESTS: See Special Provision Regarding Load Test For Friction Piles.

12. BRIDGE DECK SEALANT: The Bridge deck and reinforced approach slab shall be sealed in a future paving contract (4625 Sq. Yds. required.)

13. BRIDGE DECK FORMS: Bridge deck forms for concrete decks shall be constructed using either, removable forms or permanent forms. In either case, forms shall be attached by means other than welding to support members. See Special Provision No. 450, "Special Provision Regarding Permanent Steel Bridge Deck Forms," Revised November 9, 1975.

4. POST-TENSIONING: See Notes on Dwg's. M-44-10 and Special Provision Regarding Post-Tensioned Prestressed Concrete.

15. LINSEED OIL TREATMENT: Surfaces receiving a textured coated finish shall not receive a linseed oil treatment. See Special Provision Regarding Section 004 - Concrete Structures.

(1) Excavation **based** on lower roadway profile.

(2): See Alternote Pile Note

(3) The cost of polyethylene sheeting and all miscellaneous items necessary for installation to be included in cost of perforated C.M. Pipe.

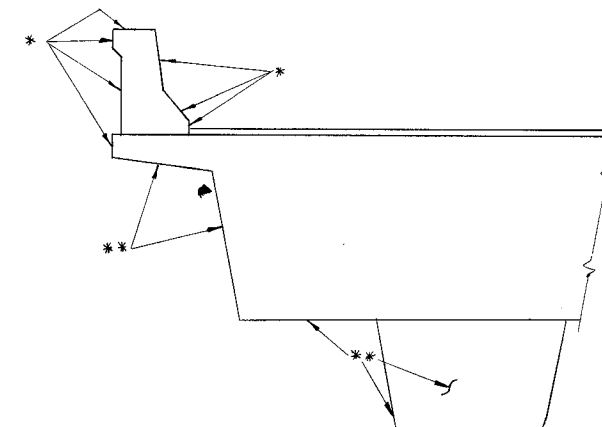
(4) Lump sum for Structure Lighting Item No. 714-01.01 includes 485± lin. ft. 2" ϕ conduit with pull wires, 90± lin. ft. 1" ϕ conduit with pull wires, 10 pull boxes, 12 anchor bolts for Str. 33A; 487± lin. ft. 2" ϕ conduit with pull wires,

(5) The cost of 28 threaded steel inserts 28-7/8" hex head bolts (A307) shall be included in bridge items bid on.

(c) Quantities given is out-to-out of wingposts.

(7) The cost of light standard base including concrete and reinforcing to be included in price bid for bridge parapet.

(b) The cost of tar-paper and all miscellaneous joint material to be included in bridge items bid on.



- * Similar to White (Fed. Spec. No. 37886)
- ** Similar to Azure Blue (Fed. Spec. No. 35190)

In addition to the above surfaces all exposed surfaces of abutments, wingwalls, wingposts & slope paving shall receive a Texture Coating Finish similar to Azure Blue (Fed. Spec. No. 35190).

SUMMARY OF ESTIMATED QUANTITIES														
Item NO.	204-02.01	604-03.01	604-03.02	604-25.04	606-09.01	606-09.02	606-09.03	615-05.01	616-08	710-10	710-11	714-01.01	604-03.03	
Description	Dry Excavation	Class A Concrete (Bridges)	Steel Bar Reinforcement (Bridges)	Textured Coated Finish	Test Piles (Precast Conc. Size 1) (2)	Loading Test (Precast Conc. Size 1) (2)	Precast Conc. Piles-Size 1 (2)	Post Tensioning	Concrete Parapet (G) (7)	G*Perf. C.M.P. (8ga)/Rorous Roadfill (3)	G* C.M.P. Underdrains (15 ga)	Structure Lighting (4)	Linseed Oil Treatment	
Unit	Cu. Yds.	Cu. Yds.	Lbs.	Sq. Yds.	Lin. Ft.	Each	Lin. Ft.	Lump Sum	Lin. Ft.	Lin. Ft.	Lin. Ft.	Lump Sum.	Sq. Yd.	
Bridge 33A	Abutment A	175	463	1735	510	30	690			90	4			
	Pier B		103.6	13300	95	35	1645							
	Abutment C	170	439	1700	492	30	690			86	4			
	Par'nt. @ Br. Ends		152.0	38830									395	
	Superstructure		969.1	204166	2125			.4	430.5			.5	1614	
Bridge 33B	Abutment A	215	573	2210	606	30	870			110	4			
	Pier B		136.0	17740	130	25	1575	1						
	Abutment C	215	573	2210	606	30	870			110	4			
	Par'nt. @ Br. Ends		195.4	50845									537	
	Superstructure		1220.3	260422	2595			.6	432.0			.5	2100	
Total	775	2939.8	593208	7139	180	1	6340	1.0	862.5	396	16	1	4649	

DESIGNED BY F. Hoffman DATE Aug '75
DRAWN BY M. Garay DATE Aug '75
SUPERVISED BY D. Mc Corkle DATE Aug '75
CHECKED BY D. Mc Corkle DATE Aug. '75

CORRECT _____
ENGINEER OF STRUCTURES

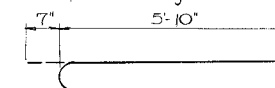
APPROVED _____
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
EACT 240-1826	1975	

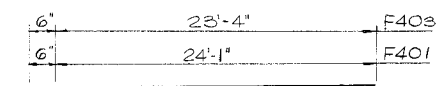
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

NOTES

1. See Dwg. M-44-3 for Estimated Quantities.
2. See Dwg. M-44-11 for Wing Wall and End Diaphragm Details.
3. See Dwg. M-44-3 for Section A-A.
4. For additional details of approach slabs see Std. Dwgs. M-86-144 & Std. Dwg. P-5-9A. Piles not req'd at ends of approach slab.
5. For drainage details see Dwg. M-44-11 & Std. Dwg. K-85-150.



Bars F501



Bars F401 & F403

BILL OF STEEL

Bar	No.	Req'd.	Length	Shape
F401	24		24'-7"	C
F402	12		36'-8"	C
F403	24		23'-10"	C
F404	12		34'-2"	C
F501	164	156	6'-5"	C

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E. B. & W.B. I-240 OVER N. WATKINS ST.

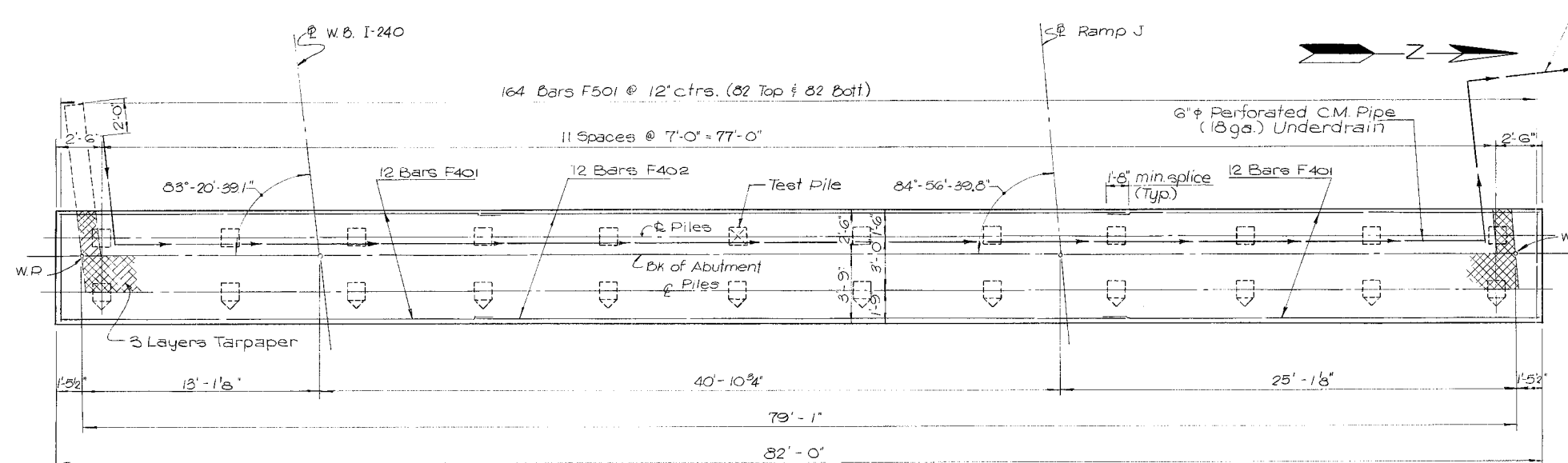
ABUTMENT A — W.B. LANES
STA. 279 + 50

SHELBY COUNTY

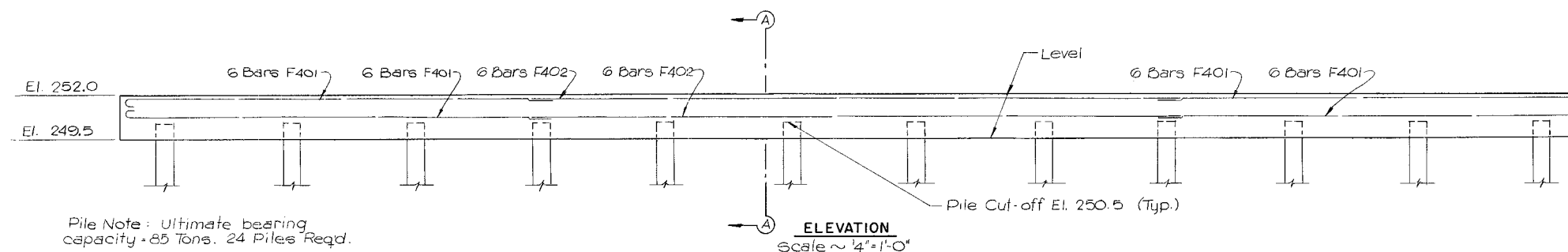
CORRECT _____
ENGINEER OF STRUCTURES

APPROVED _____
DIRECTOR OF HIGHWAYS

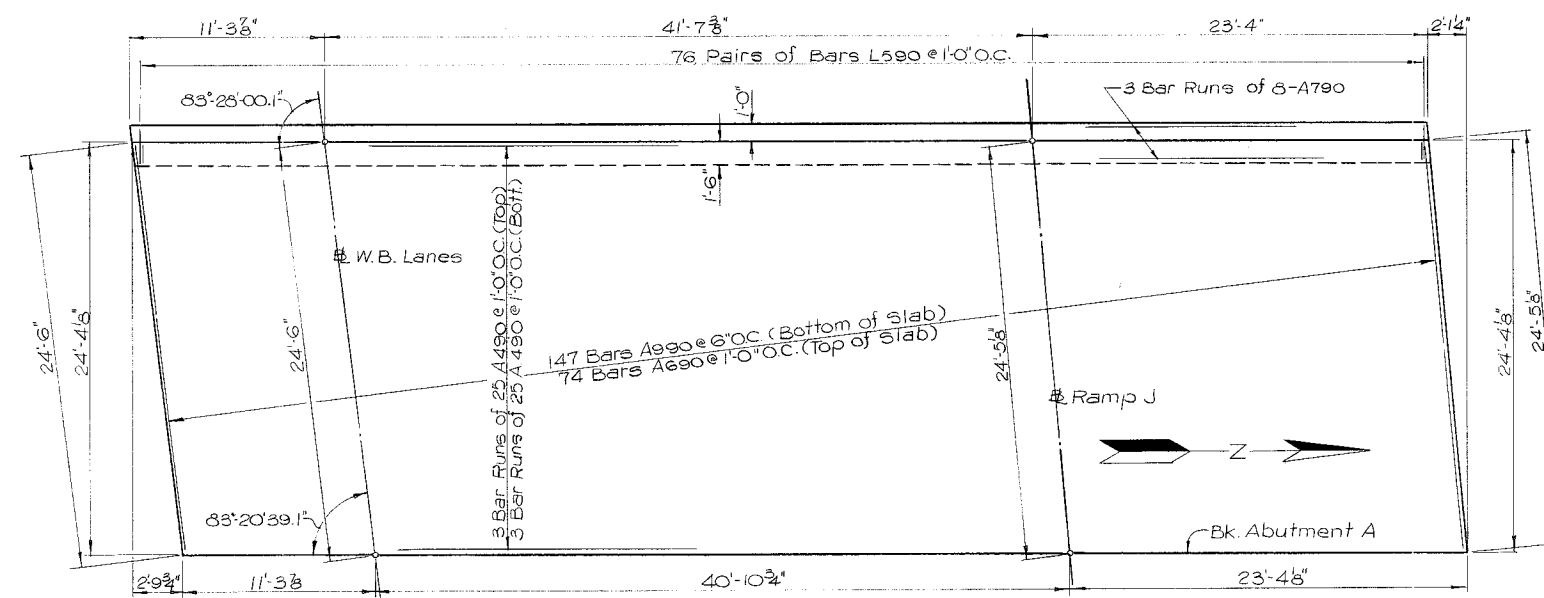
M-44-4



PLAN - ABUTMENT A
Scale ~ 1/4" = 1'-0"



Pile Note: Ultimate bearing capacity = 85 Tons. 24 Piles Req'd.



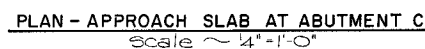
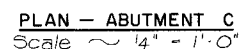
PLAN - APPROACH SLAB AT ABUTMENT A
Scale ~ 3/16" = 1'-0"

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

DESIGNED BY F. Hoffman DATE July '75
DRAWN BY B. Dale DATE July '75
SUPERVISED BY D. McCorkle DATE July '75
CHECKED BY D. McCorkle DATE July '75

[illegible]

1. See Dwg. M-44-4 for Bill of Steel.
2. See Dwg. M-44-3 for Estimated Quantities.
3. See Dwg. M-44-11 for Wing Wall and End Diaphragm Details.
4. See Dwg. M-44-3 for Section A-A.
5. For additional details of the approach slabs see Std. Dwg. M-86-144 & Std. Dwg. P-5-9A. Piles not req'd. ends of approach slab. Where notch is required for spillway, reinforcing extending into notch shall be cut in field. See Roadway Plans for size & location of spillways.
6. For drainage details see Dwg. M-44-11 & Std. Dwg. K-85-150.



CORRECT _____
ENGINEER OF STRUCTURES

APPROVED _____
DIRECTOR OF HIGHWAYS

M-44-5

DESIGNED BY F. Hoffman DATE July '75
DRAWN BY B. Dale DATE July '75
SUPERVISED BY D. McCorkle DATE July '75
CHECKED BY D. McCorkle DATE July '75

REVISIONS

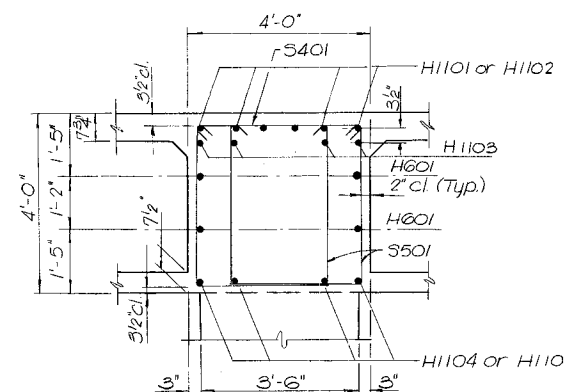
[illegible]

Const. No. 79007-3125-44

BILL OF STEEL

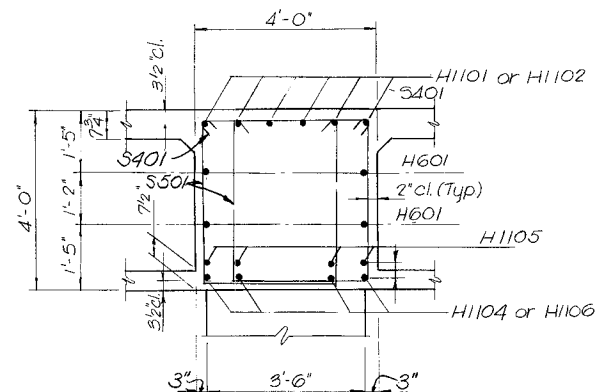
Mark	No. Req'd	Length	Shape
H1101	6	4'-7"	C
H1102	6	4'-6"	C
H1103	8	18'-5"	C
H1104	4	5'-10"	—
H1105	4	3'-6"	—
H1106	12	1'-0"	—
H201	8	47'-0"	—
H401	12	11'-5"	□
* H402	8 Sets	Varies	□
H403	184	4'-9"	C
H404	72	3'-11"	↪
S401	95	4'-5"	↪
S501	190	10'-9"	↪
V1101	40	2'-0"	—
V1102	20	2'-4"	—
V1103	20	2'-6"	—
V1104	16	9'-6"	—
F701	152	13'-2"	C

* 23 bars per set. 1 bar each length 11'-10" to 17'-4" in 3" increments.



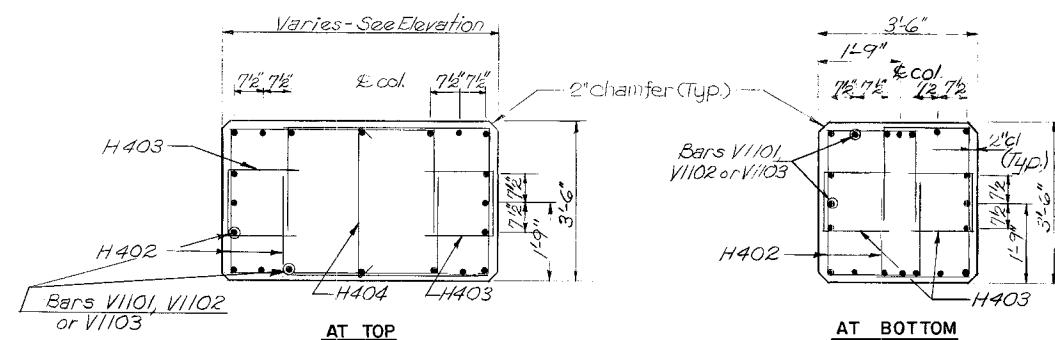
SECTION A-A

Scale $\sim 1/2'' = 1' - 0''$



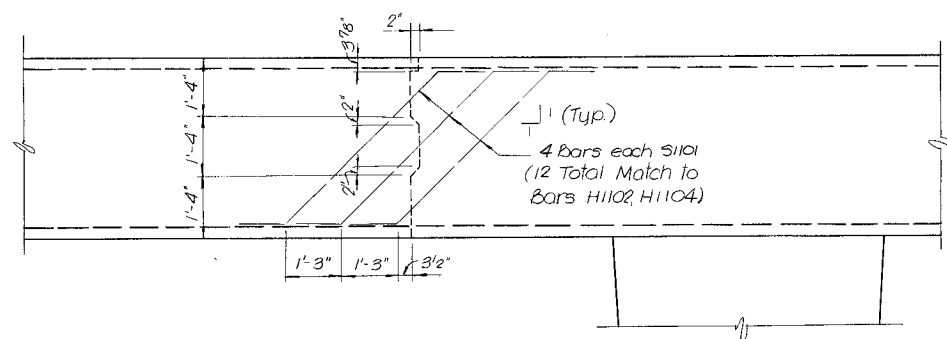
SECTION B-B

Scale $\sim 1/2'' = 1'-0''$



COLUMN	SECTION
--------	---------

Scale: $\sim 1/2" = 1'-0"$

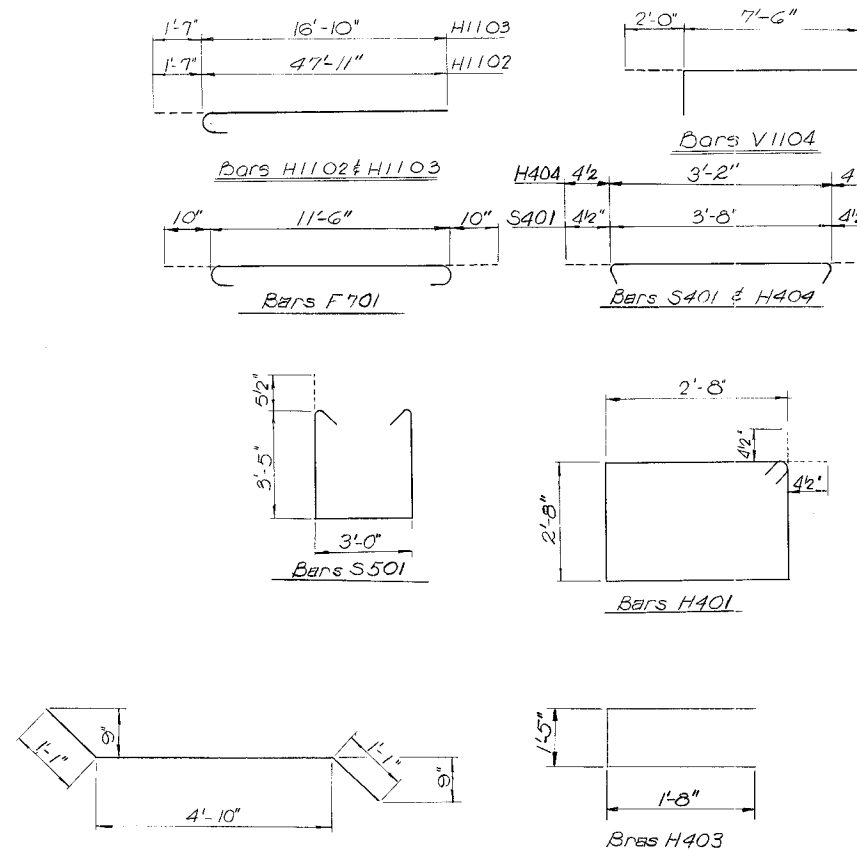


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

Scale $\sim 1/2" = 1'-0"$

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

DESIGNED BY F. Hoffman DATE July '75
DRAWN BY B. Dale DATE July '75
SUPERVISED BY D. McCorkle DATE July '75
CHECKED BY D. McCorkle DATE July '75



Bars S1101
Note: if the Contractor elects to use a longitudinal Construction joint, the cost of 12 bars S1101 will not be paid for separately but shall be included in the price bid for other items.

ESTIMATED QUANTITIES

	Item No.	Item	Unit	E.B. Lanes	W.B. Lanes
(1)	604-03.01	Class A Concrete (Bridges)	Cu. Yd.	138.0	103.6
(2)	604-03.02	Steel Bar Reinforcement	Pound	17,740	13,298
	606-09.01	Test Piles (Precast Conc. Size 1)	Lin. Ft.	25	35
	606-09.02	Loading Tests (Precast Conc. Size 1)	Each	1	1
	606-09.03	Precast Conc. Piling (Size 1)	Lin. Ft.	1,575	1,645

(1) Class 'A' concrete quantity includes concrete in footing and columns only.
Concrete in pier cap is included in Superstructure quantities

(2) Steel reinforcement includes steel in columns & footings only. Reinforcement in pier cap is included in superstructure quantities.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

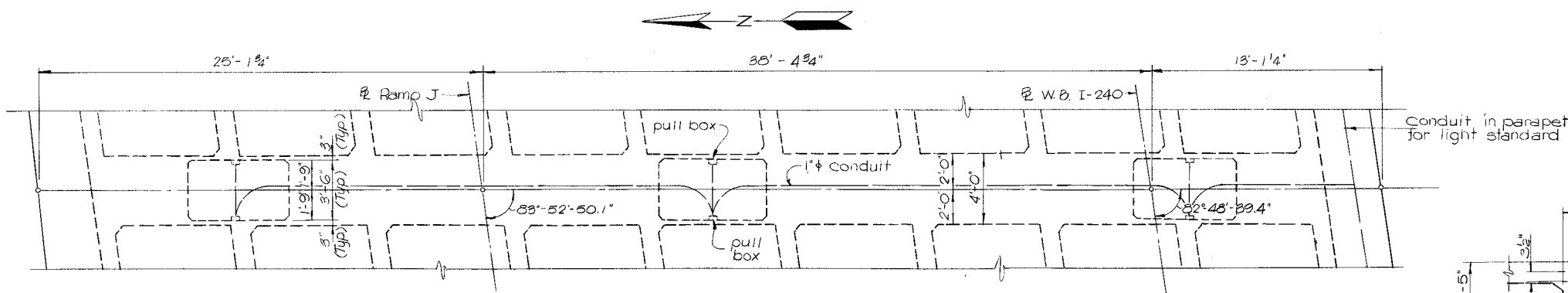
BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.

PIER B-E. B. LANES-DETAILS
STA. 279+50

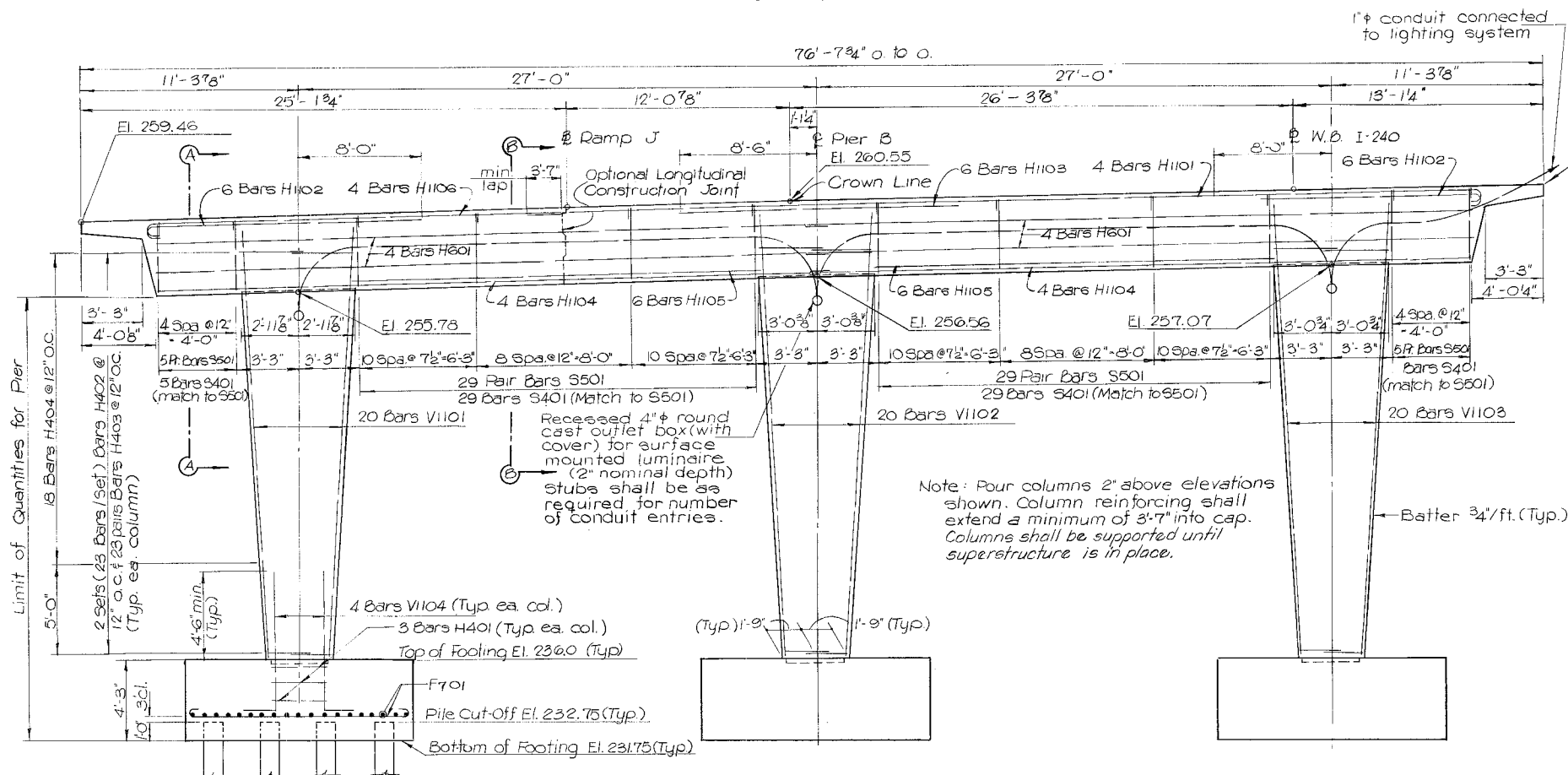
SHELBY COUNTY

CORRECT _____
ENGINEER OF STRUCTURE

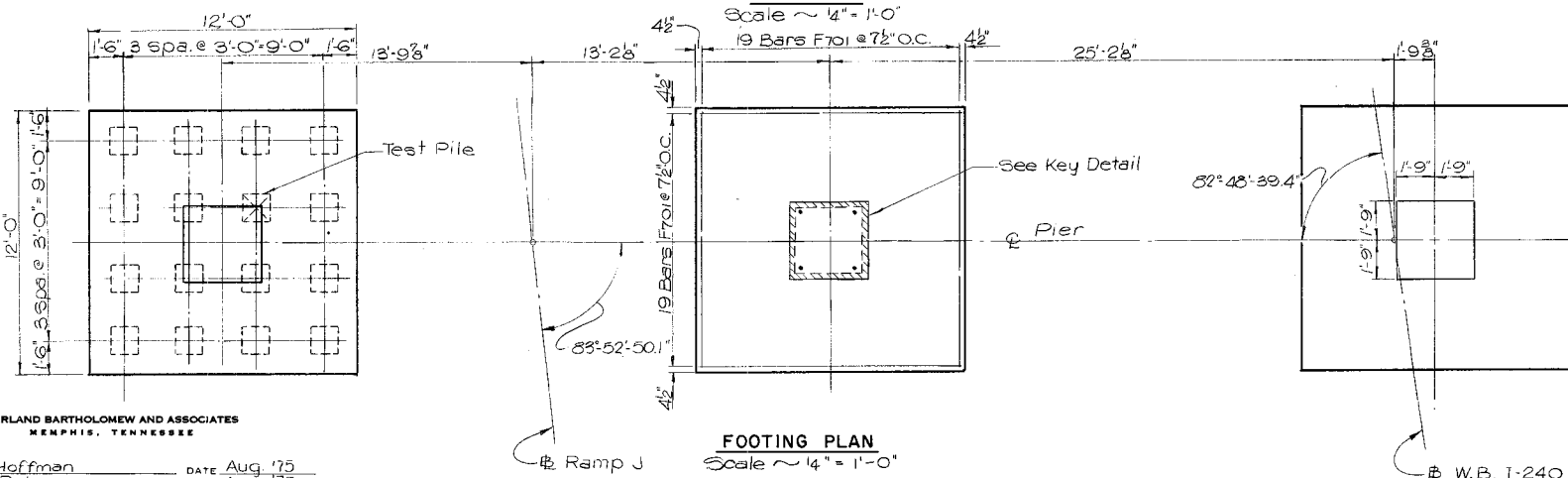
APPROVED _____
DIRECTOR OF HIGHWAYS



PLAN
Scale ~ 1/4" = 1'-0"



ELEVATION
Scale ~ 1/4" = 1'-0"

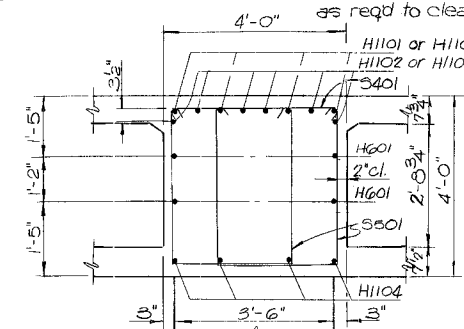


FOOTING PLAN
Scale ~ 1/4" = 1'-0"

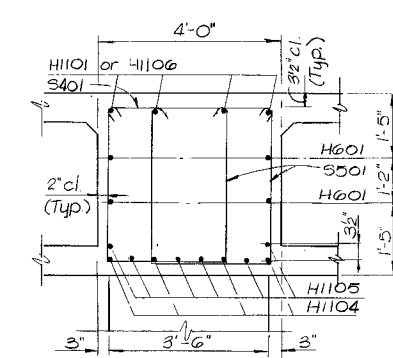
NOTES: Const. No. 79007-3125-44

1. Pier Cap shall be poured monolithically with superstructure
2. See Dwg. M-447 for Column Details, Estimated Quantities, & Longitudinal Construction Joint Details.
3. See Dwg. M-44-6 for Key Detail.
4. Space or band bottom slab reinforcement as reqd to clear column reinforcement. Cut column reinforcement as reqd to clear post-tensioning tendons.

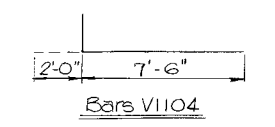
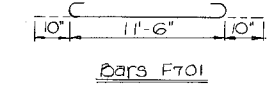
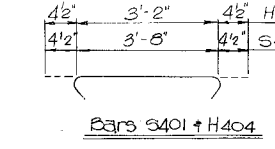
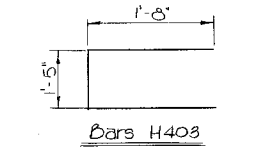
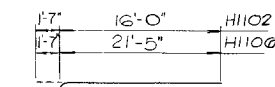
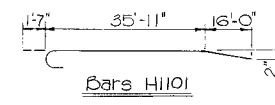
PROJECT NO.	YEAR	SHEET NO.	
EACI-240-112216	1975		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



SECTION A-A
Scale ~ 1/2" = 1'-0"



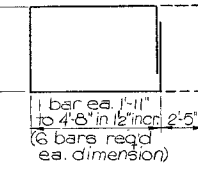
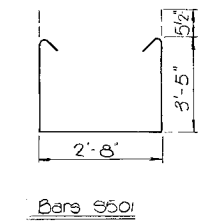
SECTION B-B
Scale ~ 1/2" = 1'-0"



BILL OF STEEL

Mark	No. Req'd	Length	Shape
H1101	4	53'-6"	
H1102	6	17'-6"	
H1103	6	17'-0"	
H1104	4	36'-0"	
H1105	6	21'-0"	
H1106	4	23'-0"	
H601	8	30'-10"	
H403	138	4'-9"	
H401	9	11'-5"	
H402	6 Sets	Varies	
H404	54	3'-11"	
S401	68	4'-5"	
S601	136	10'-5"	
V1101	20	23'-3"	
V1102	20	24'-0"	
V1103	20	24'-7"	
V1104	12	9'-6"	
F701	114	13'-2"	

* 23 Bars per set. 1 Bar each Length 11'-10" to 17'-4" in 3" increments.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.

PIER B - W.B. LANES
STA. 279 + 50

SHELBY COUNTY

CORRECT ENGINEER OF STRUCTURES

APPROVED DIRECTOR OF HIGHWAYS

M-44-8

DESIGNED BY F. Hoffman DATE Aug. '75
DRAWN BY B. Dale DATE Aug. '75
SUPERVISED BY D. McCorkle DATE Aug. '75
CHECKED BY D. McCorkle DATE Aug. '75

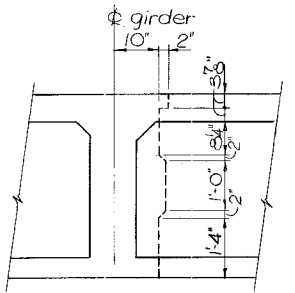
HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

MICROFILMED

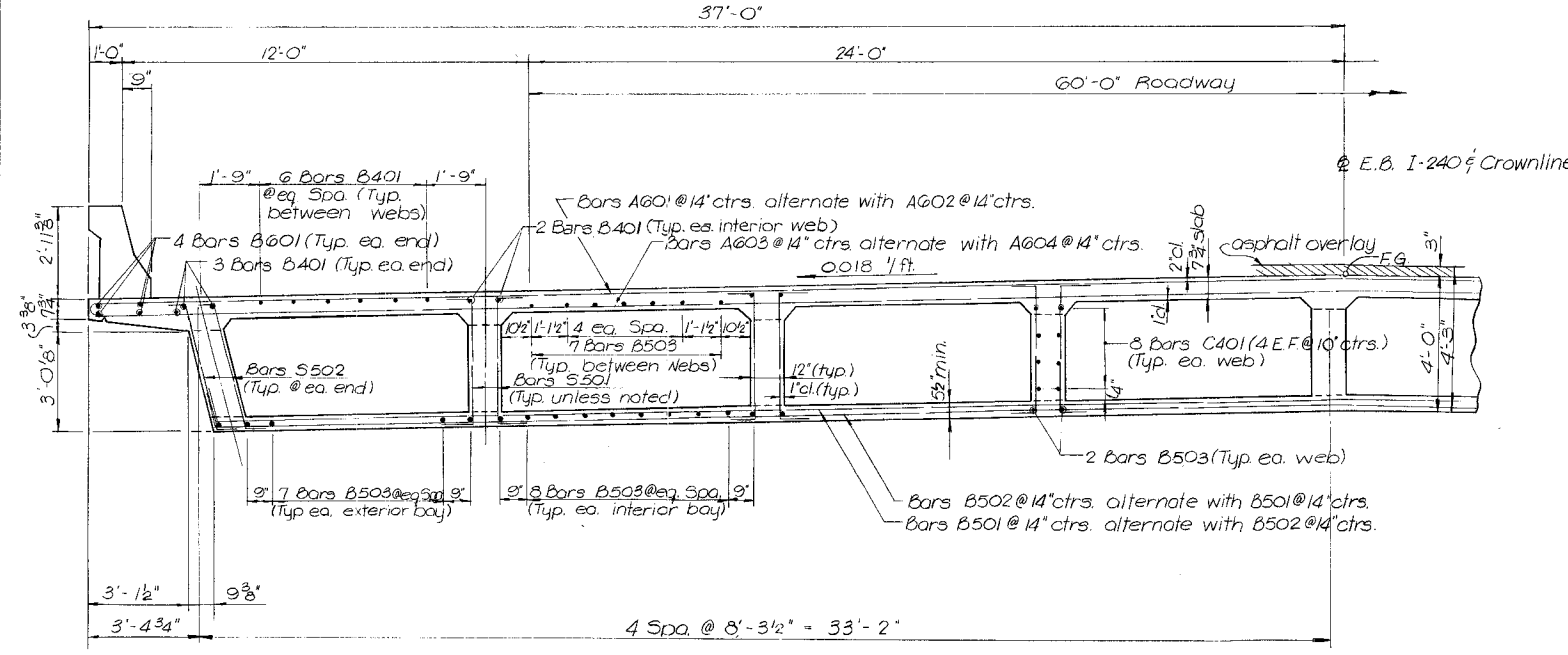
Const. No. 79007-3125-44

PROJECT NO.	YEAR	SHEET NO.	
EAC I-240-1(132)6	1975		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-1-76	CEH	Added Bars A501 and Rev. Qts.

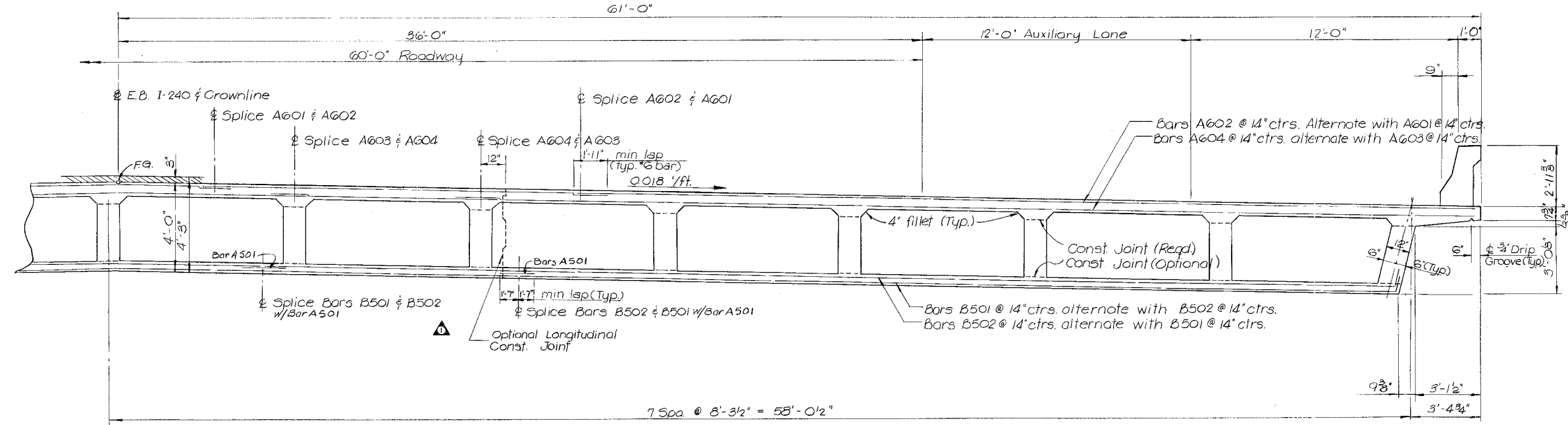
- NOTES**
1. Finished Grade is to be located at top of concrete. 3" asphalt overlay is to be feathered out at end of approach slabs.
 2. See Dwg. M-44-10 for Bill of Steel and Intermediate Diaphragm Details.



OPTIONAL LONGITUDINAL
CONSTRUCTION JOINT
Scale ~ 2" = 1'-0"



TYPICAL SECTION — E.B. LANES
Scale ~ 3/8" = 1'-0"



TYPICAL SECTION — E.B. LANES
Scale ~ 3/8" = 1'-0"

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

DESIGNED BY: F. Hoffman
DRAWN BY: B. Dale
SUPERVISED BY: D. McCorkle
CHECKED BY: D. McCorkle

DATE: July '75
DATE: July '75
DATE: July '75
DATE: July '75

(1) Quantity includes total superstructure reinforcement and 10,135 lbs. of pier cap reinforcement for E.B. Lanes (See Dwg. M-44-7), and 6,258 lbs. of pier cap reinforcement for W.B. Lanes (See Dwg. M-44-7)

ESTIMATED QUANTITIES		Unit	Quantities	
Item. No.	Description		E.B. Lanes	W.B. Lanes
604-03.01	Class A Concrete (Bridge)	Cu. Yds.	1220.9	969.1
(1) 604-03.02	Steel Bar Reinforcement	Lbs.	260,422	204,166

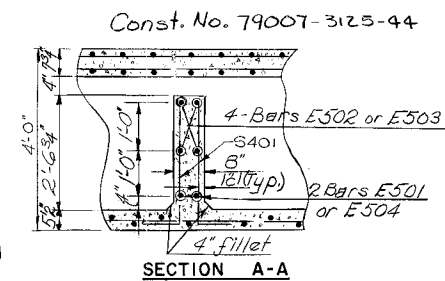
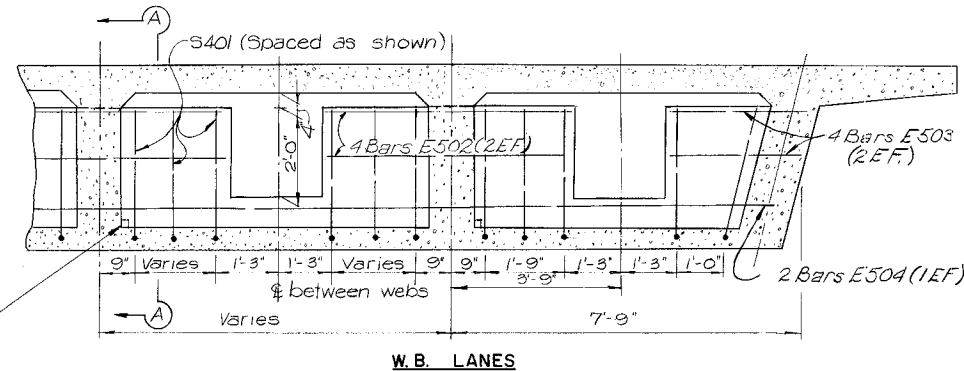
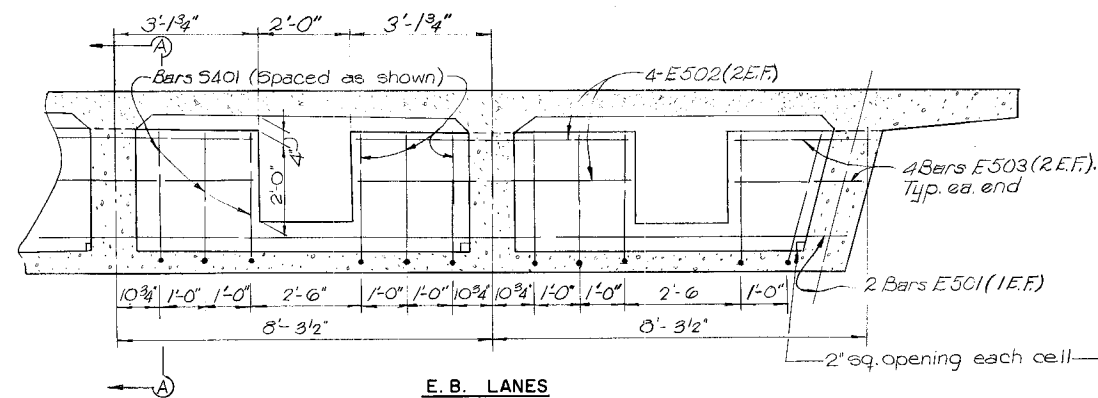
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.

TYPICAL SECTION - E.B. LANES
STA. 279 + 50

SHELBY COUNTY

CORRECT
ENGINEER OF STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

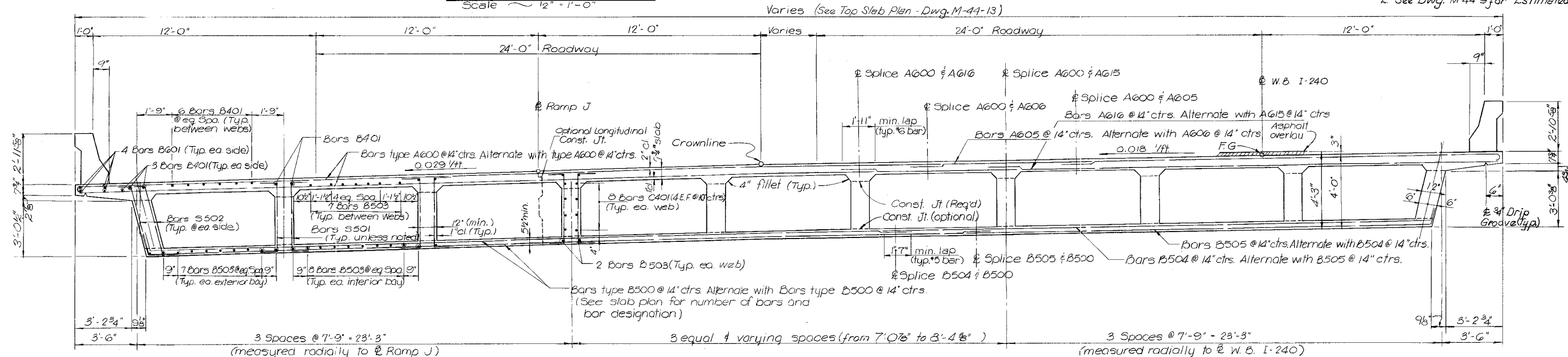


PROJECT NO.	YEAR	SHEET NO.	
EACI-240-1(132)4	1975		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	11-1-76	CEH	Added Bars A501 to Bill of Steel

Notes:

1. Finished grade is to be located at top of concrete. 3" asphalt overlay is to be feathered out at end of approach slab.
2. See Dwg. M-44-9 for Estimated Quantities.

INTERMEDIATE DIAPHRAGM DETAILS
Scale ~ 1/2" = 1'-0"

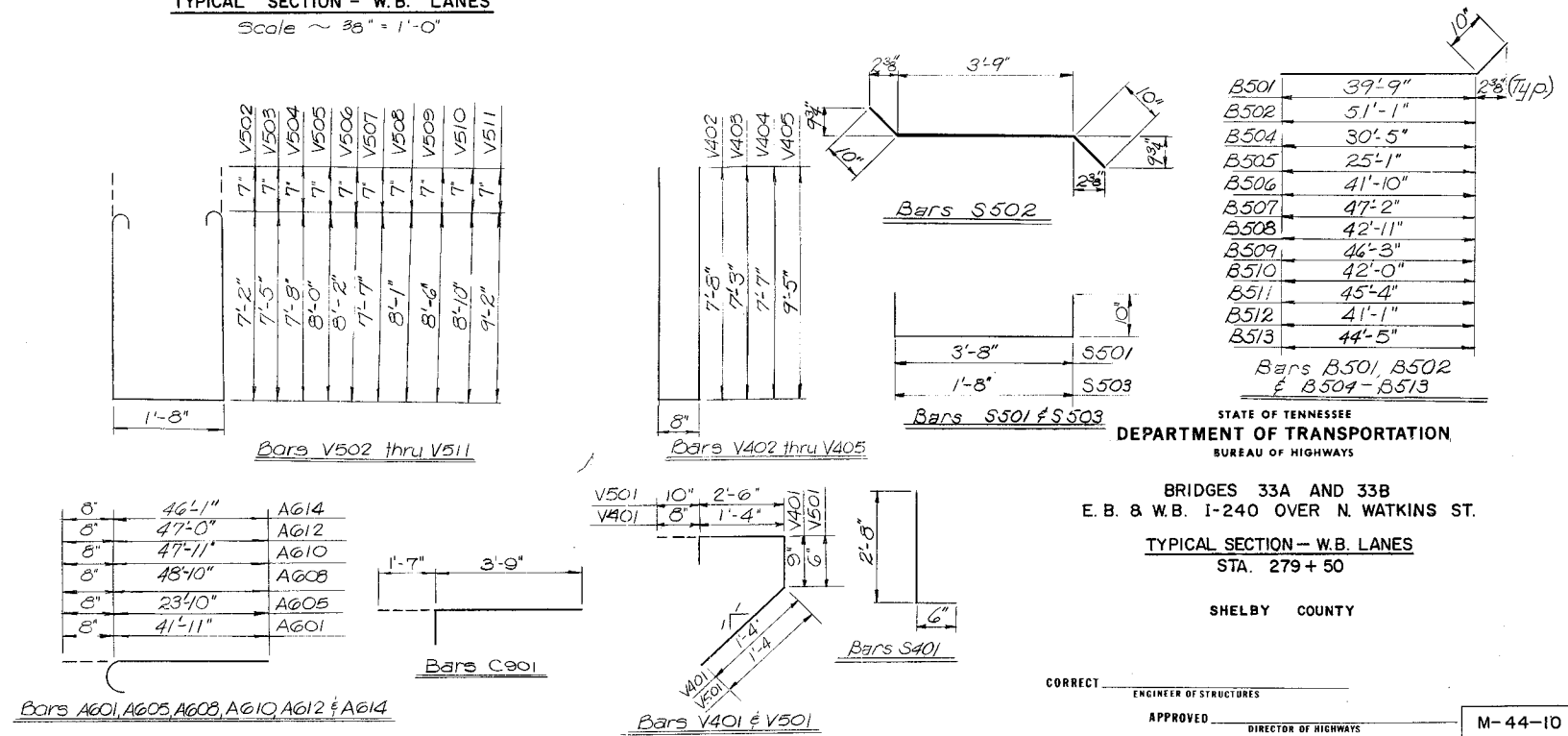


BILL OF STEEL

No. Req'd		Length	Shape	No. Req'd		Length	Shape	No. Req'd		Length	Shape	
Mark	E.B.Lanes			W.B.Lanes	Mark			E.B.Lanes	W.B.Lanes			Mark
A601	343		42'-7"	A623		60	50'-2"	E501	8		46'-3"	
A602	343		58'-8"	A624		60	41'-1"	E502	80	64	5'-7"	
A603	343		46'-1"	A501	335		3'-2"	E503	16	16	2'-8"	
A604	343		54'-5"					E504		8	35'-6"	
A605		171	24'-6"	B401	644	532	29'-7"	V401	32	32	4'-1"	
A606		171	31'-10"	B501	335		40'-7"	V402	16		16'-0"	
A607		33	57'-0"	B502	335		51'-1"	V403	16		15'-2"	
A608		33	49'-6"	B503	1309	1071	2'-10"	V404		16	15'-10"	
A609		35	56'-1"	B504		108	31'-3"	V405		16	19'-6"	
A610		35	48'-7"	B505		167	25'-11"					
A611		43	55'-2"	B506		32	42'-8"	V501	192	149	5'-2"	
A612		43	47'-8"	B507		32	48'-0"	V502	17		17'-2"	
A613		60	54'-3"	B508		35	43'-9"	V503	42		17'-3"	
A614		60	46'-9"	B509		35	47'-1"	V504	65		18'-2"	
A615		171	27'-10"	B510		43	42'-10"	V505	52		18'-10"	
A616		171	35'-11"	B511		43	46'-2"	V506	24		19'-2"	
A617		33	52'-11"	B512		58	41'-11"	V507		31	18'-0"	
A618		33	44'-10"	B513		57	45'-3"	V508		31	19'-0"	
A619		35	52'-0"					V509		31	19'-10"	
A620		35	43'-11"	B601	56	56	30'-5"	V510		31	20'-6"	
A621		43	51'-1"					V511		31	21'-2"	
A622		43	43'-0"									
HARLAND BARTHOLOMEW AND ASSOCIATES MEMPHIS, TENNESSEE DESIGNED BY: F. Hoffman DATE: July 75 DRAWN BY: B. Dale DATE: July 75 SUPERVISED BY: D. McCorkle DATE: July 75 CHECKED BY: D. McCorkle DATE: July 75				C401	672	560	29'-7"					
				S401	256	208	3'-2"	H401	108		33'-10"	
				S501	3760	2640	5'-4"	H402		36	40'-0"	
				S502	752	660	5'-5"	H403		36	38'-3"	
				S503	200	155	3'-4"	H404	76	84	9'-8"	
								C601	192	148	4'-3"	
								C901	382	294	5'-4"	

TYPICAL SECTION - W.B. LANES

Scale ~ 3/8" = 1'-0"



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.
TYPICAL SECTION - W.B. LANES
STA. 279+50

SHELBY COUNTY

CORRECT
ENGINEER OF STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

M-44-10

Const. No. 79007-3125-44

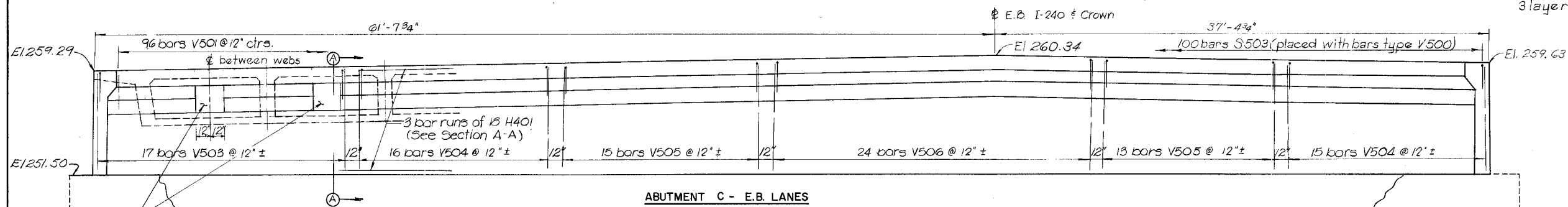
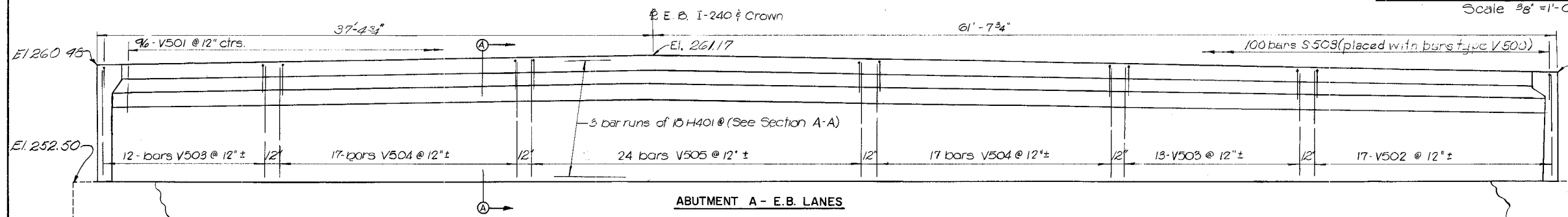
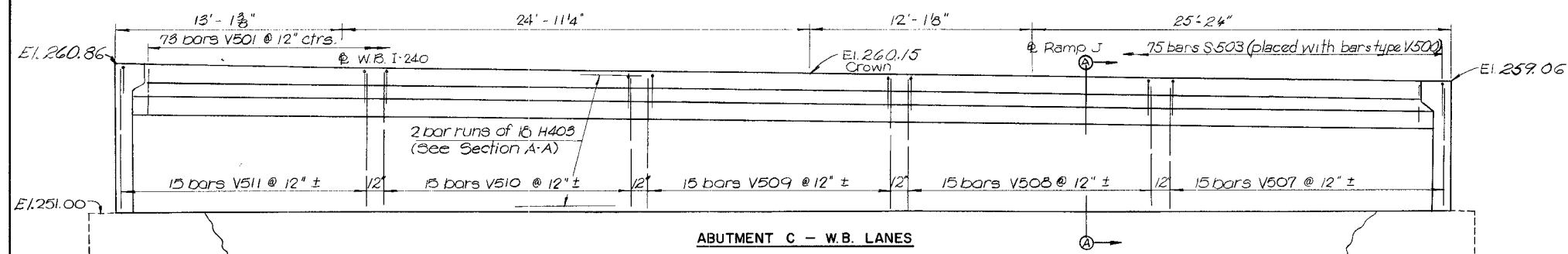
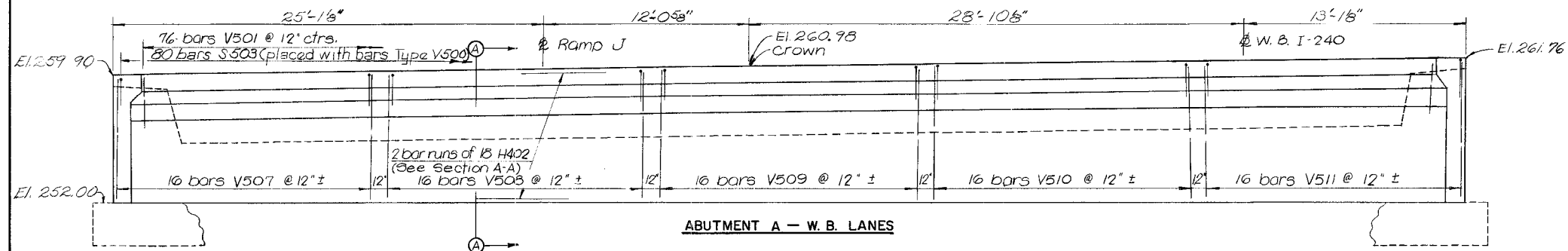
WING WALL DATA

Abut.	Lanes	Wing	EI "A"	"B"	"C"	V400
A	E.B.	N.	260.30	8'-0"	18	V402
A	E.B.	S.	260.08	7'-7"	16	V403
C	E.B.	N.	259.58	8'-1"	18	V402
C	E.B.	S.	259.24	7'-8 7/8"	16	V403
A	W.B.	N.	259.93	7'-11 1/8"	18	V404
A	W.B.	S.	261.80	9'-9 5/8"	20	V405
C	W.B.	N.	259.02	8'-0 1/4"	18	V404
C	W.B.	S.	260.82	9'-9 7/8"	20	V405

NOTES

- See Dwg. M-44-10 Bill of Steel.
- See Dwg. M-23-1 for wingpost details & wingpost reinforcement to be placed in wing walls.

PROJECT NO.	YEAR	SHEET NO.	
EACI-240-11326	1975		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



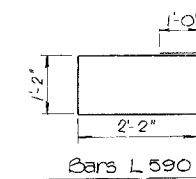
Note:

A 2'-0" x 2'-0" Inspection opening is to be formed thru the end diaphragm in each cell of all abutments as shown. Reinforcement shall be cut or spaced to clear the inspection opening as required. Openings shall be closed using expansive grout following inspection and approval of forms and completion of Post-Tensioning operations.

END ELEVATIONS
Scale ~ 1/4" = 1'-0"

BILL OF STEEL

Mark	Approach Slab		Length	Shape
	No. Required			
A490		150	26'-2"	
A491		150	24'-8"	
A492	150	150	32'-7"	
A690	96	96	24'-0"	
A790		24	26'-10"	
A791		24	25'-4"	
A792	16	16	48'-8"	
A990	191	191	24'-0"	
L590	190	190	7'-8"	



Bars L 590

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.
END DIAPHRAGM DETAILS
STA. 279 + 50

SHELBY COUNTY

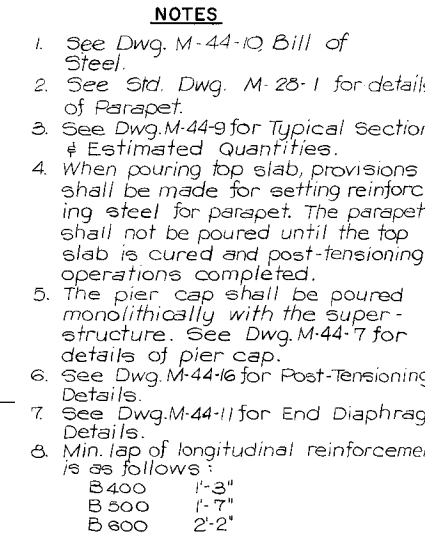
CORRECT
ENGINEER OF STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

M-44-11

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

DESIGNED BY: F. Hoffman
DRAWN BY: B. Dale
SUPERVISED BY: D. McCorkle
CHECKED BY: D. McCorkle

DATE: Aug. '75
DATE: Aug. '75
DATE: Aug. '75
DATE: Aug. '75

[illegible]

M-44-12

[illegible]

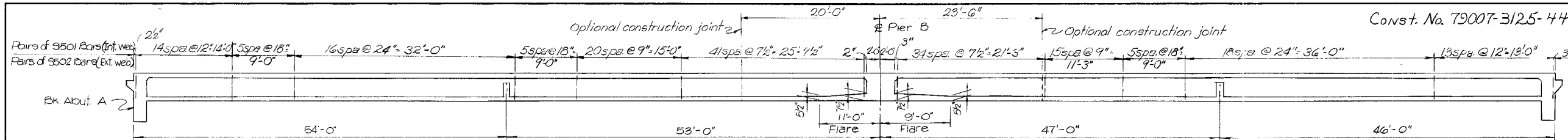
1. See Dwg. M-44-10 for Diaphragm Details, Typical Section & Bill of steel.
2. See Std. Dwg. M-28-1 for parapet reinforcement to be placed in slab. The parapet shall not be poured until the top slab is cured and post-tensioning operations completed.
3. See Dwg. M-44-11 for End Diaphragm Details
4. The outside edge of slab and parapet to conform to the horizontal curve.
5. Pier cap is to be poured monolithically with superstructure. See Dwg. M-44-8.
6. See Dwg. M-44-16 for Post-Tensioning Details.
7. See Note 8 Dwg. M-44-12 for min. lap.



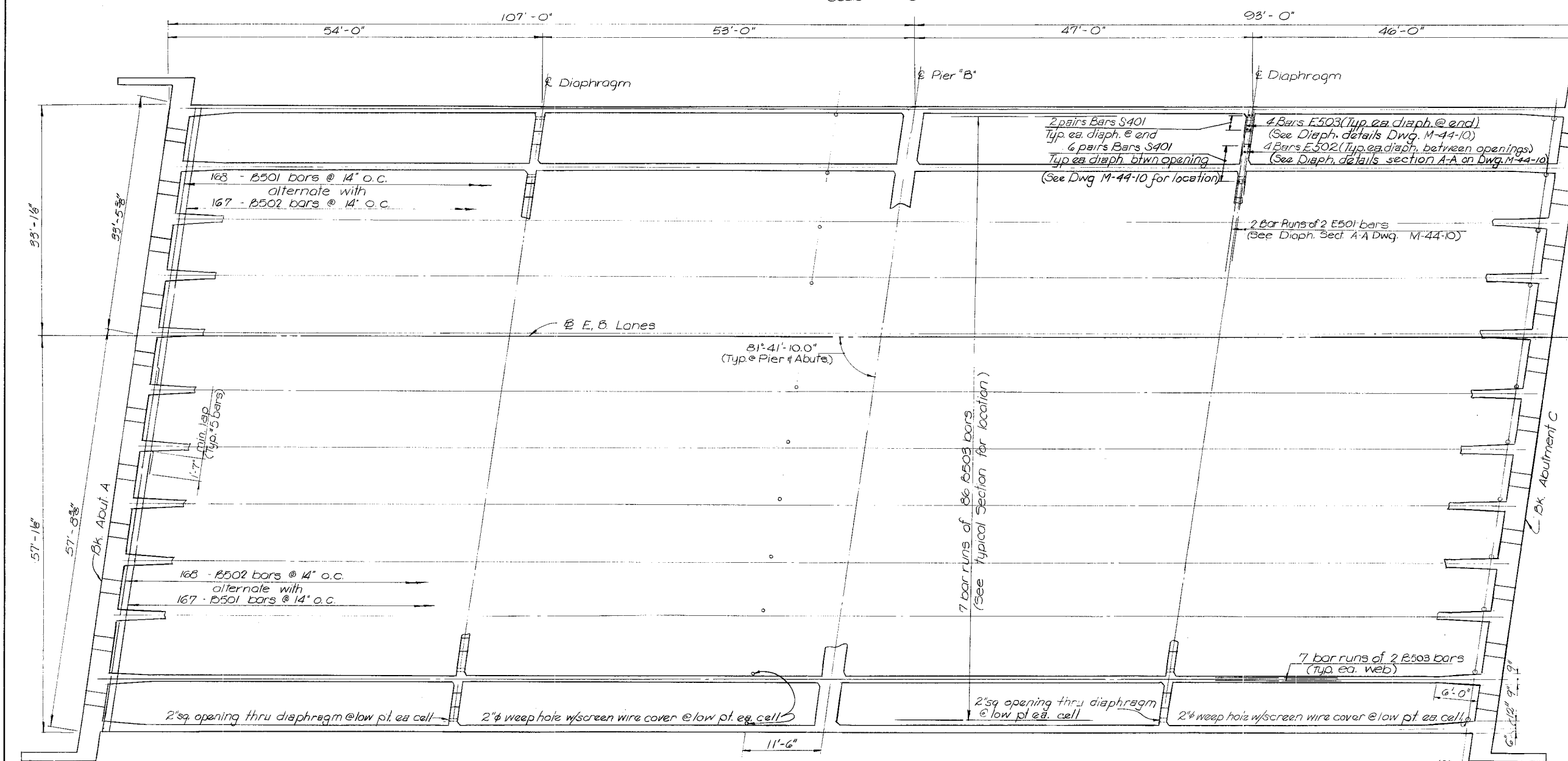
DESIGNED BY F. Hoffman DATE July '75
DRAWN BY B. Dale DATE July '75
SUPERVISED BY D. McCorkle DATE July '75
CHECKED BY D. McCorkle DATE July '75

DIRECTOR OF HIGHWAYS

M-44-13

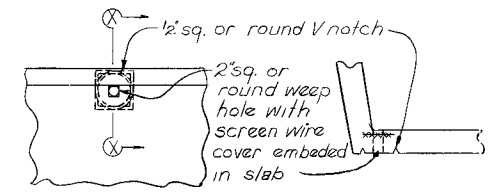


LONGITUDINAL SECTION AT C STRUCTURE
Scale 1/8" = 1'-0"



BOTTOM SLAB PLAN
Scale 1/8" = 1'-0"

Construction Note:
Forms and supports for the entire bottom slab shall be in place prior to the placement of Superstructure concrete. Concrete for the top and bottom slabs and webs may be placed in any sequence; however, construction joints will be permitted at designated locations only. No top slab concrete may be placed until all webs have been completed.



WEEP HOLE DETAIL

PROJECT NO.	YEAR	SHEET NO.	
EAC I-240-1(132)6	1975		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

- NOTES**
1. See Dwg. M-44-9 for Typical Section & Estimated Quantities.
 2. See Dwg. M-44-6 for Bill of Steel.
 3. See Dwg. M-44-11 for details of End Diaphragms.
 4. The Pier Cap shall be poured monolithically with the Superstructure. See Dwg. M-44-6 and M-44-8 for details of Pier Cap.
 5. See Dwg. M-44-16 for Post-Tensioning details.
 6. See Note 3 on Dwg. M-44-12 for min bar lap.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E. B. & W.B. I-240 OVER N. WATKINS ST.

BOTTOM SLAB PLAN - E.B. LANES
STA. 279 + 50

SHELBY COUNTY

HARLAND BARTHOLOMEW AND ASSOCIATES
MEMPHIS, TENNESSEE

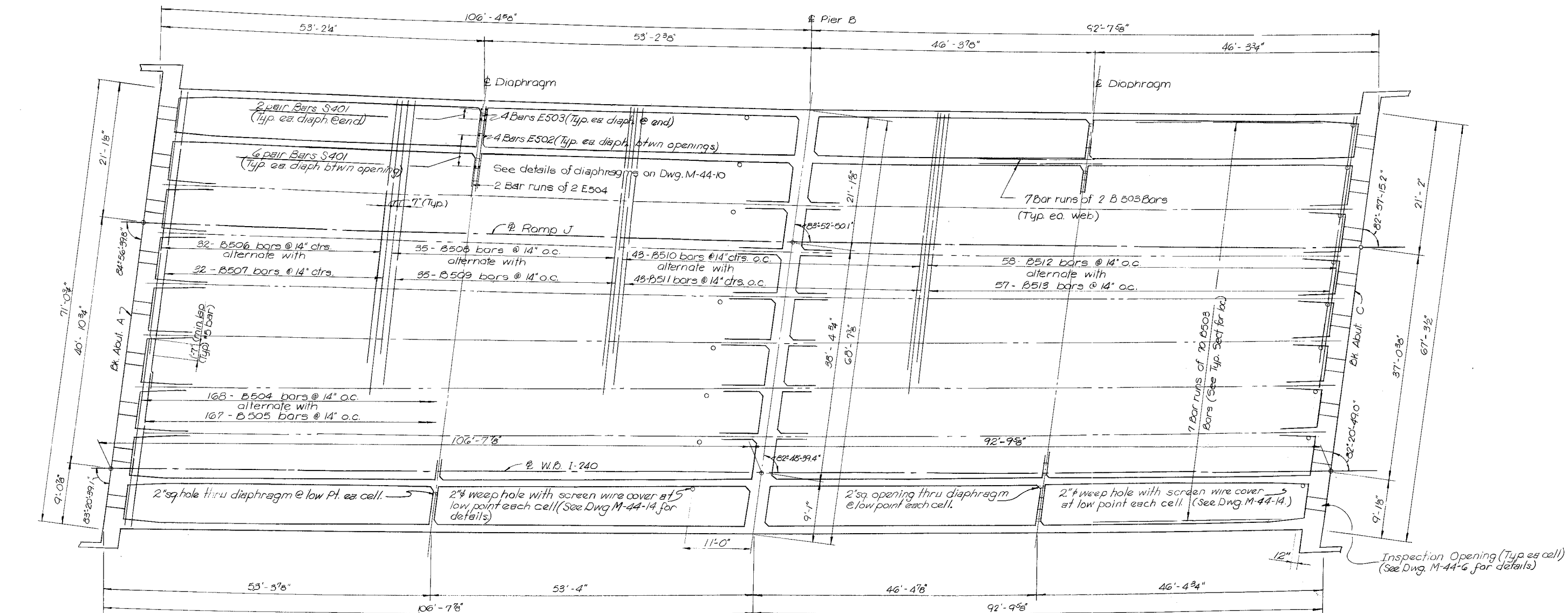
DESIGNED BY: F. Hoffman DATE: July '75
DRAWN BY: B. Dale DATE: July '75
SUPERVISED BY: D. McCorkle DATE: July '75
CHECKED BY: D. McCorkle DATE: July '75

CORRECT: _____
ENGINEER OF STRUCTURES
APPROVED: _____
DIRECTOR OF HIGHWAYS

Forms and supports for the entire bottom slab shall be in place prior to the placement of Superstructure concrete. Concrete for the top and bottom slabs and webs may be placed in any sequence; however, construction joints will be permitted at designated location only. No top slab concrete may be placed until all webs have been completed.

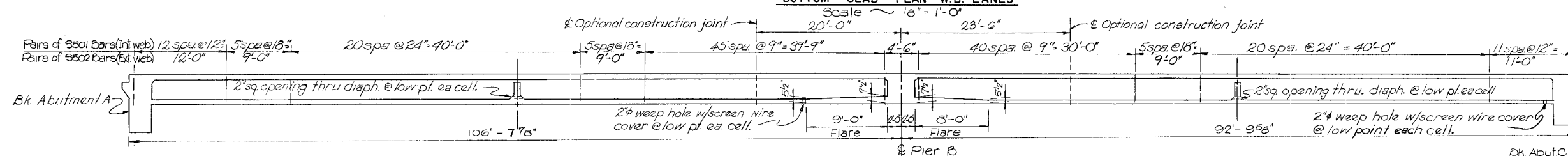
NOTES

1. See Dwg. M-44-10, for Typical Section, Bill of Steel and Diaphragm details
2. See Dwg. M-44-8 for Estimated Quantities
3. See Dwg. M-44-11 for End Diaphragm Details
4. The Pier Cap shall be poured monolithically with the Superstructure. See Dwg. M-44-8 for details of Pier Cap.
5. See Dwg. M-44-16 for Post-Tensioning Details
6. See Note 8 on Dwg. M-44-12 for min. lap.

[illegible]

Scale $\sim 18'' = 1'-0''$

Scale $\sim 18'' = 1' - 0''$

Scale $\sim 18'' = 1'-0''$

DESIGNED BY F. Hoffman DATE July 75
 DRAWN BY B. Dale DATE July 75
 SUPERVISED BY D. McCorkle DATE July 75
 CHECKED BY D. McCorkle DATE July 75

CORRECT _____
ENGINEER OF STRUCTURES

APPROVED _____
DIRECTOR OF HIGHWAYS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E.B. & W.B. I-240 OVER N. WATKINS ST.
BOTTOM SLAB PLAN - W.B. LANES
STA. 279+50

SHELBY COUNTY

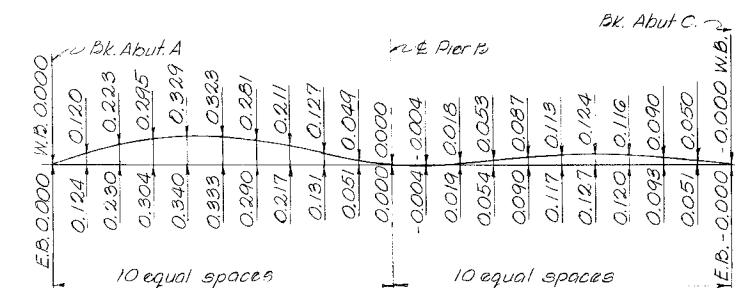
M-44-15

1. Post-Tensioning: See Special Provision No 560, Special Provision regarding Post-Tensioned Concrete, and notes this sheet.
2. Concrete: To be Class A f'c = 4000 psi. Stressing operations shall not begin until the concrete has reached a compressive strength of 3500 psi, as indicated by test specimens. See Section 615-09 of the Tennessee Standard Specification.
3. Design: Based on U=0.25 and K=0.0002. P/Jack specification at the jacking ends includes friction losses, plus provision for 3600 psi. loss in stress at jacking, plus 29,800 psi. long term loss in stress for E.R. Lanes, and 3900 psi. loss in stress at jacking plus 30,000 psi long term loss in stress for the W.B. Lanes.
4. Tensioning Force: The maximum required tensioning force at the jack is 1504 kips per web, which is 76 percent of the specified minimum ultimate tensile strength of the pre-stressed steel. Tendons shall be jacked to the above value and anchored at an equivalent anchor set of 58".
5. Stressing Sequence: Jacking shall be done from both Abutments. Avoid stressing sequence that will cause unsymmetrical forces about a vertical axis.
6. Clearance for Post-Tensioning Units: Horizontal clearance between units - 2' minimum. Units may be bundled vertically in group of 3 maximum. Vertical clearance between bundled units = 3' minimum.
7. Bar Reinforcement interfering with prestressing tendon alignment shall be adjusted by the Engineer.
8. Form work shall not be removed until all Post Tensioning is complete.
9. If ducts are to be placed within limits of bottom slab, provision shall be made to tie the ducts to the vertical steel before the bottom slab is poured.
10. Ducts to be vented through slab to within 3 ft. of high point of cable path.
11. Anchorage details are to be determined by the fabricator. Double end pulls of all tendons are required.
12. Reinforcing Steel: Reinforcing Steel required at each end anchorage shall not be paid for separately, but shall be included in the price bid for Post-tensioning. These details are to be included in post-tensioning shop drawings.
13. Chamber: Dead load chamber shown on the plans is based on $E_c = 1,214,700$ psi. The Contractor shall submit calculations of deflections due to prestress load based on tendon arrangement selected and $E_c = 1,214,700$ psi. These deflections shall be subtraction from the dead load camber shown on these plans and adjusted for the vertical curve to determine screed elevations for pouring.

[illegible]

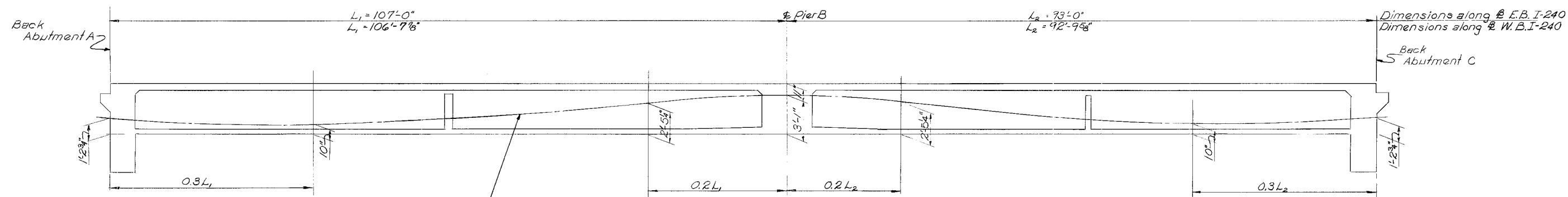
		SECTION PROPERTIES		
		At ∇ Spans (bot. slab $t = 5\frac{1}{2}$ ")	At ∇ Piers (bot. slab $t = 7\frac{1}{2}$ ")	
Bridge 334 (W.B. Lanes)	$A =$	16,218 in ²	$A =$	17,640 in ²
	$I =$	5,371,043 in ⁴	$I =$	5,915,383 in ⁴
	$Z_t =$	254,467 in ³	$Z_t =$	259,994 in ³
	$Z_b =$	199,719 in ³	$Z_b =$	234,291 in ³
	$Y_t =$	21.107 in	$Y_t =$	22.752 in
	$Y_b =$	26.731 in	$Y_b =$	25.248 in
Bridge 33B (E.B. Lanes)	$A =$	20,367 in ²	$A =$	22,245 in ²
	$I =$	6,866,092 in ⁴	$I =$	7,570,455 in ⁴
	$Z_t =$	322,816 in ³	$Z_t =$	329,475 in ³
	$Z_b =$	256,863 in ³	$Z_b =$	302,544 in ³
	$Y_t =$	21.269 in	$Y_t =$	22.977 in
	$Y_b =$	26.731 in	$Y_b =$	25.023 in

* Note Section properties for Br33A are based on an average structure width of 77'-3".



DEAD LOAD CAMBER DIAGRAM

NOTE: The curve shows the dead load camber only. Camber shall be increased by the amount of anticipated take-up in the falsework. Camber values are based on $E_c = 1,214,700$ psi. See Note 13 this Dwg. for adjustments necessary due to prestress forces and vertical curve.



Note:
- Path of center of gravity of Prestressing Force should approximate a parabola between points shown. Ordinates are vertical dimensions.

DRAPE COORDINATES FOR PRE-STRESSING STEEL

No	Scale
----	-------

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BRIDGES 33A AND 33B
E. B. & W.B. I-240 OVER N WATKINS ST.

POST-TENSIONING DETAILS
STA. 279+50

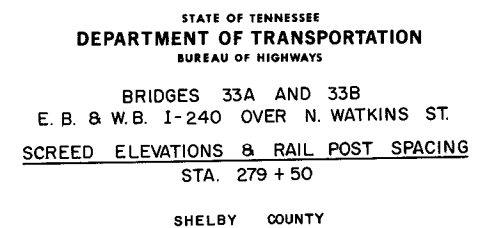
SHELBY COUNTY

DESIGNED BY F. Hoffman DATE July, '75
DRAWN BY B. Dale DATE July, '75
SUPERVISED BY D. McCorkle DATE July, '75
CHECKED BY D. McCorkle DATE July, '75

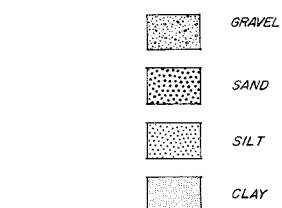
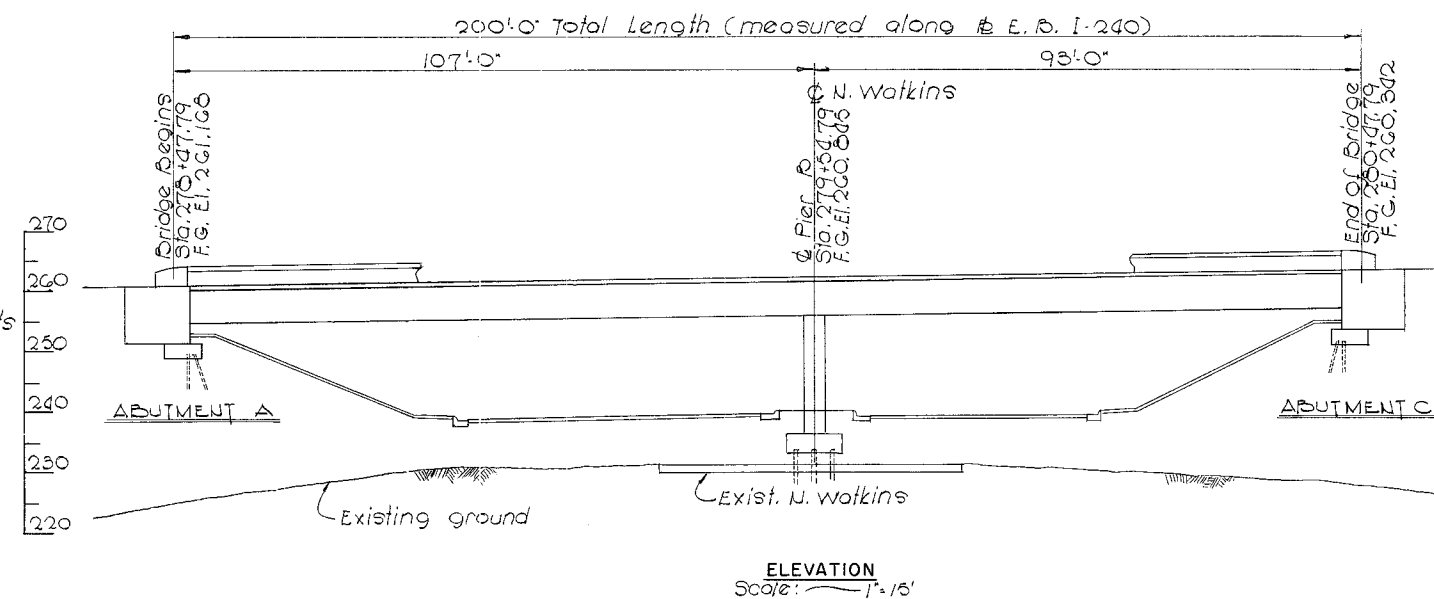
CORRECT _____
ENGINEER OF STRUCTURES

APPROVED _____
DIRECTOR OF HIGHWAYS

M-44-16

[illegible]

1-44-17



①		PILE DATA		②	
Location	Design Load	No. Reqd.	Cut-off Elev.	Tip Elevation	Pile Length
Abutment A	85 Tons	30	251.0	221.0	30 Ft.
Pier B	80 Tons	64	232.75	207.75	25 Ft.
Abutment C	75 Tons	30	250.0	220.0	30 Ft.

- ① Design Loads based on factored loads.
- ② Pile lengths are subject to change after reviewing results of load tests.

HOLE NO. 3

39.5' DEPTH AUGURED

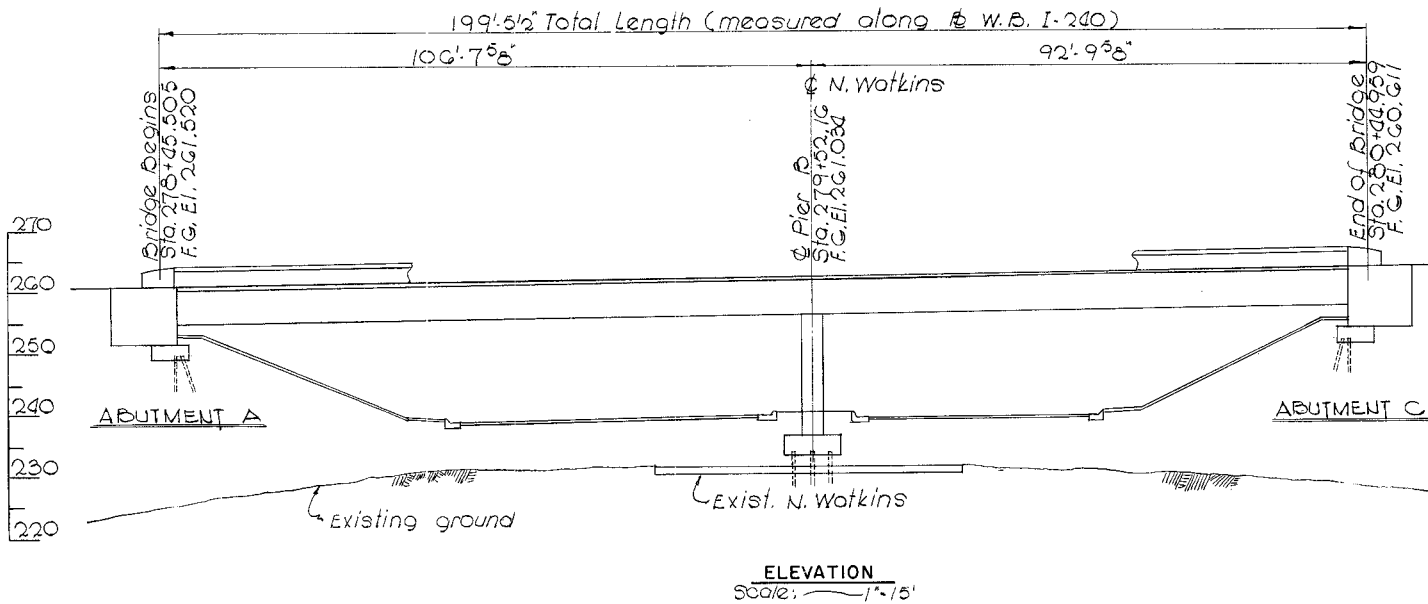
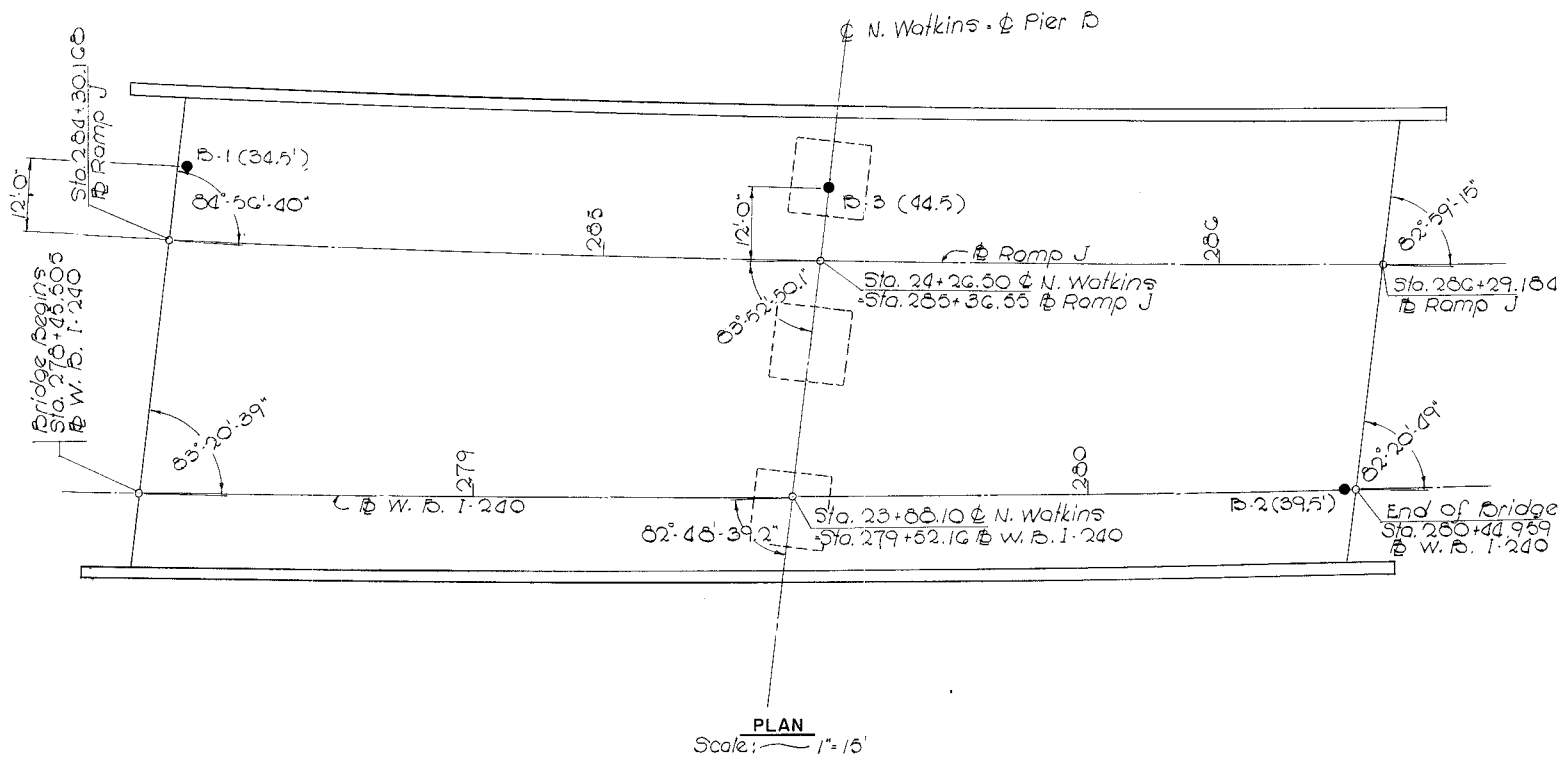
N='N' VALUE

F= TONS/FT.²

S

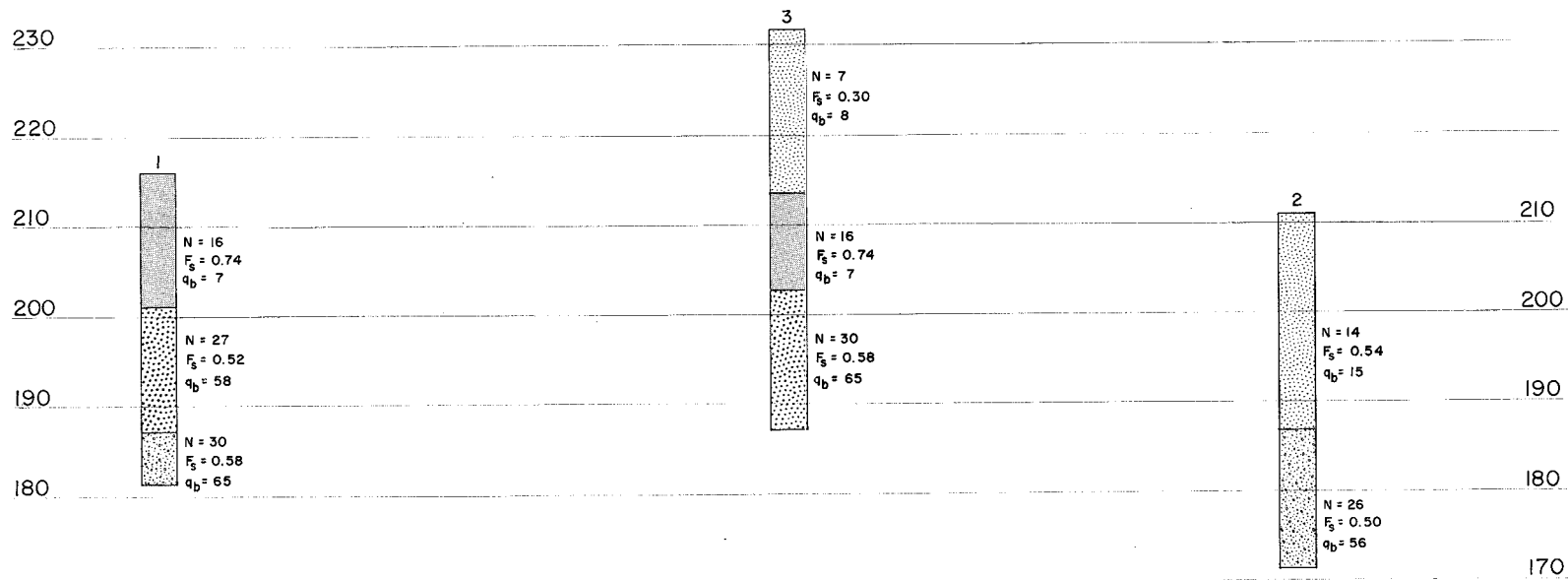
Q= TONS/FT.²

SOIL BORINGS
E. B. I- 240 OVER N. WATKINS ST.
SHELBY COUNTY

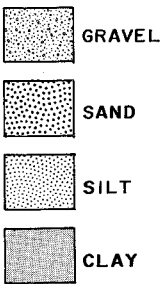


PILE DATA					
Location	Design Load	No. Req'd.	Cut-off Elev.	Tip Elevation	Pile Length
Abutment A	85 Tons	24	250.5	220.5	30 Ft.
Pier B	100 Tons	48	232.75	199.75	35 Ft.
Abutment C	75 Tons	24	249.5	219.5	30 Ft.

① Design Loads are based on factored loads.
② Pile lengths are subject to change after reviewing results of load tests.



Legend



① Depth augered
② Boring location

N = "N" Value
F_s = tons/ft.²
q_b = tons/ft.²

SOIL BORINGS
W.B. I-240 OVER N. WATKINS ST.
SHELBY COUNTY