

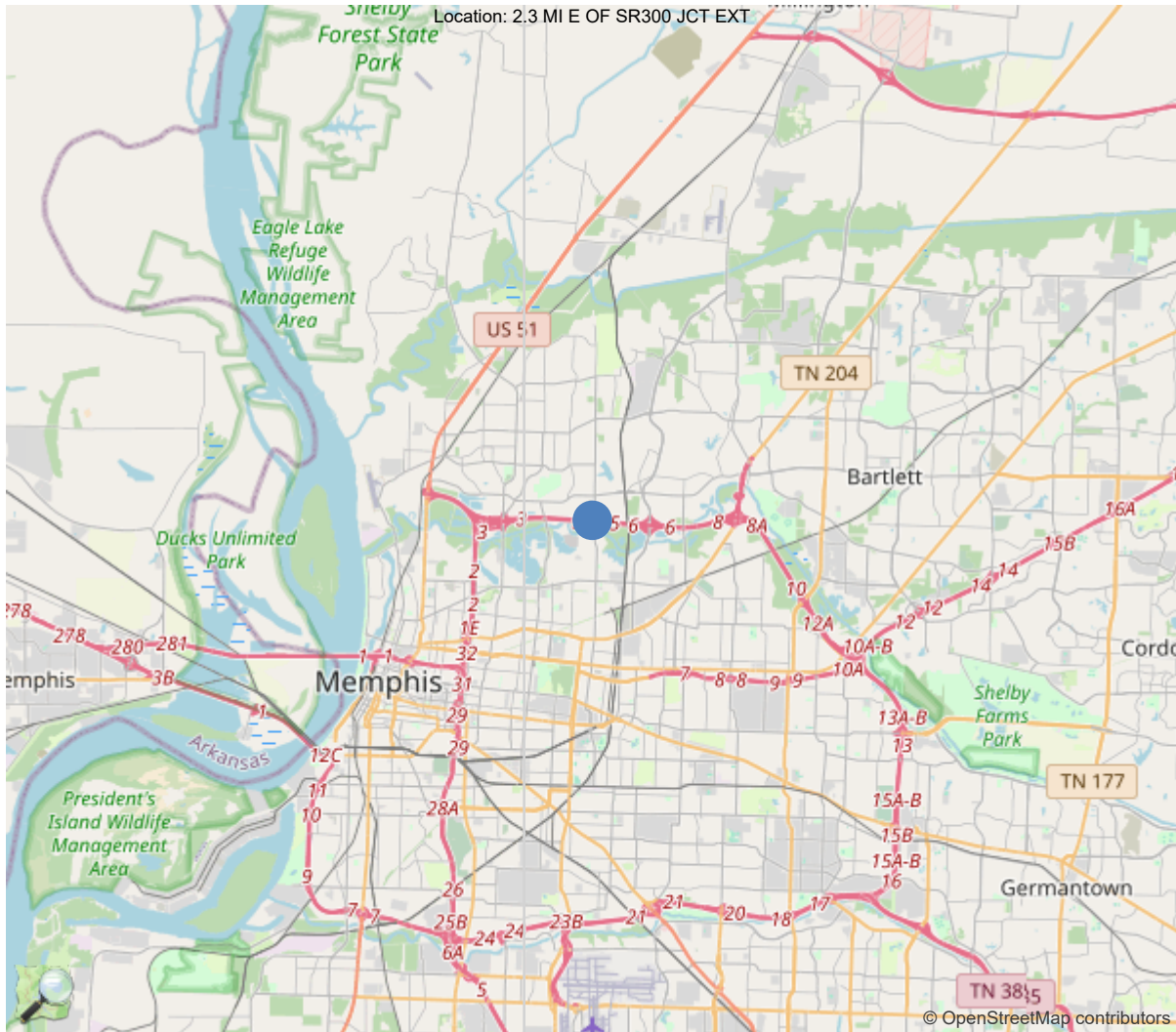


Latitude:35.19150, Longitude:-89.97603

Region 04, 79 - Shelby County

Team Leader: Nathan Bedford

Inspectors: Jacob Seager, Tonjuanita James, Jacob Castellaw, Shayne Hayes, Ty Patrick



I-40 Crossing I-40 EB / N HOLLYWOOD ST

35.19150, -89.97603

90 - LAST INSPECTION DATE 11/04/2024

10 - MIN. V.C. OVER DECK
(ROADWAY + SHOULDERS) 99.99 FT.

520 - MIN. V.C. OVER DECK
(EXCLUDES SHOULDERS) 99.99 FT.

36 - TRAFFIC SAFETY FEATURES

Br. Rail	Trans.	Appr. Rail	Terminal	SPEED LIM.
1	0	0	1	65

41 - STRC OPEN/CLOSED/POSTED A

58 - DECK 7

59 - SUPERSTRUCTURE 7

60 - SUBSTRUCTURE 6

61 - CHANL/CHANL PROTECTION N

62 - CULVERT AND RETAIN WALL N

71 - WATERWAY ADEQUACY N

72 - APPROACH RDWY ALIGNMENT 8

521 - OVERALL CONDITION 2 - Fair

16 - LATITUDE 17 - LONGITUDE

35.191500

-89.976028

N NOT APPLICABLE

9 EXCELLENT CONDITION

8 VERY GOOD CONDITION - NO PROBLEMS NOTED.

7 GOOD CONDITION - SOME MINOR PROBLEMS.

6 SATISFACTORY CONDITION - MINOR DETERIORATION OF STRUCTURAL ELEMENTS.

5 FAIR CONDITION - ALL PRIMARY STRUCTURAL ELEMENTS ARE SOUND BUT MAY HAVE MINOR SECTION LOSS, CRACKING, SPALLING OR SCOUR.

4 POOR CONDITION - ADVANCED SECTION LOSS, DETERIORATION, SPALLING OR SCOUR.

3 SERIOUS CONDITION - LOSS OF SECTION, DETERIORATION, SPALLING OR SCOUR HAVE SERIOUSLY AFFECTED PRIMARY STRUCTURAL COMPONENTS. LOCAL FAILURES ARE POSSIBLE. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT.

2 CRITICAL CONDITION - ADVANCED DETERIORATION OF PRIMARY STRUCTURAL ELEMENTS. FATIGUE CRACKS IN STEEL OR SHEAR CRACKS IN CONCRETE MAY BE PRESENT OR SCOUR MAY HAVE REMOVED SUBSTRUCTURE SUPPORT. UNLESS CLOSELY MONITORED IT MAY BE NECESSARY TO CLOSE THE BRIDGE UNTIL CORRECTIVE ACTION IS TAKEN.

1 "IMMINENT" FAILURE CONDITION - MAJOR DETERIORATION OR SECTION LOSS PRESENT IN CRITICAL STRUCTURAL COMPONENTS OR OBVIOUS VERTICAL OR HORIZONTAL MOVEMENT AFFECTING STRUCTURAL STABILITY. BRIDGE IS CLOSED TO TRAFFIC BUT CORRECTIVE ACTION MAY PUT IT BACK IN LIGHT SERVICE.

0 FAILED CONDITION - OUT OF SERVICE AND BEYOND CORREC

TEAM LEADER SIGNATURE

IDENTIFICATION	
(1) State Names	47 - Tennessee
(8) Structure Number	79I00400073
(5) Inventory Route	1
(2) Highway Agency District	Region 4
(3) County Code	79 - Shelby
(4) Place Code	48000
(6) Features Intersected	I-40 EB / N HOLLYWOOD ST
(7) Facility Carried	I40-RL
(9) Location	2.3 MI E OF SR300 JCT EXT
(11) Mile Point	7.510 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	79I0040001
(16) Latitude	35.191500
(17) Longitude	-89.976028
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	16
Material	1 - Concrete
Type	6 - Box Beam or girders - Single or Spread
(44) Approach Structure Type	00
Material	0 - Other / None
Type	0 - Other / None
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1975
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	4
Under	6
(29) Average Daily Traffic	95722
(30) Year of ADT	2021
(109) Truck ADT	8 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	125.0 ft
(49) Structure Length	125.0 ft
(50) Curb or Sidewalk Width	
Left	0.0 ft
Right	0.0 ft
(51) Bridge Roadway Width Curb to Curb	69.5 ft
(52) Deck Width Out to Out	71.5 ft
(32) Approach Roadway Width (W/Shoulders)	56.0 ft
(33) Bridge Median	1 - Open median
(34) Skew	85 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	56.0 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	16.42 ft
Ref:	
(55) Min Lat Underclear RT	0.0 ft
Ref:	
(56) Min Lat Underclear LT	0.0 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(111) Pier Protection	
(39) Navigation Vertical Clearance	0.0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	ft
(40) Navigation Horizontal Clearance	0.0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	1
(26) Functional Class	11 - Urban Principal Arterial
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	R - The right structure of par
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	4 - Historical significance is
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	6
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6 - MS 18+Mod / HS 20+Mod
(63) Operating Rating Method	8
(64) Operating Rating	
Type	8 - Load and Resistance Factor Rating (LRF
Rating	45.36
(65) Inventory Rating Method	8 - Load and Resistance Factor
(66) Inventory Rating	
Type	
Rating	34.02
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	3
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	N - Bridge not over waterway.
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	ft
(94) Bridge Improvement Cost	\$
(95) Roadway Improvement Cost	\$
(96) Total Project Cost	\$
(97) Year of Improvement Cost Estimate	
(114) Future ADT	153155
(115) Year of Future ADT	2042

INSPECTIONS *			
(90) Inspection Date	11/04/2024		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			

PERFORMANCE EVALUATION

Time of Day Inspected 2:00 PM

Weather Conditions Sunny 82°F

Vehicles Observed All types

LIVE LOAD BEHAVIOR

Sub Horiz./ Vert. Defl (No)

Sub Vibration (No)

Super Horiz./ Vert. Defl (No)

Super Vibration (No)

APPROACH

Alignment (Good)

Joints (Poor)

Approach 2 full of debris

Pavement (Poor)

Approach 2 has a large pothole

Embankment (Good)

Approach Drains (Poor)

Approach 1&2 right are full of debris

TRAFFIC SAFETY FEATURES

Bridge Railing Rating (Fair)

Transitions Rating (Good)

Guardrail Rating (Good)

Guardrail Terminal Rating (Good)

SIGNS POSTED ON ROUTE

Paddleboards No

Vertical Clearance (<14'-6") No

Posted Height

Narrow Bridge Signs No

One Lane Bridge Signs No

Other Signs or Plaques

Weight Limit Posted Not Needed

Gross Tons

Single-unit Vehicle Tons

Multi-unit Vehicle Tons

564 Assigned Bridge Name

ATTACHED SIGNS

Sign No	Location	Text on Sign	Noted Defects
79SIGN00 1123	SPAN 1 RIGHT	WEST TO I40	

DECK

Wearing Surface Type		Concrete	Wearing Surface Depth
Wearing Surface	(Fair)	Up to 1/16" cracks	
Deck - Structural Condition	(Good)	Hairline cracks with efflorescence	
Parapet	(Fair)	Up to 1/32" cracks and surface steel	

SUPERSTRUCTURE

Beams	(Good)	
Alignment of Members	(Good)	

TEXTURE COAT

ABUTMENTS

Abutment Caps	(Fair)	1/16" cracks with efflorescence , spalling
Abutment Wings	(Fair)	Spalling , impending spall , 1/8" cracks with efflorescence
Abutment Backwall	(Poor)	Spall steel abut 2 back wall
Abutment Plumb	(Good)	
Abutment Piles	(Not Visible)	
Abutment Embankment	(Good)	
Abutment Bearing Surface	(Good)	
Abutment Slope Paving	(Good)	

PIERS

BENTS

Inspection Team's Summary

This is a one span Concrete Box Beam Bridge. Safety features include metal approach rails & concrete parapet. The asphalt approach roadway has cracks up to 1/2", rough patchwork, and potholes. The approach drains are filled with debris. The approach joint is filled with debris. The asphalt wearing surface has cracks up to 1/6". The bottom deck has hairline cracks with efflorescence. The Beams have no issues. Substructure has 1/16" cracks with efflorescence, spalling. Abutment 2 back wall has heavy spall to steel. Minimum vertical clearance: 16'5".

General Inspection Comment

HQ notes to TL

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Re Concrete Deck	SF	9009	8989	20	0	0
1120	Efflorescence/Rust Staining	SF	20	0	20	0	0
510	Wearing Surfaces	SF	8688	3688	5000	0	0
3220	Crack (Wearing Surface)	SF	5000	0	5000	0	0
(12) Element record added 2015-01-15.							
(1120-12) Element record added 9/28/2022							
(3220-510-12) Element record added 9/29/2020							
110	Re Conc Opn Girder/Beam	LF	125	125	0	0	0
(110) Element record added 12/22/2016							
215	Re Conc Abutment	LF	143	126	17	0	0
1120	Efflorescence/Rust Staining	LF	2	0	2	0	0
1130	Cracking (RC and Other)	LF	15	0	15	0	0
(215) Element record added 2015-01-15.							
(1120-215) Element record added 9/28/2022							
(1130-215) Element record added 9/28/2022							
300	Strip Seal Exp Joint	LF	71	71	0	0	0
(300) Element record added 2015-01-15.							
331	Re Conc Bridge Railing	LF	250	248	2	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
(331) Element record added 2015-01-15.							

Equipment List

General Inspection

☐ Pocket knife
☐ Sounding/chipping hammer
☐ Chain drag
☐ Yes Range pole
☐ 25' rod - depth and clearance

Visual Aid

☐ Binoculars
☐ Flashlight
☐ Magnifying glass
☐ Hand mirror

Cleaning

☐ Wisk broom
☐ Wire brush
☐ Flat bladed screwdriver
☐ Hand shovel
☐ Penetrating oil (WD-40, etc.)

Tools For Access

☐ Ladders
☐ Rope
☐ Waders
☐ Machete or bush axe

Comment

Tools For Measuring

☐ Yes Masonry/Wood Ruler
☐ 6' Pocket Tape
☐ 25' and 100' Tape
☐ Calipers
☐ Yes Thermometer
☐ Carpenter's Level
☐ String and Weighted line (plumb bob)

Special Purpose Equipment

☐ Reach All
☐ Bucket Truck
☐ Yes Traffic control
☐ Boat
☐ Sonar depth finder
☐ Increment borer
☐ Survey equipment
☐ Safety Harness
☐ Climbing equipment
☐ Dye penetrant
☐ Drone
☐ Air Meter

Special Purpose Equipment

Reach-All Approval and Comments



Approach 2 asphalt



Approach 2 joint



Approach 1 asphalt



View across deck



Opposite direction of route



Approach 2 pavement



Approach 2 joint



Looking right



Direction of route



Approach 1 pavement



Back of bridge mounted sign



Bridge mounted sign upper connection



Right elevation



Front of bridge mounted sign



Back of bridge mounted sign



Abutment 2



Abutment 2 crack



Abutment 2 impending spall



Abutment 2 sidewalk



Abutment 2 spill



Abutment 1 , wing wall , Right side



Bridge number



Abutment 1, hairline crack



Abutment 1



Span 1



Spall about 2 backwall



Spall abut 2 back wall

Maintenance Recommendations

525 - Repair List # N 523 - Repair List Add Date 524 - Repair List Revise Date 9/27/2022

Date Added	Recommendation	Priority
06/05/2007	APPROACH GUARDRAILS ARE SUBSTANDARD	
06/05/2007	UNDERPASS SUBSTRUCTURE PROTECTION GUARDRAILS ARE NON-EXISTENT	
09/28/2022	REPAIR APPROACH GUARDRAILS AT APPROACH NO.1 RT	
11/04/2024	LEVEL THE WEARING SURFACE AT BOTH APPROACHES.	
11/04/2024	CLEAR APPROACH DRAINS.	
11/04/2024	REPAIR BACKWALL AT ABUTMENT NO.2	

SHELBY COUNTY

79-10040-0751 R

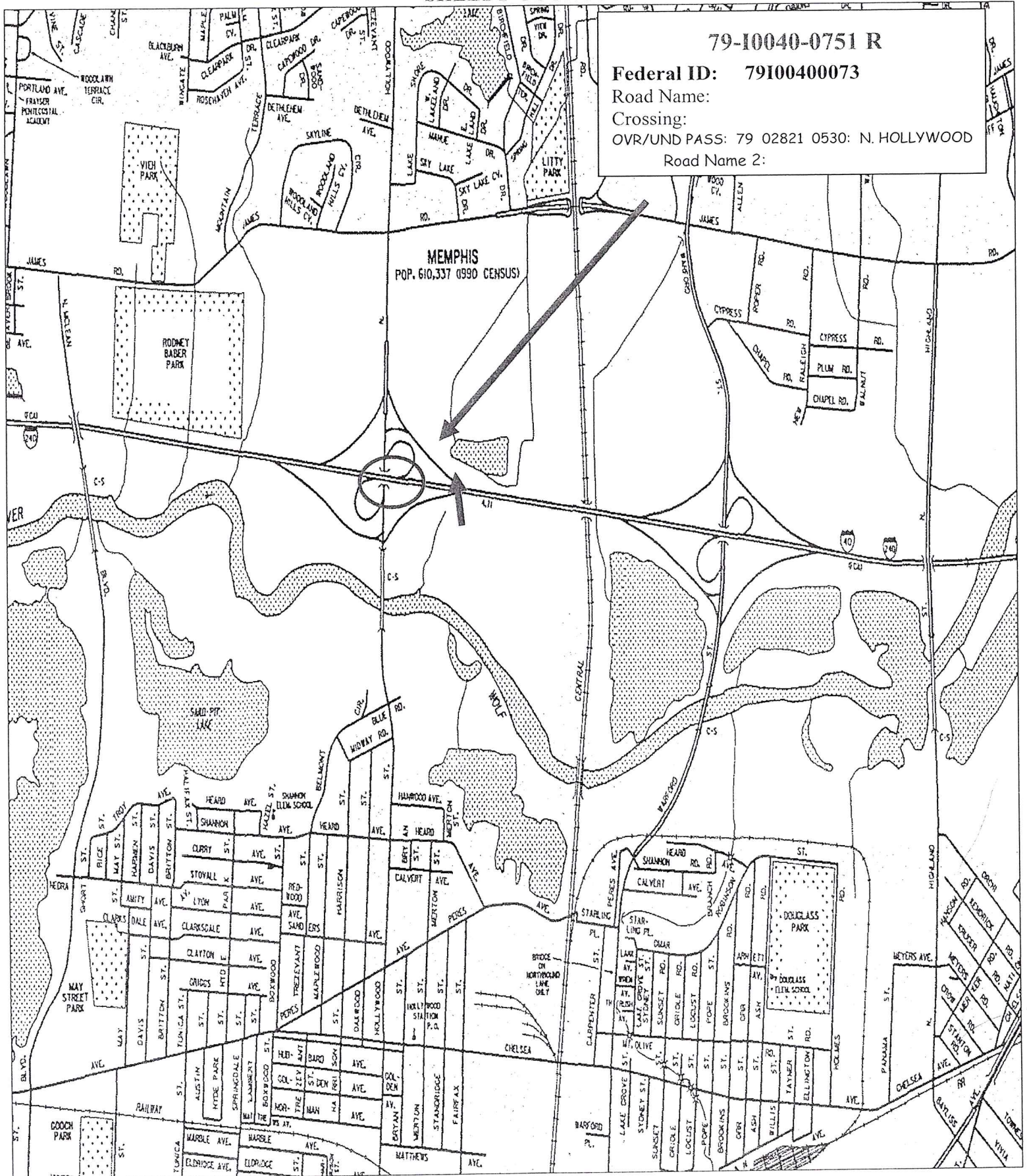
Federal ID: 79100400073

Road Name:

Crossing:

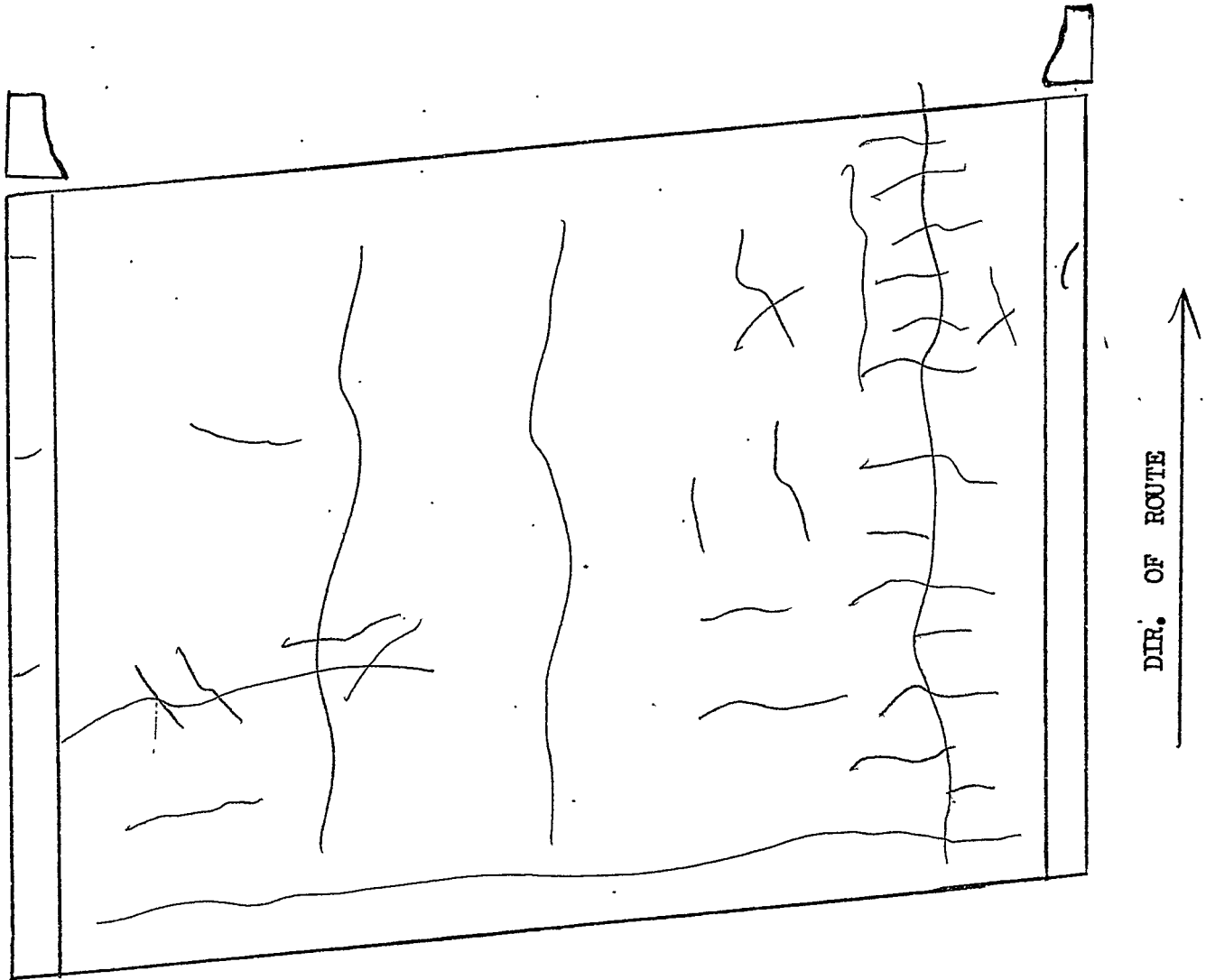
OVR/UND PASS: 79 02821 0530: N. HOLLYWOOD

Road Name 2:



RT

BRIDGE NO. 79 I-40 - 75D EBL SK. _____ RT. SPAN NO. 1



DECK	G (F) P C	upto 1/16" cracks
PARAPET	G (F) P C	Surface steel upto 1/32" cracks
DRAINS	G F P C	
JOINT	G F P C	

RT

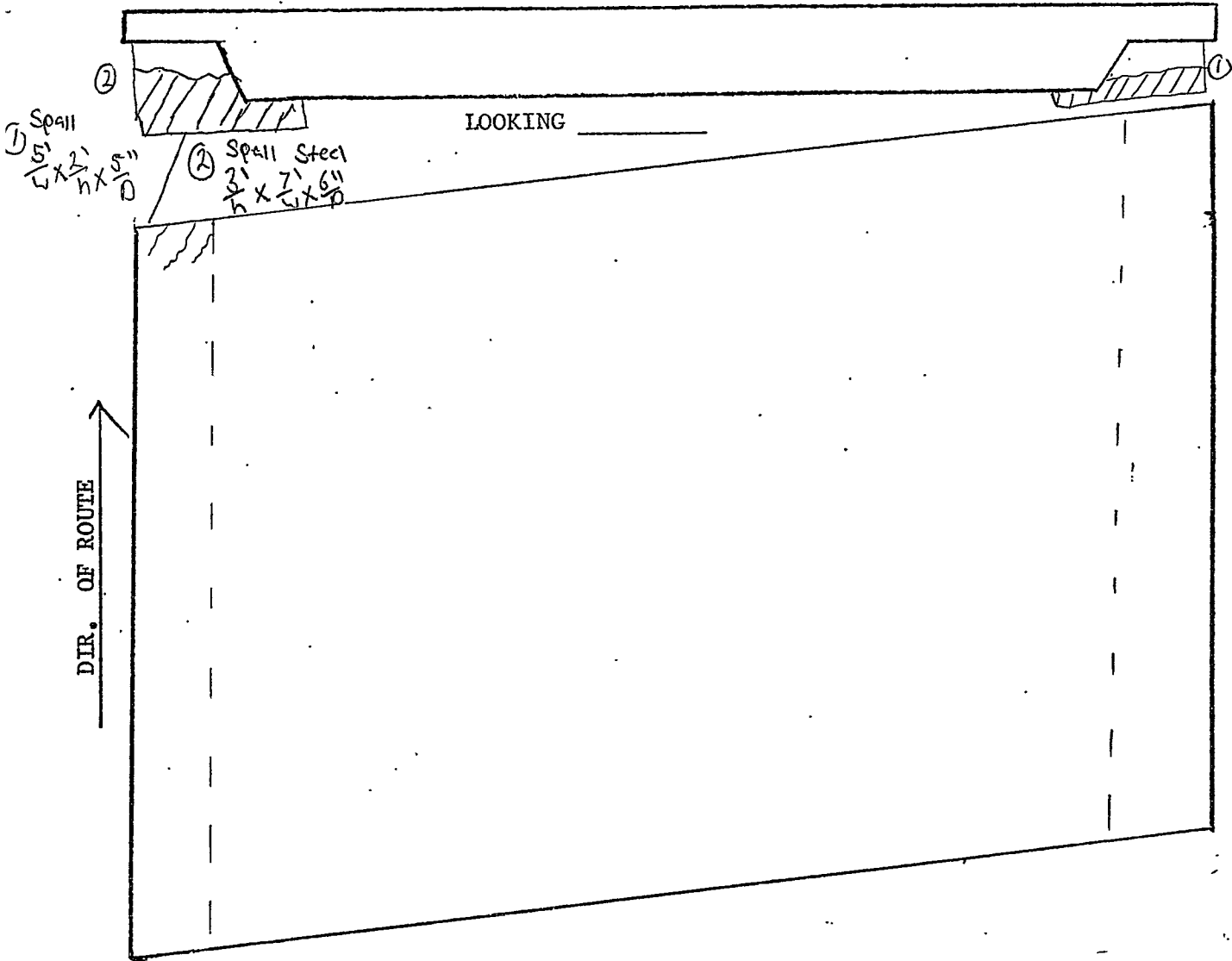
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I 40-751R EBL

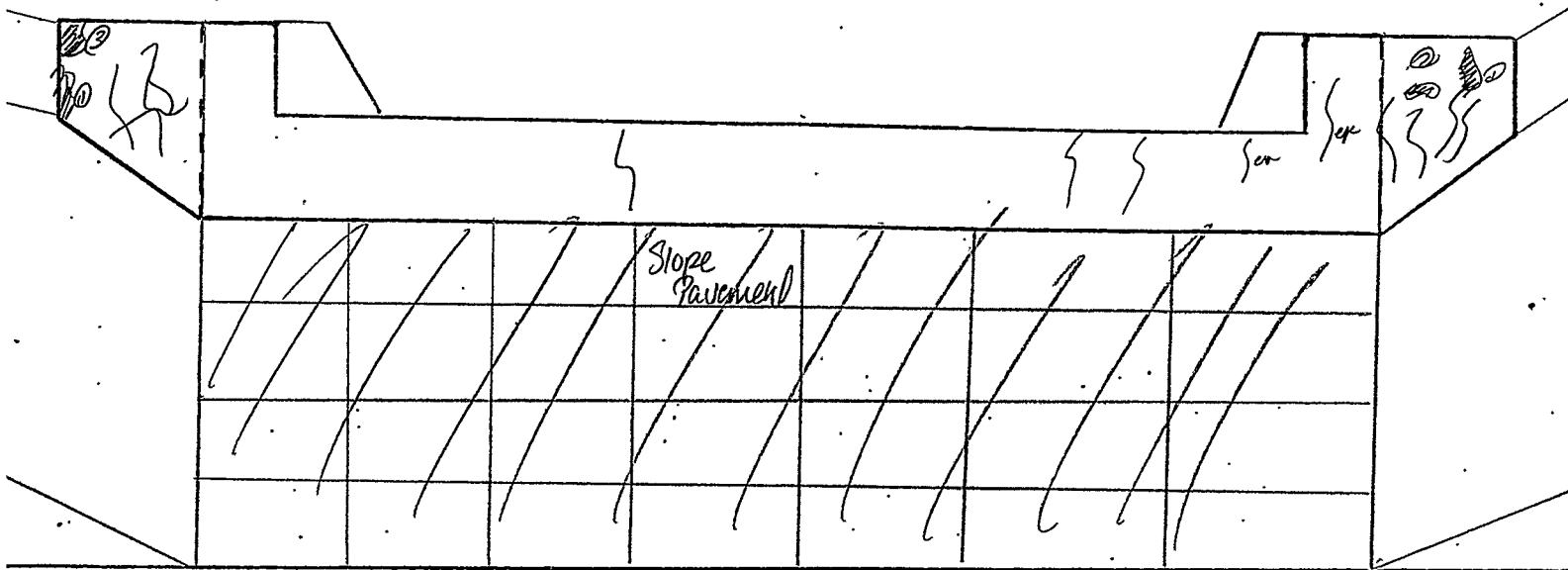
SK.

RT.

SPAN NO. 1



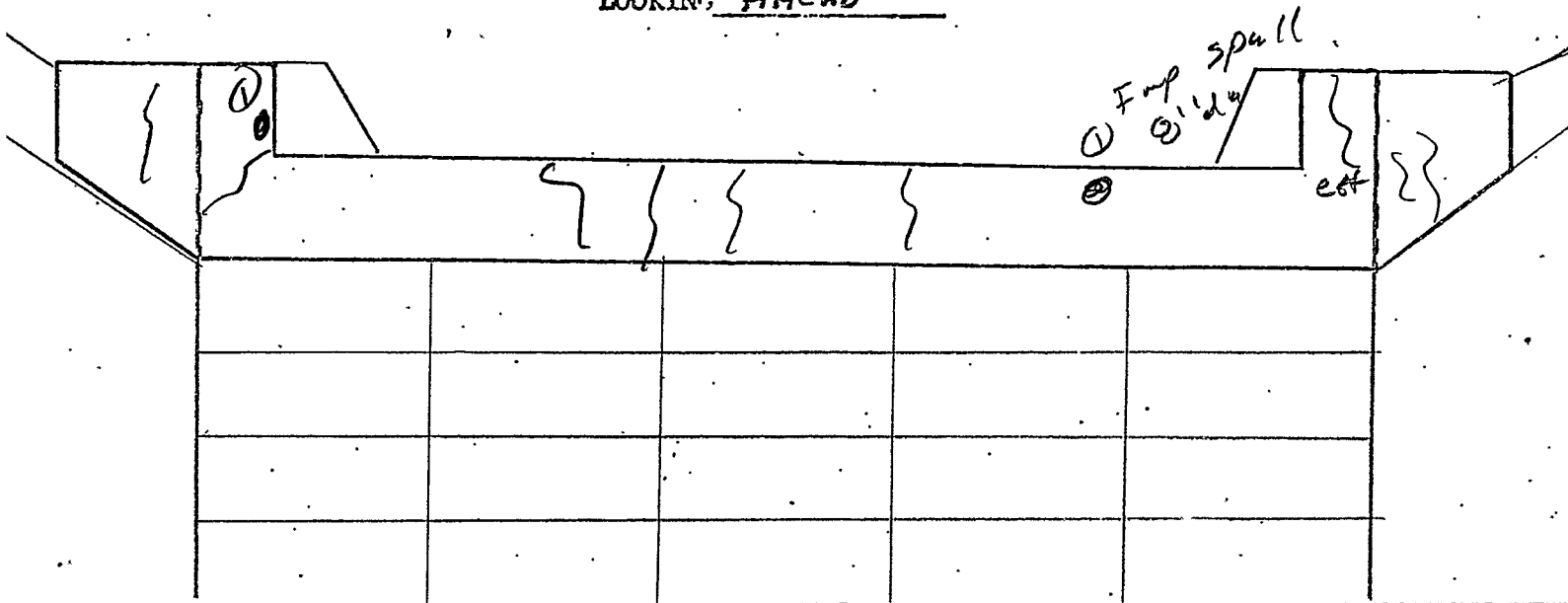
ELEMENT	RATING	COMMENT
BOTTOM DECK	G F P C	hL EBL
Backwall	(P)	See (1), (2)
Box Beam	(G)	

LOOKING BACK (13)

ELEMENT	RATING	COMMENTS
BEARING	G F P C	N/A
PAINT	G F (P) C	
CAP	(G) F P C	Handline cracks w/eff
WINGS	G (F) P C	See (1), (2), 1/8" cracks w/eff
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	N/A

BRIDGE NO. 79 7-40-75 E.B.L. ABUT. NO. 2

LOOKING AHEAD



LEMENT	RATING	COMMENTS
BEARING	(D) F P C	
PAINT	G F P C	N/A
CAP	G F P C	① Up to 1/16" cracks with chf
WINGS	(G) F P C	Horizontal cracks e&f
EMB.	(G) F P C	
VEG.	(G) F P C	
RIP-RAP	G F P C	
SLOPE PAV	(G) F P C	
BACKWALL	(G) F P C	Medi corrosion
EQ		

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. 79100400073

Eleven Digit No.

Underpass Location No. 79 - 10040 - 0759 R-0-

Railroad/Walkway

or

- - -

Co. Route Log Mile

over/
under

Co. Route Log Mile

79 - 02821 - 0530

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 (X) N.A. ()

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

Width of Approach Traveled Roadway 76 ft. (Does Not Include Shoulders)

Width of Median if Divided Highway _____ ft.

Approach Shoulder Width 9 ft. Right 11' ft. Left*Horizontal Clearance Under Bridge 69 ft. 5 IN.

*Distance Between Pier Protection Guardrail and Substructure _____ ft. Right _____ ft. Left

*Width of Sidewalk Under Bridge 5' ft. Right 5' ft. Left*Minimum Vertical Clearance: 16 ft. 5 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. Bedford
2. Seager
3. _____
4. _____
5. _____
6. _____

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

Date _____

Underpass Location No. 79 - 10040 - 0759 R
Co. Route Log Mile

Other Signs or Plaques: _____

Comments Regarding any Problems with Signing: _____

BRIDGE FEATURES (*.* ft.)

Bridge Skew 85 R+
Structure Type (Main Span) Cone Box Beam No. Main Spans 1
Structure Type (Appr. Spans) _____ No. Appr. Spans _____
Maximum Span Length 125 (ft.) Total Length 125 (ft.)
Width of Bridge Out-to-Out 21.5 (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 6

BRIDGE CONDITION:G (F) P C

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

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

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

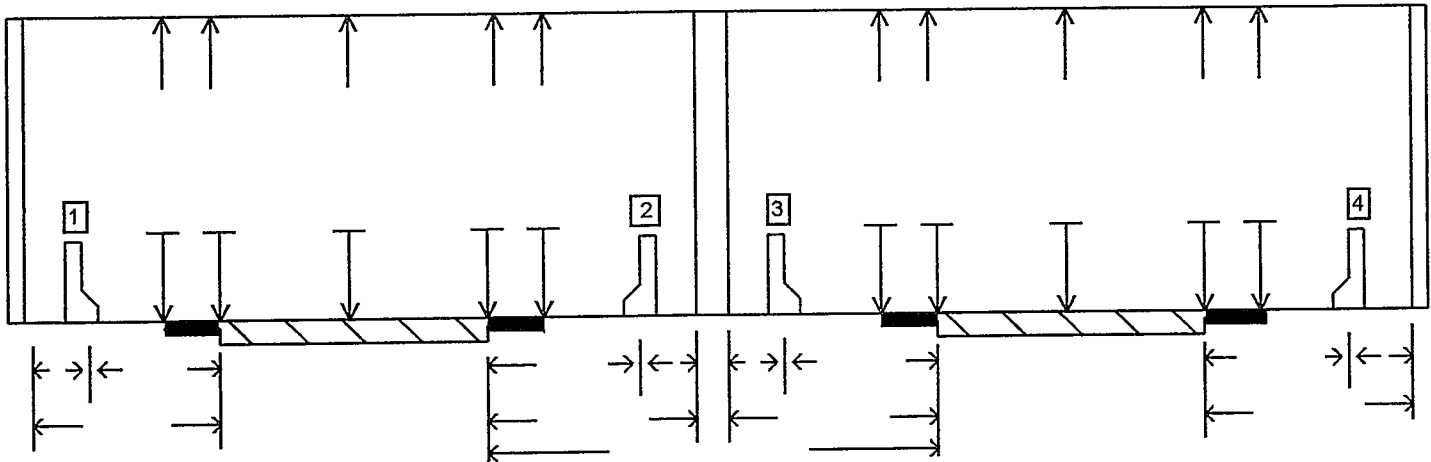
7.51

BRIDGE LOC. NO. 79 I0040 ~~0759~~ R
CO. ROUTE L. M. L/R

DATE: _____

LATERAL AND VERTICAL CLEARANCES

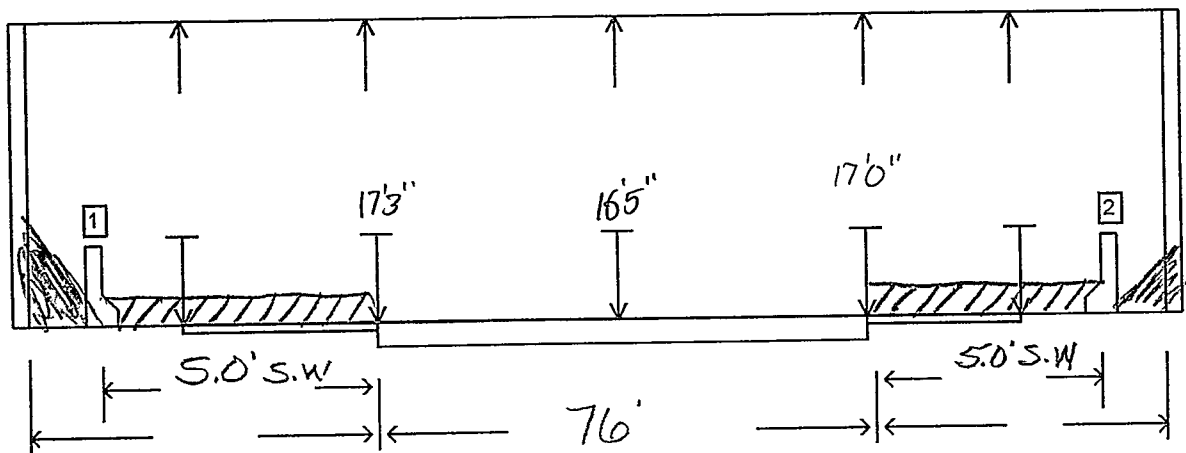
BENT/ABUT. _____ BENT _____ BENT/ABUT. _____



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

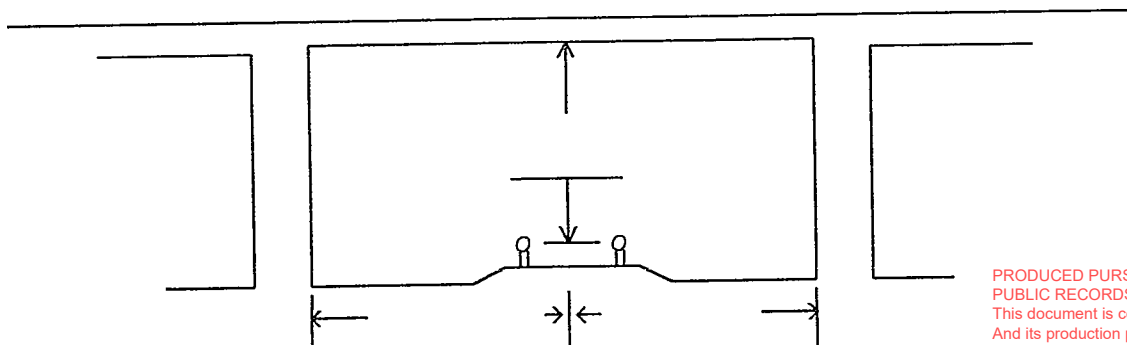
BENT/ABUT. 1

BENT/ABUT. 2



BENT/ABUT. _____

BENT/ABUT. _____



TDOT BRIDGE MOUNT SIGN INSPECTION REPORT

INSPECTION DATE: 11/4/2024

SIGN NUMBER: 79SIGN001123

LOCATION: ATTACHED TO SPAN #1 RIGHT OF
79-I0040-7.51 R (79I00400073)

DIRECTION OF UNDERPASS ROUTE: NB

BASE PLATE BOLT DIAMETER: 3/4"

NUMBER OF BOLTS PER BASE PLATE: 2

TOTAL NUMBER OF BOLTS ATTACHING SIGN TO BRIDGE: 8

BASE BOLTS CONDITION: (G) F P C

COMMENTS: _____

FOUNDATION (PARAPET/BEAM) CONDITION: (G) F P C

COMMENTS: _____

UPPER ARMS CONDITION: (G) F P C

COMMENTS: _____

LOWER ARMS CONDITION: (G) F P C

COMMENTS: _____

SIGN FACE CONDITION: (G) F P C

COMMENTS: _____

OVERALL CONDITION: (G) F P C

SIGNATURE: _____

