

Inspection Report with SI&A Data

Structure Description: 209.87 Foot - 4 Span Steel Stringer/Multi-beam or Girder

2 District: 06 3 County: Harrison 16 Latitude: 38°20'29.00" 7 Longitude: 84°18'06.00"

7 Facility Carried OLD LAIR RD

Milepoint: 0.070

6A Feature Intersected: S FK LICKING RIVER

9 Location: .1 MI E OF JCT KY 982

NBI	
Element	
Fracture Critical	
Underwater	X
Special	

NBI CONDITION RATINGS			
58 Deck:	5	61 Channel:	6
59 Superstructure:	4	62 Culvert:	N
60 Substructure:	3	Sufficiency Rating:	14.2

GEOMETRIC DATA	
48 Max Length Span:	49.730 ft
49 Structure Length:	209.870 ft
32 Approach Roadway:	20.013 ft
33 Median:	(0) No Median
34 Skew:	0°
35 Flare:	No Flare
50A Curb/Sidewalk Width L:	2.500 ft
50B Curb/Sidewalk Width R:	2.500 ft
47 Horiz. Clearance:	12.130 ft
51 Width Curb to Curb:	12.130 ft
52 Width Out to Out:	16.100 ft

DESIGN	
Substandard:	Weight
43A Main Span Material:	(3) Steel
43B Main Span Design:	(02) Stringer / Girder
45 Number of Spans Main:	4
44A Approach Span Material:	Not Applicable (0)
44B Approach Span Design:	Not Applicable (00)
46 Number of Approach Spans:	0
107 Deck Type:	(1) Concrete-Cast-in-Place
108A Wearing Surface:	(6) Bituminous
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	Yes
Overlay Type:	Asphalt
Overlay Thickness:	2.000 in
Overlay Date:	

ADMINISTRATIVE	
27 Year Built:	1925
106 Year Reconstructed:	0
42A Type of Service On:	(1) Highway
42B Type of Service Under:	(5) Waterway
37 Historical Significance:	(5) Not Eligible
21 Maintenance Responsibility:	(02) County Hwy Agency
22 Owner:	(02) County Hwy Agency
101 Parallel Structure:	(N) No II Structure Exists

APPRAISAL	
36A Bridge Railings:	(0) Substandard
36B Transitions	(0) Substandard
36C Approach Guardrail:	(0) Substandard
36D Approach Guardrail Ends:	(0) Substandard
71 Waterway Adequacy:	(7) Above Minimum
72 Approach Alignment:	(5) Above Tolerable
92A Fracture Critical Inspection:	No
92B Under Water Inspection:	Yes
113 Scour Critical:	(5) Stable w/in footing
Recommended Scour Critical:	(5) Stable w/in footing

CLEARANCES	
10 Vert. Clearance:	99.999 ft
53 Min. Vert. Clearance Over:	99.999 ft
54A Vert. Under Reference:	(N) Feature not hwy or RR
54B Min. Vert. Underclearance:	0.000 ft
55A Lateral Under Reference:	(N) Feature not hwy or RR
55B Min. Lat. Underclearance R:	0.000 ft
56 Min. Lat. Underclearance L:	0.000 ft

LOAD RATINGS	
63 Operating Type:	(1) Load Factor (LF)
64 Operating Rating:	3.1 tons
65 Inventory Type:	(1) Load Factor (LF)
66 Inventory Rating:	3.1 tons
Truck Capacity Type I:	3 tons
Truck Capacity Type II:	3 tons
Truck Capacity Type III:	3 tons
Truck Capacity Type IV:	3 tons

POSTINGS	
41 Posting Status:	(B) Posting Recommended
Signs Posted Cardinal:	No
Signs Posted Non-Cardinal:	No
Field Postings Gross:	20 tons
Field Postings Type I:	20 tons
Field Postings Type II:	20 tons
Field Postings Type III:	20 tons
Field Postings Type IV:	20 tons

Inspection Report with SI&A Data

:									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
			%		%		%		%

STRUCTURE NOTES

03/21/14 Posting memo for 3 tons gross due to the serious condition of the substructure ? ALi

Item 113=5, per Stantec UW 4-5-16 MS

INSPECTION NOTES

This inspection shows no appreciable change in condition since the previous underwater inspection.

*Note that during inspection heavy loads (+3 tons) were seen using structure.

2.2. Observed Structure Conditions

Abutment 1

- Severe cracking on both the East Face of the abutment and on each wingwall. The cracks extend the entire height of the masonry structure.
- Random areas with loss of mortar up to 6 inches deep.
- Several stones were found to be missing or dislodged.

Pier 2

- No significant defects observed.

Pier 3

- Several stones were found to be missing or dislodged, primarily on the downstream nose, just above the waterline.
- Areas of severe mortar loss up to 12 inches deep from the bottom of the stone masonry to approximately 4 feet above the waterline.
- Moderate vertical cracking along the mortar joints on the West Face.

SI&A Rating Recommendations:

60.7 and 60.8 – Substructure Rating: 4 – Poor Condition

113 – Scour Critical Rating: 5 – Scour within limits footing

Damage or deterioration which may have significantly affected the integrity, stability or load bearing capacity of the observed substructure elements was detected at or below the water surface. Vertical cracking is evident in the masonry section of the west abutment, on both on the abutment face and each of the wingwalls. It is recommended that crack gauges be installed and monitored on a regular basis. The cracks should be repaired as soon as practically possible, immediately if the crack gauge shows signs of movement. Pier 3 is missing masonry stones and exhibits areas of missing mortar. It is recommended that the missing masonry stones and mortar be replaced / repaired. The structure should be inspected after any high water event with special care given to Pier 3 and the Abutments. Routine underwater inspections of the substructure elements should be performed at a maximum interval of five years.

Inspection Report with SI&A Data

WORK

Action: 1005 - Approach Roadway-Wedge Approach

Generated by user "cbresch" on 3/23/2016

-Repair both approach roadway transitions to the structure.

Action: 1026 - Channel-Remove Debris

Generated by user "cbresch" on 3/23/2016

-Remove all channel debris that was found hung up on pier #2.

-Remove channel debris that was found hung up throughout superstructure.

Action: 1037 - Deck-Wash

Generated by user "cbresch" on 3/23/2016

-Remove debris buildup throughout gutter lines to allow drains to perform as design.

Action: 1047 - Joints-Replace

Generated by user "cbresch" on 3/23/2016

-Replace seal material throughout expansion joints.

Action: 1070 - Substructure-Patch spalls

Generated by user "cbresch" on 3/23/2016

-Repair spalls throughout pier caps as soon as possible, due to bearing loss.

Action: 1071 - Substructure-Rehab

Generated by user "cbresch" on 3/23/2016

-Repair all Stone Masonry elements, due to poor condition as soon as possible.

Action: -1 - Converted Work Candidates

Generated by user "cbresch" on 3/23/2016

-Sandblast, clean, and paint all steel elements throughout structure.