Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 2267 Agency ID: 022B00038N SR: 39.2 SD/FO: SD

IDENTIFICATION

State 1: 21 Kentucky
Struc Num 8: 022B00038N
Facility Carried 7: US-60
Location 9: .35 MI E OF JCT KY 1662
Rte.(On/Under)5A: Route On Structure
Rte. Signing Prefix 5B: 2 U.S. Numbered Hwy
Level of Service 5C: 1 Mainline
Rte. Number 5D: 00060
Directional Suffix 5E: 0 N/A (NBI)
% Responsibility : Unknown
SHD District 2: District 9
County Code 3: Carter (022)
Place Code 4: FIPS 0000
Mile Post 11: 3.679 mi
Feature Intersected 6: REEVES BRANCH
Latitude 16: 38d 17' 46"
Longitude 17: 083d 15' 55"
Border Bridge Code 98: Unknown (P)
Border Bridge Number 99:

INSPECTION

Frequency 91: 12 months
Inspection Date 90: 3/7/2012
Next Inspection: 03/07/2013
FC Frequency 92A: NA
FC Inspection Date 93A: NA
Next FC Inspection: NA
UW Frequency 92B: NA
UW Inspection Date 93B: NA
Next UW Inspection: NA
SI Frequency 92C: NA
SI Date 93C: NA
Next SI: NA
Element Frequency: 12 months
Element Inspection Date: 03/07/2012
Next Elem. Insp. Due: 03/07/2013

CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy
Parallel Structure 101: No || bridge exists
Direction of Traffic 102: 2 2-way traffic
Temporary Structure 103: Not Applicable (P)
Highway System 104: 0 Not on NHS
NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road
Functional Class 26: 07 Rural Mjr Collector
Defense Hwy 110: 0 Not a STRAHNET hwy
Historical Significance 37: 5 Not eligible for NRHP
Owner 22: 01 State Highway Agency
Custodian 21: 01 State Highway Agency

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0
Number of Spans Main Unit 45: 1
Main Span Material/Design 43A/B:
1 Concrete
04 Tee Beam
Deck Type 107: 1 Concrete-Cast-in-Place
Wearing Surface 108A: 6 Bituminous
Membrane 108B: 0 None
Deck Protection 108C: None

CONDITION

Deck 58: 4 Poor
Super 59: 4 Poor
Sub 60: 5 Fair
Culvert 62: N N/A (NBI)
Channel/Channel Protection 61: 5 Bank Prot Eroded

LOAD RATING AND POSTING

Inventory Rating Method 65: 1 LF Load Factor
Operating Rating Method 63: 1 LF Load Factor
Inventory Rating 66: HS14.7
Operating Rating 64: HS24.6
Design Load 31: 2 M 13.5 (H 15)
Posting 70: 5 At/Above Legal Loads
Posting status 41: P Posted for load

AGE AND SERVICE

Year Built 27: 1923
Year Reconstructed 106: -4
Type of Service on 42A: 1 Highway
Type of Service under 42B: 5 Waterway
Lanes on 28A: 2
Lanes Under 28B: 0
Detour Length 19: 5.0 mi
ADT 29: 3,380
Truck ADT 109: 9 %
Year of ADT 30: 2011

APPRAISAL

Bridge Rail 36A: 0 Substandard
Approach Rail 36C: 0 Substandard
Transition 36B: 0 Substandard
Approach Rail Ends 36D: 0 Substandard
Str. Evaluation 67: 4
Deck Geometry 68: 2 Intolerable - Replace
Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)
Waterway Adequacy 71: 8 Equal Desirable
Approach Alignment 72: 8 Equal Desirable Crit
Scour Critical 113: 8 Stable Above Footing

GEOMETRIC DATA

Length Max Span 48: 24.0 ft
Structure Length 49: 26.9 ft
Curb/Sdwlk Width L 50A: 0.0 ft
Curb/Sidewalk Width R 50B: 0.0 ft
Width Curb to Curb 51: 20.0 ft
Width Out to Out 52: 22.3 ft
Approach Roadway Width 32: (w/ shoulders) 20.0 ft
Median 33: 0 No median
Deck Area: 600.2 sq. ft
Skew 34: 0.00 °
Structure Flared 35: 0 No flare
Vertical Clearance 10: 99.99 ft
Horiz. Clearance 47: 19.69 ft
Minimum Vertical Clearance Over Bridge 53: 328.1 ft
Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR
Minimum Vertical Underclearance 54B: 0.0 ft
Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR
Minimum Lateral Underclearance R 55: 0.0 ft
Minimum Lateral Underclearance L 56: 0.0 ft

PROPOSED IMPROVEMENTS

Bridge Cost 94: $ 90,000
Type of Work 75: 31 Repl-Load Capacity
Roadway Cost 95: $ 50,000
Length of Improvement 76: 2.6 ft
Total Cost 96: $ 140,000
Future ADT 114: 4,056
Year of Cost Estimate 97: 1999
Year of Future ADT 115: 2031

NAVIGATION DATA

Navigation Control 38: 0 Permit Not Required
Vertical Clearance 39: 0.0 ft
Horizontal Clearance 40: 0.0 ft
Pier Protection 111: 1 Not Required
Lift Bridge Vertical Clearance 116:

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	13/1	Unp Conc Deck/AC Ovl	(SF)	600	0 %	0	100 %	600	0 %	0	0 %	0	0 %	0
1	110/1	R/Conc Open Girder	(LF)	135	60 %	81	0 %	0	40 %	54	0 %	0	0 %	0
1	217/1	Other Mtl Abutment	(LF)	76	32 %	24	46 %	35	14 %	11	8 %	6	0 %	0
1	334/1	Metal Rail Coated	(LF)	54	0 %	0	0 %	0	0 %	0	0 %	0	100 %	54
1	359/1	Soffit Smart Flag	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	361/1	Scour Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0

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Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	363/1	Section Loss SmFlag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
1	503/1	Curbs	(LF)	54	0 %	0	0 %	0	50 %	27	50 %	27	0 %	0
1	606/1	Drains	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	13/1	Concrete Deck - Unprotected w/ AC	Asphalt wearing surface is in fair condition at this time. Deck underside has widespread full depth deterioration with a 6' x 6' spalled area with exposed steel with section loss near abutment 2 between beams 1 and 2. See photos for details.
1	110/1	Reinforced Conc Open Girder/Bear	Exterior beams at the upstream and downstream sides are cracked and spalled with exposed steel for the entire length of beams. Exposed steel has up to 40% section loss. Beams are deteriorating at a very rapid pace and repairs will need to be considered in the very near future. See photos.
1	217/1	Other Material Abutment	Stone masonry abutment with reinforced concrete cap is in fair condition. Reinforced concrete facings and wings are in good condition. Reinforced concrete cap has some minor cracking. Abutment 1 has a spall near flowline on the downstream side. See photos.
1	334/1	Metal Bridge Railing - Coated	Although guardrail has been replaced it is very loose due to the condition of the beams that rail post are anchored to. Rail is unsafe as a safety barrier. See photos.
1	359/1	Soffit of Concrete Deck or Slab	Soffit has a spall with exposed steel with section loss in the upstream bay, approximately 7 feet from Abutment 2. Remainder of soffitt has evidence of full depth deterioration. See photos.
1	361/1	Scour	Scour and undermining are present at both abutment footings. This is due to degradation of bedrock. Undermining is approximately 6" to 8". This will need to be corrected. See photos.
1	363/1	Section Loss	Moderate to heavy section loss of reinforcement of upstream and downstream exterior beams. This needs to be coated and patched. See photos.
1	503/1	Reinforced Concrete Curbs and Tir	Downstream curb is essentially rotted away. Upstream curb is in somewhat better condition, but is heavily scaled at the top. Both curbs have exposed steel with heavy section loss. See photos.
1	606/1	Drains	Drains are blocked with overlays. Drains need to be opened up.

BRIDGE NOTES

-14.9

PAST INSPECTION

Inspection Date: 03/07/2012 Type: 3 Substandard (12 months)

Inspector: RROGERS Pontis User Key: RROGERS - Rick

Scope:

NBI: ☒ Other: ☐ Element: ☒

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

Bridge is posted as recommended (TY III - 31 T). Both signs are in place at this time. Inspected by R.Rogers.