Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 2287 Agency ID: 022B00064N SR: 29.8 SD/FO: SD

IDENTIFICATION

State 1: 21 Kentucky Struc Num 8: 022B00064N
Facility Carried 7: US-60 Location 9: 1.5 MI E OF E-JCT KY 1
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: 26.123 mi
Feature Intersected 6: UPPER STINSON CREEK
Latitude 16: 38d 19' 43" Longitude 17: 082d 54' 23"
Border Bridge Code 98: Unknown (P)
Border Bridge Number 99:

INSPECTION

Frequency 91: 24 months Inspection Date 90: 4/2/2012 Next Inspection: 04/02/2014
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: 24 months Element Inspection Date: 04/02/2012 Next Elem. Insp. Due: 04/02/2014

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: 3
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: 3 Serious Super 59: 3 Serious Sub 60: 4 Poor
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: HS19.5 Operating Rating 64: HS32.4
Design Load 31: 5 MS 18 (HS 20) Posting 70: 5 At/Above Legal Loads
Posting status 41: A Open, no restriction

AGE AND SERVICE

Year Built 27: 1949 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: 1.2 mi
ADT 29: 4,250 Truck ADT 109: 5 % Year of ADT 30: 2011

APPRAISAL

Bridge Rail 36A: 0 Substandard Approach Rail 36C: 1 Meets Standards
Transition 36B: 1 Meets Standards Approach Rail Ends 36D: 1 Meets Standards
Str. Evaluation 67: 3 Deck Geometry 68: 3 Intolerable - Correct
Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)
Waterway Adequacy 71: 6 Equal Minimum Approach Alignment 72: 7 Above Min Criteria
Scour Critical 113: 4 Stable, needs action

GEOMETRIC DATA

Length Max Span 48: 29.9 ft Structure Length 49: 99.1 ft
Curb/Sdwlk Width L 50A: 0.0 ft Curb/Sidewalk Width R 50B: 0.0 ft
Width Curb to Curb 51: 25.9 ft Width Out to Out 52: 30.0 ft
Approach Roadway Width 32: (w/ shoulders) 25.9 ft Median 33: 0 No median
Deck Area: 2,972.4 sq. ft
Skew 34: 0.00 ° Structure Flared 35: 0 No flare
Vertical Clearance 10: 99.99 ft Horiz. Clearance 47: 25.92 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: $ 337,000 Type of Work 75: 34 Widen w/ Deck Reha
Roadway Cost 95: $ 0 Length of Improvement 76: 9.8 ft
Total Cost 96: $ 336,000 Future ADT 114: 5,100
Year of Cost Estimate 97: 1994 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)	2,574	0 %	0	0 %	0	100 %	2,574	0 %	0	0 %	0
1	110/1	R/Conc Open Girder	(LF)	495	39 %	192	20 %	100	41 %	203	0 %	0	0 %	0
1	205/1	R/Conc Column	(EA)	12	0 %	0	58 %	7	42 %	5	0 %	0	0 %	0
1	215/1	R/Conc Abutment	(LF)	54	37 %	20	33 %	18	30 %	16	0 %	0	0 %	0
1	234/1	R/Conc Cap	(LF)	60	0 %	0	83 %	50	17 %	10	0 %	0	0 %	0
1	301/1	Pourable Joint Seal	(LF)	60	0 %	0	0 %	0	100 %	60	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	331/1	Conc Bridge Railing	(LF)	246	0 %	0	35 %	86	65 %	160	0 %	0	0 %	0
1	359/1	Soffit Smart Flag	(EA)	1	0 %	0	0 %	0	0 %	0	100 %	1	0 %	0
1	361/1	Scour Smart Flag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	503/1	Curbs	(LF)	198	0 %	0	0 %	0	100 %	198	0 %	0	0 %	0
1	606/1	Drains	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	612/3	Chan Algn	(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	The asphalt wearing surface is in satisfactory condition at this time. The deck underside has widespread cracking with efflorescence. See photos.
1	110/1	Reinforced Conc Open Girder/Bear	The downstream most beams (beams 4 and 5 from upstream) have extensive longitudinal cracking with efflorescence throughout all three spans. Widespread cracking is also present at the bearings of these beams (haunches). The remaining beams have some lighter longitudinal and delamination cracking with some areas of shallow exposed steel. Discoloration is also present at drain outlets. See photos for details.
1	205/1	Reinforced Conc Column or Pile Ex	The columns of pier 3 are moderately scaled at the flowline. The downstream columns of piers 2 and 3 have extensive cracking with efflorescence. Columns 1 and 5 from upstream have some moderate cracking at both piers. Lighter cracking is present in column 2 from upstream of pier 2. See photos.
1	215/1	Reinforced Conc Abutment	The abutments have some areas of cracking with efflorescence. The downstream end of abutment 4 has some moderate cracking of the backwall and moderate spalling of the breast wall. See photos.
1	234/1	Reinforced Conc Cap	Pier caps have extensive cracking with efflorescence at the upstream and downstream ends. Spalling with exposed steel is present at the downstream ends of both piers. The concrete appears to be rotten at these locations. Lighter to moderate cracking is present throughout the rest of the length of the caps. See photos.
1	301/1	Pourable Joint Seal	Joints can not be visually inspected due to asphalt overlay. See photos.
1	331/1	Reinforced Conc Bridge Railing	The downstream railing has heavy deterioration. It is heavily cracked and spalled throughout with several areas of exposed steel. The upstream rail has more moderate deterioration with some heavy deterioration in span 3. See photos
1	359/1	Soffit of Concrete Deck or Slab	The deck underside has extensive cracking with efflorescence and discoloration. Especially at the downstream end of the soffit. Full depth deterioration is possible at some locations. The deck underside also has a large full depth patch at the downstream end near abutment 1. See photos.
1	361/1	Scour	Scour countermeasures have been placed along the upstream embankments and along pier 3 in span 3. This appears to be functioning well at this time. Only some minor scour is present at pier 3. See photos.
1	503/1	Reinforced Concrete Curbs and Tir	The curbs are heavily cracked and scaled. They are in poor condition. See photos.
1	606/1	Drains	Drains are 100% blocked and needs to be cleaned out.
1	612/3	Channel Alignment	The channel alignment is poor. The stream makes a sharp turn as in enters under the bridge. This should be corrected when the new bridge is constructed. See photos.

BRIDGE NOTES

This bridge is on the 6 year plan to be replaced.

Structure Inventory and Appraisal Sheet (English Units)

PAST INSPECTION

Inspection Date: 04/02/2012 Type: 2 Standard (24 months)

Inspector: AGREINER Pontis User Key: AGREINER - Alex

Scope:

NBI: ☒ Other: ☐ Element: ☒

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

Inspected by A.Greiner.

PAST INSPECTION

Inspection Date: 05/06/2010 Type: 7 Special (0 -60 months)

Inspector: AGREINER Pontis User Key: AGREINER - Alex

Scope:

NBI: ☐ Other: ☒ Element: ☐

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

Inspected by R.Rogers and A.Greiner.