Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 318 | Agency ID: 004B00044N | SR: 26.5 | SD/FO: SD

IDENTIFICATION

State 1:	21 Kentucky	Struc Num 8:	004B00044N
Facility Carried 7:	KY-358	Location 9:	.50 MI NOR. OF JCT KY 473
Rte.(On/Under)5A:	Route On Structure	Rte. Signing Prefix 5B:	3 State Hwy
Level of Service 5C:	1 Mainline	Rte. Number 5D:	00358
Directional Suffix 5E:	0 N/A (NBI)	% Responsibility :	Unknown
SHD District 2:	District 1	County Code 3:	Ballard (004)
Place Code 4:	FIPS 0000	Mile Post 11:	14.055 mi
Feature Intersected 6:	CLANTON CREEK		
Latitude 16:	37d 09' 09"	Longitude 17:	088d 56' 15"
Border Bridge Code 98:	Unknown (P)		
Border Bridge Number 99:			

INSPECTION

Frequency 91:	6 months	Inspection Date 90:	12/7/2011	Next Inspection:	06/07/2012
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:	6 months	Element Inspection Date:	12/07/2011	Next Elem. Insp. Due:	06/07/2012

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:	08 Rural min 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 | 22 Channel 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:	3 Serious
Culvert 62:	N N/A (NBI)	Channel/Channel Protection 61:	4 Protection Undermined		

LOAD RATING AND POSTING

Inventory Rating Method 65:	1 LF Load Factor	Operating Rating Method 63:	1 LF Load Factor
Inventory Rating 66:	HS5.6	Operating Rating 64:	HS5.6
Design Load 31:	2 M 13.5 (H 15)	Posting 70:	0 >39.9% below
Posting status 41:	P Posted for load		

AGE AND SERVICE

Year Built 27:	1957	Year Reconstructed 106:	0
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:	3.7 mi
ADT 29: 233	Truck ADT 109: 5 %	Year of ADT 30:	2010

APPRAISAL

Bridge Rail 36A:	0 Substandard	Approach Rail 36C:	1 Meets Standards
Transition 36B:	1 Meets Standards	Approach Rail Ends 36D:	0 Substandard
Str. Evaluation 67:	3	Deck Geometry 68:	4 Tolerable
Underclearance, Vertical and Horizontal 69:	N Not applicable (NBI)		
Waterway Adequacy 71:	9 Above Desirable	Approach Alignment 72:	8 Equal Desirable Crit
Scour Critical 113:	8 Stable Above Footing		

GEOMETRIC DATA

Length Max Span 48:	29.9 ft	Structure Length 49:	96.1 ft
Curb/Sdwlk Width L 50A:	0.7 ft	Curb/Sidewalk Width R 50B:	0.7 ft
Width Curb to Curb 51:	22.0 ft	Width Out to Out 52:	24.0 ft
Approach Roadway Width 32: (w/ shoulders)	18.0 ft	Median 33:	0 No median
Deck Area:	2,302.3 sq. ft		
Skew 34:	0.00 °	Structure Flared 35:	0 No flare
Vertical Clearance 10:	99.99 ft	Horiz. Clearance 47:	21.98 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:	$ 209,000	Type of Work 75:	Unknown (P)
Roadway Cost 95:	$ 20,000	Length of Improvement 76:	0.0 ft
Total Cost 96:	$ 260,000	Future ADT 114:	284
Year of Cost Estimate 97:	1999	Year of Future ADT 115:	2030

NAVIGATION DATA

Navigation Control 38:	0 Permit Not Required		
Vertical Clearance 39:	0.0 ft	Horizontal Clearance 40:	0.0 ft
Pier Protection 110:	Not Applicable (P)	Lift Bridge Vertical Clearance 116:	0.0 ft

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)	2,143	0 %	0	100 %	2,143	0 %	0	0 %	0	0 %	0
1	110/1	R/Conc Open Girder	(LF)	768	0 %	0	0 %	0	0 %	0	100 %	768	0 %	0
1	206/1	Timber Column	(EA)	11	0 %	0	36 %	4	18 %	2	45 %	5	0 %	0
1	234/1	R/Conc Cap	(LF)	100	0 %	0	0 %	0	50 %	50	50 %	50	0 %	0
1	301/1	Pourable Joint Seal	(LF)	48	0 %	0	0 %	0	100 %	48	0 %	0	0 %	0
1	334/1	Metal Rail Coated	(LF)	192	100 %	192	0 %	0	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	361/1	Scour Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
1	363/1	Section Loss SmFlag	(EA)	1	0 %	0	0 %	0	0 %	0	100 %	1	0 %	0
1	503/1	RC Curb	(LF)	192	0 %	0	0 %	0	96 %	185	4 %	7	0 %	0
1	601/1	MisAlign/ot of plane	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	610/1	Chan Drift	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
1	611/1	Embankment Erosion	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	613/1	Vegetation	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	13/1	Concrete Deck - Unprotected w/ AC	Minor to moderate wear in asphalt overlay, cracking at lateral joints.
1	110/1	Reinforced Conc Open Girder/Bea	110...CONC. CHANNEL BEAMS ARE HEAVLY SPALLED WITH EXPOSED STEEL WITH CONSIDERABLE AMT OF SECTION LOSS IN EACH BEAM
1	206/1	Timber Column or Pile Extension	Moderate to heavy decay in all timber piles. False Bent in place at Bent 2, due to pile failure. Piles 1 and 5 have been spliced in Bent 3. Moderate stream degradation exposing pile.
1	234/1	Reinforced Conc Cap	Moderate deterioration in caps, vertical full depth cracking in Bents 2 and 3 along with spalls with exposed steel.
1	301/1	Pourable Joint Seal	Joints leaking due to seperation of asphalt at joint locations
1	334/1	Metal Bridge Railing - Coated	< none >
1	361/1	Scour	Moderate amount of stream degradation.
1	363/1	Section Loss	Moderate amount of section loss to exposed steel in legs of channel beams, soffit area.
1	503/1	Reinforced Concrete Curb	503...MOD. TO HEAVY DET. WITH SOME SPALLING & EXP STEEL
1	601/1	Alignment, Out-of-Plane	Notable sag in deck on downstream side approx. at Bent 2.
1	610/1	Channel Drift	Scattered on banks
1	611/1	Embankment Erosion	Minor to moderate at end bent slopes, moderate amount on up and downstream banks.
1	613/1	Vegetation	

BRIDGE NOTES

RECOMMEND REPLACEMENT; SCOUR IS A CONCERN DUE TO HEAVY STREAM DEGRADATION AT BENT #2.
Inspection cycle moved to 6 month rotation.

PAST INSPECTION

Inspection Date: 12/07/2011 Type: 3 Substandard (12 months)

Inspector: SVICK Pontis User Key: SVICK - Steven Vi

Scope:

NBI: ☒ Other: ☐ Element: ☒

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

Load posting signage in place, 10 tons. False bent in place at bent 2, beams resting on steel I beams in false bents. Informed Ballard County Maint. to keep monitor bridge when area due to sag on downstream side. False bents in place at Bent 2, sag in deck could be a result in settlement of piles for false bent.