Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 13893 Agency ID: 118C00012N SR: 16.5 SD/FO: SD

IDENTIFICATION

State 1:	21 Kentucky	Struc Num 8:	118C00012N
Facility Carried 7:	VERNE ROAD	Location 9:	.2 MI E OF JCT KY 904
Rte.(On/Under)5A:	Route On Structure	Rte. Signing Prefix 5B:	4 County Hwy
Level of Service 5C:	1 Mainline	Rte. Number 5D:	01184
Directional Suffix 5E:	0 N/A (NBI)	% Responsibility :	Unknown
SHD District 2:	District 11	County Code 3:	Whitley (118)
Place Code 4:	FIPS 0000	Mile Post 11:	0.139 mi
Feature Intersected 6:	PATTERSON CREEK		
Latitude 16:	36d 43' 11"	Longitude 17:	084d 04' 05"
Border Bridge Code 98:	Unknown (P)		
Border Bridge Number 99:			

INSPECTION

Frequency 91:	12 months	Inspection Date 90:	8/12/2010	Next Inspection:	08/12/2011
FC Frequency 92A:	24 months	FC Inspection Date 93A:	8/1/1993	Next FC Inspection:	8/1/1995
UW Frequency 92B:	NA	UW Inspection Date 93B:	NA	Next UW Inspection:	NA
SI Frequency 92C:	NA	SI Date 93C:	8/12/2010	Next SI:	NA
Element Frequency:	12 months	Element Inspection Date:	08/12/2010	Next Elem. Insp. Due:	08/12/2011

CLASSIFICATION

Defense Highway 100:	0 Not a STRAHNET hwy	Parallel Structure 101:	No || bridge exists
Direction of Traffic 102:	3 1-lane Br for 2-way	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:	09 Rural Local
Defense Hwy 110:	0 Not a STRAHNET hwy	Historical Significance 37:	5 Not eligible for NRHP
Owner 22:	02 County Hwy Agency		
Custodian 21:	02 County Hwy Agency		

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 1

Main Span Material/Design 43A/B:

3 Steel 10 Truss-Thru

Deck Type 107:	1 Concrete-Cast-in-Place
Wearing Surface 108A:	1 Monolithic Concrete
Membrane 108B:	0 None
Deck Protection 108C:	None

CONDITION

Deck 58:	5 Fair	Super 59:	3 Serious	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:	HS1.7	Operating Rating 64:	HS1.7
Design Load 31:	0 Other or Unknown	Posting 70:	0 >39.9% below
Posting status 41:	B Posting Recommended		

AGE AND SERVICE

Year Built 27:	1947	Year Reconstructed 106:	-4		
Type of Service on 42A:	1 Highway				
Type of Service under 42B:	5 Waterway				
Lanes on 28A:	1	Lanes Under 28B:	0	Detour Length 19:	6.2 mi
ADT 29:	250	Truck ADT 109:	Unknown	Year of ADT 30:	2006

APPRAISAL

Bridge Rail 36A:	0 Substandard	Approach Rail 36C:	0 Substandard
Transition 36B:	0 Substandard	Approach Rail Ends 36D:	0 Substandard
Str. Evaluation 67:	2	Deck Geometry 68:	2 Intolerable - Replace
Underclearance, Vertical and Horizontal 69:	N Not applicable (NBI)		
Waterway Adequacy 71:	9 Above Desirable	Approach Alignment 72:	4 Minimum Tolerable
Scour Critical 113:	8 Stable Above Footing		

GEOMETRIC DATA

Length Max Span 48:	74.1 ft	Structure Length 49:	80.0 ft
Curb/Sdwlk Width L 50A:	0.0 ft	Curb/Sidewalk Width R 50B:	0.0 ft
Width Curb to Curb 51:	11.8 ft	Width Out to Out 52:	12.0 ft
Approach Roadway Width 32: (w/ shoulders)	14.1 ft	Median 33:	0 No median
Deck Area:	960.1 sq. ft		
Skew 34:	0.00 °	Structure Flared 35:	0 No flare
Vertical Clearance 10:	99.99 ft	Horiz. Clearance 47:	11.48 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:	$ 139,000	Type of Work 75:	31 Repl-Load Capacity
Roadway Cost 95:	$ 0	Length of Improvement 76:	7.9 ft
Total Cost 96:	$ 139,000	Future ADT 114:	250
Year of Cost Estimate 97:	1994	Year of Future ADT 115:	2026

NAVIGATION DATA

Navigation Control 38:	0 Permit Not Required		
Vertical Clearance 39:	0.0 ft	Horizontal Clearance 40:	0.0 ft
Pier Protection 111:	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	12/1	Bare Concrete Deck	(SF)	960	0 %	0	0 %	0	100 %	960	0 %	0	0 %	0
1	113/1	Paint Stl Stringer	(LF)	480	0 %	0	50 %	240	50 %	240	0 %	0	0 %	0
1	121/1	P/Stl Thru Truss/Bot	(LF)	160	0 %	0	0 %	0	0 %	0	100 %	160	0 %	0
1	126/1	P/Stl Thru Truss/Top	(LF)	160	0 %	0	0 %	0	0 %	0	0 %	0	100 %	160
1	152/1	Paint Stl Floor Beam	(LF)	52	0 %	0	50 %	26	50 %	26	0 %	0	0 %	0
1	215/2	R/Conc Abutment	(LF)	46	0 %	0	100 %	46	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	311/1	Moveable Bearing	(EA)	4	0 %	0	0 %	0	100 %	4	0 %	0	0 %	0
1	333/1	Other Bridge Railing	(LF)	150	0 %	0	0 %	0	100 %	150	0 %	0	0 %	0
1	356/1	Steel Fatigue SmFlag	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	357/1	Pack Rust Smart Flag	(EA)	1	0 %	0	0 %	0	100 %	1	0 %	0	0 %	0
1	358/1	Deck Cracking SmFlag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	359/1	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
1	611/1	Embankment Erosion	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	12/1	Concrete Deck - Bare	DUE TO SURFACE WORN, CRKS, AGG. EXP.
1	113/1	Painted Steel Stringer	DUE TO RUST
1	121/1	Painted Steel Bottom Chord Thru T	LOWER CHORD EYEBARS AT ABUTMENT 1 HAVE BEEN REPAIRED BY SPLICING NEW EYEBARS ATTACHED WITH NEW PIN TO END POST. OTHER EYEBARS AT VERTICAL POST HANGAR HAVE ALSO BEEN REPAIRED IN THE PAST. ALL EYEBAR CONNECTIONS ARE HEAVILY CORRODED.
1	126/1	Painted Steel Thru Truss (excl. bot	CORRSION COMMON IN THE TOP CHORD AT CONNECTIONS. THE DIAGONAL POST TO BEARING CONNECTION AREA HAS BEEN COVERED ON ALL SIDES BY STEEL WELDED IN AFTER CONSTRUCTION
1	152/1	Painted Steel Floor Beam	1ST FLOOR BEAM OUT OF ALIGNMENT. HAS BEEN WELDED IN PAST TO STRINGERS TO CONTROL MOVEMENT AND BUCKLING. RUST THRUOUT
1	215/2	Reinforced Conc Abutment	MINOR CRACKING SOME LEACHING TOP OF ABUT COVERED WITH DIRT
1	311/1	Moveable Bearing (roller, sliding, e	BEARINGS AT ABUT 1 HAVE BEEN PRESSURE WASHED PRIOR TO REPAIRS. ABUTMENT 2 BEARINGS HAVE HEAVY CORROSION.
1	333/1	Other Bridge Railing	DUE TO RUST, CORROSION, WEAK
1	356/1	Steel Fatigue	LOWER CHORDS AT SPLICES HAVE HAD PROBLEMS IN PAST. MAINTAINING SMART FLAG TO MONITOR. SOUTH FLOOR BM OUT OF ALIGNMENT
1	357/1	Pack Rust	AT THE CONNECTION OF VERTICALS AND UPPER AND LOWER CORDS ALSO IN THE BEARINGS.
1	358/1	Deck Cracking	DUE TO CRKS IN DECK
1	359/1	Soffit of Concrete Deck or Slab	DUE TO MINOR RUST
1	611/1	Embankment Erosion	EROSION UPSTREAM,DOWNSTREAM. LITTLE PROBLEM TO BRIDGE

BRIDGE NOTES

BRIDGE HAS BEEN REPAIRED BY SPLICING LOWER CHORDS AT ABUT #1. FLOOR BEAM HAS BEEN WELDED IN PAST TO STRINGERS TO CONTROL SIDEWAYS MOVEMENT. AUG '10 MW.

PAST INSPECTION

Inspection Date: 08/12/2010 Type: 7 Special (0 -60 months)

Inspector: MWEST Pontis User Key: MWEST - Mike W

Scope:

NBI: ☒ Other: ☒ Element: ☒

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

AUG 12, 2010 MIKE WEST. THESE ARE HISTORIC NOTES. AM MAINTAINING TO AID FUTURE INSPECTIONS. NEEDS POSTED CLOSED & BARRICADED EACH SIDE. CBMNR SUBMITTED frost june 12 09. RECEIVED PHONE CALL FROM WHITLEY COUNTY JUDGES OFFICE MR SILER 23 AUGUST 09 CONCERNING THE REPAIRS OF BROKEN CHORDS ON THIS TRUSS, REPORTED REPAIRS ARE INADAUQATE PLEASE LOOK AT PHOTO LABEL REPAIR. THIS BRIDGE NEEDS BARRIACED IMMEDIADTELY THE BOTTOM CHORD HAS THE POTENTIAL TO FAIL AT ANY TIME FLOOR BEAM 1 IS BOWED LEAVING PANEL 2 STRINGERS WITH MINAMAL BEARING AREAS SOME LESS THAN 3/4" ON A 1/2" THICK FLANGE WITH BOLT HOLES ON THE RIGHT SIDES AND A POOR WELD AT THE FLANGE STRINGER CONNECTION. MY SUPERVISOR MIKE WEST WAS THE LEAD INSPECTOR AT THIS FOLLOW UP. NOT POSTED OR BARRICADED 05/26/2010 MFROST MEET 7 JULY 2010 AT BRIDGE WITH MWEST,MCALEB,JSAMS TO DISCUSS POSSIBLE REPAIR METHOD. REEXAMINED UPPER AND LOWER CHORDS CONNECTING POINTS FLOOR BEAMS STRINGERS AND ABUTMENTS TO DETERMINE IF THE BROKEN CHORDS AT ABUTMENT 1 AND THE FLOOR BEAM MENTIONED BELOW WERE THE ONLY ITEMS THAT NEED IMMEDIATE REPAIRS. SOME OF THE EYEBAR ENDS ARE LAPPED WITH ROUND