



Structure Inventory and Appraisal

Bridge ID: SOLDIER-131040	Official SR: 48.7	SD/FO: Not Deficient or Obsolete
FHWA No.: 131040	Unofficial SR: 48.7	SD/FO: Not Deficient or Obsolete

IDENTIFICATION	
7 Facility Carried:	LOCAL
5B Rte. Signing Prefix:	4
5C Level of Service:	1 - MAINLINE
5D Inventory Route:	00000
City:	RURAL
3 County:	024 - Crawford
9 Location:	085413502
5E Directional Suffix:	0 - NOT APPLICABLE
6 Feature Intersected:	SMALL STREAM
2 District:	0
Garage:	000
98 Border Bridge Code:	
% Responsibility:	0
99 Border Bridge No.:	

INSPECTION			
90 Inspection Date:	04/26/2014	Inspection Type:	N/A
Next Routine Insp Date:	04/26/2016	91 Frequency:	24
		Next Insp Type:	Regular
Inspection Agency:	5 - Consultant	Inspection Group:	Crawford County
93A FC Inspection Date:			
92A FC Frequency:	0	Next FC Insp.:	NA
93B UW Inspection Date:			
92B UW Frequency:	0	Next UW Insp.:	NA
93C SI Date:			
92C SI Frequency:	0	Next Spec. Insp.:	NA
Other Non-NBI Date:			
Other Non-NBI Freq.:		Next Other Insp.:	NA

STRUCTURE TYPE AND MATERIALS	
43A Main Span	3 - Steel
43B Main Span Design:	02 - Stringer/Multi-beam or Girder
45 No. Spans Main Unit:	2
44A Appr. Span	000 - NA
44B Appr. Span Design:	000 - NA
46 No. of Appr. Spans:	Near 0 Far 0
107 Deck Type:	8 - Wood or Timber
108A Wearing Surface:	9 - Other
108B Membrane:	0 - None
108C Deck Protection:	0 - None

CONDITION	
58 Deck:	6 - Satisfactory Condition (minor deterioration)
59 Super:	6 - Satisfactory Condition (minor deterioration)
60 Sub:	5 - Fair Condition (minor section loss)
61 Channel/Channel Prot.:	6 - Bank slump. widespread minor damage
62 Culvert:	N - Not Applicable

GEOMETRIC DATA	
48 Length Max Span:	37 ft.
49 Structure Length:	58 ft.
34 Skew:	0°
Deck Area:	1276.0 sq. ft.
50B Curb/Sdwb Width R:	0 ft.
50A Curb/Sdwb Width L:	0 ft.
51 Width Curb to Curb:	22.0 ft.
52 Width Out to Out:	22.0 ft.
32 Appr. Roadway width:	26 ft.
(w/ Shoulders)	
33 Median:	0 - No median
35 Structure Flared:	00 - No flare
10 Vertical Clearance:	99'99"
47 Horiz. Clearance:	22'00"
53 Min. Vert. Clearance Over:	99'99"
54B Min. Vert. Underclearance:	00'00"
55 Min. Lat. Underclearance R:	00'00"
56 Min. Lat. Underclearance L:	00'00"

APPRAISAL	
67 Str. Evaluation:	4 - Meets minimum tolerable limits
68 Deck Geometry:	5 - Somewhat better than minimum adequacy
69 Underclear Vert & Horiz:	N - Not applicable
71 Waterway Adequacy:	5 - Occasional Flooding - Significant Delays
72 Approach Alignment:	7 - Better than present minimum criteria
36A Bridge Rail:	0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED.
36B Transition:	0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
36C Approach Rail:	0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
36D Approach Rail Ends:	0 - DOES NOT MEET CURRENT SAFETY STANDARDS, OR IS NOT THERE AND IS NEEDED
113 Scour Critical:	3 - Scour Critical - Unstable

NAVIGATION DATA	
38 Navigation Control:	0 - No navigation control on waterway (bridge permit not required)
111 Pier Protection:	
39 Vertical Clearance:	00'00"
40 Horiz. Clearance:	000'00"

LOAD RATING AND POSTING	
31 Design Load:	0 - Unknown
63 Rating Method:	2 - Allowable Stress (AS) reported in english tons using HS-20 loading.
64 Operating Rating:	20.0 Tons
65 Rating Method:	2 - Allowable Stress (AS) reported in english tons using HS-20 loading.
66 Inventory Rating:	13.6 Tons
70 Posting:	1 - 30.0-39.9% below legal loads
41 Posting Status:	P - Posted for Load

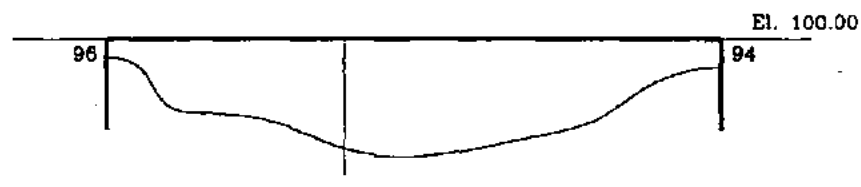
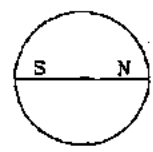
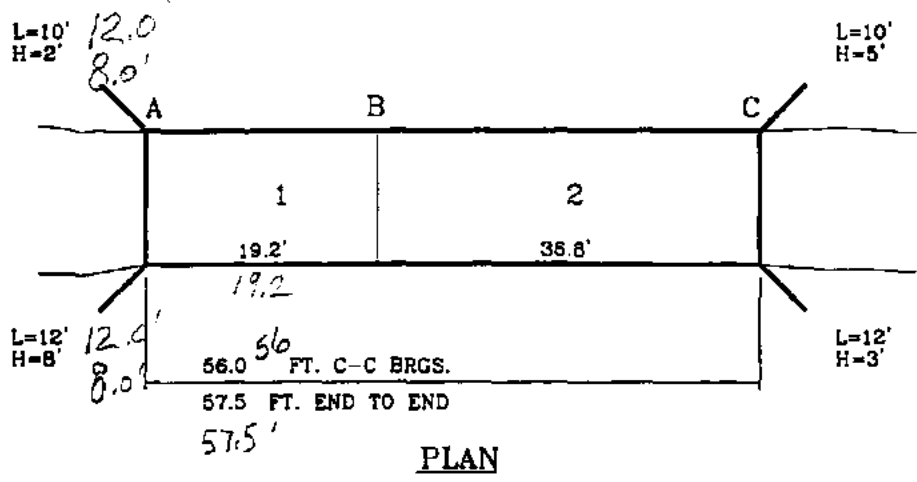
16 Latitude: 42.12542981	17 Longitude: -95.59410881
--------------------------	----------------------------

AGE AND SERVICE			
27 Year Built:	1900	Design No.:	0
106 Year Reconstructed:	1977		
42A Type of Service on:	1 - Highway		
42B Type of Service Under:	5 - Waterway		
28A Lanes on:	2	28B Lanes under:	0
29 ADT:	20	30 Year of ADT:	2012
109 Truck ADT:	0 %	Speed Limit:	55
19 Detour Length:	4 mi.		

FRA No. (if RR Bridge):	
Mile Post:	

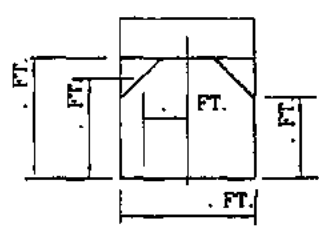
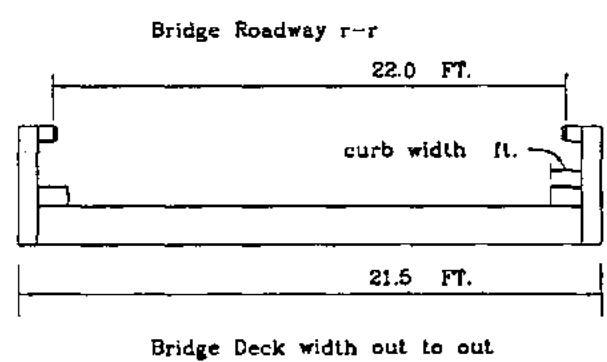
CLASSIFICATION	
112 NBIS Length:	Y
26 Functional Class:	09 - Rural - Local
100 STRAHNET:	0 - Not a defense highway
101 Parallel Structure:	N - No parallel structure
102 Direction of Traffic:	2 - 2-way traffic
22 Owner:	02 - County Highway Agency
21 Custodian:	02 - County Highway Agency
37 Historical Significance:	3 - May be eligible for National Register
75A Type of Work Proposed:	31 - Replacement - Load/Geometry
75B Work Done by:	2 - Work to be done by owner's forces

BRIDGE PLAN AND PROFILE



STREAMBED ELEVATION	DATE
82.0	4/10
81.5	4/08
82.0	4/08
81.5	4/04
82.0	1/02
82.0	3/00
82.0	8/99
83.4	12/96

PROFILE



DECK SECTION

CLEARANCE DIAGRAM

REMARKS: _____

BRIDGE DECK DETAILS

Top of deck

DECK

Span	Pontis No. Element	Wearing Surface	Thickness Size	Condition State	Remarks
1	141 timber deck	1" dirt	1 1/2(3x12)(4x16)	2	fair condition
2	141 timber deck	1" dirt	1 1/2(3x12)(4x16)	2	fair condition

BRIDGE RAILING

Span	Pontis No. Element	Total Length	Condition State	Remarks
1	383 timber bridge rail ^{metal} 572	20.1 38.5' 40.2	3	poor condition, decayed, broken missing at east side
2	385 painted steel rail	40.2 + 73.5' = 113.7	2	fair condition, moderate rust

DECK/SLAB JOINTS

Loc.	Pontis No. Element	Length	Condition State	Opening Width	Remarks

ADDITIONAL DECK/SLAB ELEMENTS

Elements	Condition State	Remarks
131-Bottom of deck/slab or box		
391-Approach slab		
410 Deck/slab cracking		
Drains		

REMARKS: paint handrail

SUPERSTRUCTURE DETAILS
(STEEL OR TIMBER BEAM)

DIMENSIONAL DATA

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support
1	36.8"	(B)	7"	16"		3/4	S15 x 50#	9	30"	31"

Remarks: bridge at 1/2 point and ends

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support
2	36.8'	B	7"	16"		7/16"	16 x 36#	9	30"	

Remarks: diaphragms at 1/3 points and end

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support

Remarks:

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support

Remarks:

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support

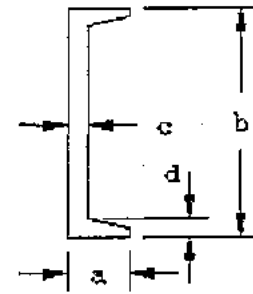
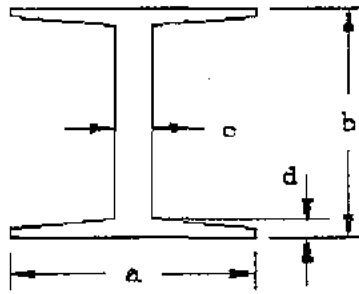
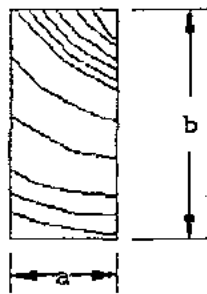
Remarks:

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support

Remarks:

Span	Length	Element Type	a	b	c	d	Steel beam size	No. beams	Lateral Spacing	Support

Remarks:



Type AT (Treated)
Type AUT (Untreated)

Type B

Type C

SUBSTRUCTURE DETAILS

REINFORCED CONCRETE ABUTMENTS AND WINGWALLS AND BACKWALLS

Pontis No./Element	Location	Length	Height	Condition		Remarks
				State		

TIMBER/STEEL ABUTMENTS, WINGWALLS AND BACKWALLS

Pontis No./Element	Location	Length	Height	Condition		Remarks
				State		
312 timber backing wall	A	28.3 21.5'	7.0' 8'	1		3x12 good condition
312 timber backing wall	C	21.5'	3.0'	2		3x12 fair condition
313 timber wingwall	A	24.0 22.0'	5.0' 8'	2		3x12 fair condition
313 timber wingwall	C	22.0'	4.0'	2		3x12 fair condition

PIER/PILE CAPS

Pontis No./Element	Location	Type	Length	Height	Condition		Remarks
					State		
308 timber trestle pile cap	A	A	21.5' 23.5'	1.0' 10' 2"	2		fair condition
244 red lead steel pier cap	B	B	21.5'	0.8'	2		fair cond., moderate rust
238 red lead steel abut. cap	C	B	21.5'	0.7'	2		fair cond., moderate rust

PIER/ABUTMENT - PILE/BENT

Pontis No./Element	Location	Total Length	Condition		Remarks
			State		
327 timber trestle pile	A	6 @ 20.0 = 120.0'	2		12"Ø, fair condition, splits, weathered monitor #1 for checking/decay at top
327 timber trestle pile	B	6 @ 20.0 = 120.0'	2		12"Ø, fair condition, splits, weathered
327 timber trestle pile	C	6 @ 16.0 = 96.0'	1		12"Ø, good condition, splits, weathered

SUBSTRUCTURE SMART FLAGS

Pontis No.	Description	Yes	No	Remarks
405	Structure Impact		X	
412	Streambed Movement (Degradation)	X		minor
413	Streambed Scour	X		moderate
414	Abutment Erosion	X		moderate at "A"
415	Settlement		X	

SUBSTRUCTURE DETAILS

PIER/PILE CAP DIMENSIONAL DATA

Location	Type	a	b	c	d	e	f
A	A	12"	12"	/	/	/	/
B	B	13"	10"	5/16"	2 3/4"	1/4"	9/16"
C	B	12"	8"	5/16"	2 1/4"	1/4"	1/2"

REMARKS: "A" cap type A with channel on top

