HistoricBridges.org - National Bridge Inventory Data Sheet

2012 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

Illinois [17]	Alexander County [003]	Cairo [10383]	1 MI S CAIRO	36-59-19 = 36.9	089-09-04 = -89.1

2000600888	Highway agency district: 9	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		

Route: 51		US 51	Toll: On free road [3]	Features intersected: OHIO RIVER

Design - main	Steel continuous [4]	Design - approach	Steel [3]	Kilometerpoint	27.4 km = 17.0 mi
5	Truss - Thru [10]	27	Other [00]	Year built: 1937	Year reconstructed: 1979
				Skew angle: 0	Structure Flared:
				Historical significance	Bridge is not eligible for the NRHP. [5]

Total length	1787.7 m = 5865.4 ft	Length of maximum span	243.8 m = 799.9 ft	Deck width, out-to-out	7.9 m = 25.9 ft	Bridge roadway width, curb-to-curb	6.1 m = 20.0 ft

Inventory Route, Total Horizontal Clearance	6 m = 19.7 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 ft

Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Latex Concrete or similar additive [3]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	21.6 metric ton = 23.8 tons	
19.9 km = 12.3 mi	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	44.1 metric ton = 48.5 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 18 / H 20 [4]	

Functional Details

Average Daily Traffic	4700	Average daily truck traffi	25 %	Year	2011	Future average daily traffic	4874
Year	2032						
Road classification	Principal Arterial - Other (Rural) [02]	Lanes on structure	2	Approach roadway width	7.9 m = 25.9 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Railroad-waterway [7]	Lanes under structure	0	Navigation control	Navigation control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	15.2 m = 49.9 ft	Navigation horizontal clearance	195 m = 639.8 ft				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	5.99 m = 19.7 ft				
Minimum lateral underclearance reference feature	Railroad beneath structure [R]						
Minimum lateral underclearance on right	10.5 m = 34.5 ft	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	12.19 m = 40.0 ft	Minimum vertical underclearance reference feature	Railroad beneath structure [R]				
Appraisal ratings - underclearances	Superior to present desirable criteria [9]						

Repair and Replacement Plans

Type of work to be performed

Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	20051000	Roadway improvement cost	2005000
Length of structure improvement	1787.7 m = 5865.4 ft	Total project cost	30077000
Year of improvement cost estimate			
Border bridge - state	Unknown [214]	Border bridge - percent responsibility of other state	50
Border bridge - structure number	#Num!		

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Good [7]		

Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]

Appraisal ratings - water adequacy	Somewhat better than minimum adequacy to tolerate being left in place as is [5]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	Navigation protection not required [1]	Sufficiency rating	42.5

Culverts	Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings	
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	November 2010 [1110]	Designated inspection frequency	24	Months

Underwater inspection	Unknown [Y60]	Underwater inspection date	December 2009 [1209]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	November 2010 [1110]
Other special inspection	Not needed [N]	Other special inspection date	

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Basic Information

Kentucky [21]	Ballard County [007]	Unknown [00000]	4.0 MI WEST OF JCT US51&6	36-59-40 = 36.994444	089-08-40 = -89.144444

004B00021N	Highway agency district 1	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 51		US-51	Toll: On free road [3]	Features intersected: OHIO RIVER -IC (SOU) RR	

Design - main: Steel [3]	Design - approach: Steel [3]	Kilometerpoint: 1279.3 km = 793.2 mi			
5	Truss - Thru [10]	27	Stringer/Multi-beam or girder [02]	Year built: 1937	Year reconstructed: N/A [0000]
				Skew angle: 0	Structure Flared:
				Historical significance: Bridge is possibly eligible for the NRHP. [3]	

Total length: 1787.7 m = 5865.4 ft	Length of maximum span: 243.8 m = 799.9 ft	Deck width, out-to-out: 7.3 m = 24.0 ft	Bridge roadway width, curb-to-curb: 6.1 m = 20.0 ft		
Inventory Route, Total Horizontal Clearance: 6.1 m = 20.0 ft	Curb or sidewalk width - left: 0.6 m = 2.0 ft	Curb or sidewalk width - right: 0.6 m = 2.0 ft			

Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Latex Concrete or similar additive [3]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating: Allowable Stress(AS) [2]	Inventory rating: 9.1 metric ton = 10.0 tons			
15.8 km = 9.8 mi	Method to determine operating rating: Allowable Stress(AS) [2]	Operating rating: 31.8 metric ton = 35.0 tons			
	Bridge posting: 10.0 - 19.9 % below [3]	Design Load: M 18 / H 20 [4]			

Functional Details

Average Daily Traffic	5350	Average daily truck traffi	34 %	Year	2011	Future average daily traffic	8292
Year	2031						
Road classification	Principal Arterial - Other (Rural) [02]	Lanes on structure	2	Approach roadway width	7.3 m = 24.0 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Railroad-waterway [7]	Lanes under structure	0	Navigation control	Navigation control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	15.2 m = 49.9 ft	Navigation horizontal clearance	192 m = 630.0 ft				
Minimum navigation vertical clearance, vertical lift bridge	0 m = 0.0 ft	Minimum vertical clearance over bridge roadway	5.79 m = 19.0 ft				
Minimum lateral underclearance reference feature	Railroad beneath structure [R]						
Minimum lateral underclearance on right	10.1 m = 33.1 ft	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	12.19 m = 40.0 ft	Minimum vertical underclearance reference feature	Railroad beneath structure [R]				
Appraisal ratings - underclearances	Superior to present desirable criteria [9]						

Repair and Replacement Plans

Type of work to be performed

Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	20938000	Roadway improvement cost	0
Length of structure improvement	178.8 m = 586.6 ft	Total project cost	20938000
Year of improvement cost estimate	2004		
Border bridge - state	Unknown [175]	Border bridge - percent responsibility of other state	50
Border bridge - structure number	002-0006		

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Basically intolerable requiring high priority of replacement [2]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Good [7]		
Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]		
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]		
Appraisal ratings - water adequacy	Somewhat better than minimum adequacy to tolerate being left in place as is [5]	Status evaluation	Structurally deficient [1]
Pier or abutment protection	Navigation protection not required [1]	Sufficiency rating	22.4
Culverts	Not applicable. Used if structure is not a culvert. [N]		

Traffic safety features - railings	
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	November 2011 [1111]	Designated inspection frequency	12	Months	
Underwater inspection	Unknown [Y60]			Underwater inspection date	December 2009 [1209]
Fracture critical inspection	Every two years [Y24]			Fracture critical inspection date	December 2001 [1201]
Other special inspection	Not needed [N]			Other special inspection date	