HistoricBridges.org - National Bridge Inventory Data Sheet

2010 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

Michigan [26]	Antrim County [009]	Bellaire [06980]	IN BELLAIRE	44-58-42 = 44.978333	085-12-36 = -85.210000

05105031000B010	Highway agency district: 2	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 88		M-88	Toll: On free road [3]	Features intersected: INTERMEDIATE RIVER	

Design - main: Steel [3]		Design - approach:		Kilometerpoint: 1929.9 km = 1196.5 mi	
1	Stringer/Multi-beam or girder [02]	0	Other [00]	Year built: 1931	Year reconstructed: N/A [0000]
				Skew angle: 10	Structure Flared:
				Historical significance: Bridge is on the NRHP. [1]	

Total length: 18.2 m = 59.7 ft	Length of maximum span: 18.2 m = 59.7 ft	Deck width, out-to-out: 16.8 m = 55.1 ft	Bridge roadway width, curb-to-curb: 12.2 m = 40.0 ft				
Inventory Route, Total Horizontal Clearance: 15.8 m = 51.8 ft	Curb or sidewalk width - left: 1.8 m = 5.9 ft	Curb or sidewalk width - right: 1.8 m = 5.9 ft					
Deck structure type: Concrete Cast-in-Place [1]							
Type of wearing surface: Integral Concrete (separate non-modified layer of concrete added to structural deck) [2]							
Deck protection:							
Type of membrane/wearing surface: Other [9]							

Weight Limits

Bypass, detour length: 3.1 km = 1.9 mi	Method to determine inventory rating: Allowable Stress(AS) [2]	Inventory rating: 28.2 metric ton = 31.0 tons		
	Method to determine operating rating: Allowable Stress(AS) [2]	Operating rating: 63.6 metric ton = 70.0 tons		
	Bridge posting: Equal to or above legal loads [5]	Design Load: M 13.5 / H 15 [2]		

Functional Details

Average Daily Traffic	6157	Average daily truck traffi	2 %	Year	2007	Future average daily traffic	10287
Year	2018						
Road classification	Minor Arterial (Rural) [06]	Lanes on structure	4	Approach roadway width	13.7 m = 44.9 ft		
Type of service on bridge	Highway-pedestrian [5]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Waterway [5]	Lanes under structure	0	Navigation control			
Navigation vertical clearanc	0 = N/A	Navigation horizontal clearance	0 = N/A				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	99.99 m = 328.1 ft				
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]						
Minimum lateral underclearance on right	99.9 = Unlimited	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	0 = N/A	Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]				
Appraisal ratings - underclearances	N/A [N]						

Repair and Replacement Plans

Type of work to be performed

Bridge deck replacement with only incidental widening. [37]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	120000	Roadway improvement cost	6000
Length of structure improvement	18.3 m = 60.0 ft	Total project cost	70000
Year of improvement cost estimate			
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

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	Fair [5]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Satisfactory [6]	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 and embankment protection is severely undermined. River control devices have severe damage. Large deposits of debris are in the channel. [4]

Appraisal ratings - water adequacy	Equal to present minimum criteria [6]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	52.6

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

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	Not applicable or a safety feature is not required. [N]
Traffic safety features - approach guardrail	Not applicable or a safety feature is not required. [N]
Traffic safety features - approach guardrail ends	Not applicable or a safety feature is not required. [N]

Inspection date	August 2009 [0809]	Designated inspection frequency	24	Months

Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	