HistoricBridges.org - National Bridge Inventory Data Sheet

2000 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]	Montmorency County [119]	Hillman [38380]	IN HILLMAN M-32 SPUR	45-06-26 = 45.107222	083-90-07 = -84.501944

601600310000B010	Highway agency district	2	Owner	State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route	32		ACCESS TO MAINT GA	Toll	On free road [3]	Features intersected	THUNDER BAY R

Design - main	Concrete [1]	Design - approach		Kilometerpoint	64.9 km = 40.2 mi		
2	Girder and floorbeam system [03]	0	Other [00]	Year built	1922	Year reconstructed	N/A [0000]
				Skew angle	52	Structure Flared	
				Historical significance	Bridge is on the NRHP. [1]		

Total length	45.7 m = 149.9 ft	Length of maximum span	22.8 m = 74.8 ft	Deck width, out-to-out	9.2 m = 30.2 ft	Bridge roadway width, curb-to-curb	6.2 m = 20.3 ft
Inventory Route, Total Horizontal Clearance	6.2 m = 20.3 ft	Curb or sidewalk width - left	0.1 m = 0.3 ft	Curb or sidewalk width - right	1.5 m = 4.9 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	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	23.6 metric ton = 26.0 tons	
0.8 km = 0.5 mi	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	5200	Average daily truck traffi	8 %	Year	1995	Future average daily traffic	4543
Year	2015						
Road classification	Local (Rural) [09]	Lanes on structure	2	Approach roadway width	6.1 m = 20.0 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	0 m = 0.0 ft	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

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	1000	Roadway improvement cost	1000
Length of structure improvement	45.7 m = 149.9 ft	Total project cost	
Year of improvement cost estimate	1994		
Border bridge - state		Border bridge - percent responsibility of other state	0
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	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Poor [4]		

Scour	Scour calculation/evaluation has not been made. [6]
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	Equal to present desirable criteria [8]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	51.7

Culverts	Not applicable. Used if structure is not a culvert. [N]
Traffic safety features - railings	
Traffic safety features - transitions	
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	

Inspection date	October 1999 [1099]	Designated inspection frequency	15	Months

Underwater inspection	Unknown [N24]	Underwater inspection date	
Fracture critical inspection	Unknown [N24]	Fracture critical inspection date	
Other special inspection	Unknown [N24]	Other special inspection date	