

The National Bridge Inventory contains data submitted by state transportation departments to the Federal Highway Administration in coded format.
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Basic Information

Michigan [26] Macomb County [099] Macomb [50480] 0.3 MI EAST OF NORTH AVE 42-41-44 = 42.695556 082-52-20 = - 82.872222

50309H00024B010 Highway agency district 7 Owner County Highway Agency [02] Maintenance responsibility County Highway Agency [02]

Route 0 CHAPMAN RD Toll On free road [3] Features intersected DEER CREEK

Design - main Concrete [1] Design - approach Other [00] Kilometerpoint 51 km = 31.6 mi

1 Arch - Deck [11] 0 Other [00] Year built 1910 Year reconstructed N/A [0000]

Skew angle 40 Structure Flared

Historical significance Bridge is not eligible for the NRHP. [5]

Total length 14 m = 45.9 ft Length of maximum span 12.2 m = 40.0 ft Deck width, out-to-out 5.4 m = 17.7 ft Bridge roadway width, curb-to-curb 4.9 m = 16.1 ft

Inventory Route, Total Horizontal Clearance 4.9 m = 16.1 ft Curb or sidewalk width - left 0 m = 0.0 ft Curb or sidewalk width - right 0 m = 0.0 ft

Deck structure type Not applicable [N]

Type of wearing surface Not applicable (applies only to structures with no deck) [N]

Deck protection Not applicable (applies only to structures with no deck) [N]

Type of membrane/wearing surface Not applicable (applies only to structures with no deck) [N]

Weight Limits

Bypass, detour length 0.3 km = 0.2 mi Method to determine inventory rating No rating analysis performed [5] Inventory rating 11 metric ton = 12.1 tons

Method to determine operating rating No rating analysis performed [5] Operating rating 11 metric ton = 12.1 tons

Bridge posting Design Load M 9 / H 10 [1]

Functional Details

Average Daily Traffic	135	Average daily truck traffi	2	%	Year	1996	Future average daily traffic	302	Year	2016
Road classification	Local (Rural) [09]		Lanes on structure	2		Approach roadway width	4.9 m = 16.1 ft			
Type of service on bridge	Highway [1]		Direction of traffic	One lane bridge for 2 - way traffic [3]		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	Work done by		Work to be done by contract [1]	
Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]	Bridge improvement cost	450000	Roadway improvement cost	400000
	Length of structure improvement	18.9 m = 62.0 ft	Total project cost	850000
	Year of improvement cost estimate	2005		
	Border bridge - state		Border bridge - percent responsibility of other state	
	Border bridge - structure number			

Inspection and Sufficiency

Structure status	Posted for load [P]	Appraisal ratings - structural	Basically intolerable requiring high priority of corrective action [3]
Condition ratings - superstructure	Serious [3]	Appraisal ratings - roadway alignment	Better than present minimum criteria [7]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	N/A [N]
Condition ratings - deck	Not Applicable [N]		
Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]		
Channel and channel protection	Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and rush restrict the channel. [5]		
Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	25.9
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions			
Traffic safety features - approach guardrail	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail ends			
Inspection date	May 2009 [0509]	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	