

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]	Calhoun County [025]	Marengo [51520]	3.4 MI E OF I-69	42-16-55 = 42.281944	084-56-10 = - 84.936111
13113083000S030	Highway agency district 5	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 0	18 1/2 MILE ROAD	Toll On free road [3]	Features intersected I-94		
Design - main Concrete continuous [2]	Design - approach	Kilometerpoint 54.1 km = 33.5 mi	Year built 1960	Year reconstructed N/A [0000]	
4 Tee beam [04]	0 Other [00]	Skew angle 0	Structure Flared		
		Historical significance	Bridge is not eligible for the NRHP. [5]		
Total length 69.2 m = 227.0 ft	Length of maximum span 21.6 m = 70.9 ft	Deck width, out-to-out 9.5 m = 31.2 ft	Bridge roadway width, curb-to-curb 7.3 m = 24.0 ft		
Inventory Route, Total Horizontal Clearance 7.3 m = 24.0 ft	Curb or sidewalk width - left 0.7 m = 2.3 ft	Curb or sidewalk width - right 0.7 m = 2.3 ft			
Deck structure type	Concrete Cast-in-Place [1]				
Type of wearing surface	Monolithic Concrete (concurrently placed with structural deck) [1]				
Deck protection					
Type of membrane/wearing surface					

**Weight Limits**

Bypass, detour length 0.5 km = 0.3 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	56.4 metric ton = 62.0 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]	

### Functional Details

Average Daily Traffic	410	Average daily truck traffi	3	%	Year	1974	Future average daily traffic	410	Year	1977
Road classification	Local (Urban) [19]		Lanes on structure	2		Approach roadway width	6.6 m = 21.7 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	Highway, with or without ped		Lanes under structure	4		Navigation control	Not applicable, no waterway. [N]			
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	Highway beneath structure [H]									
Minimum lateral underclearance on right	2.6 m = 8.5 ft					Minimum lateral underclearance on left	8.7 m = 28.5 ft			
Minimum Vertical Underclearance	4.83 m = 15.8 ft		Minimum vertical underclearance reference feature	Highway beneath structure [H]						
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrective action [3]									

### Repair and Replacement Plans

Type of work to be performed	Work done by									
Bridge deck replacement with only incidental widening. [37]	Work to be done by contract [1]									
	Bridge improvement cost	80000		Roadway improvement cost	8000					
	Length of structure improvement	69.2 m = 227.0 ft		Total project cost	94000					
	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	Equal to present minimum criteria [6]
Condition ratings - superstructure	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Satisfactory [6]		
Scour	Bridge not over waterway. [N]		
Channel and channel protection	Not applicable. [N]		
Appraisal ratings - water adequacy	N/A [N]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	81.1
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	Inspected feature meets currently acceptable standards. [1]		
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	