

The National Bridge Inventory contains data submitted by state transportation 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]	Gratiot County [057]	North Star [58880]	SEC 16-21 NORTH STAR TWP	43-14-53 = 43.248056	084-33-23 = - 84.556389
29200013000B010	Highway agency district 4	Owner County Highway Agency [02]	Maintenance responsibility	County Highway Agency [02]	
Route 2938	BUCHANAN ROAD	Toll On free road [3]	Features intersected DRAIN #294		
Design - main Concrete [1]	Design - approach	Kilometerpoint 2267.4 km = 1405.8 mi	Year built 1952	Year reconstructed N/A [0000]	
1 Tee beam [04]	0 Other [00]	Skew angle 0	Structure Flared		
		Historical significance Bridge is not eligible for the NRHP. [5]			
Total length 9.1 m = 29.9 ft	Length of maximum span 8.8 m = 28.9 ft	Deck width, out-to-out 8.9 m = 29.2 ft	Bridge roadway width, curb-to-curb 7 m = 23.0 ft		
Inventory Route, Total Horizontal Clearance 7.3 m = 24.0 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	Bituminous [6]				
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 39.1 metric ton = 43.0 tons
	Method to determine operating rating Allowable Stress(AS) [2]	Operating rating 69.6 metric ton = 76.6 tons
Bridge posting Equal to or above legal loads [5]	Design Load MS 18+Mod / HS 20+Mod [6]	

Functional Details

Average Daily Traffic Average daily truck traffi % Year Future average daily traffic Year

Road classification Lanes on structure Approach roadway width

Type of service on bridge Direction of traffic Bridge median

Parallel structure designation

Type of service under bridge Lanes under structure Navigation control

Navigation vertical clearanc Navigation horizontal clearance

Minimum navigation vertical clearance, vertical lift bridge Minimum vertical clearance over bridge roadway

Minimum lateral underclearance reference feature

Minimum lateral underclearance on right Minimum lateral underclearance on left

Minimum Vertical Underclearance Minimum vertical underclearance reference feature

Appraisal ratings - underclearances

Repair and Replacement Plans

Type of work to be performed

Work done by

Bridge improvement cost Roadway improvement cost

Length of structure improvement Total project cost

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

Meets minimum tolerable limits to be left in place as is [4]

Condition ratings - superstructure

Good [7]

Appraisal ratings -
roadway alignment

Better than present minimum criteria [7]

Condition ratings - substructure

Poor [4]

Appraisal ratings -
deck geometry

Meets minimum tolerable limits to be left in place as is [4]

Condition ratings - deck

Satisfactory [6]

Scour

Bridge is scour critical; bridge foundations determined to be unstable. [3]

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

Better than present minimum criteria [7]

Status evaluation

Structurally deficient [1]

Pier or abutment protection

Sufficiency rating

52.6

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

June 2009 [0609]

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