

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] Bay County [017] Kawkawlin [42360] 200 FT W OF FOUR MILE RD 43-40-02 = 43.667222 083-58-12 = - 83.970000

09200018000B050 Highway agency district 4 Owner County Highway Agency [02] Maintenance responsibility County Highway Agency [02]

Route 938 BEAVER ROAD Toll On free road [3] Features intersected KAWKAWLIN RIVER

Design - main Concrete [1] Design - approach Other [00] Kilometerpoint 1588.3 km = 984.7 mi

1 Girder and floorbeam system [03] 0 Other [00] Year built 1928 Year reconstructed N/A [0000]

Skew angle 0 Structure Flared

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

Total length 18.2 m = 59.7 ft Length of maximum span 16.4 m = 53.8 ft Deck width, out-to-out 8.3 m = 27.2 ft Bridge roadway width, curb-to-curb 6.7 m = 22.0 ft

Inventory Route, Total Horizontal Clearance 6.7 m = 22.0 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 0.6 km = 0.4 mi Method to determine inventory rating Allowable Stress(AS) [2] Inventory rating 32.7 metric ton = 36.0 tons

Method to determine operating rating Allowable Stress(AS) [2] Operating rating 32.7 metric ton = 36.0 tons

Bridge posting Equal to or above legal loads [5] Design Load M 13.5 / H 15 [2]

### 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                                  | <input type="text" value="Open, no restriction [A]"/>                                                                                                                                                                              | Appraisal ratings - structural        | <input type="text" value="Equal to present minimum criteria [6]"/>                            |
| Condition ratings - superstructure                | <input type="text" value="Satisfactory [6]"/>                                                                                                                                                                                      | Appraisal ratings - roadway alignment | <input type="text" value="Equal to present minimum criteria [6]"/>                            |
| Condition ratings - substructure                  | <input type="text" value="Satisfactory [6]"/>                                                                                                                                                                                      | Appraisal ratings - deck geometry     | <input type="text" value="Basically intolerable requiring high priority of replacement [2]"/> |
| Condition ratings - deck                          | <input type="text" value="Satisfactory [6]"/>                                                                                                                                                                                      |                                       |                                                                                               |
| Scour                                             | <input type="text" value="Bridge is scour critical; bridge foundations determined to be unstable. [3]"/>                                                                                                                           |                                       |                                                                                               |
| Channel and channel protection                    | <input type="text" value="Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly. [6]"/> |                                       |                                                                                               |
| Appraisal ratings - water adequacy                | <input type="text" value="Equal to present desirable criteria [8]"/>                                                                                                                                                               | Status evaluation                     | <input type="text" value="Functionally obsolete [2]"/>                                        |
| Pier or abutment protection                       | <input type="text"/>                                                                                                                                                                                                               | Sufficiency rating                    | <input type="text" value="76.8"/>                                                             |
| Culverts                                          | <input type="text" value="Not applicable. Used if structure is not a culvert. [N]"/>                                                                                                                                               |                                       |                                                                                               |
| Traffic safety features - railings                | <input type="text"/>                                                                                                                                                                                                               |                                       |                                                                                               |
| Traffic safety features - transitions             | <input type="text"/>                                                                                                                                                                                                               |                                       |                                                                                               |
| Traffic safety features - approach guardrail      | <input type="text"/>                                                                                                                                                                                                               |                                       |                                                                                               |
| Traffic safety features - approach guardrail ends | <input type="text"/>                                                                                                                                                                                                               |                                       |                                                                                               |
| Inspection date                                   | <input type="text" value="April 2008 [0408]"/>                                                                                                                                                                                     | Designated inspection frequency       | <input type="text" value="24"/> Months                                                        |
| Underwater inspection                             | <input type="text" value="Not needed [N]"/>                                                                                                                                                                                        | Underwater inspection date            | <input type="text"/>                                                                          |
| Fracture critical inspection                      | <input type="text" value="Not needed [N]"/>                                                                                                                                                                                        | Fracture critical inspection date     | <input type="text"/>                                                                          |
| Other special inspection                          | <input type="text" value="Not needed [N]"/>                                                                                                                                                                                        | Other special inspection date         | <input type="text"/>                                                                          |