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 43-04-33 = 086-13-02 = -									
Michigan [26]	Ottawa County [139]		Grand Haven [33340] GRAND HAVEN-FERRYSE				43.075833	86.217222	
70170014000B020 Highway agency district 3			Owner State Highway A	Owner State Highway Agency [01] Maintenance responsibility			State Highway Ag	ency [01]	
Route 31 Toll On free road [3] Features intersected GRAND RIVER									
Design - steel [3] main  Movable - B	ascule [16]	Design - approach  6 Gird	el [3] der and floorbeam system [03]	Kilometerpoint Year built 1960 Skew angle 0 Historical signific	Structure F	constructed 2006			
Total length 211.1 m = 692.6 ft Length of maximum span 69 m = 226.4 ft Deck width, out-to-out 29.1 m = 95.5 ft Bridge roadway width, curb-to-curb 24 m = 78.7 ft  Inventory Route, Total Horizontal Clearance 28.6 m = 93.8 ft Curb or sidewalk width - left 1.3 m = 4.3 ft Curb or sidewalk width - right 1.3 m = 4.3 ft  Deck structure type Open Grating [3]									
Type of wearing surface  Deck protection  Epoxy Overlay [5]  Epoxy Coated Reinford			forcing [1]						
Type of membrane/wearing surface									
Weight Limits									
Bypass, detour length  5.6 km = 3.5 mi  Method to determine inventory rating  Method to determine operating rating			Allowable Stress(AS) [2] Allowable Stress(AS) [2]		Inventory rating 29.1 metric ton = 32.0 tons Operating rating 99.9 metric ton = 109.9 tons				
Bridge posting Equal to or above legal loads [5]					Design Load MS	18 / HS 20 [5]			

Functional Details							
Average Daily Traffic 62192 Average daily tr	uck traffi 3 % Year 2007 Future average daily traffic	c 63200 Year 2026					
Road classification Other Principal Arterial (Urban)	Approach roadway width 14.6 m = 47.9 ft						
Type of service on bridge Highway-pedestrian [5]	Bridge median						
Parallel structure designation No parallel structure	e exists. [N]						
Type of service under bridge Waterway [5]	Lanes under structure 0 Navigation control	Navigation control on waterway (bridge permit required). [1]					
Navigation vertical clearanc 8 m = 26.2 ft Navigation horizontal clearance 46 m = 150.9 ft							
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 2.5 m = 8.2 ft  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						
	Bridge improvement cost Roadway i	improvement cost					
	Length of structure improvement	Total project cost					
	Year of improvement cost estimate						
	Border bridge - percent responsibility of other state						
	Border bridge - structure number						

Inspection and Sufficiency									
Structure status Open, no res	triction [A]	Appraisal ratings - structural	Better than pr						
Condition ratings - superstructur Good [7]		Appraisal ratings - roadway alignment							
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Somewhat better than minimum adequacy to tolerate being left in place as is [5]						
Condition ratings - deck Good [7]		ueck geometry	.0 [0]						
Scour		Countermeasures have been installed to mitigate an existing problem with scour. [7]							
Channel and channel protection	Bank protection is ir Banks and/or chann	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 adequace	y Better than present	minimum criteria [7]	St	atus evaluation					
Pier or abutment protection	In place and function	ning [2]	Su	Sufficiency rating 77					
Culverts Not applicable. Used if structure is not a culvert. [N]									
Traffic safety features - railings	Inp	ected feature meets currently acce	eptable standards						
Traffic safety features - transition	Inp	ected feature meets currently acce							
Traffic safety features - approach	ected feature meets currently acce	feature meets currently acceptable standards. [1]							
Traffic safety features - approach guardrail ends Inpected feature meets currently acceptable standards. [1]									
Inspection date April 2009 [0409] Designated inspection frequency 15 Months									
Underwater inspection	Unknown [Y60]	Underwater inspec	August 2005 [0805]						
Fracture critical inspection	Unknown [Y15]	Fracture critical in:	spection date	April 2009 [0409]					
Other special inspection	Not needed [N]	Other special insp	ection date						