HistoricBridges.org - National Bridge Inventory Data Sheet - Ball Creek Road Western Bridge

2009 Inventory

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

Michigan [26]	Kent County [081]	Kent City [42780]	.30 MI N.W. OF 17 MILE RD	43-13-18 = 43.221667	085-45-38 = -85.760556

414359400001B01 | Highway agency district: 3 | Owner: City or Municipal Highway Agency [04] | Maintenance responsibility: City or Municipal Highway Agency [04]

Route: 0 | BALL CREEK RD. | Toll: On free road [3] | Features intersected: BALL CREEK

Design - main	Concrete [1]	Design - approach		Kilometerpoint	240.1 km = 148.9 mi
1	Tee beam [04]	0	Other [00]	Year built	1925
				Year reconstructed	N/A [0000]
				Skew angle	0
				Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]

Total length	7.3 m = 24.0 ft	Length of maximum span	6.4 m = 21.0 ft	Deck width, out-to-out	9 m = 29.5 ft	Bridge roadway width, curb-to-curb	7.9 m = 25.9 ft
Inventory Route, Total Horizontal Clearance	7.9 m = 25.9 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: 0.2 km = 0.1 mi

Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	30 metric ton = 33.0 tons
Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	52.7 metric ton = 58.0 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18+Mod / HS 20+Mod [6]

Functional Details

Average Daily Traffic	2100	Average daily truck traffi	0 %	Year	2004	Future average daily traffic	3075	Year	2024

Road classification	Major Collector (Rural) [07]	Lanes on structure	2	Approach roadway width	8.5 m = 27.9 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	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

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	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructure	Fair [5]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - deck	Poor [4]		

Scour	Bridge with "unknown" foundation that has not been evaluated for scour. [U]
Channel and channel protection	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	Equal to present desirable criteria [8]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	67.2

Culverts	Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	

Inspection date	September 2008 [0908]	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	

HistoricBridges.org - National Bridge Inventory Data Sheet - Ball Creek Road Central Bridge

2009 Inventory

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Basic Information

Michigan [26]	Kent County [081]	Kent City [42780]	500 FT S.E. OF 17 MILE RD	43-13-08 = 43.218889	085-45-16 = -85.754444

414359400001B02 | Highway agency district: 3 | Owner: City or Municipal Highway Agency [04] | Maintenance responsibility: City or Municipal Highway Agency [04]

Route: 0 | BALL CREEK RD. | Toll: On free road [3] | Features intersected: BALL CREEK

Design - main	Concrete [1]	Design - approach	
1	Tee beam [04]	0	Other [00]

Kilometerpoint: 297.9 km = 184.7 mi

Year built: 1925 | Year reconstructed: N/A [0000]

Skew angle: 0 | Structure Flared:

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

Total length: 7.3 m = 24.0 ft | Length of maximum span: 6.4 m = 21.0 ft | Deck width, out-to-out: 9 m = 29.5 ft | Bridge roadway width, curb-to-curb: 7.9 m = 25.9 ft

Inventory Route, Total Horizontal Clearance: 7.9 m = 25.9 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: 0.2 km = 0.1 mi

Method to determine inventory rating: Allowable Stress(AS) [2] | Inventory rating: 30 metric ton = 33.0 tons

Method to determine operating rating: Allowable Stress(AS) [2] | Operating rating: 52.7 metric ton = 58.0 tons

Bridge posting: Equal to or above legal loads [5] | Design Load: MS 18+Mod / HS 20+Mod [6]

Functional Details

Average Daily Traffic	2100	Average daily truck traffi	0 %	Year	2004	Future average daily traffic	3075	Year	2024

Road classification	Major Collector (Rural) [07]	Lanes on structure	2	Approach roadway width	8.5 m = 27.9 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	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

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	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructure	Fair [5]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - deck	Satisfactory [6]		

Scour	Bridge with "unknown" foundation that has not been evaluated for scour. [U]
Channel and channel protection	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 adequacy	Equal to present desirable criteria [8]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	70.3

Culverts	Not applicable. Used if structure is not a culvert. [N]
Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	

Inspection date	September 2008 [0908]	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	

HistoricBridges.org - National Bridge Inventory Data Sheet - Ball Creek Road Eastern Bridge

2009 Inventory

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Basic Information

Michigan [26]	Kent County [081]	Kent City [42780]	.14 MI. S.E. OF MAIN ST.	43-12-58 = 43.216111	085-44-56 = -85.748889

414359400001B03	Highway agency district: 3	Owner: City or Municipal Highway Agency [04]	Maintenance responsibility: City or Municipal Highway Agency [04]		

Route: 0		BALL CREEK RD.	Toll: On free road [3]	Features intersected: BALL CREEK	

Design - main: Concrete [1]		Design - approach:		Kilometerpoint: 352.8 km = 218.7 mi	
1	Tee beam [04]	0	Other [00]	Year built: 1925	Year reconstructed: N/A [0000]
				Skew angle: 0	Structure Flared:
				Historical significance: Bridge is not eligible for the NRHP. [5]	

Total length: 7.3 m = 24.0 ft	Length of maximum span: 6.4 m = 21.0 ft	Deck width, out-to-out: 9 m = 29.5 ft	Bridge roadway width, curb-to-curb: 7.9 m = 25.9 ft
Inventory Route, Total Horizontal Clearance: 7.9 m = 25.9 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: 0.2 km = 0.1 mi	Method to determine inventory rating: Allowable Stress(AS) [2]		Inventory rating: 30 metric ton = 33.0 tons		
	Method to determine operating rating: Allowable Stress(AS) [2]		Operating rating: 52.2 metric ton = 57.4 tons		
	Bridge posting: Equal to or above legal loads [5]		Design Load: MS 18+Mod / HS 20+Mod [6]		

Functional Details

Average Daily Traffic	2100	Average daily truck traffi	0 %	Year	2004	Future average daily traffic	3075	Year	2024

Road classification	Major Collector (Rural) [07]	Lanes on structure	2	Approach roadway width	8.5 m = 27.9 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	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

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	Poor [4]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - deck	Fair [5]		

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	53.1

Culverts	Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	

Inspection date	September 2008 [0908]	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	