

HistoricBridges.org - National Bridge Inventory Data Sheet

2013 Inventory

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

Ohio [39]	Scioto County [145]	Rarden [65522]	.35 MI W OF SR 772	38-55-24 = 38.923333	083-14-54 = - 83.248333
7302193	Highway agency district 9	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 73		SR 73	Toll On free road [3]	Features intersected RARDEN CREEK	
Design - main	Concrete [1]	Design - approach		Kilometerpoint 198 km = 122.8 mi	
1	Girder and floorbeam system [03]	0	Other [00]	Year built 1930	Year reconstructed N/A [0000]
				Skew angle 0	Structure Flared
				Historical significance Bridge is not eligible for the NRHP. [5]	
Total length 19.2 m = 63.0 ft	Length of maximum span 18.3 m = 60.0 ft	Deck width, out-to-out 8.8 m = 28.9 ft	Bridge roadway width, curb-to-curb 7 m = 23.0 ft		
Inventory Route, Total Horizontal Clearance 7 m = 23.0 ft	Curb or sidewalk width - left 0.2 m = 0.7 ft	Curb or sidewalk width - right 0.2 m = 0.7 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 1.1 km = 0.7 mi	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating 21.7 metric ton = 23.9 tons
	Method to determine operating rating	Load Factor(LF) [1]	Operating rating 29.8 metric ton = 32.8 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]

Functional Details

Average Daily Traffic	2530	Average daily truck traffi	7	%	Year	2011	Future average daily traffic	3637	Year	2033
Road classification	Major Collector (Rural) [07]		Lanes on structure	2		Approach roadway width	9.1 m = 29.9 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	0 = N/A					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	Better than present minimum criteria [7]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Poor [4]		
Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]		
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	Meets minimum tolerable limits to be left in place as is [4]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	32.7
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions	Inspected feature meets currently acceptable standards. [1]		
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	November 2012 [1112]	Designated inspection frequency	12 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	

Unit of Measure: English

Structure File Number: 7302193

Sufficiency Rating: 032.7 SD

Bridge Inventory Information

Inventory Bridge Number: SCI 00073 01230 N

ROUTE CARRIED "ON" THE STRUCTURE RARDEN CREEK

Report Date: 02-10-2015 BM-191 Page: 1 of 2

BR. Type: CONCRETE/GIRDER (FLOOR SYSTEM)/THRU

Date of Last Inventory Update:

District: 09

County: SCIOTO

(101) Location: .35 MI W OF SR 772

(102) Facility Carried: SR 73

(2) FIPS Code: SCI-T-65522-RARDEN TWP

(103) Route On Bridge: STATE (ODOT) (TOLL FR

(104) Route Under Bridge: NON HIGHWAY TRAFFIC ON BRIDGE

(9) Direction of Traffic: 2-WAY TRAFFIC

(10) Temporary: N

(11) Truck Network: N

(12) Parallel: N

(100) Type Serv: (On): HIGHWAY

(Under): WATERWAY

Inventory Route Data

(3) Route On/Under: ROUTE CARRIED "ON" THE STR Hwy Sys: STATE HIGHWAY

Route No: 00073 Dir: NOT APPLICABLE Des: MAINLINE Pref: N

(4) Feature Intersected: RARDEN CREEK

(5) County: SCI Mileage: 01230 Special Desig: N

(6) Avg. Daily Traffic(ADT): 2,530 (7) ADT Year: 2011

(8) Truck Traf: 170 (14) NHS: NON-NHS BRG E (15) Corridor: N

(16) Functional Class: RURAL - MAJOR COLLECTOR (19) Strahnt: NON-STRAHNET BRIDGES

Intersected Route Data

(22) Route On/Under: Hwy Sys:

Route No: Dir: Des: Pref:

(23) Feature Intersected:

(24) County: Mileage: 0000 Special Desig:

(25) Avg. Daily Traffic(ADT): (26) ADT Year:

(27) Truck Traf: (28) NHS: - (29) Corridor: N

(30) Functional Class: (36) Strahnt:

Clearance On the Bridge

(154) Min. Hriz on Bridge: NC: 0.0 Card: 23.0 Ft

(155) Prac Max Vert On Brq: 9999.9 Ft

(67) Min Vrt Clr On Brq: NC: 0.0 Card: 9999.9 Ft

(80) Min Latl Clr: NC: 0.0/0.0 Ft Card: 0.0/0.0 Ft

(81) Vrt Clr Lft: 0.0 Ft

Structure Information

(38) Bypass Length: 07 Miles

(39) Latitude: 38 Deg 55 Min 24.24 Sec Longitude: 83 Deg 14 Min 54.38 Sec

(40) Toll: ON FREE ROAD, THE STRUCTU

(41) Date Built: 7/1/1930 (42) Major Rehabilitation:

(43) No. Lanes On: 2 No. Lanes Under: 0

(44) Horiz Curve: (45) Skew: 0 Deg

(49) App. Rdw Width: 30 Ft (50) Brq. Rdw Width: 23.0 Ft

(51) Deck Width: 29.0 Ft Deck Area: 1830 Sq. Ft

(52) Median Type: NONE/NON BARRIER/NO JOINT

(53) Bridge Median: NO MEDIAN

(54) Sidewalks: (left) 0.8 Ft (right) 0.8 Ft

(55) Type Curb or Sidewalks:

(Left) Matl: CONCRETE Type: SAFETY CURB (2' OR LESS WIDTH)

(Right) Matl: CONCRETE Type: SAFETY CURB (2' OR LESS WIDTH)

(56) Flared: N (57) Composite: N - NON_COMPOSITE

(58) Railing: REINFORCED CONCRETE PARAPET

(59) Deck Drainage: SCUPPERS AND DOWNSPOUTS

(60) Deck Type: REINFORCED CONCRETE

(61) Deck Protection: External: NONE OR NOT APPLICABLE

Internal: NONE OR NOT APPLICABLE

(62) Wearing Surface: BITUMINOUS (ASPHALTIC CONCRETE) - OVERLA

Thickness: 7.9 in (119) Date of Wearing Surface: 10/31/2008

Slope Protection: NONE

(63) Main Spans Number: 1 Type: CONCRETE/GIRDER (FLOOR SYSTEM)/THRU

Approach Spans Number: 0 Type: NONE/NONE/NONE

Total Spans: 1 (65) Max Span: 60 Ft (66) Overall Leng: 63 Ft

(70) Substructure

(71) Foundation and Scour Information

Abut-Rear Matl: CONCRETE Type: CANTILEVER Fnd: TIMBER PILES

Abut-Fwd Matl: CONCRETE Type: CANTILEVER Fnd: TIMBER PILES

Pier-Pred Matl: NONE Type: NONE Fnd: NONE (SUCH AS MOST CULVERTS)

Pier-Other Matl: NONE Type: NONE Fnd: NONE (SUCH AS MOST CULVERTS)

Pier-Other Matl: NONE Type: NONE Fnd: NONE (SUCH AS MOST CULVERTS)

No of Piers Predominate: Other: Other:

(86) Stream Velocity: 00000 (74) Scour: BRIDGE FOUNDATIONS DETERMINED TO BE STAB

(189) Dive: N Freq: 0 Probe: N Freq: 0 (75) Chan Prot: OTHER (GRASS, BUSHES, TREES)

(189) Date of last Dive Insp: (152) Drainage Area: UUU Sq Mi

Clearance Under the Bridge

(156) Min. Horiz Under Clear: NC: 0.0 Ft Card: 0.0 Ft

(157) Prac Max Vrt Under Clear: 0.0 Ft

(77) Min Vert Under Clear: NC: 0.0 Ft Card: 0.0 Ft

(78) Min Lat Under Clear: NC: 0.0/0.0 Ft Card: 0.0/0.0 Ft

Load Rating Information

(88-89) Appraisal

(48) Design Load: H15

Opr Rat Fact: 0.920 LD: HS20 LOADING

Inv Rat Fact: 0.670 LD: HS20 LOADING

(83) Ohio Percent of Legal Load: 120

Year of Rating: 1995

(84) Analysis: LOAD FACTOR RATING (LFR)

(85) Rate Soft: BARS

Analysis on Bars: NOT ON BARS [DEFAULT]

PE#: 0

(88) Waterway Adequacy: 4

(89) Approach Alignment: 7

Calc Gen Appraisal: 4

Calc Deck Geometry: 2

Calc Underclearance: N

Approach Information

(109) Approach Guardrail: STEEL BEAM

(110) Approach Pavement: BITUMINOUS

(111) Grade: GOOD

Culvert Information

(131) Culvert Type: NOT A CULVERT OR RIGID FRAME

(127) Length: 0.0 Ft

(129) Depth of Fill: 0.0 Ft

(130) Headwalls: NONE OR NOT APPLICABLE (NOT A CU

General Information

(121) Main Member: CONCRETE GIRDER

(122) Moment Plate: NO MOMENT PLATES

(169) Expansion Joint: NONE

(124) Bearing Devices: SLIDING (BRONZE)

(126) Navigation: Control-N

Vert Clr: 0.0 Ft

Horiz Clear: 0.0 Ft

(193) Spec Insp: N

Freq: 0

Date:

(188) Fracture Critical Insp: N

Freq: 0

Date:

(138) Long Member: TWO GIRDER BRIDGE

(135) Hinges: NOT APPLICABLE (STRUCTURES WITH NO

(141) Structural Steel Memb: NONE

(139) Framing: STRAIGHT BEAMS/GIRDERS

Railing: N

Pay Wt: 0 pounds

Prime Loc: NONE (I.E.

Paint: NONE OR NOT APPLICABLE

Bridge Dedicated Name:

Sufficiency Rating: 032.7 SD

Inventory Bridge Number: SCI 00073 01230 N

BR. Type: CONCRETE/GIRDER (FLOOR SYSTEM)/THRU

Date of Last Inventory Update:

ROUTE CARRIED "ON" THE STRUCTURE RARDEN CREEK

PONTIS CoRe elements and Conditions States								
Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
13	CONCRETE DECK - UNPROTECTED W/AC OVERLAY	1		0	0	0	0	0
215	REINFORCED CONC ABUTMENT	58		0	0	0	0	0
331	CONCRETE BRIDGE RAILING	124		0	0	0	0	0

(*) Percentages should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

STRUCTURE FILE NUMBER: 7302193

SCI
CO

00073
Route

01230
SLM

SCI-T-65522-RARDEN TWP
FIPS

DATE BUILT 07/01/1930

District 09 CONCRETE/GIRDER (FLOOR SYSTEM) Type of Service 1 15 RARDEN CREEK

N
SD SCI

DECK

1. Floor	Out/Out 29.0 1-REINFORCED CONCRETE	3	2. Wearing Surface	THCK= 7.9 6-BITUMINOUS (ASPHALTIC CONCRETE) -	1
3. Curbs, Sidewalks & Walkways	1-CONCRETE 1-CONCRETE	3	4. Median	W.S. Date = 10/31/2008 N-NO MEDIAN	
5. Railing	1-REINFORCED CONCRETE PARAPET	2	6. Drainage	3-SCUPPERS AND DOWNSPOUTS	3
7. Expansion Joints	N-NONE		8. SUMMARY	Deck Area: 1,830	4

SUPERSTRUCTURE

9. Alignment of Members	MAX.SPAN.LENGTH = 60	1	10. Beams/Girders/Slab	5-CONCRETE GIRDER	2
11. Diaphragms or Cross Frames	TOT.LGTH = 63		12. Joist/Stringers		
13. Floorbeams		3	14. Floorbeam Connections		
15. Verticals			16. Diagonals		
17. End posts			18. Upper Chord		
19. Lower Chord			20. Gusset Plates		
21. Lateral Bracing			22. Sway Bracing		
23. Portals			24. Bearing Devices	3-SLIDING (BRONZE) N-NONE	1
25. Arch			26. Arch Columns or Hangers		
27. Spandrel Walls			28. Protective Coating System (PCS)	TYPE: NNONE OR NOT APPLICABLE DATE =	
29. Pins/Hangers/Hinges	ADT: 2,530 TRUCK: 170 YEAR: 2011		30. Fatigue Prone Detail (E & E')		
31. Live Load Response (E or S)		S	32. SUMMARY		4

SUBSTRUCTURE

33. Abutments	2-CONCRETE 2-CONCRETE	2	34. Abutment Seats	PIERS=	# OF SPANS=1	2
35. Piers	TYPE = N-NONE		36. Pier Seats			
37. Backwalls			38. Wingwalls	ABUTMENT:=TIMBER PILES/TIMBER PILES		2
39. Fenders and Dolphins			40. Scour (Insp Type - 1, 2, 3)	8-BRIDGE FOUNDATIONS DETERMINED TO BE STAB		1
41. Slope Protection	N-NONE		42. SUMMARY	DIVE DT= N/A		5

CULVERTS

43. General			44. Alignment		
45. Shape			46. Seams		
47. Headwalls or Endwalls			48. Scour (Insp Type - 1, 2, 3)		
49. Abutments			50. SUMMARY		N

CHANNEL

51. Alignment	2	52. Protection	0-OTHER (GRASS, BUSHES, TREES)	1
53. Hydraulic Opening	3	54. SUMMARY		5

APPROACHES

55. Pavement	2-BITUMINOUS	1	56. Approach Slabs		
57. Guardrail	1-STEEL BEAM	1	58. Relief Joint		
59. Embankment	BRDG.WIDTH=23.0	1	60. SUMMARY	PCT.LEGAL= 120	7

GENERAL

61. Navigation Lights		62. Warning Signs	ROUTINE.RESP: 1-OHIO STATE TRANSPORTATION DEPARTMENT MAINT.RESP: 1-OHIO STATE TRANSPORTATION DEPT	1
63. Sign Supports	MVC ON=9999 UND=0000	64. Utilities		
65. Vertical Clearance (1, 2-change, N)		66. General Appraisal & Operational Status		4 A

67. INSPECTED BY

68. REVIEWED BY

Print First & Last Name

PE Number

DB
Initial

Print First & Last Name

75.187
PE Number

WF
Initial

Inspected Date: 12/11/2013

Reviewed Date: 1/1/0001

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69. Survey (1, 0, N)