HistoricBridges.org - National Bridge Inventory Data Sheet

2011 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

Ohio [39]	Cuyahoga County [035]	Cleveland [16000]	N OFF RIVER RD (FLATS)	41-29-51 = 41.497500	081-42-38 = -81.710556

1869981	Highway agency district	12	Owner	City or Municipal Highway Agency [04]	Maintenance responsibility	City or Municipal Highway Agency [04]

Route	#Num!		WILLOW ST	Toll	On free road [3]

Features intersected: CUYAHOGA RIVER

Design - main	Steel [3]	Design - approach	Steel [3]
1	Movable - Lift [15]	2	Frame [07]

Kilometerpoint: 0 km = 0.0 mi

Year built: 1965 Year reconstructed: 1987

Skew angle: 0 Structure Flared:

Historical significance: Historical significance is not determinable at this time. [4]

Total length	106.7 m = 350.1 ft	Length of maximum span	94.5 m = 310.1 ft	Deck width, out-to-out	14.6 m = 47.9 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	1.2 m = 3.9 ft	Curb or sidewalk width - right	1.2 m = 3.9 ft

Deck structure type	Open Grating [3]
Type of wearing surface	Other [9]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length: 0.5 km = 0.3 mi

Method to determine inventory rating	No rating analysis performed [5]	Inventory rating	32.4 metric ton = 35.6 tons
Method to determine operating rating	No rating analysis performed [5]	Operating rating	32.4 metric ton = 35.6 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	M 18 / H 20 [4]

Functional Details

Average Daily Traffic	4000	Average daily truck traffi	84 %	Year	1975	Future average daily traffic	5552
Year	2025						
Road classification	Other Principal Arterial (Urban) [14]	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 control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	29.9 m = 98.1 ft	Navigation horizontal clearance	51.8 m = 170.0 ft				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	4.57 m = 15.0 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	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructur	Fair [5]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - deck	Fair [5]		

Scour	Countermeasures have been installed to mitigate an existing problem with scour. [7]
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	Superior to present desirable criteria [9]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	In place but re-evaluation of design suggested [4]	Sufficiency rating	60.5

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	October 2008 [1008]	Designated inspection frequency	12	Months

Underwater inspection	Unknown [Y00]	Underwater inspection date	June 1987 [0687]
Fracture critical inspection	Every year [Y12]	Fracture critical inspection date	February 1996 [0296]
Other special inspection	Not needed [N]	Other special inspection date	

District: **12** | County **CUYAHOGA** | (101) Location: **N OFF RIVER RD (FLATS)** | (102) Facility Carried: **WILLOW ST**
(2)FIPS Code: **CLEVELAND** | (103) Route On Bridge: **MUNICIPAL** | (104) Route Under Bridge: **OTHER**
(9) Direction of Traffic: **2-WAY TRAFFIC** | (10) Temporary: **N** | (11)Truck Network: **N** | (12)Parallel: **N**
(95) Insp: **CITY/LOCAL** (96) Maint: **CITY/LOCAL** (97) Routine: **CITY/LOC** | (100) Type Serv: (On): **HIGHWAY** | (Under): **WATERWAY**

Inventory Route Data

(3) Route On/Under: **ON** | Hwy Sys: **MUNICIPAL STREET**
Route No.: **WILOW** | Dir: | Des: **BUSINESS** | Pref:
(4) Feature Intersected: **CUYAHOGA RIVER**
(5) County: **CUY** | Mileage: **1068M** | Special Desig:
(6) Avg. Daily Traffic(ADT): **4,000** | (7) ADT Year: **1975**
(8) Truck Traf: **3,350** | (14) NHS: **NO** - **X** | (15) Corridor: **N**
(16) Functional Class: **OTHER PRINCIPAL ARTERIAL-URBAN** | (19) Strahnt: **Not Applicable**

Intersected Route Data

(22) Route On/Under: | Hwy Sys:
Route No.: | Dir: | Des: | Pref:
(23) Feature Intersected:
(24) County: | Mileage: | Special Desig:
(25) Avg. Daily Traffic(ADT): **0** | (26) ADT Year:
(27) Truck Traf: **0** | (28) NHS: - | (29) Corridor:
(30) Functional Class: | (36) Strahnt: **Not Applicable**

Clearance On the Bridge

(154) Min Hriz on Bridge: | NC: **0.0** Ft | Card: **26.0** Ft
(155) Prac Max Vert On Brg: | **15.0** Ft
(67) Min Vrt Clr On Brg: | NC: **0.0** Ft | Card: **15.0** Ft
(80) Min Latl Clr: | NC: **0.0 / 0.0** Ft | Card: **0.0 / 1.5** Ft
(81) Vrt Clr Lft: | **0.0** Ft

Structure Information

(38) Bypass Length: **03** Miles
(39) Latitude: **41 Deg 29.9 Min** | Longitude: **81 Deg 42.6 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1965** | (42) Major Rehabilitation: **01/01/1987**
(43) No. Lanes On: **2** | No. Lanes Under: **0**
(44) Horiz Curve: **Deg. Min.** | (45) Skew: **0** Deg
(49) App. Rdw Width: **30** Ft | (50) Brg. Rdw Width: **26.0** Ft
(51) Deck Width: **48.0** Ft | Deck Area: **16803** Sq. Ft
(52) Median Type: **NONE** / **NON BARRIE** / **NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: | (left) **3** Ft | (right) **3** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **CONCRETE** | Type: **SIDEWALK(>2')**
(Right) Matl: **CONCRETE** | Type: **SIDEWALK(>2')**
(56) Flared: **N** | (57) Composite: **non-composite**
(58) Railing: **STEEL POST & STEEL PANEL (DECORATIVE)**
(59) Deck Drainage: **OTHER-NATURAL(OFF THE BRIDGE ENDS)**
(60) Deck Type: **STEEL GRID - OPEN**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **OTHER**
Thickness: **3.9** in | (119) Date of Wearing Surface:
Slope Protection: **NONE-NATURAL PROTECTION(GRASS,BUSHES)**

(63) Main Spans Number: **1** | Type: **STEEL / TRUSS / MOVABLE - LIFT**
Approach Spans Number: **2** | Type: **STEEL / FRAME / OTHER**
Total Spans: **3** | (65) Max Span: **310** Ft | (66) Overall Leng: **350** Ft

(70) Substructure	(71) Foundation and Scour Information	
Abut-Rear Matl: **STEEL AND CONCRETE**	Type: **OTHER**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Abut-Fwd Matl: **STEEL AND CONCRETE**	Type: **OTHER**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Pred Matl: **CONCRETE**	Type: **GRAVITY**	Fnd: **CIP REINF CONCRETE PILES(OTHER DIAMETER)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **OTHER**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **OTHER**
No of Piers Predominate: **02**	Other: **NN**	Other: **NN**

(86) Stream Velocity: **UUU** | (74) Scour: **COUNTERMEAS INSTALLED TO CORRECT PROBLEM**
(189) Dive: **Y Freq: 0** | Probe: **N** Freq: **0** | (75) Chan Prot: **SHEET PILING**
(189) Date of last Dive Insp: **06/01/1987** | (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

(48) Design Load: **H/20**
(83) Operating: **36** Ton
Inventory: **36** Ton
Ohio Percent of Legal Load **150**
Year of Rating: **1989**
(84) Analysis: **ENGINEERING JUDGEMENT [DEFAULT]**
(85) Rate Soft: **NO SOFTWARE USED** Analyzed by:
Analysis on Bars: **NOT ON BARS [DEFAULT]**

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy **9**
(89) Approach Alignment **6**
Calc Gen Appraisal: **5**
Calc Deck Geometry: **3**
Calc Underclearance: **N**

Approach Information

(109) Approach Guardrail: **STEEL CABLE**
(110) Approach Pavement: **CONCRETE** | (111) Grade: **GOOD**

Culvert Information

(131) Culvert Type: **NONE/NOT APPLICBLE** | (127) Length: **0.0** Ft
(129) Depth of Fill: **0.0** Ft | (130) Headwalls: **NONE**

General Information

(121) Main Member **ROLLED STEEL** | (122) Moment Plate: **NONE**
(169) Expansion Joint: **METAL FINGER**
(124) Bearing Devices: **ROCKERS/NONE**
(126) Navigation: **Control- Y** | Vert Clr: **98.0** Ft | Horiz Clear:: **170.0** Ft
(193) Spec Insp: **N** | Freq: **0** | Date:
(188) Fracture Critical Insp: **Y** | Freq: **12** | Date: **1996-02-07**
(138) Long Member: **TWO TRUSSES (WELDED)** | (135) Hinges: **NOT APPLICABLE**
(141) Structural Steel Memb: **UNKNOWN** | (139) Framing: **NONE**
Railing: **UNKNOWN**
Pay Wt: **0** pounds | Prime Loc: **UNKNOWN** | Paint: **OTHER**
Bridge Dedicated Name:

General Information (Continued)

(---) Hist Significance: **NOT DETERMINED**
(---) Hist Builder: **NONE N/A**
Hist Build Year:
(69) Hist Type: **NONE N/A**
(161) Special Features (see below):
(105) Border Bridge State: Resp % (106) SFN:
(69) NBIS: **Y**

Proposed Improvements

(90) Type Work: **-**
(90) Length: Ft
(90) Bridge Cost ($1000s): **0**
(90) Roadway Cost ($1000s): **0**
(90) Total Project Cost ($1000s): **0**
(90) Year:
(91) Future ADT (On Bridge): **0**
(92) Year of Future ADT: **2033**

Programming Info

PID Number: **3462**
PID Status: **PROGRAM**
PID Date: **01/08/1985**

Original Plans Information

(142) Fabricator:
(143) Contractor:
(144) Ohio Original Construction Project No.:
(---) Microfilm Reel:
(151) Standard Drawing:
Aperture Cards: Orig: **N** Repair: **N** Fabr: **N**
Plan Information Available: **1PLAN INFORMATION AVAILABLE**

(153) Repair Projects

1. **/ 020**	2. **/ 020**	3. **/ MMM**
4. **/**	5.	6.
7.	8.	9.
10.		

Inspection Summary

(I-8) Deck:	**9**
(I-32) Superstructure:	**5**
(I-42) Substructure:	**7**
(I-50) Culvert:	
(I-54) Channel:	**6**
(I-60) Approaches:	**6**
(I-66) General Appraisial:	**5**
(I-66) Operational Status:	**C**
Inspection Date:	**09/22/2011**
(94) Desig Insp Freq:	**12 Months**

(I-69) Survey Items

Railings:	**1 MEETS CURRENT STANDARDS**
Transitions:	**N NONE N/A**
Guardrail:	**N NONE N/A**
Rail Ends:	**N NONE N/A**
In Depth:	**N NONE N/A**
Fracture Critical:	**N NONE N/A**
Scour Critical:	**N NONE N/A**
Critical Findings:	**N NONE N/A**
Insp. Update Date:	**01/06/2012**

Utilities

(46) Electric:	**U**
Gas:	**U**
Sanitary Sewer:	**U**
Telephone:	**U**
TV Cable:	**U**
Water:	**U**
Other:	**U**

Special Features

(161) Lighting:	**N**
Fencing:	**Y**
Glare-Screen:	**N**
Splash-Guard:	**Y**
Catwalks:	**N**
Other-Feat:	**U**
(184) Signs-on:	**N**
Signs-Under:	**N**
(162) Fence-Ht:	**0.0** Ft
(163) Noise Barr:	**N**

SFNs Replacing this retired bridge: **-**
SFNs That where replaced by this bridge: **-**
This bridge was retired and copied to:
The bridge was copied from:

INV Field Bridge Marker: **CUY-WILOW-1068M-**
INT Field Bridge Marker: **---**

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
		0						

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1 8 6 9 9 8 1
1 Structure File Number 7

Bridge Number **CUY WILOW1068M** **CLEVELAND** **Date Built 07/01/1965 - 1987**
CO ROUTE UNIT

District **12** Bridge Type **STEEL/TRUSS/MOVABLE - LIFT** Type Service **1** **15 CUYAHOGA RIVER** **CUY**

DECK Out/Out 48.0				THCK = 3.9	
1. Floor 5-STEEL GRID - OPEN 8	1		2. Wearing Surface 0-OTHER 41		1
1-CONCRETE			W.S. Date =		
3. Curbs, Sidewalks, Walkways 1-CONCRETE 9	1		4. Median 42		
5. Railing 6-STEEL POST & STEEL PAN 10	1		6. Drainage 0-OTHER-NATURAL(OFF THE 43		1
7. Expansion Joints 1-METAL FINGER 11	1		**8. Summary** 44		9
SUPERSTRUCTURE MAX.SPAN=310					
9. Alignment 12	1		10. Beams/Girders/Slab 1-ROLLED STEEL 45		2
TOT.LGTH=350					
11. Diaphragms or Crossframes 13	2		12. Joists/Stringers 46		1
13. Floor Beams 14	2		14. Floor Beam Connections 47		2
15. Verticals 15	1		16. Diagonals 48		1
17. End Posts 16	1		18. Top Chord 49		1
19. Lower Chord 17	1		20. Lower Lateral Bracing 50		
21. Top Lateral Bracing 18			22. Sway Bracing 51		1
23. Portals 19	1		2-ROCKERS 24. Bearing Devices N-NONE 52		2
25. Arch 20			26. Arch Columns or Hangers 53		
27. Spandrel Walls 21			TYPE = 0-OTHER 28. Protective Coating System DATE = 01/01/1986 54		5
29. Pins/Hangers/Hinges 22			30. Fatigue Prone Connections 55		2
31. Live Load Response 23	S		**32. Summary** 56		5
SUBSTRUCTURE 7-STEEL AND CONCRETE			PIERS=2 SPANS = 1		
33. Abutments 7-STEEL AND CONCRETE 24	1		34. Abutment Seats 57		1
35. Piers TYPE = 2-CONCRETE 25	1		36. Pier Seats 58		
37. Backwalls 26	1		ABUTMENT:=CIP REI / CIP REI 38. Wingwalls 59		2
39. Fenders and Dolphins 27	4		40. Scour 7-COUNTERMEAS INSTALLED 60	1	1
41. Slope Protection N-NONE 28			**42. Summary** DIVE DT=06/01/1987 62		7
CULVERTS					
43. General 29			44. Alignment 63		
45. Shape 30			46. Seams 64		
47. Headwalls or Endwalls 31			48. Scour 65		
49. 32			50. Summary 66		
CHANNEL					
51. Alignment 33	1		3-SHEET PILING 52. Protection 67		4
53. Waterway Adequacy 34	1		**54. Summary** 68		6
APPROACHES					
55. Pavement 1-CONCRETE 35	2		56. Approach Slabs 69		1
57. Guardrail 3-STEEL CABLE 36			58. Relief Joints 70		
59. Embankment BRDG.WIDTH=26.0 37	1		**60. Summary** PCT.LEGAL=150 71		6
GENERAL					
61. Navigation Lights 38	1		ROUTINE.RESP: 4-CITY/LOCAL 62. Warning Signs MAINT.RESP: 4-CITY/LOCAL 72		4
MVC ON=15.0 UND=0000					
63. Sign Supports 39	1		64. Utilities 73		1
65. Vertical Clearance 40	1		**66. General Appraisal & Operational Status** 74	COND 5	STAT C

67. INSPECTED BY

SIGNED 76 PE J D 78 INITIALS

68. REVIEWED BY

SIGNED 7 0 8 9 0 81 PE J H 83 INITIALS

DOT 2852

DECK AREA 16,803

Date 0 9 2 2 1 1
86 91

1 N N N N N N N
92 69 Survey 99

Date 1 2 2 0 1 1
100 105

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1	8	6	9	9	8	1

1 Structure File Number 7

Bridge Number **CUY** (CO) **WILOW** (ROUTE) **1068M** (UNIT)

Date Built 07/01/1965 - 1987

District **12** Bridge Type **STEEL/TRUSS/MOVABLE - LIFT** Type Service **1** **1** **5**

CUYAHOGA RIVER

00 NO REMARKS FOUND FOR THIS INSPECTION.