

The National Bridge Inventory contains data submitted by state transportation departments to the Federal Highway Administration in coded format.
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Basic Information

Ohio [39] Huron County [077] New Haven [54712] 0.4 MI NORTH OF MAY ROAD 41-01-23 = 41.023056 082-43-04 = - 82.717778

3946479 Highway agency district 3 Owner County Highway Agency [02] Maintenance responsibility County Highway Agency [02]

Route #Num! BUCKINGHAM 181 Toll On free road [3] Features intersected BUCKINGHAM / MARSH RUN

Design - main Steel [3] Design - approach Kilometerpoint 0 km = 0.0 mi

1 Truss - Thru [10] 0 Other [00] Year built 1922 Year reconstructed 1991

Skew angle 20 Structure Flared Historical significance Bridge is not eligible for the NRHP. [5]

Total length 18 m = 59.1 ft Length of maximum span 16.5 m = 54.1 ft Deck width, out-to-out 6.2 m = 20.3 ft Bridge roadway width, curb-to-curb 5.2 m = 17.1 ft

Inventory Route, Total Horizontal Clearance 5.2 m = 17.1 ft Curb or sidewalk width - left 0 m = 0.0 ft Curb or sidewalk width - right 0 m = 0.0 ft

Deck structure type Wood or Timber [8]

Type of wearing surface Bituminous [6]

Deck protection

Type of membrane/wearing surface

Weight Limits

Bypass, detour length 1.3 km = 0.8 mi Method to determine inventory rating Load Factor(LF) [1] Inventory rating 32.4 metric ton = 35.6 tons

Method to determine operating rating Load Factor(LF) [1] 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	609	Average daily truck traffi	5	%	Year	2004	Future average daily traffic	845	Year	2030
Road classification	Local (Rural) [09]		Lanes on structure	2		Approach roadway width	7 m = 23.0 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	Not applicable, no waterway. [N]			
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			Work to be done by contract [1]		
Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]	Bridge improvement cost	\$53,000	Roadway improvement cost	\$5,000		
	Length of structure improvement	26.8 m = 87.9 ft		Total project cost	\$61,000	
	Year of improvement cost estimate	2003				
	Border bridge - state			Border bridge - percent responsibility of other state		
	Border bridge - structure number					

Inspection and Sufficiency

Structure status	Posted for load [P]	Appraisal ratings - structural	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - superstructure	Poor [4]	Appraisal ratings - roadway alignment	Superior to present desirable criteria [9]
Condition ratings - substructure	Poor [4]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Satisfactory [6]		
Scour	Bridge foundations (including piles) on dry land well above flood water elevations. [9]		
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	Superior to present desirable criteria [9]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	45.2
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions			
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
Inspection date	October 2010 [1010]	Designated inspection frequency	12 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	October 2010 [1010]
Other special inspection	Not needed [N]	Other special inspection date	

Unit of Measure: **English**
Structure File Number **3946479**
Sufficiency Rating: **45.2 SD**

Bridge Inventory Information
Inventory Bridge Number: **HUR T0181 0043**
ON BUCKINGHAM / MARSH RUN

Report Date **09/04/2012** BM-191 Page: 1 of 2
BR. Type STEEL / TRUSS / PONY (TRUSS)
Date of Last Inventory Update: **03/09/2011**

District: **03** County **HURON** (101) Location: **0.4 MI NORTH OF MAY ROAD** (102) Facility Carried: **BUCKINGHAM 181**
(2) FIPS Code: **NEW HAVEN TWP** (103) Route On Bridge: **TOWNSHIP** (104) Route Under Bridge: **NON-HIGHWAY**
(9) Direction of Traffic: **2-WAY TRAFFIC** (10) Temporary: **N** (11) Truck Network: **N** (12) Parallel: **N**
(95) Insp: **COUNTY** (96) Maint: **COUNTY** (97) Routine: **COUNTY** (100) Type Serv: (On): **HIGHWAY** (Under): **WATERWAY**

Inventory Route Data
(3) Route On/Under: **ON** Hwy Sys: **COUNTY/TOWNSHIP HIGHWAY** (63) Main Spans Number: 1 Type: **STEEL / TRUSS / PONY (TRUSS)**
Route No.: **T0181** Dir: Des: **MAINLINE** Pref: Approach Spans Number: 0 Type: **NONE / NONE / NONE**
Total Spans: 1 (65) Max Span: **54** Ft (66) Overall Leng: **59** Ft

(4) Feature Intersected: **BUCKINGHAM / MARSH RUN** (70) Substructure (71) Foundation and Scour Information
(5) County: **NHT** Mileage: **0043** Special Desig: Abut-Rear Matl: **CONCRETE** Type: **SOLID WALL** Fnd: **SPREAD FOOTING**
(6) Avg. Daily Traffic(ADT): **609** (7) ADT Year: **2004** Abut-Fwd Matl: **CONCRETE** Type: **PROPRIETARY WALL W/STUB T** Fnd: **SPREAD FOOTING**
(8) Truck Traf: **31** (14) NHS: **NO - X** (15) Corridor: **N** Pier-Pred Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
(16) Functional Class: **LOCAL ROAD-RURAL** (19) Strahnt: **Not Applicable** Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
Pier-Other Matl: **NONE** Type: **NONE** Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**

Intersected Route Data
(22) Route On/Under: Hwy Sys: No of Piers Predominate: **NN** Other: **NN** Other: **NN**
Route No.: Dir: Des: Pref: (86) Stream Velocity: **000.0** (74) Scour: **FND/PILES ABOVE FLOOD WATER ELEVATIONS**
(23) Feature Intersected: (189) Dive: **N Freq: 0** Probe: **Y Freq: 12** (75) Chan Prot: **NONE**
(24) County: Mileage: Special Desig: (189) Date of last Dive Insp: (152) Drainage Area: **011** Sq Mi
(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 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

Clearance On the Bridge
(154) Min Hriz on Bridge: NC: **0.0** Ft Card: **17.2** Ft
(155) Prac Max Vert On Brg: **9999.9** Ft
(67) Min Vrt Clr On Brg: NC: **0.0** Ft Card: **9999.9** Ft
(80) Min Latl Clr: NC: **0.0 / 0.0** Ft Card: **3.2 / 3.5** Ft
(81) Vrt Clr Lft: **0.0** Ft

Structure Information
(38) Bypass Length: **08** Miles
(39) Latitude: **41 Deg 1.4 Min** Longitude: **82 Deg 43.1 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1922** (42) Major Rehabilitation: **01/01/1991**
(43) No. Lanes On: **2** No. Lanes Under: **0**
(44) Horiz Curve: **00 Deg. D00M Min.** (45) Skew: **20** Deg
(49) App. Rdw Width: **23** Ft (50) Brg. Rdw Width: **17.2** Ft
(51) Deck Width: **20.2** Ft Deck Area: **1195** Sq. Ft
(52) Median Type: **NONE / NON BARRIE / NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: (left) **0** Ft (right) **0** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **NONE** Type: **NONE**
(Right) Matl: **NONE** Type: **NONE**
(56) Flared: **N** (57) Composite: **non-composite**
(58) Railing: **OTHER**
(59) Deck Drainage: **OVER THE SIDE (W/O DRIP STRIP)**
(60) Deck Type: **LAMINATED TIMBER STRIP**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **BITUM (ASPHLT CONCRT)**
Thickness: **2.0** in (119) Date of Wearing Surface: **01/01/2000**
Slope Protection: **NONE-NATURAL PROTECTION(GRASS,BUSHES)**

Load Rating Information (88-89) Appraisal
(48) Design Load: **H/20** (Including calculated items)
(83) Operating: **36** Ton
Inventory: **26** Ton
Ohio Percent of Legal Load **100** (88) Waterway Adequacy **9**
Year of Rating: **2010** (89) Approach Alignment **9**
(84) Analysis: **LOAD FACTOR (LF)** Calc Gen Appraisal: **4**
(85) Rate Soft: **OTHER** Analyzed by: **BLN** Calc Deck Geometry: **2**
Analysis on Bars: **NOT ON BARS [DEFAULT]** Calc Underclearance: **N**

Approach Information
(109) Approach Guardrail: **NONE**
(110) Approach Pavement: **BITUMINOUS** (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 **N/A (CULVERTS, TRUSSES, ETC.)** (122) Moment Plate: **NONE**
(169) Expansion Joint: **NONE**
(124) Bearing Devices: **SLIDING (BRONZE)/NONE**
(126) Navigation: **Control- X** Vert Clr: **0.0** Ft Horiz Clear: **0.0** Ft
(193) Spec Insp: **N** Freq: **0** Date:
(188) Fracture Critical Insp: **Y** Freq: **24** Date: **2010-10-21**
(138) Long Member: **TWO TRUSSES (WELDED)** (135) Hinges: **NOT APPLICABLE**
(141) Structural Steel Memb: **UNKNOWN** (139) Framing: **NONE**
Railing: **UNKNOWN**
Paint: **OTHER**
Pay Wt: **79** pounds Prime Loc: **UNKNOWN**
Bridge Dedicated Name:

Unit of Measure: **English**
 Structure File Number **3946479**
 Sufficiency Rating: **45.2 SD**

Bridge Inventory Information
 Inventory Bridge Number: **HUR T0181 0043**
ON BUCKINGHAM / MARSH RUN

Report Date **09/04/2012** BM-191 Page: 2 of 2
 BR. Type **STEEL/TRUSS/PONY (TRUSS)**
 Date of Last Inventory Update: **03/09/2011**

General Information (Continued)				Original Plans Information			
(---) Hist Significance: NOT HISTORIC		(69) NBIS: Y		(142) Fabricator: OHIO BRIDGE			
(---) Hist Builder: UNKNOWN		Hist Build Year: 1922		(143) Contractor: HURON CO HWY			
(69) Hist Type: WARREN (RIVETED)				(144) Ohio Original Construction Project No.:			
(161) Special Features (see below):				(---) Microfilm Reel:			
(105) Border Bridge State: Resp % (106) SFN:				(151) Standard Drawing:			
Proposed Improvements		Programming Info		Aperture Cards: Orig: N Repair: N Fabr: N			
(90) Type Work: 31 - BRG/STR REPL--SUBSTD LD CAP OR RDW GEOM		PID Number:		Plan Information Available: 2FIELD MEASURED INFORMATION			
(90) Length: Ft		PID Status:		(153) Repair Projects			
(90) Bridge Cost (\$1000s): 0		PID Date:		1. / 020		2. / MMM	
(90) Roadway Cost (\$1000s): 0				4. 910000 / 003		5.	
(90) Total Project Cost (\$1000s): 0		(90) Year:		7.		8.	
(91) Future ADT (On Bridge): 0		(92) Year of Future ADT: 2030		10.		9.	
Inspection Summary		(I-69) Survey Items		Utilities		Special Features	
(I-8) Deck: 6	Railings: 0 DOES NOT MEET CURRENT STANDARDS	(46) Electric: N	(161) Lighting: N				
(I-32) Superstructure: 4	Transitions: 0 DOES NOT MEET CURRENT STANDARDS	Gas: N	Fencing: N				
(I-42) Substructure: 4	Guardrail: 0 DOES NOT MEET CURRENT STANDARDS	Sanitary Sewer: N	Glare-Screen: N				
(I-50) Culvert:	Rail Ends: 0 DOES NOT MEET CURRENT STANDARDS	Telephone: N	Splash-Guard: N				
(I-54) Channel: 7	In Depth: 1 MEETS CURRENT STANDARDS	TV Cable: N	Catwalks: N				
(I-60) Approaches: 5	Fracture Critical: 1 MEETS CURRENT STANDARDS	Water: N	Other-Feat: N				
(I-66) General Appraisal: 4	Scour Critical: N NONE N/A	Other: N	(184) Signs-on: N				
(I-66) Operational Status: A	Critical Findings: N NONE N/A		Signs-Under: N				
Inspection Date: 07/16/2011	Insp. Update Date: 12/02/2011		(162) Fence-Ht: 0.0 Ft				
(94) Desig Insp Freq: 12 Months			(163) Noise Barr: N				
SFNs Replacing this retired bridge: -				INV Field Bridge Marker: HUR-T0181-0043 -			
SFNs That where replaced by this bridge: -				INT Field Bridge Marker: ---			
This bridge was retired and copied to:							
The bridge was copied from:							

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

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Bridge Number **HUR T0181 0043**
CO ROUTE UNIT

NEW HAVEN TWP

Date Built **07/01/1922 - 1991**

1 Structure File Number 7

District **03** Bridge Type **STEEL/TRUSS/PONY (TRUSS)**

Type Service **1 15 BUCKINGHAM / MARSH RUN**

HUR

DECK		Out/Out 20.2	2	THCK = 2.0		2
1. Floor	2-LAMINATED TIMBER STRIP	8	2	2. Wearing Surface	6-BITUM (ASPHLT CONCRT)	41
		N-NONE		W.S. Date = 01/01/2000		
3. Curbs, Sidewalks, Walkways		N-NONE	9	4. Median		42
5. Railing		0-OTHER	10	6. Drainage	1-OVER THE SIDE (W/O DRI	43
7. Expansion Joints		N-NONE	11	8. Summary		44
SUPERSTRUCTURE		MAX.SPAN=54	3			
9. Alignment			12	10. Beams/Girders/Slab	N-N/A (CULVERTS, TRUSSES	45
		TOT.LGTH=59				
11. Diaphragms or Crossframes			13	12. Joists/Stringers		46
13. Floor Beams			14	14. Floor Beam Connections		47
15. Verticals			15	16. Diagonals		48
17. End Posts			16	18. Top Chord		49
19. Lower Chord			17	20. Lower Lateral Bracing		50
21. Top Lateral Bracing			18	22. Sway Bracing		51
23. Portals			19	24. Bearing Devices	3-SLIDING (BRONZE) N-NONE	52
25. Arch			20	26. Arch Columns or Hangers		53
27. Spandrel Walls			21	28. Protective Coating System	TYPE = 0-OTHER DATE = 01/01/1993	54
29. Pins/Hangers/Hinges			22	30. Fatigue Prone Connections		55
31. Live Load Response			23	32. Summary		56
SUBSTRUCTURE		2-CONCRETE	2	PIERS=0 SPANS = 1		3
33. Abutments		2-CONCRETE	24	34. Abutment Seats		57
35. Piers		TYPE = N-NONE	25	36. Pier Seats		58
37. Backwalls			26	38. Wingwalls	ABUTMENT:=SPREAD / SPREAD	59
39. Fenders and Dolphins			27	40. Scour	9-FND/PILES ABOVE FLOOD	60
41. Slope Protection		N-NONE	28	42. Summary		62
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	52. Protection	N-NONE	67
53. Waterway Adequacy			34	54. Summary		68
APPROACHES						
55. Pavement		2-BITUMINOUS	35	56. Approach Slabs		69
57. Guardrail		N-NONE	36	58. Relief Joints		70
59. Embankment		BRDG.WIDTH=17.2	37	60. Summary		71
GENERAL						
61. Navigation Lights			38	62. Warning Signs	ROUTINE.RESP: 3-COUNTY MAINT.RESP: 3-COUNTY	72
63. Sign Supports		MVC ON=9999 UND=0000	39	64. Utilities		73
65. Vertical Clearance			40	66. General Appraisal & Operational Status		74

67. INSPECTED BY

68. REVIEWED BY

SIGNED

5	5	4	8	8
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76 PE

J	W
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78 INITIALS

SIGNED

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81 PE

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83 INITIALS

DOT 2852

DECK AREA 1,195

Date

0	7	1	6	1	1
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86

91

Date

0	0	0	0	1	1	N	N
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92

69 Survey

99

Date

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100

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BRIDGE INSPECTION REPORT

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1 Structure File Number 7

Bridge Number **HUR** **T0181** **0043**
CO ROUTE UNIT

Date Built 07/01/1922 - 1991

District **03** Bridge Type **STEEL/TRUSS/PONY (TRUSS)**

Type Service **1 15**

BUCKINGHAM / MARSH RUN

00 NO REMARKS FOUND FOR THIS INSPECTION.
