

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]	Columbiana County [029]	Middleton [49784]	1.3 MI S C428	40-43-42.00 = 40.728333	080-36-42.00 = -80.611667
1537741	Highway agency district 11	Owner County Highway Agency [02]	Maintenance responsibility	County Highway Agency [02]	
Route #Num!	ECHO DELL RD 929	Toll On free road [3]	Features intersected	LITTLE BEAVER CREEK	
Design - main	Steel [3]	Design - approach	Kilometerpoint	0 km = 0.0 mi	
1	Truss - Thru [10]	0	Year built	1909	Year reconstructed 2009
		Other [00]	Skew angle	0	Structure Flared
			Historical significance	Bridge is eligible for the NRHP. [2]	
Total length	39.3 m = 128.9 ft	Length of maximum span	38.7 m = 127.0 ft	Deck width, out-to-out	4.9 m = 16.1 ft
Inventory Route, Total Horizontal Clearance	3.8 m = 12.5 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 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	Method to determine inventory rating		Inventory rating	3.6 metric ton = 4.0 tons
1 km = 0.6 mi	Method to determine operating rating		Operating rating	4.9 metric ton = 5.4 tons
	Bridge posting		Design Load	

Functional Details

Average Daily Traffic	80	Average daily truck traffi	0	%	Year	1951	Future average daily traffic	111	Year	2032
Road classification	Local (Rural) [09]		Lanes on structure	1		Approach roadway width	6.1 m = 20.0 ft			
Type of service on bridge	Highway [1]		Direction of traffic	One lane bridge for 2 - way traffic [3]		Bridge median				
Parallel structure designatio	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	3.81 m = 12.5 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 owner's forces [2]				
Bridge rehabilitation because of general structure deterioration or inadequate strength. [35]	Bridge improvement cost	\$8,000	Roadway improvement cost	\$1,000		
	Length of structure improvement	4 m = 13.1 ft		Total project cost	\$9,000	
	Year of improvement cost estimate	2006				
	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

Basically intolerable requiring high priority of corrective action [3]

Condition ratings - superstructure

Satisfactory [6]

Appraisal ratings -
roadway alignment

Somewhat better than minimum adequacy to tolerate being left in place as is [5]

Condition ratings - substructure

Good [7]

Appraisal ratings -
deck geometry

Basically intolerable requiring high priority of corrective action [3]

Condition ratings - deck

Good [7]

Scour

Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]

Channel and channel protection

Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition. [8]

Appraisal ratings - water adequacy

Equal to present desirable criteria [8]

Status evaluation

Pier or abutment protection

Sufficiency rating

23.3

Culverts

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

Traffic safety features - railings

Inspected feature meets currently acceptable standards. [1]

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

July 2013 [0713]

Designated inspection frequency

12

Months

Underwater inspection

Not needed [N]

Underwater inspection date

Fracture critical inspection

Every two years [Y24]

Fracture critical inspection date

August 2012 [0812]

Other special inspection

Not needed [N]

Other special inspection date

(203) Bridge (Dedicated) Name:

Structure File Number: 1537741

Sufficiency Rating: 024.9 Deficiency Rating: FO

BRIDGE INVENTORY AND APPRAISAL

Inventory Bridge Number: COL T0929 01050 32

LITTLE BEAVER CREEK

Report Date: 7/11/2018

Bridge Status: Active

(2) District: 11	(3) County: 15-COLUMBIANA	(9) Location: 1.3 Mi S C428	(7) Facility Carried: Echo Dell Rd 929
(4) FIPS Code: COL-T-49784-MIDDLETON TWP	Owner: COUNTY	(208) Route On Bridge: Township	(207) Route Under Bridge: Non Highway Traffic On Bridge (I.E.
(102) Direction of Traffic: 3 - One Lane Bridge For 2-Way	(103) Temporary Structure:	(110) Designated National Network: Not National Network	(101) Parallel: N
		(42A) Type Serv: (On): Highway	(42B) Type Serv (Under): Waterway

INVENTORY ROUTE DATA

(5A) Route On/Under: 1 - Route Carried "On" The Structure
(5B) Hwy Sys: 4 - County Highway (Township Highway)
(5D) Route No: T0929 (5E) Dir: Not Applic (5C) Des: Mainline
(6) Feature Int: Little Beaver Creek
(200) CL: 01050 (201)Spec Des:32 (209) Interstate Mile:
(29) Avg. Daily Traffic(ADT): 324 (30) ADT Year: 2015
(235) Truck Traf: 24 (210) Corridor: N (104) NHS: non-nhs bridge - 0
(26) Functional Class: rural - local (100) Strahnt: Not Strahnt

(45) Main Spans Number: 1 (43) Type: Steel/Truss/Thru
(46) Approach Spans Nbr: 0 (44) Type: None/None/None
(307) Total Spans: 1 (48) Max Span: 127.0 Ft (49) Overall Leng: 129.0 Ft

SUBSTRUCTURE

(370A) Record Type: (370B) Hwy Sys:
(370D) Route No: (370E) Dir: (370C) Des:
(373) Feature Int:
(382) CL: 0000 (371) Interstate Mile: (387) Special Desig:
(379) Avg. Daily Traffic(ADT): (380) ADT Year:
(381) Truck Traf: (384) Corridor: (378) NHS: Non-Nhs Bridge - 0
(375) Functional Class: (386) Strahnt:

Abut-Rear (532) Matl: Stone (531) Type: Solid Wall (533) Fnd: Other
Abut-Fwd (527) Matl: Stone (526) Type: Solid Wall (528) Fnd: Other
Pier-Pred (535) Matl: None (534) Type: None (536) Fnd: None (Such As Most Culverts)

INTERSECTED ROUTE DATA

(370A) Record Type: (370B) Hwy Sys:
(370D) Route No: (370E) Dir: (370C) Des:
(373) Feature Int:
(382) CL: 0000 (371) Interstate Mile: (387) Special Desig:
(379) Avg. Daily Traffic(ADT): (380) ADT Year:
(381) Truck Traf: (384) Corridor: (378) NHS: Non-Nhs Bridge - 0
(375) Functional Class: (386) Strahnt:

(663) Stream Velocity: 00000 fps (113) Scour: Bridge Foundations Determined To Be Stab
(92B) Underwater Inspection: N Freq: (655) Chan Prot: None
(93B) Date of last Underwater Insp: (657) Drainage Area: UUU Sq Mi

CLEARANCE ON THE BRIDGE

Min. Horiz on Bridge: (335) NC: 0.0 Ft (47) Card: 12.5 Ft
(53) Prac Max Vert On Brg: 12.5 Ft
Min Vrt Clr On Brg: (336) NC: 0.0 Ft (10) Card: 12.5 Ft
Min Latl Clr: (338) Right NC: 0.0 Ft (337) Right Card: 0.0 Ft
(340) Left NC: 0.0 Ft (339) Left Card: 0.0 Ft

CLEARANCE UNDER THE BRIDGE

Min. Horiz Under Clear: (326) NC: 0.0 Ft (325) Card: 0.0 Ft
(328) Prac Max Vrt Under Clear: 0.0 Ft
Min Vert Under Clear: (327) NC: 0.0 Ft (54) Card: 0.0 Ft
Min Lat Under Clear: (329) Right NC: 0.0 Ft (55) Right Card: 0.0 Ft
(330) Left NC: 0.0 Ft (56) Left Card: 0.0 Ft

STRUCTURE INFORMATION

(19) Bypass Length: 6.0 Miles
(16) Latitude: 40 Deg 43 Min 39.48 Sec (17) Longitude: 80 Deg 36 Min 40.48 Sec
(20) Toll: On Free Road, The Structure Is Toll Free
(263) Date Built: 7/1/1909 (264) Major Reconstruction Date: 2/12/2009
(28A) No. Lanes On: 1 (28B)No. Lanes Under: 0
(301) Horiz Curve: (34) Skew: 0 Deg
(32) App. Rdw Width: 20 Ft (51) Brg. Rdw Width: 12.5 Ft
(52) Deck Width: 16.2 Ft (424) Deck Area: 2088 Sq. Ft
(406) Median Type: /Non Barrier/No Joint
(33) Bridge Median: No Median
Sidewalks: (50A) Left 0.0 Ft (50B) Right 0.0 Ft
Type Curb or Sidewalk:
(427) Left Matl: None (428) Type: None Or N/A (Rr, Pedestrian, Etc.)
(429) Right Matl: None (430) Type: None Or N/A (Rr, Pedestrian, Etc.)
(35) Flared: 0 (408) Composite: N - Non-Composite
(407) Railing: Steel Guardrail On Steel, Concrete Or Ti
(409) Deck Drainage: Over The Side (With Drip Strip)

LOAD RATING INFORMATION

(31) Design Load: UNKNOWN
(64) Opr Rat Fact/Ton: 6.000
(66) Inv Rat Fact/Ton: 5.000
(734) Ohio Percent of Legal Load: 15
(704) Year of Rating: 2016 (708) Rate Soft: Assigned Rating (No
(63) Opr Rat Method: Field Evaluation And Documented Engineer
(65) Inv Rat Method: Field Evaluation And Documented Engineer
Load Rater: (705) Troy (706) Graft (707) PE#: 65578

APPRAISAL

(71) Waterway Adequacy: 8 Equal to present desirable criteria
(72) Approach Alignment: 5 Somewhat better than minimum adequac
(67) Calc Str Appraisal: 3 - Intolerable - high priority of corrective acti
(68) Calc Deck Geometry: 2 - Intolerable - high priority of replacemen
(69) Calc Underclearance: N - Not Applicable

APPROACH INFORMATION

(401) Approach Guardrail: Steel Beam
(403) Approach Pavement: Bituminous (402) Grade: Good

CULVERT INFORMATION

(575) Culvert Type: Not A Culvert Or Rigid Frame (578) Length: 0.0 Ft
(580) Depth of Fill: 0.0 Ft (582) Headwalls: None Or Not Applicable (Not A Culvert)

GENERAL INFORMATION

(475) Main Member: Not Applicable (Culverts, Trusses, Arche (477) Moment Plate: No Moment Plates
(414) Expansion Joint: Open (Unarmored)
(453) Bearing Devices: Other
(38) Navigation: 0 (39) Nav Vert Clr: 0.0 Ft (40) Nav Horiz Clear: 0.0 Ft

(203) Bridge (Dedicated) Name:		BRIDGE INVENTORY AND APPRAISAL		Report Date: 7/11/2018
Structure File Number: 1537741		Inventory Bridge Number: COL T0929 01050 32		
Sufficiency Rating: 024.9 Deficiency Rating: FO		LITTLE BEAVER CREEK		Bridge Status: Active
(107) Deck Type: Steel Grid - Open	(92C) Spec Insp: N	Freq: 0	(93C) Special Inspection Date:	
Deck Protection: (108B) External: Not Applicable (Only For Bridges For No	(92A) Fracture Critical Insp: Y	Freq: 24	(93A) Fracture Critical Feature Inspection Date: 8/2/2016	
(108C) Internal: Not Applicable (Applies Only To Bridges	(474) Main Structure System: Two Trusses (Riveted)		(468) Hinges: Pins, Pin Plates	
(108A) Wearing Surface: Other	(487) Structural Steel Memb: Unknown		(465) Framing: None Or Not Applicable	
(423) Thickness: 4.0 in (422) Date of Wearing Surface: 2/12/2009	(482) Paint: Other Paint		(426) Bridge Railing Steel: U	
(547) Slope Protection: None	(483) PCS Date: 6/20/1976			
GENERAL INFORMATION (CONTINUED)		ORIGINAL PLANS INFORMATION		
(37) Hist Significance: Eligible For National Register Of Histor	(250) Fabricator:			
(112) NBIS: Y	(249) Contractor:			
(842) Hist/Designer: Central Construction Co	(248) Ohio Original Construction Project No:			
(827) Hist Build Year: 1909	(252) Microfilm Reel:			
(828) Hist Type: Pratt (Pinned)	(251) Standard Drawing:			
(98A) Border Bridge State:	Aperture Cards:			
(98B) Border Bridge Resp:	(246) Orig: N			
(99) Border Bridge SFN:	(247) Repair: N			
	(245) Fabr: N			
PROPOSED IMPROVEMENTS		(709) Rating Source: 0 No Plans Or Information Available For Lo		
(114) Future ADT (On Bridge): 450	(115) Year of Future ADT: 2038			
INSPECTION SUMMARY		UTILITIES		SPECIAL FEATURES
(58) Deck: 7	(36A) Railings: Meets Acceptable Standards	(265) Electric Line: N	(283) Lighting: N	
(59) Superstructure: 6	(36B) Transitions: Meets Acceptable Standards	(266) Gas Line: N	(431) Fence: N	
(60) Substructure: 7	(36C) Guardrail: Meets Acceptable Standards	(269) Sanitary Sewer: N	(433) Glare-Screen: N	
(62) Culvert: N	(36D) Guardrail Ends: Meets Acceptable Standards	(267) Telephone Line: N	(436) Splash-Guard: N	
(61) Channel: 8	(219) Temporary Barrier: N	(268) TV Cable: N	(459) Catwalks: N	
(C6) Approaches: 8	(223) Temporary Shoring: N	(270) Water Line: N	(271) Other-Feat: N	
General Appraisal: 6	(224) Temporary Sub Decking: N	(271) Other Utilities: N	(279) Signs-On: N	
(41) Operational Status: P			(281) Signs-Under: N	
(90) Inspection date: 9/19/2017		Insp 1st: 3 - County Agency	(432) Fence-Ht on Bridge: 0.0 FT	
(91) Desig Insp Freq: 12 Mos		2nd:	(434) Noise Barrier Walls: N	
(253) SFNs Replacing this retired bridge:		3rd:		
(255) SFNs That were replaced by this bridge:		(21) Major Maint 1st: 3 - County Agency		
		2nd:		
		3rd:		
		(225) Routine Maint 1st: 3 - County Agency		
		2nd:		
		3rd:		

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

STRUCTURE FILE NUMBER: 1537741 COL T0929 01050 COL-T-49784-MIDDLETON TWP DATE BUILT 07/01/1909 - 2009
CO Route SLM FIPS

District 11 STEEL/TRUSS/THRU Type of Service 1 15 LITTLE BEAVER CREEK 32
SD COL

DECK

1. Floor	Out/Out 16.2 5-STEEL GRID - OPEN	1	2. Wearing Surface	THCK= 4.0 0-OTHER	1
3. Curbs, Sidewalks & Walkways	N-NONE N-NONE		4. Median	W.S. Date = 02/12/2009 0-NO MEDIAN	
5. Railing	7-STEEL GUARDRAIL ON STEEL, CONCRETE OR TI	1	6. Drainage	6-OVER THE SIDE (WITH DRIP STRIP)	1
7. Expansion Joints	6-OPEN (UNARMORED)	1	8. SUMMARY	Deck Area: 2,088	7

SUPERSTRUCTURE

9. Alignment of Members	MAX.SPAN.LENGTH = 127	1	10. Beams/Girders/Slab	N-NOT APPLICABLE (CULVERTS, TRUSSES, ARCHE	
11. Diaphragms or Cross Frames	TOT.LGTH = 129		12. Joist/Stringers		1
13. Floorbeams		1	14. Floorbeam Connections		
15. Verticals		1	16. Diagonals		2
17. End posts			18. Upper Chord		2
19. Lower Chord		1	20. Gusset Plates		
21. Lateral Bracing		1	22. Sway Bracing		1
23. Portals			24. Bearing Devices	0-OTHER N-NONE	1
25. Arch			26. Arch Columns or Hangers		
27. Spandrel Walls			28. Protective Coating System (PCS)	TYPE: 0OTHER PAINT DATE = 06/20/1976	1
29. Pins/Hangers/Hinges	ADT: 324 TRUCK: 24 YEAR: 2015	2	30. Fatigue Prone Detail (E & E')		
31. Live Load Response (E or S)		S	32. SUMMARY		6

SUBSTRUCTURE

33. Abutments	1-STONE 1-STONE	1	34. Abutment Seats	PIERS= # OF SPANS=1	1
35. Piers	TYPE = N-NONE		36. Pier Seats		
37. Backwalls		1	38. Wingwalls	ABUTMENT:=OTHER/OTHER	1
39. Fenders and Dolphins			40. Scour (Insp Type - 1, 2, 3)	8-BRIDGE FOUNDATIONS DETERMINED TO BE STAB 1	1
41. Slope Protection	N-NONE		42. SUMMARY	DIVE DT= N/A	7

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		1	52. Protection	N-NONE	
53. Hydraulic Opening		1	54. SUMMARY		8

APPROACHES

55. Pavement	2-BITUMINOUS	1	56. Approach Slabs		1
57. Guardrail	1-STEEL BEAM	1	58. Relief Joint		
59. Embankment	BRDG.WIDTH=12.5	1	60. SUMMARY	PCT.LEGAL= 15	8

GENERAL

61. Navigation Lights			62. Warning Signs	ROUTINE.RESP: 3-COUNTY AGENCY MAINT.RESP: 3-COUNTY AGENCY	1
63. Sign Supports	MVC ON=1206 UND=0000		64. Utilities		
65. Vertical Clearance (1, 2-change, N)			66. General Appraisal & Operational Status		6 P

67. INSPECTED BY

68. REVIEWED BY

Print First & Last Name
Inspected Date: 9/19/2017

PE Number

TH Initial							
1	1	1	1				

Print First & Last Name

65.578
PE Number

TG
Initial

Reviewed Date: 1/8/2018

69. Survey (1, 0, N)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

STRUCTURE FILE NUMBER: 1537741

COL
CO

T0929
Route

01050
SLM

COL-T-49784-MIDDLETON TWP
FIPS

DATE BUILT 07/01/1909 - 2009

District 11 STEEL/TRUSS/THRU

Type of Service 1 15 LITTLE BEAVER CREEK

32
SD COL