# OHIO DEPARTMENT OF TRANSPORTATION

# **BRIDGE INSPECTION REPORT**

1 8 0 1 5 0 3  STRUCTURE FILE NUMBER	CUY	00010 ROUTE	1613 UNIT	YEAR BU	ILT <u>1932</u>
	43	TYPE OF SERVICE	57	CUY RIVER VA	ALLEY & FI RR
DECK					-
1. Floor	3	2. Wearing Surface			1
3. Curbs, Sidewalks & Walkways	1	4. Median			
5. Railing		6. Drainage			1
7. Expansion Joints	2	8. SUMMARY			5
SUPERSTRUCTURE					
Alignment of Members	1	10. Beams/Girders/S	Slab		1
11. Diaphragms or Cross frames	1	12. Joists/Stringers			2
13. Floorbeams	2	14. Floorbeam Conr	nections		1
	2	16. Diagonals	IÇGÜÖN IS		2
15. Verticals	<b>-</b>	18. Upper Chord			1
17. End posts		20. Gusset Plates			3
19. Lower Chord	3				
21. Lateral Bracing	1	22. Sway Bracing	_		1 2
23. Portals	_	24. Bearing Devices			
25. Arch		26. Arch Columns of	-		<u> </u>
27. Spandrel Walls		28. Protective Coa		PCS)	7
29. Pins/Hangers/Hinges	2	30. Fatigue Prone [	Detail (E & E')		
31. Live Load Response (E or S)	S	32. SUMMARY			4
SUBSTRUCTURE					
33. Abutments	1	34. Abutment Seats	3		1
35. Piers	2	36. Pier Seats			_1_
37. Backwalls	1	38. Wingwalls			1
39. Fenders and Dolphins	4	40. Scour (Insp Typ	oe – 1, 2, 3)		1 2
41. Slope Protection		42. SUMMARY			6
CULVERT					
43. General		44. Alignment			
45. Shape		46. Seams			
47. Headwall or Endwalls		48. Scour (Insp Typ	e - 1,2,3)		
49. Abutments		50. SUMMARY			
CHANNEL					
51. Alignment	2	52. Protection			2
53. Hydraulic Opening	1	54. SUMMARY			6
APPROACHES					
55. Pavement	1	56. Approach Slabs			1
57. Guardrail		58. Relief Joint			
59. Embankment		60. SUMMARY			8
GENERAL 61. Navigation Lights		62. Warning Signs			
		64. Utilities			3
63. Sign Supports	N	66. General Apprai	isal & Oneratio	onal Status	4 A
65. Vertical Clearance (1, 2-change, N)	I IN				1714
67. Inspected By, First & Last Name		68. Reviewed By, F	not or Edot IVal	110	
7					
	.E.# 76258 🥌		5		P.E.# 69991
Anthony D. Koloze	E Number	Wesley	R. Weir, P.E.		PE Number
Date 11/16/2012 1 1	1 1	0 0 0	N	Date	12/19/2012
7,11,012012	69. Survey			-	

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### **BRIDGE INSPECTION REPORT**

1	8	0	1	5	0	3	1	CUY	00010	1613	YEAR BUILT 1932
	S	TRUCTU	RE FILE	NUMBI	R		i.	со	ROUTE	UNIT	
DIST	1	2	BRI	DGE TY	PE		343		TYPE OF SERVICE	5 7	CUY RIVER VALLEY & FI RR

#### Deck

- 1. The east cellular unit underside of deck exhibits a 10' diameter spall with 100% section loss to 7 consecutive transverse bars and spalls with exposed rebar exhibiting minor section loss over 10% of the deck area. The main truss spans deck soffit exhibits spalls with exposed rebar in isolated locations over up to 5% of total deck area, and transverse cracking at 10' spacings with efflorescence. The utility deck soffit exhibits widespread spalling of the 1" to 2" thick concrete that was poured below the underside of floorbeam top flanges, which represents potential falling hazards over the streets and industrial yard below.
- The north sidewalk was being modified for the addition of a bike lane at the time of inspection and was not fully accessible
- Expansion joints were being rehabbed at the time of inspection and could not be inspected. Previous inspections
  noted areas of torn neoprene glands at isolated expansion joints.

## Superstructure

- 12. The first interior stringers adjacent to Truss A and D of the main truss spans exhibit isolated holed-through sections and minor pitting (cleaned and painted) on the web and bottom flanges.
- 13. The floorbeams exhibit isolated holed-through sections and minor pitting (cleaned and painted) on the web and web stiffeners adjacent to Truss A and D at joint locations.
- 15. Verticals exhibit moderate section loss (cleaned and painted) up to 1/4" at isolated locations. Pack rust between web plates and flange angles is beginning to reactivate.
- 16. Moderate to advanced section loss was noted to diagonal member webs with up to 1/4" pitting at gusset plate interfaces (cleaned and painted). Pack rust up to 3/4" was noted between web plates and flanges.
- 19. Moderate section loss is typical with isolated areas of advanced loss to web plates, bottom flange angles, and rivet heads. Pack rust is beginning to reactivate in several locations, mainly between web plates and top flange angles.
- 20. Up to 10% section loss is typical thoughout gusset plates with isolated areas of advanced section loss up to 50%. Lower chord gusset plates exhibit average section loss of 20% along the interface with lower chord members. Gusset plate CL70S exhibits a lamellar split on the west free edge below the diagonal, reducing the effective gusset plate thickness to 1/4" remaining.
- Isolated bearing pins exhibit moderate pitting and pack rust between bearing castings and gusset plates.
- Rust staining and isolated paint failures with activating rust is typical at joint locations.
- 29. Pins exhibit pack rust up to 1" between web plates and gusset plates in isolated locations, preventing sliding pins from fully bearing on chord members. Lower chord sliding pins at Panel Points AL17 and BL41 appear to be frozen as a result of pack rust. Several pins exhibit advanced wear up to 1/2" along one-third of the pin diameter.
- 30. Utility deck floorbeams exhibit fatigue cracks due to lack of radial coping at truss connections. Isolated cracks in floorbeams have not been arrested. Previously noted cracks have not propagated since the 2011 inspection.

## Substructure

- 35. Large spalls with exposed rebar are typical throughout architectural pier towers above truss bearings. Pier walls exhibit hairline cracks with rust staining and isolated corner spalls along outside corbels.
- The fender system has failed due to severe timber rot and collision damage.

## Channel

- 51. Channel has a sharp bend upstream and downstream of the bridge.
- 52. The west bank sheet piling is washed out 200 yards north (downstream) of the bridge.

### General

The light poles were in the process of being replaced as part of the rehabilitation being performed during the inspection. Previous inspections noted widespread cracking with isolated spalls and numerous missing access covers for electrical boxes on the precast concrete light poles mounted outside bridge railing. During the current inspection, a precast concrete light pole on the west approach was noted to have collision damage. Several decorative pier lights were noted to be damaged or missing.