

OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

1	8	3	0	1	4	7	CUY	00069	0857	YEAR BUILT	1925
STRUCTURE FILE NUMBER							CO	ROUTE	UNIT	1983	
DIST	12	BRIDGE TYPE	CONCR/ARCH/DECK			TYPE OF SERVICE	55	ROCKY RIVER, PARK & ROAD			

DECK DECK AREA:70065						
1. Floor	2,200 SF Spalls/Delams	3	2. Wearing Surface	Cracks/Delams	2002 MSMC	3
3. Curbs, Sidewalks & Walkways	up to 1/2" offset	1	4. Median			
5. Railing	Conc. Post & Panel	1	6. Drainage	N Downspout Plugged	Scuppers	3
7. Expansion Joints	Armor: Spalled, Seal: Torn	2	8. SUMMARY			4

SUPERSTRUCTURE		MAX. SPAN = 220	TOT. LGTH = 865		
9. Alignment of Members		1	10. Beams/Girders/Slab		2
11. Diaphragms or Cross frames	Spalls/Delams	2	12. Joists/Stringers		
13. Floorbeams	Spalls/Delams	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		
25. Arch	Rib Arch: Spalls/Delams	3	26. Arch Columns or Hangers	Spalls/Delams	3
27. Spandrel Walls		2	28. Protective Coating System (PCS)		
29. Pins/Hangers/Hinges			30. Fatigue Prone Detail (E & E')		
31. Live Load Response (E or S)		S	32. SUMMARY		4

SUBSTRUCTURE		SPANS = 5			
33. Abutments		2	34. Abutment Seats		
35. Piers	P1 & P2:~600 SF Spalls/Delams Each	3	36. Pier Seats		
37. Backwalls		2	38. Wingwalls		1
39. Fenders and Dolphins			40. Scour (Insp Type - 1, 2, 3)	P2: E Edge Exposed	1
41. Slope Protection		2	42. SUMMARY		4

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

CHANNEL						
51. Alignment		1	52. Protection	Concrete Slabs	At Arch Pier#2: Shifted	2
53. Hydraulic Opening		1	54. SUMMARY			6

APPROACHES		PCT. LEGAL = 150			
55. Pavement	Sealed Cracks	1	56. Approach Slabs		
57. Guardrail		3	58. Relief Joint		2
59. Embankment		1	60. SUMMARY		5

GENERAL		MVC ON =9999	UND 0000	MAINT. RESP: 3-COUNTY	
61. Navigation Lights			62. Warning Signs	Endmarkers	1
63. Sign Supports			64. Utilities	Water	2
65. Vertical Clearance (1, 2-change, N)	N		66. General Appraisal & Operational Status		4

67. Inspected By, First & Last Name	68. Reviewed By, First & Last Name
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	P.E.# 77409		P.E.# 69991
Nicholas R. Fisco, P.E.	PE Number	Wesley R. Weir, P.E.	PE Number

Date	12/7/2013	0 0 0 0 N N N N	Date	12/9/2013
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69. Survey (1, 0, N)

Deck:

- **Floor:** Arch and APPR span decks have scattered transverse leaking cracks with scattered spalls/DELAMs along the cracks (Total ~550 SF). Center LONGL CJ in bay 2 leaks. The deck is spalled/DELAM up to 4' wide with corroded REINF along almost the entire CJ in arch and APPR spans (Total ~2,000 SF).
- **Wearing Surface:** Many map cracked areas and over 1,500 SF of DELAMs (most at the START end). Extensively map cracked, settled and breaking up between START end and EXP JT 1. Map cracked and DELAM ~300 SF in RIGHT lanes of START arch span. Majority of WS in LEFT lanes of arch span 1 is map cracked and has scattered DELAMs. Both gutter lines have short, transverse, hairline cracks spaced every 1'-2'. LEFT lanes at FINISH ABUT have numerous short LONGL cracks.
- **Curbs/Sidewalks:** Both curb plates are corroded. **Sidewalks:** LEFT: Hairline transverse cracks at FINISH-LEFT overlook. RIGHT: Hairline LONGL cracks on west half of EXP JT 2; walk on east half of joint is ½" higher; Hairline LONGL cracks on west half of EXP JT 3; walk on west half of joint is ¼" higher. Cantilever Walk Beams have scattered vertical leaking cracks, numerous (>5 per beam) small spalls at vertical REINF too close to surface and ~400 SF of scattered spalls/DELAMs.
- **Railing:** Scattered rust stains. One or both lower ends of railing at EXP JTs are cracked: LEFT: At FINISH EXP JT (east cracked, west spalled). RIGHT: At START, START-intermediate and FINISH-intermediate EXP JTs.
- **Drainage:** START-RIGHT: Connection at top of jack arch at ABUT is leach stained and clean-out cover plate at rib arch lifted by debris. Bottom of downspout has heavy corrosion/section loss. FINISH: Concrete outlet flumes under downspouts at ABUT are failing due to combination of cracking, sliding, undermining and erosion of stream bank. Clean-out cover plate is missing on LEFT downspout. Bottom bracket of south drainpipe on P2 (river pier) is loose and is missing a U-clamp. 2 scuppers along LEFT walk are plugged.
- **Expansion Joints:** EXP JT 1: Actively leaks under the cantilevered sidewalk and at the juncture of the exterior edge of Bay 4. EXP JT 2: Bay 2: Seal is torn and hanging ~5 LF with a through hole ~5 LF x up to 1" wide. Bay 3 has a through hole ~18" long x up to 1" wide. EXP JT 3: Bay 3: Concrete is failing and water is actively leaking under sidewalk cantilever. Sidewalk EXP Joints: All are missing the joint seals (Either expandable foam is in place or nothing at all).

Superstructure:

- **Floor Beams:** Scattered rust stained cracks and spalls/DELAMs (~600 SF total). Scattered vertical corroded REINF exposed on numerous FBs. FINISH FB in bay 1, EXP JT 1, has a 8 SF DELAM on the interior vertical face. FINISH FB in bay 1, EXP JT 2, has a 10 SF spall/DELAM with exposed corroded REINF. START FB in bay 3, EXP JT 2, has a 36 SF spall/DELAM, with exposed corroded REINF, on the bottom face and interior vertical face up to 4" deep. FINISH FB in bay 3, EXP JT 2, has a 6 SF spall/DELAM, with exposed corroded REINF, on the bottom face and interior vertical face. START FB in bay 1, EXP JT 3, has a 44 SF spall/DELAM, with exposed corroded REINF, on the bottom face and interior vertical face up to 3" deep. FINISH FB in bay 1, EXP JT 3, has a 38 SF spall/DELAM, with exposed corroded REINF, on the bottom face and the interior vertical face up to 3" deep. Both FBs in bay 3, EXP JT 3, have a ~20 SF spall/DELAM, with exposed corroded REINF, on the interior vertical face. FBs at juncture of rib arch 1 and sidewalk cantilever at EXP JT 4 has a ~8 SF spall/DELAM, with exposed corroded REINF. START FB in bay 1, EXP JT 4, has a ~4 SF spall/DELAM, with exposed corroded REINF, on the interior vertical face. Rust stained on bottom face. FINISH FB in bay 1, EXP JT 4, has a ~8 SF spall/DELAM, with exposed corroded REINF, on the interior vertical face. FBs at juncture of rib arch 4 and sidewalk cantilever at EXP JT 4 has ~16 SF spall/DELAM, with five exposed corroded REINF, and a small through hole. START FB in bay 3, EXP JT 4, has a ~8 SF spall/DELAM, with exposed corroded REINF, on the bottom face. FINISH FB in bay 3, EXP JT 4, has a ~4 SF spall/DELAM, with exposed corroded REINF, on the bottom face. Bottom of both FBs are rust stained with hanging stalactites.
- **Arch:** LONGL cracks along top and bottom face and bottom edges of rib arches. Exterior Rib arches have up to 600 SF spalls/DELAMs in each span. Interior rib arches have up to 130 SF of spalls/DELAMs in each span. Total spalls/DELAMs on rib arches are over 3,000 SF. Concrete spalled/DELAM due to continuing corrosion of REINF (most spalls expose corroded REINF). Some REINF is 100% debonded: Span 1: Rib Arch 1: 7 REINF debonded. Rib Arch 2: 1 REINF debonded and 4 REINF partially debonded. Rib Arch 3: 6 REINF debonded and 8 REINF partially debonded. Rib Arch 4: 4 REINF debonded and 9 REINF partially debonded. Span 3: Rib Arch 1: 1 REINF debonded. Rib Arch 2: 1 REINF debonded. Rib Arch 3: 3 REINF debonded. Several edge cracks/spalls/DELAMs are over Metropark Parkway and all purpose trail.

START = WEST

- **Arch Columns:** Spalled/DELAM primarily under EXP JTs: Span 1: ~200 SF; Span 2: ~100 SF; Span 3: ~100 SF. Column struts spalled/DELAM: Span 1: 3 struts. Span 2: 5 struts (2-entire bottom face). Span 3: 4 struts.
- **Spandrel Wall/Jack Arches:** Scattered spalls/DELAMs (especially under EXP JTs): ~400 SF total. **Approach Jack Arches:** Scattered cracks/spalls/DELAMs on jack arches, spandrel columns and column bracing in both APPR spans. Worst area is in the FINISH APPR span (fourth jack arch) with the bottom face of west and center jack arch ~50% spalled/DELAM. South lower edge of east jack arch ~75% cracked/DELAM. Column 4 of east spandrel column cracked/DELAM along SE corner for ~75% of height. Jack Arch 4 in the START APPR span is ~30% cracked/DELAM on bottom face of west arch.

Substructure:

- **Abutments:** START: Scattered cracks, spalls/DELAMs.
- **Piers (Arch Bases):** Rib arch piers have scattered spalls and coating/patching is spalling off (total ~600 SF each). Most pier columns have up to 150 SF of spalls/DELAMs. P1: Column 1: ~450 SF of spalls/DELAMs up to 8" deep. Many exposed REINF on north column of P1 are debonded. P2: Column 3: ~350 SF spalls/DELAMs (spalls expose corroded REINF). Struts/bracing between rib arches at top of pier are spalled/DELAM on one or both vertical faces: P1: ~280 SF, P2: ~70 SF.
- **Scour:** Channel along east edge of P2 footer scoured to shale. ~3' height of footer exposed.
- **Slope Protection:** START: East slope rutted up to 1' wide x 2' deep at north edge.

Channel:

- **Protection:** Four concrete blocks on top of P2 footer spalled. Two north blocks shifted north by stream flow.

Approaches:

- **Pavement:** START-RIGHT: Concrete WS cracked/DELAM 3 LF x 11" wide. Asphalt WS has numerous transverse, LONGL and map cracks (most are sealed). 4 SF spall/DELAM on exterior fascia and 2 SF of adjacent light pole blister corner (along railing) failed. 6" width bottom of railing spalled/DELAM on all 3 faces along crack. ~8' west of crack, fascia has a 4 SF spall/DELAM on top/exterior face at a second $\frac{1}{16}$ " crack.
- **Guardrail:** Both START BTAs have no backer plates (START-RIGHT has only 1 through bolt). START-LEFT: All posts and block-outs are dry rotted and 4 posts rotten through at base.
- **Relief Joints:** START: Sealed LONGL and transverse cracks. Joint is cut ~12" in both curbs and is cut ~42" in the PVMT.

General:

- **Utility:** Nine light poles have hairline vertical cracks at top and bottom of access cover near base. Fourth pole from the START on the RIGHT is spalled up to 2" wide x 3" along crack under the cover plate. UTIL cover plates in LEFT walk are missing and are all covered with cones. UTIL cover plate in FINISH-RIGHT walk is cracked and breaking up.