

## BRIDGE INSPECTION REPORT

1800930

BRIDGE NUMBER

CUY 0006 1456

YEAR BUILT

1917

Structure File Number

DIST 12

Bridge Type 354

TYPE SERVICE 5 7

(1499)CUY. RIVER &amp; RTA

<b>DECK</b>	out/out 85.2 Deck Area 226,205 sqft		2 INTEGRAL CONCRETE (MONOLITHIC)	
1. FLOOR	1 REINF CONCRT (PRESTRSD, PRECAST)	2	2. WEARING SURFACE	Thk 1 Wear Date 11/15/1996 2
3. CURBS, SIDEWALKS AND WALKWAYS	Left 2 SIDEWALK(>2') / Right 2 SIDEWALK(>2')	1	4. MEDIAN	Lanes on 6
5. RAILING	5 REINF CONCR POST & CONCR PANEL	1	6. DRAINAGE	3 SCUPPERS & DWNSPTS 2
7. EXPANSION JOINTS	8 ELASTOMERIC STRIP SEAL	2	8. SUMMARY	6
<b>SUPERSTRUCTURE</b>			1 N/A (CULVERTS, TRUSSES, ETC.)	
9. ALIGNMENT	Max Spans 591	1	10. BEAMS/GIRDERS/SLAB	2
11. DIAPHRAGMS or CROSSFRAMES			12. JOISTS/STRINGERS	3
13. FLOOR BEAMS		3	14. FLOOR BEAM CONNECTIONS	2
15. VERTICALS		2	16. DIAGONALS	2
17. END POSTS		1	18. UPPER CHORD	1
19. LOWER CHORD		2	20. GUSSET PLATES	3
21. LATERAL BRACING		2	22. SWAY BRACING	1
23. PORTALS		2	24. BEARING DEVICES	8 FIXED ARCH-RIB 2
25. ARCH		2	26. ARCH COLUMNS or HANGERS	3
27. SPANDREL WALLS			28. PROTECTIVE COATING SYSTEM	Paint Date 7/15/1999 5 PAINT SYSTEM OZEU 6
29. PINS/HANGERS/HINGES		2	30. FATIGUE PRONE DETAIL (E, E')	2
31. LIVE LOAD RESPONSE (E OR S)		S	32. SUMMARY	4
<b>SUBSTRUCTURE</b>			3 SOLID WALL	
33. ABUTMENTS	3 SOLID WALL	2	34. ABUTMENT SEATS	Abutment: NOT ON PILING
35. PIERS		3	36. PIER SEATS	B TOWER Piers: NOT ON PILING 2
37. BACKWALLS			38. WINGWALLS	2
39. FENDERS and DOLPHINS	Piers = 12 NN NN Spans = 13	3	40. SCOUR (INSP TYPE - 1,2,3)	1 2
41. SLOPE PROTECTION	N NONE-NATURAL PROTECTION(GRASS,B		42. SUMMARY	Dive Date 10/2/2010 4
<b>CULVERTS</b>				
43. GENERAL	N NONE/NOT APPLICABLE		44. ALIGNMENT	
45. SHAPE			46. SEAMS	
47. HEADWALLS or ENDWALLS	Culvert Length 0		48. SCOUR (INSP TYPE - 1,2,3)	
49. ABUTMENT			50. SUMMARY	
<b>CHANNEL</b>				
51. ALIGNMENT		1	52. PROTECTION	3 SHEET PILING 2
53. HYDRAULIC OPENING	8 SLIGHT CHANCE OVERTOPPING APPR	1	54. SUMMARY	6
<b>APPROACHES</b>				
55. PAVEMENT	1 CONCRETE	2	56. APPROACH SLABS	
57. GUARDRAIL	0 OTHER	2	58. RELIEF JOINTS	
59. EMBANKMENT		2	60. SUMMARY	Percent Legal = 135 6
<b>GENERAL</b>				
61. NAVIGATION LIGHTS		1	62. WARNING SIGNS	Maint Resp 1 OHIO TRAN DEPT 2
63. SIGN SUPPORTS	Signs on = Y MVC on = 14	1	64. UTILITIES	3
65. VERTICAL CLEARANCE	Under C = 30 Under NC = 0	1	66. GENERAL APPRAISAL & OPERATIONAL STATUS	4 A

67. INSPECTED BY

68. REVIEWED BY

SIGNED

PE Number

SIGNED

59487

PE Number

Name ANDREA PERSANYI

Name YOUSSEF SEIF

DATE 4/19/2013

1 N 1 0 0 0 1 N  
SURVEY

DATE 5/30/2013

## DECK

FLOOR: ISOLATED HEAVY SPALLS W/ EXP. REBAR W/ MOD. SECTION LOSS, FLOOR CRACKING WITH EFFLO THROUGHOUT THE WEST APPROACH AND TUNNELS.

WEARING SURFACE: LARGE SPALLS TO OUTSIDE EB LANE, TYPICALLY WITH ASPHALT PATCHES. OTHER MINOR SPALLS & ASPHALT PATCHES THRU OUT.

CSW: AREAS OF CRACKING & MAP CRACKING. ISOLATED SMALL SPALLS. ISOLATED AREAS OF DEBRIS.

RAILING: DAMAGE TO FEW SECTIONS OF PEDESTRIAN FENCING. VERTICAL LEACHING CRACKS.

DRAINAGE: PARTIALLY CLOGGED CURB DRAINS. CSW TROUGHS TYPICALLY FILLED WITH DEBRIS. MISSING & BROKEN GRATING IN NORTH LONGITUDINAL CSW TROUGH. PONDED WATER ALONG NORTH CSW IN SPAN 4. CLOGGED CATCH BASIN ON SOUTH SIDE OF PIER #9 (AT BOTTOM).

EXJTS: HEAVY DEBRIS IN GLANDS. ISOLATED PLOW DAMAGE TO JOINT ARMOR. SHALLOW SPALLING OF JOINT HEADERS NOTED THROUGHOUT THE BRIDGE.

## SUPERSTRUCTURE

FLOORBEAMS: AREAS OF LOCALIZED RUSTED THRU HOLES OF FLOORBEAM WEBS, PARTICULARLY ALONG THE ARCH LINES AND NEAR LATERAL BRACING CONNECTIONS. THE CIRCULAR WELD RETROFIT AT UPPER DECK FB 22 WAS PREVIOUSLY CRACKED, NO MOVEMENT FROM 2012 MARK. THIS CRACK REMAINS CONFINED TO THE WELD MATERIAL. THE EXTERIOR FLOORBEAM CORBELS IN THE CONCRETE APPROACH SPANS EXHIBIT

LARGE SPALLS AND EXPOSED REINFORCING WITH ISOLATED LOCATIONS WITH THE ENTIRE FRONT FACE SPALLED OFF. THE BOTTOM OF TWO LOWER DECK FLOORBEAMS AT PIER 13 HAS SPALLED OFF EXPOSING RUSTING REINFORCING BARS OVER THEIR ENTIRE LENGTH.

STRINGERS: UPPER AND LOWER DECK STRINGERS IN SPAN 4 WITH LOCALIZED ADVANCED SECTION LOSS. STRINGER P BETWEEN FLOORBEAMS 20 AND 21 WITH ADVANCED WEB LOSSES (UP TO 100%) IN THE LOWER 4" OF THE WEB.

FLOORBEAM CONNECT: LOWER FLOORBEAMS WITH HEAVY LOSSES ADJACENT TO HANGER CONNECTIONS. PREVIOUSLY CLEANED AND PAINTED BUT NOW RUSTING WITH LOCALIZED SIGNIFICANT ADDITIONAL LOSSES.

VERTICALS: LOCATIONS BELOW THE UPPER DECK LEVEL (PPS 0-4 AND 20-24) WITH ACTIVE CORROSION AT VERTICAL MEMBER CONNECTIONS. AREAS OF RUST HOLES TO CONNECTION PLATES.

DIAGONALS: LOCATIONS BELOW THE UPPER DECK LEVEL (PPS 0-4

AND 20-24) WITH ACTIVE CORROSION AT DIAGONAL MEMBER

CONNECTIONS. AREAS OF RUST HOLES TO CONNECTION PLATES.

END POSTS: MINOR PITTING AND CORROSION. MINOR IMPACT DAMAGE TO NORTHWEST FLANGE ANGLE.

UPPER CHORD: SOME SECTION LOSS. A FEW MISSING RIVETS. U7-U8 HAS AN 8" LONG LAMINAR TEAR IN THE OUTSIDE LEG OF THE NORTH TOP FLANGE ANGLE.

LOWER CHORD: LOCALIZED MODERATE TO ADVANCED SECTION LOSS, TYPICALLY AT GUSSET PLATE TO LOWER CHORD INTERFACE, PANELS 0-4 AND 20-24, TYPICAL.

GUSSET PLATES: LOCALIZED ADVANCED SECTION LOSS TO GUSSET PLATES AT LOWER CHORD INTERFACE, PANELS 0-4 AND 20-24, TYPICAL. SEVERAL AREAS OF PLUG WELDS.

LATERAL BRACING: ISOLATED LATERAL BRACING MEMBERS WITH LOCALIZED ADVANCED SECTION LOSS AND RUST HOLES NEAR THE CONNECTION LOCATIONS.

PORTALS: LOCALIZED AREAS WITH 100% LOSS OF PORTAL BATTEN PLATES AND LACING MEMBERS.

BEARINGS: MODERATE RUSTING PRIMARILY ON THE INTERIOR OF THE TRUSS BOLSTERS, MULTIPLE SADDLE BEARINGS WITH 100% LOSS. SEVERAL CRACKS TO THE RETAINING WASHERS AT ARCH BEARINGS.

ARCH: STEEL ARCH HAS AREAS OF CORROSION.

ARCH COLUMN: COLUMNS IN THE WEST STATION AND TUNNEL SECTIONS WITH HEAVY SPALLING AND EXPOSED REINFORCEMENT WITH MODERATE CORROSION AND ISOLATED COLUMNS WITH 360 DEGREE EXPOSURE OF REINFORCEMENT. SEVERAL SPALLED AND DELAMINATED ARCH COLUMNS SCATTERED THROUGHOUT APPROACH SPANS 1A-3 AND 5-13.

PCS: PAINT FAILURES TYPICAL AT TRUSS CONNECTIONS BELOW THE UPPER DECK. ESTIMATED BETWEEN 10%-15%

PINS/HANGERS: MODERATE PITTING AT EYEBAR HEADS AT THE LOWER CONNECTIONS AT ISOLATED PANEL POINTS.

FPD: NO FATIGUE DISTRESS WAS NOTED AT THE EYEBAR HEADS.

#### SUBSTRUCTURE

ABUTMENTS: ABUTMENT CONCRETE WITH MINOR CRACKING.

PIERS: SOUTH TOWER B SETTLEMENT HAS CONTINUED. A NEW CRACK GAUGE WAS INSTALLED AT THE LOWER DECK ON 4/17/13, AS THE OLD CRACK GAUGE HAD MOVED OFF THE SCALE BY 1/7/13.

PIER SEATS: MINOR CRACKING WAS NOTED AT THE TRUSS BEARING SEATS WITH NO SIGNIFICANT CHANGE SINCE THE PREVIOUS INSPECTION.

WINGWALLS: SOFT CONCRETE AT SOUTHWEST WING. CRACKING & SPALLS AT CURTAIN WALLS TYPICAL WITH NO SIGNIFICANT CHANGE SINCE PREVIOUS INSPECTION.

FENDERS AND DOLPHINS: NO FUNCTIONAL COLLISION PROTECTION IS

## PRESENT FOR PIER 3.

SCOUR: SCOUR HOLE AT PIER 4 HAS SLIGHTLY INCREASED IN SIZE  
SINCE LAST INSPECTION.

## CHANNEL

PROTECTION: WEST EMBANKMENT LACKS ANY TYPE OF BANK  
PROTECTION. A 3' SINK HOLE BEHIND THE SOUTH CHANNEL  
PROTECTION NEAR PIER 4 (NEAR SWING BRIDGE)

## APPROACHES

PAVEMENT: MINOR SHOIVING AND CRACKING THROUGHOUT BOTH ASPHALT  
APPROACHES.  
GUARDRAIL: EASTBOUND IMPACT ATTENUATOR DAMAGED.  
EMBANKMENT: EROSION CHANNEL AT THE NORTHEAST WING HAS  
UNDERMINED/DAMAGED CSW. CSW IS CLOSED.

## GENERAL

WARNING SIGNS: WARNING SIGNS PRESENT ONLY AT THE NORTHEAST  
AND SOUTHWEST CORNERS OF THE TRUSS (SPAN #4).  
UTILS: UTILITY JUNCTION BOXES IN SPANS 3, 6 & 13 EXHIBIT  
ADVANCED CORROSION THROUGHOUT COMPONENTS WITH FAILED  
CORRUGATED METAL OUTER CONTAINMENT. AREAS OF LOOSELY  
CONNECTED/HANGING WIRES. DAMAGE TO SOME HANGERS. AREAS  
OF DISCONNECTED CONDUIT. RUSTED SECTION LOSS TO  
CONDUIT, MOSTLY IN TUNNELS.

STRUCTURE WAS INSPECTED BY KEN BANASZAK, DAN BRED, MIKE  
GERSTENSLAGER, ANDREA PERSANYI AND MIKE SUTAK.