STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION FIELD REPORT

Structure File Number: 1801325 Inventory Bridge Number: CUY 00010 08.690 N Bridge Type: 3 - STEEL/5 - ARCH/3 - DECK

Sufficiency Rating: 75.1 Date Built: 7/1/1935

District: 12 Place Code (FIPS): FAIRVIEW PARK SR 10 over VALLEY PKWY/ROCKY RIVER Type of Service on: HIGHWAY-PEDESTRIAN

APPROACH ITEMS

	QTY.	1	2	3	4	cr TR
c1. Approach Wearing Surface (EA)	2					2
c2. Approach Slabs (SF)						
c3. Relief Joint (LF)						
c4. Embankment (EA) d	4					2
c5. Guardrail (EA)	0.00					2
N36. Safety Features: Tr, Gr, Tm						
	36)B 1	36)C 1	36)D 1		(9-0)	
c6. Approach Summary						6

DECK ITEMS

	QTY.	1	2	3	4	cr TR
c7.1 Floor/Slab (SF)	79540.41					2
c7.2 Edge of Floor/Slab (LF)	2460					
c8. Wearing Surface (SF)	63960					2
c9. Curb/Sidewalk/Walkway (LF)	2460.00					2
c10. Median (LF)						
c11. Railing (LF)	2460					3
N36. Safety Features: Rail						
	36)A 1					
c12. Drainage (EA) d	0.00					2
c13. Expansion Joint (LF) d	0.00					1
N58. Deck Summary					(9-0)	6

SUPERSTRUCTURE ITEMS

	QTY.	1	2	3	4	cr TR
c14. Alignment (EA) d	9					1
c15.1 Beams/Girders (LF)	0.00					2
c15.2 Slab (SF)						
c16. Diaphragm/X-Frames (EA)	0.00					1
c17. Stringers (LF)	0.00					1
c18. Floorbeams (LF)	0.00					1
c19. Truss Verticals (EA)						
c20. Truss Diagonals (EA)						
c21. Truss Upper Chord (EA)						
c22. Truss Lower Chord (EA)						
c23. Truss Gusset Plate (EA) d						
c24. Lateral Bracing (EA)						
c25. Sway Bracing (EA)	0.00					
c26. Bearing Devices (EA) d	0.00					2
c27. Arch (LF)	0.00					2
c28. Arch Column/Hanger (EA)	0.00					2
c29. Arch Spandrel Walls (LF)						
c30. Prot. Coating System (LF) d	0.00					2
c31. Pins/Hangers/Hinges (EA) d	0000					2
c32. Fatigue (LF) d	0.00					1
N59. Superstructure Summary					(9-0)	6

SUBSTRUCTURE ITEMS

	QTY.	1	2	3	4	cr TR
c33. Abutment Walls (LF)	129.33					1
c34. Abutment Caps (LF)	129.33					1
c35. Abut. Columns/Bents (EA)	0.00					
c36. Pier Walls (LF)	323.34					2
c37. Pier Caps (LF)	323.34					1
c38. Pier Columns/Bents (EA)	0.00					2
c39. Backwalls (LF)	129.33					1
c40. Wingwalls (EA)	0.00					1
c42. Scour (EA) d	10					1
c43. Slope Protection (EA) d	0.00					3
N60. Substructure Summary					(9-0)	6

CULVERT ITEMS

	QTY.	1	2	3	4	cr TR
c44. General (LF)						
c45. Alignment (LF) d						
c46. Shape (LF) d						
c47. Seams (LF) d						
c48. Headwall/Endwall (LF)						
c49. Scour (LF) d						
c50. Abutments (LF)						
N62. Culvert Summary					(9-0)	N

CHANNEL ITEMS

	QTY.	1	2	3	4	cr TR
c51. Alignment (LF) d	200.00					1
c52. Protection (LF) d						
c53. Hydraulic Opening (EA) d	1					1
c54. Navigation Lights (EA) d						
N61. Channel Summary					(9-0)	7

SIGN/UTILITY ITEMS

	QTY.	1	2	3	4	cr TR
c55. Signs (EA) d						
c56. Sign Supports (EA) d						
c57. Utilities (LF) d	0.00					3
General Appraisal					(9-0)	6
N41. Operating Status						A

Inspector Name Costa, Jose

Inspection Date/Type 09/16/2014 Routine

PE Number 61171

Reviewer Name Costa, Jose

Review Date 03/06/2015

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District: 12 Place Code (FIPS): FAIRVIEW PARK SR 10 over VALLEY PKWY/ROCKY RIVER Type of Service on: HIGHWAY-PEDESTRIAN

Key: "Qty" = Quantity for Element Level inspection; "(LF)" = Linear Feet; "(SF)" = Square Feet; "(EA)" = Each or count; "CR" = 1-4 Condition Rating or average of worst span unless Summary item 9-0, then the average of entire bridge influenced by the bold boxes; "TR" = Transition Rating or weighted average of condition states; "d" = dedicated or specific chart and guidance, all others use Material specific chart/guidance; "c" = condition prefix; "N" = NBIS rating

Inspection Procedures

Next Insp Cycle is in 2015 and Est. Hours is and TTC is MT-95.31 and other TT notes include. . . . . with 2014 lead insp. EF and truck req'd . . .

Comments

APPROACH

c1. Approach Wearing Surface

Sealed transverse cracks and some patching. Small potholes.

c4. Embankment

The shale east embankments continue to slowly erode. The west embankments are heavily vegetated and act as floodplains during high water events.

c5. Guardrail

One post on north guardrail, east approach, is missing a spacer block. South guardrail, west approach, has collision damage.

DECK

c7.1 Floor/Slab

Floor is in fair condition. There are some minor pop-outs, up to 3" in diameter, at random locations. Minor spalls at the interfaces with the stringers. A 30"x6"x8" spall with exposed reinforcing exists between stringers 9 & 10 in span 5. The deck floor in span 9 has full-length longitudinal cracks with efflorescence.

c7.2 Edge of Floor/Slab

Portions of the edges of the deck over the park trails had some loose concrete removed by ODOT crews in .

c8. Wearing Surface

Wearing surface is in fair condition. Spans 5 and 7 have random longitudinal and transverse hairline cracks throughout. Span 8 has had some isolated patching.

c9. Curb/Sidewalk/Walkway

Sidewalk is in fair condition with cracking in isolated areas. Multiple sections of sidewalk have been repaired. Older sidewalk sections have scaling. The sidewalks at the west approach show signs of heaving, with offsets up to 1-1/2 inches. There is a 6"x19"x1" spall in the south sidewalk in span 7.

c11. Railing

Railing is in fair-to-poor condition. The tubular decorative railing is retaining water and corroding from the inside out. There are several locations where rails have rust holes. North railing at joint 5 has up to 100% section loss around sliding angles. The concrete bases of the railing posts are spalling in some location, exposing the railing anchors. Both downspouts attached to Tower 2 appear to be clogged and bulging.

The clogged downspout at the north column of Pier 3 has blown out.

c12. Drainage

Deck drainage is in fair condition. Deck inlet grates along curbs are clogged with vegetation and debris, and there is ponding along the north curb in span 8. Downspout in Span 7, north side near Column 8 has a 2"x7" corrosion hole. Clean out cover in Span 6, north side, missing 7 out of 8 bolts. Scupper in in Span 6, north side, has 3 corrosion holes totaling 30 sq.in. Clogged downspout on north side of Pier 3 has blown out.

c13. Expansion Joint

Strip seal expansion joints are in good condition. No currently active leakage above towers observed. Joints are aligned well in roadway, but there is some misalignment in the north sidewalk above Towers 4 and 5, and in the south sidewalk in Spans 8 and 9. There is a 2"x1" gouge in the armor of the joint over Tower 7.

SUPERSTRUCTURE

c14. Alignment

All spans show proper alignment.

c15.1 Beams/Girders

Beams in approach spans 1-3 are in good condition.

c16. Diaphragm/Cross Frames

Diaphragms between girders and between arches are in good condition. Debris does accumulate on bottom flanges of some of the struts between arches because of the angle they are at.

c17. Stringers

Stringers are in good condition overall. One missing bolt on the bottom flange of Stringer 8 in Span 8. One anchor bolt missing for Stringer 4 at Tower 7.

c18. Floorbeams

Floorbeams in good condition overall. Multiple cracks noted in the non-structural, porous tack welds on the edges of the floorbeam bottom flanges, but no cracks in the base metal.

c26. Bearing Devices

Arch skewbacks have fretting corrosion indicating proper movement. Stringer sliding bearings at tops of towers are functioning properly. Girder bearings at abutments are working properly, but exterior bearings have corrosion.

c27. Arch

The arches are in good condition overall, with random areas of peeling paint. Areas of previous section loss exist at bottoms of the arch columns, but are painted now and not actively corroding. The missing hatch on the north arch, Span 5, has not been repaired and is currently covered by a plastic bag.

c28. Arch Column/Hanger

Arch columns are in fair condition with minor pack rust re-activating along the full heights of the columns on both interior and exterior faces. Surface corrosion and accumulation of debris in the bottom 3' of most columns. Reactivated pack rust has cracked some of the erection tack welds, but no propagation into base metal was noted.

c30. Protective Coating System

The paint is in good condition on the superstructure and on the exterior faces of the columns and towers, but there is a general failure of the paint system inside the towers and columns, with peeling paint, surface corrosion and laminating corrosion. Also, the exterior beam bearings at the abutments have corrosion.

c31. Pins/Hangers/Hinges

Pins at ends of arches have surface corrosion.

c32. Fatigue

The majority of the erection tack welds on the bottom flanges of the floorbeams are partially to fully cracked; none of these cracks have propagated into base metal. Riveted connections on the floorbeams are in good condition, with no cracks and no sheared rivets. The welds inside the towers are in good condition, although the welded stiffeners themselves have heavy section loss in some cases.

SUBSTRUCTURE

c33. Abutment Walls

The abutments are in fair-to-good condition. Corrosion staining on the West Abutment wall is coming from the overhead utilities, not from rebar.

c34. Abutment Caps

There is a full-height crack below Stringer 8 on the East Abutment, and five partial-height cracks below Stringer 9.

c38. Pier Columns/Bents

The interiors of the towers have section loss in multiple locations. Multiple stiffeners inside bottom of Towers 5, 6 and 7 have 50%-100% section loss. Corrosion holes in plates of several towers from 1/8" up to 2-1/2" in diameter but not concentrated in any one plate. Vagrant belongings inside bottom of Tower 5. Smaller corrosion holes are present in Towers 4 and 8. Water is infiltrating the interiors of the steel columns of Pier 1 and causing laminating corrosion inside. The south column of Pier 3 and both columns of Pier 2 have light surface corrosion inside. There are several areas of patching on the concrete bases of the towers that are in good condition when sounded with hammer.

c36. Pier Walls

The web walls between the tower/arch bases have transverse cracking. There are several areas of patching are in good condition when sounded with hammer. There is a 5'x3'x3" spall with exposed rebar under the south skewback for Tower 8, but the exposed painted rebar is not actively corroding.

c37. Pier Caps

Tower caps in good condition, including paint. Raccoon fur and droppings inside most of the caps. Wire screens installed over tops of caps have failed to keep out

raccoons (peeled open). The caps for the steel piers are in fair condition with some minor corrosion.

c39. Backwalls

Abutment backwalls are in good condition.

c40. Wingwalls

Wingwalls are in good condition.

c43. Slope Protection

The gabions on the West Abutment slope have continued to slide and deform downward, and the manhole between the Pier 2 columns has been broken and displaced. The soil around the drains between the Pier 1 columns has been eroded. The East bank of the Rocky River consists of easily erodible shale and has sloughed up against and overtopped the concrete base of Tower 8. West side of Tower 8 is severely eroded.

CHANNEL

c51. Alignment

Channel is well aligned perpendicular to structure; normal flow is only under span 8.

c53. Hydraulic Opening

More than adequate. Extremely remote chance of overtopping.