



STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

Structure File Number: 1812246

Inventory Bridge Number: CUY 00322 15.340 N

USR322 over CHAGRIN RIV .25 MI W 174#

Inspection Type: Routine

Inspection Date: 10/07/2014

District: 12

County: CUYAHOGA

Place Code (FIPS): GATES MILLS

Bridge Type: STEEL

Type of Service: HIGHWAY

Owner: OHIO STATE TRANSPORTATION DEPARTMENT

Inspection Responsibility: OHIO STATE TRANSPORTATION
DEPARTMENT

Maintenance Responsibility: OHIO STATE TRANSPORTATION
DEPARTMENT

Lead Inspector: Sutak, Mike

Reviewed By: Seif, Youssef

STATE OF OHIO DEPARTMENT OF TRANSPORTATION APPROACH INSPECTION

Structure File Number: 1812246 Inventory Bridge Number: CUY 00322 15.340 N Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS
 Sufficiency Rating: 81.8 Date Built: 7/1/1939
 District: 12 Place Code (FIPS): GATES MILLS USR322 over CHAGRIN RIV .25 MI W 174# Type of Service on: HIGHWAY

APPROACH

(c6) Approach Summary: 8 **Recommended:** 9

c1. Approach Wearing Surface (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 2 | 3.9 | 0.1 | | | 1.04 |

A FEW CRACKS.

c2. Approach Slabs (SF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0 | 2090 | 110 | 0 | 0 | 1.07 |

CRACKS. LIGHT SCALING.

c4. Embankment (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 4 | 4 | | | | 1.00 |

c5. Guardrail (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 4 | 0 | 0 | 0 | 1.00 |

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
APPROACH INSPECTION PHOTOS**

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**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DECK INSPECTION**

Structure File Number: 1812246

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Bridge Type: 3 - STEEL/2 - BEAM/2 - CONTINUOUS

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USR322 over CHAGRIN RIV .25 MI W 174#

Type of Service on: HIGHWAY

DECK

(58) NBIS Deck Summary:

8

Recommended: 9

c7.1 Floor/Slab (SF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 9762.45 | 9274.3 | 488.1 | 0 | 0 | 1.07 |

DIAGONAL CRACKS AT ABUTMENTS, SOME ARE WET.

c7.2 Edge of Floor/Slab (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 300 | 300 | 0 | 0 | 0 | |

c8. Wearing Surface (SF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 8250 | 7837.5 | 412.5 | | | 1.07 |

CRACKS.

c9. Curb/Sidewalk/Walkway (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 300.00 | 285 | 15 | | | 1.07 |

LIGHT SCALING.

c10. Median (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 150 | 150 | | | | 1.00 |

>50% OF SEALER HAS PEELED.

c11. Railing (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 300 | 300 | | | | 1.00 |

c12. Drainage (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 2 | 0 | 0 | 0 | 1.00 |

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DECK

c13. Expansion Joint (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|-----------------------|----------------|----------------|----------------|----------------|--------------------------|
| 0.00 | NaN | 0 | 0 | 0 | |

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DECK INSPECTION PHOTOS**

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**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE INSPECTION**

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SUPERSTRUCTURE

(59) NBIS Superstructure Summary: 7 **Recommended:** 9

c14. Alignment (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 2 | 2 | | | | 1.00 |

c15.1 Beams/Girders (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 1423.5 | 474.5 | 0 | 0 | 1.33 |

SOME AREAS OF RUST SECTION LOSS.

c16. Diaphragm/Cross Frames (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 99 | 33 | 0 | 0 | 1.33 |

MINOR RUST SECTION LOSS.

c26. Bearing Devices (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 39 | 0 | 0 | 0 | 1.00 |

c30. Protective Coating System (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 20 | 1328.6 | 94.9 | 94.9 | 2.79 |

BEAM ENDS AND FASCIA BEAMS PAINTED. 5% RUSTING. PEELING PAINT.

c32. Fatigue (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | NaN | 0 | 0 | 0 | |

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STATE OF OHIO DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE INSPECTION

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SUBSTRUCTURE

(60) NBIS Substructure Summary: 7 **Recommended:** 9

c33. Abutment Walls (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 130.17 | 117.2 | 13 | | | 1.14 |

CRACKS. SANDSTONE DETERIORATION. MISSING MORTAR. CONCRETE PATCHES.

c35. Abutment Columns/Bents (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | NaN | 0 | 0 | 0 | |

c34. Abutment Caps (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 130.17 | NaN | 0 | 0 | 0 | |

c38. Pier Columns/Bents (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 0.00 | | | | |

c36. Pier Walls (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 65.08 | 61.8 | 3.3 | 0 | 0 | 1.07 |

CRACKS. SCALING.

c37. Pier Caps (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 65.08 | NaN | 0 | 0 | 0 | |

c39. Backwalls (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 130.17 | 130.17 | | | | 1.00 |

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SUBSTRUCTURE

c40. Wingwalls (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 3.6 | 0.4 | 0 | 0 | 1.14 |

CRACKS.

c42. Scour (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 3 | 2.8 | 0.2 | 0 | | 1.10 |

SOME STONE AROUND PIER HAS SHIFTED. WATER DEPTHS WEST OF PIER ARE >6'.

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SUBSTRUCTURE INSPECTION PHOTOS**

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**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CHANNEL INSPECTION**

Structure File Number: 1812246

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Type of Service on: HIGHWAY

CHANNEL

(61) NBIS Channel Summary: 5

Recommended: 6

c51. Alignment (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 200.00 | | 200.00 | | | 2.00 |

RIVER FLOWS TOWARDS REAR ABUTMENT AND INTO EAST FACE OF PIER #1.

c52. Protection (LF)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 200.00 | | 200.00 | | | 2.00 |

UNEVEN SETTLEMENT OF STONE SLABS NEAR REAR ABUTMENT.

c53. Hydraulic Opening (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 1 | 1 | | | | 1.00 |

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CHANNEL INSPECTION PHOTOS**

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**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SIGNS/UTILITIES INSPECTION**

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SIGNS/UTILITIES

(41) Open, Posted or Closed: A

c55. Signs (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | 2 | 0 | 0 | 0 | 1.00 |

c56. Sign Supports (EA)

| Total Quantity | State 1 | State 2 | State 3 | State 4 | Transition Rating |
|----------------|---------|---------|---------|---------|-------------------|
| 0.00 | NaN | 0 | 0 | 0 | |

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SIGNS/UTILITIES INSPECTION PHOTOS**

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**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
REVIEW**

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