

Inspector: Ropelewski,Robert

Inspection Date: 05/07/2024

Structure Number: 1809660

Facility Carried: SR 174

**Ohio Bridge Inspection Summary Report****CUY-00174-0023 (1809660)**2: District 29498 - GATES MILLS (CUY county)  
ict  
12

5A: Inventory Route 1 00174

21: Major Maint A/B 01 - State Highway Agency /  
225 Routine Main A/B 01 - State Highway Agency /  
221 Inspection A/B 01 - State Highway Agency /  
220: Inv. Location DISTRICT 127: Facility On SR 174  
6: Feature Ints STREAM .68 MI. S. OF 322  
9: Location .23 MILES N OLD MILL ROAD  
Lat, Lon 41.5211 , -81.405142

Condition		Structure Type	
<b>58: Deck</b>	<b>5 - Fair Condition</b>	43: Bridge Type	1 - Concrete
58.01 Wearing Surface	7 - Good (1% distress)		04 - Tee Beam
58.02 Joint	N- Not Applicable		N- Not Applicable
<b>59: Superstructure</b>	<b>5 - Fair Condition</b>	45: Spans Main / Approach	1 / 0
59.01 Paint & PCS	N - Not Applicable	107: Deck Type	1 - Concrete Cast-in-Place
<b>60: Substructure</b>	<b>6 - Satisfactory Condition</b>	408: Composite Deck	Y - Composite Construction
<b>61: Channel</b>	<b>6</b>	414A Joint Type 1	N - None
61.01 Scour	<b>6 - Satisfactory</b>	414B: Joint Type 2	N - None
<b>62: Culverts</b>	<b>N - Not Applicable</b>	108A: Wearing Surface	2 - Integral Concrete (separate non-modified layer of concrete added to structural deck)

67.01 GA 5

Appraisal	
Sufficiency Rating	67.4 SD/FO 0 - ND
36: Rail, Tr, Gd, Term Std	1 1 1 1
72: Approach Alignment	8 - Equal to present desirable criteria
113: Scour Critical	4 - Action is required to protect exposed foundations
71: Waterway Adequacy	8 - Bridge Above Approaches

422: WS Date	07/01/2009
423: WS Thick (in)	3.0
482: Protective Coating	N - None or Not Applicable
483: PCS Date	
453: Bearing Type 1	N - None
455: Bearing Type 2	N - None
528: Foundn: Abut Fwd	4 - Spread Footing (on soil)
533: Foundn: Abut Rear	4 - Spread Footing (on Soil)
536: Foundn: Pier 1	N - None (Such as most Culverts)
539: Foundn: Pier 2	N - None (Such as most Culverts)

Geometric	
48: Max Span Length (ft)	22.0
49: Structure Length (ft)	22.0
52: Deck Width, Out-To-Out (ft)	33
424: Deck Area (sf)	726
32: Appr Roadway Width (ft)	27.0
51: Road Width, Curb-Curb (ft)	31
50A: Curb/SW Width: Left (ft)	0
50A: Curb/SW Width: Right (ft)	0
34: Skew (deg)	0
33: Bridge Median	3 - Closed median with non-mountable barriers
54B: Min Vert Underclearance (ft)	0
336A: Min Vert Clrnce IR Cardinal (ft)	99
336B: Min V Clr IR Non-Cardinal (ft)	0
578: Culvert Length (ft)	0

Age and Service	
27: Year Built/ 106 Rehab	1932 / 0000
42A: Service On	5 - Highway-pedestrian
42B: Service Under	5 - Waterway
28A: Lanes on	02
28B: Lanes Under	00
19: Bypass Length	3
29: ADT	2463
109: % Trucks (%)	2

Load Posting	
41: Op/Post/Closed	A - Open
70: Posting	5 - Equal to or above legal loads
70.01: Date	
70.02: Sign Type	
734: Percent Legal (%)	150
704: Analysis Date	07/01/2010
63: Analysis Method	6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections	
90: Routine Insp.	Months 12 05/07/2024
92A: FCM Insp.	N 0
92B: Dive Insp.	N 0
92C: Special Insp.	N 0
92D: UBIT Insp.	N 0
92E: Drone Insp.	N 0
Inspector	Ropelewski,Robert

**Structure Number:** 1809660

**Facility Carried:** SR 174

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>16-Reinforced Concrete Top Flange</b>	3 - Mod.	726	sq. ft.	376	300	50	0
	CS2- Cracks throughout. Mottled areas. Honeycombed areas. Delaminated areas. CS3- Mottled areas with leaching cracks, rust stains. Some spalls with exposed rebar.						
510-Wearing Surfaces		682	sq. ft.	642	30	10	0
	CS2- Minor scaling. CS3- One longitudinal crack as wide as 1/16" in NB lane.						
<b>110-Reinforced Concrete Open Girder/Beam</b>	3 - Mod.	154	ft.	31	65	58	0
	CS2- Cracks. Mottled areas. Areas of light efflorescence build up. Delams. CS3- Leaching cracks with stalactites and rust stains. Wide horizontal cracks, most leaching with an efflorescence build up.						
521-Concrete Protective Coating		462	sq. ft.	0	0	0	462
	CS4- CPC is not present						
<b>215-Reinforced Concrete Abutment</b>	3 - Mod.	68	ft.	0	52	16	0
	CS2- Cracks. Scaling at water line. Efflorescence. Minor spalls along slab joints. CS3- Leaching cracks with efflorescence build up. Spalls, most along slab joints. Deteriorated concrete at rear-left, forward-right bottom corners and at forward-left edge.						
521-Concrete Protective Coating		238	sq. ft.	0	0	0	238
	CS4- CPC is not present						
<b>330-Metal Bridge Railing</b>	3 - Mod.	44	ft.	0	38	4	2
	CS2- Start of rust to backside of rail. Chalking of galvanized coating. CS3- Spots of sections loss. CS4- Several small rust thru holes.						
<b>815-Drainage</b>	3 - Mod.	2	each	2	0	0	0
<b>830-Abutment Backwall</b>	3 - Mod.	68	ft.	36	32	0	0
	CS2- Cracks. Areas of scaling. Areas of honeycombing.						
521-Concrete Protective Coating		102	sq. ft.	0	0	0	102
	CS4- CPC is not present						

**Inspector:** Ropelewski,Robert

**Structure Number:** 1809660

**Inspection Date:** 05/07/2024

**Facility Carried:** SR 174

ODOT District: District 12

**CUY-00174-0023\_(1809660)**

Date Built: 07/01/1932

Major Maint: 01 - State Highway Agency

Facility Carried: SR 174

Traffic On: 5 - Highway-pedestrian

Rehab Date:

Routine Maint: 01 - State Highway Agency

Feature Inters: STREAM .68 MI. S. OF 322

Traffic Under: 5 - Waterway

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 29498 - GATES MILLS (CUY county)

Location: DISTRICT 12

.23 MILES N OLD MILL ROAD

Insp  
Resp B:

Inspector

Ropelewski,Robert

Inspection Date 05/07/2024

Reviewer Seif,Youssef

## **Inspector Comments - Deck and Approach**

### **Deck**

### **Approach**

#### **Approach Wearing Surface**

Full width asphalt patch in SB lane at rear. Full width asphalt patch at forward. A few cracks. Area of asphalt map cracking in

#### **Approach Embankment**

Erosion at rear-left with concrete base of guardrail post exposed.

#### **Approach Guardrail**

Minor collision damage at forward-left. Some areas of rust section loss with some small rusted thru holes.

#### **Signs**

No bridge end markers.

## **Inspector Comments - General Appraisal**

### **Superstructure**

### **Substructure**

#### **Wingwalls**

Cracks, some leaching.

#### **Substructure Scour**

Scour hole as deep as 2' at forward-right abutment corner, probing indicates no undermining. Scour hole as deep as 1' at rear left with up to 6" of undermining.

### **Culvert**

## **Inspector Comments - Waterway**

**Inspector:** Ropelewski,Robert  
**Inspection Date:** 05/07/2024

**Structure Number:** 1809660  
**Facility Carried:** SR 174

**Waterway Adequacy**

**Channel**

**Channel Alignment**

Stream flows into corner of forward abutment & then along rear abutment.

**Channel Protection**

Gabion wall slightly tipped in. Some rock channel protection has washed away or settled.

**Channel Hydraulic Opening**

Rocks & sediment block as much as 5% thru out.

**Scour Critical**

**Inspector:** Robert Ropelewski

**Structure Number:** 1809660

**Inspection Date:** 05/07/2024

**Facility Carried:** SR 174

## Bridge Inspection Report

### Pictures