Inspector:	Beedy, Matthew	Structure Number:	4505751
Inspection Date:	02/24/2023	Facility Carried:	STATE ROUTE 310

# Ohio Bridge Inspection Summary Report

# LIC-00310-1005 (4505751)

2: District <sup>Distr</sup> 39102 - JER ict 05	SEY TWP (LIC	county)	5A	: Inventory Ro	oute 1	00310	)
	- State Highwa	ay Agency	/ 7.	Facility On	STATE RO	OUTE 310	
	- State Highwa			Feature Ints		/ER SR161	
	- State Highwa			Location	AT JCT SI		
220: Inv. Location DISTR	-	, , ,		Lat, Lon	40.076783		,-82.666661
	Condition				Sti	ructure Typ	De
58: Deck	8 - Very Goo	od Condition		43: Bridge T	ype 5-Pi	estressed co	ncrete
58.01 Wearing Surface	8 - Very Goo	d (isolated or min	or problems	)	02 - 3	Stringer/Multi-	beam or Girder
58.02 Joint	N- Not Appli	cable			N- No	ot Applicable	
59: Superstructure	8 - Very Goo	od Condition		45: Spans M	lain / Approa	ach 2	/ 0
59.01 Paint & PCS	N - Not Appl	cable		107: Deck T	уре	1 - Concret	e Cast-in-Place
60: Substructure	8 - Very Goo	od Condition		408: Compo	site Deck	Y - Compos	site Construction
61: Channel	Ν			414A Joint T	ype 1	N - None	
61.01 Scour	N - Not App	licable		414B: Joint	Type 2	N - None	
62: Culverts 67.01 GA	N - Not App 8	licable		108A: Weari	ing Surface		nic Concrete Iy placed with structural licable
	Appraisal			422: WS Dat	te	10/01/2007	
Sufficiency Pating	97.9	SD/FO 0-ND		<b>4</b> 23: WS Thi	ick (in)	1.0	
Sufficiency Rating		3D/FO 0 - ND	4	482: Protect	ive Coating	N - None o	r Not Applicable
36: Rail, Tr, Gd, Term Std	1 1 7 Detter the		1	483: PCS D	ate		
72: Approach Alignment		in present minimu	m criteria	453: Bearing	g Type 1	C - Elastom	neric (laminated)
113: Scour Critical	N - Not over	•		455: Bearing	g Type 2	N - None	
71: Waterway Adequacy	N - Not Appl			528: Foundr	n: Abut Fwd	7 - Steel H	Piles (HP 10 x 42)
	Geometric	;		533: Foundr	h: Abut Rear		Place Reinforced
48: Max Span Length (ft)		101.3			<b>D</b> . 4		iles (12" diameter)
49: Structure Length (ft)		204.5		536: Foundr	n: Pier 1		Place Reinforced iles (16" diameter)
52: Deck Width, Out-To-Out	: (ft)	59.5		539: Foundr	n: Pier 2		Such as most Culverts)
424: Deck Area (sf)		12167.75				e and Servi	
32: Appr Roadway Width (ft	)	56.0		27: Year Bui			/ 0000
51: Road Width, Curb-Curb	(ft)	56.0		42A: Service		1 - Highw	
50A: Curb/SW Width: Left (1		0		42B: Service	-	-	ay, with or w/out
SOA. CUID/SW WIGHT. Left (I	()	0			Onder	pedestria	
50A: Curb/SW Width: Right	(ft)	0		28A: Lanes	on	03	
34: Skew (deg)		3		28B: Lanes	Under	04	
33: Bridge Median		0 - No median		19: Bypass I	Length	4	
54B: Min Vert Underclearan	ce (ft)	17		29: ADT		7514	
336A: Min Vert Clrnce IR Ca		99		109: % Truc	ks (%)	6	
336B: Min V Clr IR Non-Car		0		<b></b>	line		
578: Culvert Length (ft)		0			ins	pections	
	Load Postin	<u> </u>		90: Routine	Insn	Months 24	02/24/2023
		9		92A: FCM Ir	•	0	02/2 1/2020
41: Op/Post/Closed	A - Open			92B: Dive In	-	0	
	or above legal	loads		92C: Specia	•	0	
70.01: Date				920: Opecia 92D: UBIT II	-	-	
70.02: Sign Type				92E: Drone I	•	0 0	
734: Percent Legal (%)	150				пор. п	v	

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704: Analysis Date 63: Analysis Method	09/30/2022 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.	Inspector	Beedy,Matthew

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12-Reinforced Concrete Deck	3 - Mod.	12168	sq. ft.	11948	220	0	0
	(CS2) - Floor/Slab Minor transverse cracks throughout with a few spots showing efflorescence. Edge of Floor/Slab Minor popouts with random transverse cracking along the bottom of bridge rail.					•	
805-Wearing Surface - Monolithic Concrete		11452	sq. ft.	11327	125	0	0
	(CS2) - Transverse and longitudinal cracking mostly at forward end.						
109-Prestressed Concrete Open Girder/Beam	3 - Mod.	1636	ft.	1536	100	0	0
	(CS2) - Minor c 1,2,3,4,6,7,8 for		am haur	iches and we	ebs at beams	4,5,6 and 8	rear and
205-Reinforced Concrete Column	3 - Mod.	4	each	4	0	0	0
215-Reinforced Concrete Abutment	3 - Mod.	119	ft.	119	0	0	0
234-Reinforced Concrete Pier Cap	3 - Mod.	60	ft.	50	10	0	0
	(CS2) - Crackin	g along the	cap ed	ges.			
310-Elastomeric Bearing	3 - Mod.	16	each	16	0	0	0
312-Enclosed/Concealed Bearing	3 - Mod.	16	each	16	0	0	0
320-Prestressed Concrete Approach Slab	3 - Mod.	4928	sq. ft.	4678	250	0	0
	(CS2) - Transve	erse and lor	ngitudina	al cracking fo	rward and tra	ansverse cra	cking rear.
331-Reinforced Concrete Bridge Railing	3 - Mod.	409	ft.	374	35	0	0
	(CS2) - Vertical cracks. Reflector missing or damaged left. epoxy is starting to flake off in various locations left and right. There was a 2 x 2 spalled area removed from the face of the left bridge rail at centerline of westbound 161.						
815-Drainage	3 - Mod.	2	each	2	0	0	0
840-Approach Slab: Termination or Joint	3 - Mod.	112	ft.	88	24	0	0
	(CS2) - Forwar	d Jeene se	al becor	ning unbond	ed		

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ODOT District: District 05		LIC-00310-1005 _(450	05751)	Date Built: 10/01/2007
Major Maint: 01 - State Hig	hway Agency Facility Carried:	STATE ROUTE 310 Traffic C	)n: 1 - Highway	Rehab Date:
Routine Maint: 01 - State Hig	hway Agency Feature Inters:	SR310 OVER SR161 Traffic L	Inder: 1 - Highway, with or w/out	Insp. 01 - State Highway Agency Resp A:
FIPS Code: 39102 - JERS	EY TWP (LIC county)	Location: DISTRICT 05 AT	pedestrian JCT SR 161	Insp
	Inspector Beedy,Matthew	Inspection Date 02/24/2023	Reviewer Zigan,Curtis	Resp B:

#### Inspector Comments - Deck and Approach

Deck

#### **Bridge Wearing Surface (SF)**

HMWM Applied in 2020.

#### **Deck Drainage (EA)**

Debris scattered along edges both right and left.

#### Approach

#### **Approach Wearing Surface (EA)**

The transverse edges of the concrete is chipping at relief joints forward and rear. There are large transverse cracks at the rear.

#### Approach Slab (SF)

HMWM Applied in 2020.

#### Approach Relief Joint (LF)

Type A was removed and jeene seals installed at approach slabs The rear and forward has become unbonded and has failed.

#### Approach Embankment (EA)

All 4 slopes have some erosion. The berms are settled along the edge of the pavement at all four corners of the bridge. This has caused the electrical conduit coming out of the ends of the bridge rail to become exposed with the rear left conduit becoming seperated. The embankment has settled at the ends of the rear turned back wings and some of the backfill sand is leaking out from behind the walls.

#### Approach Guardrail (EA)

Minor washout at left rear and minor ding and dent damage along each run.

#### Signs (EA)

There is one sign on the right rail over the median of SR 161 and is is in good condition.

#### Sign Supports (EA)

There is one sign on the right rail over the median of SR 161 and is is in good condition.

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#### **Inspector Comments - General Appraisal**

#### Superstructure

#### **Diaphragm/X-Frames (EA)**

The diaphragms over the pier are starting to form delaminations and cracking, rear in bays 2,3,4,5,6 and 7 and forward in bays 2,3,4,6 and 7. Vertical cracking under the beams in the concrete diaphragms both forward and rear abutments.

#### **Utilities (LF)**

There is electrical conduits running through the bridge rails. Settlement of the embankment at the bridge ends has caused the conduits to become exposed. The rear left conduit has become seperated at connection that enters the bridge rail.

#### Substructure

#### Wingwalls (EA)

Minor cracking

#### **Slope Protection (EA)**

The embankment has settled at the ends of the turned back MSE walls and some backfill sand is seeping on to the ground. The corner of the rear left coping is becoming deteriorated and spalling. See Photo

#### <u>Culvert</u>

#### **Inspector Comments - Waterway**

#### Waterway Adequacy

<u>Channel</u>

Scour Critical

**Bridge Inspection Report** 

### **Pictures**



PHOTO 1 Description



PHOTO 2 Description

**Bridge Inspection Report** 

### **Pictures**



PHOTO 3 Description



PHOTO 4 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 5

Description



PHOTO 6 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 7 Description



PHOTO 8 Description

**Bridge Inspection Report** 

## Pictures



# PHOTO 9

Description



PHOTO 10 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 11

Description



PHOTO 12 Description

**Bridge Inspection Report** 

## Pictures



PHOTO 13





PHOTO 14 Description

**Bridge Inspection Report** 

## Pictures



PHOTO 15 Description



PHOTO 16 Description

Bridge Inspection Report

### **Pictures**



PHOTO 17 Description



PHOTO 18 Description

**Bridge Inspection Report** 

### **Pictures**



PHOTO 19

Description



PHOTO 20 Description

**Bridge Inspection Report** 

### **Pictures**



PHOTO 21





PHOTO 22 Description

**Bridge Inspection Report** 

### **Pictures**



PHOTO 23

Description



PHOTO 24 Description

**Bridge Inspection Report** 

### **Pictures**



PHOTO 25 Description



PHOTO 26 Description

**Bridge Inspection Report** 

## **Pictures**



## PHOTO 27

Description

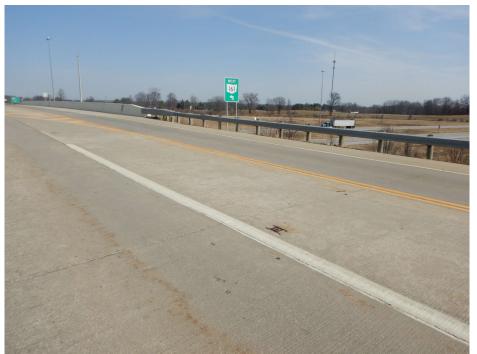


PHOTO 28 Description

02/24/2023 Inspection Date:

STATE ROUTE 310

**Bridge Inspection Report** 

## **Pictures**



PHOTO 29 Description



PHOTO 30 Description

#### Inspector: Matthew Beedy

**Inspection Date:** 02/24/2023

**Bridge Inspection Report** 

### **Pictures**



PHOTO 31

Description



PHOTO 32 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 33

Description



PHOTO 34 Description

# Inspector: Matthew Beedy

Inspection Date: 02/24/2023

**Bridge Inspection Report** 

## Pictures



PHOTO 35 Description



PHOTO 36 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 37

Description



PHOTO 38 Description

**Bridge Inspection Report** 

### Pictures

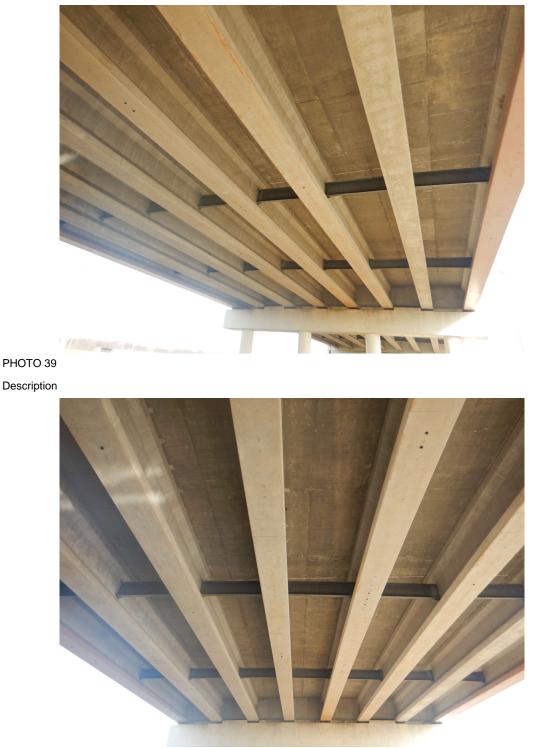


PHOTO 40 Description

4505751 STATE ROUTE 310

**Bridge Inspection Report** 

## **Pictures**



PHOTO 41

Description



PHOTO 42 Description

**Bridge Inspection Report** 

### Pictures



PHOTO 43

Description



PHOTO 44 Description

Bridge Inspection Report

### Pictures



PHOTO 45

Description



PHOTO 46 Description

**Bridge Inspection Report** 

## Pictures



PHOTO 47





PHOTO 48 Description

**Bridge Inspection Report** 

## Pictures

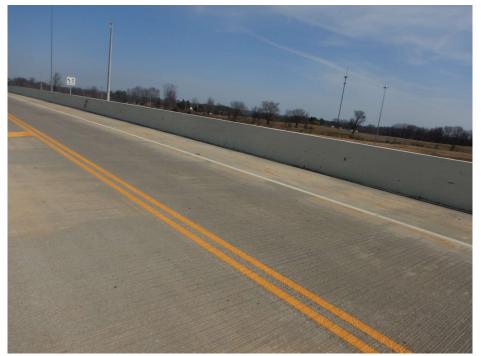


PHOTO 49 Description



PHOTO 50 Description

Bridge Inspection Report

## Pictures



PHOTO 51 Description



PHOTO 52 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 53

Description



PHOTO 54 Description

**Bridge Inspection Report** 

## **Pictures**



PHOTO 55 Description



PHOTO 56 Description