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# **Oregon Department of Transportation Bridge Inspection Report**

District: Structure: Creek & CORP, Hwy 35 (Shady)

Bridge ID: 02173A

Fac Crossed : CORP Suff Rating : 75.7

State Highway Agency

Fac Carried : OR 42 (HWY 035)

0.00 AC Depth :

Owner: County: Douglas

Mile Point : 75.99 mi Insp Date : 04/18/2018

Bridge 370.00 ft Length:

Record Type : 1 Insp Freq: 24 Bridge Width: 98.50 ft

JOSH LONIE (S0037) Inspector 1: Josh Beattie (832) Inspector 2:

Signature: \_

## **Element Condition States (New AASHTO report)**

		,	•						
Element	Structure Unit	Environment	Quantity	Units	CS 1	CS 2	CS 3	CS 4	Temp
12-Re Concrete Deck	1	3	36445	(SF)	36225	220	0	0	
1080-Delamination/Spall/Patched Area	1	3	200	(SF)	0	200	0	0	
1120-Efflorescence/Rust Staining	1	3	20	(SF)	0	20	0	0	
1130-Cracking (RC and Other)	1	3	4550	(SF)	4550	0	0	0	
1131-Soffit Cracking (RC, PSC)	1	3	100	(SF)	100	0	0	0	
521-Conc Prot Coating	1	3	31820	(SF)	31820	0	0	0	
109-Pre Opn Conc Girder/Beam	1	3	4070	(LF)	4036	33	1	0	
1080-Delamination/Spall/Patched Area	1	3	1	(LF)	0	0	1	0	
1110-Cracking (PSC)	1	3	33	(LF)	0	33	0	0	
205-Re Conc Column	1	3	12	(EA)	12	0	0	0	
215-Re Conc Abutment	1	3	285	(LF)	284	1	0	0	
1080-Delamination/Spall/Patched Area	1	3	1	(LF)	0	1	0	0	
1130-Cracking (RC and Other)	1	3	8	(LF)	8	0	0	0	
234-Re Conc Pier Cap	1	3	418	(LF)	418	0	0	0	
1130-Cracking (RC and Other)	1	3	12	(LF)	12	0	0	0	
302-Compressn Joint Seal	1	3	273	(LF)	69	164	0	40	
2310-Leakage	1	3	126	(LF)	0	86	0	40	
2350-Debris Impaction	1	3	70	(LF)	0	70	0	0	
2370-Metal Deterioration or Damage	1	3	8	(LF)	0	8	0	0	
306-Other Joint	1	3	273	(LF)	228	45	0	0	
2310-Leakage	1	3	45	(LF)	0	45	0	0	
310-Elastomeric Bearing	1	3	88	(EA)	88	0	0	0	
321-Re Conc Approach Slab	1	3	3940	(SF)	3940	0	0	0	
511-AC Wearing Surface	1	3	3440	(SF)	2840	600	0	0	
330-Metal Bridge Railing	1	3	370	(LF)	0	370	0	0	
1000-Corrosion	1	3	370	(LF)	0	370	0	0	
515-Steel Protective Coating	1	3	1110	(SF)	1110	0	0	0	
331-Re Conc Bridge Railing	1	3	820	(LF)	0	820	0	0	
1130-Cracking (RC and Other)	1	3	820	(LF)	0	820	0	0	
980-Approach Roadway Embank	1	3	1	(EA)	1	0	0	0	
990-Miscellaneous Elements	1	3	1	(EA)	1	0	0	0	
999-Roadway Impact	1	3	1	(EA)	0	1	0	0	

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Appraisal	NBI#	Rating
Scour	113	5 Stable w/in footing
Bridge Rail	36A	1 Meets Standards
Transitions	36B	0 Substandard

## **NBI Category**

Category	NBI#	Rating
Deck Condition	58	6 Satisfactory
Superstructure	59	7 Good
Substructure	60	6 Satisfactory

Appraisal	NBI#	Rating
Approach Rail	36C	0 Substandard
Rail Ends	36D	0 Substandard
Structural	67	6 Equal Min Criteria
Deck	68	9 Above Desirable Crit
Clearance	69	8 Equal Desirable
Waterway	71	8 Equal Desirable
Approach Alignment	72	8 Equal Desirable Crit

Category	NBI#	Rating
Channel	61	7 Minor Damage
Culvert/Retaining Walls	62	N N/A (NBI)

### Remarks

#### 12-Re Concrete Deck

The soffit in Span 5 left near Bent 5 is covered in soot from transient fires.

#### 1080-Delamination/Spall/Patched Area

There were some previous barrier anchor bolt spalls located in the eastbound fast lane prior to the deck seal. There were numerous areas of rough finished concrete with rock pockets and pop outs in the deck prior to the deck seal.

#### 1120-Efflorescence/Rust Staining

There are some small areas of hairline transverse cracking with efflorescence in the soffit near Bent 5 left.

### 1130-Cracking (RC and Other)

There were some large sized transverse cracks over the interior bents prior to the deck seal.

### 1131-Soffit Cracking (RC, PSC)

There are some hairline transverse cracks in the soffit.

#### 521-Conc Prot Coating

The deck was sealed in 2015.

#### 109-Pre Opn Conc Girder/Beam

The girders in Span 5 left near Bent 5 are covered in soot from transient fires.

### 1080-Delamination/Spall/Patched Area

The end of Span 1 - Girder 10 is spalled off with a piece of exposed rebar above the bearing (PHOTO A3).

### 1110-Cracking (PSC)

The girder closure pours (live load plugs) over the internal bents all have large vertical cracks.

## 215-Re Conc Abutment

## 1080-Delamination/Spall/Patched Area

There is a small corner spall near the left end of Bent 1.

#### 1130-Cracking (RC and Other)

There are a few hairline vertical cracks in the abutments.

#### 234-Re Conc Pier Cap

## 1130-Cracking (RC and Other)

There are hairline shear cracks in Bent 2, 3 and 4 caps near the column connections.

## 302-Compressn Joint Seal

### 2310-Leakage

The joint material at Bents 1 and 5 is completely gone in the sidewalk areas. The median section of the Bent 1 joint has completely failed. There is a lot of water leaking through the joint seals onto the abutments.

### 2350-Debris Impaction

The Bent 5 joint is full of debris in the eastbound lanes.

### 2370-Metal Deterioration or Damage

The armored corners at Bent 1 and 5 are bent in a couple of small areas.

### 306-Other Joint

The end relief joints have been paved over in some areas.

## 2310-Leakage

The end relief joints are leaking water in some areas.

#### 321-Re Conc Approach Slab

There is a void under the impact panel at Bent 1 left.

## 511-AC Wearing Surface

There are several minor sized longitudinal cracks in the asphalt on the approach slabs. Most of the cracks in the asphalt have been individually sealed.

#### 330-Metal Bridge Railing

## 1000-Corrosion

There is initial corrosion along the top rail of the pedestrian fence the entire length of the bridge.

## 331-Re Conc Bridge Railing

The bridge rail is misaligned two inches vertically and four and half inches horizontally at Bent 1 left (PHOTO A4). The sacking is coming off of the rail near Bent 3 left.

### 1130-Cracking (RC and Other)

There are hairline shrinkage cracks in the rails at less than three foot spacing.

### 990-Miscellaneous Elements

There are utilities mounted under the left and right sides of the bridge. There is pedestrian screening along the sidewalk on the left hand side of the bridge.

## Notes

Inspection Notes
Bridge Notes

### **Bridge Hydraulics Notes**

## Maintenance Recommendations As of: 3/7/2019

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/Schedule	Coos Bay Bridge Crew	109 PS/PT Con Open Girder/Beam Patch Concrete	Patch the spall in Span 1 - Girder 10 at Bent 1.		Approved	04/21/2014
Routine/Schedule	Coos Bay Bridge Crew	302 Joints Compression Seal Reseal Joint	Replace the missing sections of the joint seals in the median section of the Bent 1 joint and the sidewalk portions of the Bent 1 & 5 joint seals.		Approved	04/21/2014

<sup>\*</sup>Completed items not included on default search

## **Load Rating**

**Rating Date :** 08/18/2008 **Design Load :** 5 MS 18 (HS 20)

Operating Load: 35 ton
Inventory Rating: 27 ton

Posting Req: 5 At/Above Legal Loads

Posting Status: A Open, no restriction
OR Method: 8 LRFR RF HL93
IR Method: 8 LRFR RF HL93

Truck	Rating Factor	% Below	Posting Required	Controlling Member	Actual Posting	Posting Date
Type 3	4.60	5 At/Above Legal Loads	No	Int. Girder, span 1 of 4 Long. Reinf. Chk. at 0.75		
Type 3S-2	3.49	5 At/Above Legal Loads	No	Int. Girder, span 1 of 4 V at 0.944L		
Type 3-3	3.43	5 At/Above Legal Loads	No	Int. Girder, span 1 of 4 V at 0.944L		
SU4	4.14	5 At/Above Legal Loads	No	Int. Girder, span 2 of 4 V at 0.044L		
SU5	3.56	5 At/Above Legal Loads	No	Int. Girder, span 2 of 4 V at 0.044L		
SU6	3.21	5 At/Above Legal Loads	No	Int. Girder, span 2 of 4 V at 0.044L		
SU7	2.89	5 At/Above Legal Loads	No	Int. Girder, span 2 of 4 V at 0.044L		
EV2			No			
EV3			No			

# **Load Rating Notes**

Category	oad Rating NBI#	Condition Comparison Chart Rating Condition	Current Condition
Traffic Impact		CS2 Condition State 2	CS2
Deck Condition	58	5	6
Superstructure	59	8	7
Substructure	60	7	6
Temporary Repairs	103		
Wearing Surface Thickness		0.00	0.00

Inspection Schedule								
Activity	Conducted On	Frequency	Next Inspection					
Routine Inspection	04/18/2018	24	04/01/2020					
X-Channel	04/21/2010	120	04/01/2020					

# **Oregon Department of Transportation**

# Structure Inventory and Appraisal Report

Suff Rating: 75.7 Bridge NO: 02173A

Sun Kating. 73.7					Insp Date: 04/18/2018
(2) Highway District	District 7	(42A) Type Service On	5	(75) Type of Work	
(3) County	Douglas	(42B) Type Service Under	7	(76) Improvement Length	
(4) City	00000	(43) Struct Main	6 P/S Conc Continuous 02 Stringer/Girder	(90) Inspection Date	04/18/2018
(5) Inventory Route	131000420	(44) Struct Appr	0 Not Applicable 00 Not Applicable	(91) Inspection Frequency	24
(6) Feature INT	CORP	(45) Number Main Spans	4	(92) Critical Feat Insp (A) Fracture Critical (B) Underwater Insp	
(7) Facility Carried	OR 42 (HWY 035)	(46) Number Appr Spans	0	(94) Cost of Improvement	
(8) Structure Number	02173A035 07602	(47) Horizontal Clearance	86.00 ft	(95) Roadway Improvement	
(9) Location	012 MI NW HWY 1 JCT	(48) Maximum Span Length	95.00 ft	(96) Project Improvement	0
(10) Vert Clearance	99.99 ft	(49) Structure Length	370.00 ft	(97) Year of Improvement	
(11) Mile Post	75.99 mi	(50A) Sidewalk Width LT	8.00 ft	(98) Border BRST-Code	
(12) Base Highway Network	1	(50B) Sidewalk Width RT	0.00 ft	(100) Defense Highway	2
(13) LRS Inventory Route	003500100S00	(51) Bridge Roadway Width	86.00 ft	(101) Parallel Structure	N
(16) Latitude	43° 8' 51.75"	(52) Deck Width	98.50 ft	(102) Direction of Traffic	2
(17) Longitude	123° 22' 33.65"	(53) Vert Clear Over Deck	99.99 ft	(103) Temporary Structure	
(19) Bypass Detour	20.72 mi	(54) Vert Clear Under Deck	R 23.00 ft	(104) Highway System	1
(20) TOLL	3 On free road	(55) Min Lat Underclear CD	R 24.00 ft	(105) Federal Lands HWY	0
(21) Custodian	State Highway Agency	(56) Min Lat Underclear	L 0.00 ft	(106) Year Reconstructed	
(22) Owner	State Highway Agency	(58) Deck	6	(107) Deck Structure	1
(26) Func Class	14 Urban Other Princ	(59) SuperStructure	7	(108) Wearing Surface	100
(27) Year Built	1976	(60) SubStructure	6	(109) Truck ADT	22%
(28) Lanes	on: 5 / under: 0	(61) Channel	7	(110) Designated National Network	0
(29) Average Daily Traffic	22000	(62) Culvert	N	(111) Pier Protection	
(30) Year of ADT	2017	(63) Oper Rating Method	8	(112) NBIS Bridge Length	Υ
(31) Design Load	5 MS 18 (HS 20)	(64) Operating Rating	35.00 ton	(113) Scour Critical Bridge	5
(32) Approach Roadway	86.00 ft	(65) Inv Rating Method	8	(114) Future ADT	25500
(33) Bridge Median	0 No median	(66) Inventory Rating	27.00 ton	(115) Year of Future ADT	2037
(34) Skew	46°	(67) Structure Condition	6	(116) Vert-Lift Clearance	
(35) Structure Flared	0 No flare	(68) Deck Geometry	9	(117) Est Maint Cost	
(36) Traffic Safety Feature	1000	(69) Underclearance	8	(118) Culvert Length	
(37) Historical Significance	5	(70) Posting	5	(119) Culvert Inside Height	
(38) Navigation Control	0	(71) Waterway Adequacy	8	(120) Inspector	JOSH LONIE (S0037)
(39) Navigation Vert Clear	0.00 ft	(72) APPR RDWY Alignment	8	(122) Highway/CO RD	035
(40) Navigation Horz Clear	0.00 ft			(125) Embankment Erosion	5
(41) Open Status	Α				
Quality Assurance:					
WS Depth	0.00	(52) Deck Width	98.50 ft	(70) Posting	5
(28) Lanes	on: 5 / under: 0	(53) Vert Clear Over Deck	99.99 ft	(71) Waterway Adequacy	8
(32) Approach Roadway	86.00 ft	(58) Deck	6	(72) APPR RDWY Alignment	8
(41) Open Status	A	(59) SuperStructure	7	(95) Roadway Improvement	
		(00) 0 1 01 1	6	(103) Temporary Structure	
(43) Struct Main	6 P/S Conc Continuous	(60) SubStructure	U	(100) 1000 0000	
(43) Struct Main (44) Struct Appr	6 P/S Conc Continuous  0 Not Applicable	(60) SubStructure (61) Channel	7	(108) Wearing Surface	100

5

(51) Bridge Roadway Width 86.00 ft

(125) Embankment Erosion

**Bridge Clearance Documents: Not Available** 

**Bridge Detours Maps:** 02173A.tif (/BRMREPORTS/Reports/DownloadAttachments?fileName=%5C%5CS7000b%5CBridgeMgmt%5CBrMReports%5CBridge\_Detours%5C02173A.tif)

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Job Hazard Assessment: JHA02173A.pdf (/BRMREPORTS/Reports/DownloadAttachments?fileName=%5C%5CS7000b%5CBridgeMgmt%5CBrMReports%5CJob\_Hazard\_Assessment%5CRegion3%5CPDF%5CJHA02173A.pdf)

Cross Channel Documents: XC02173A.pdf (/BRMREPORTS/Reports/DownloadAttachments?fileName=%5C%5CS7000b%5CBridgeMgmt%5CBrMReports% 5CX Channel Reports%5CRegion3%5CPDF%5CXC02173A.pdf)

**Gusset Plate Documents: Not Available** 

Fracture Critical Inspection Documents: Not Available

Fatigue Prone Assessment: Not Available

Under Water: Not Available
Scour Plan Of Action: Not Available
Timber Boring: Not Available
Pin Hanger: Not Available
Deck Surveys: Not Available
Draw Bridges: Not Available
Supplemental: Not Available
Critical Findings: Not Available

Tunnel Maps: Not Available Tunnel Access: Not Available

https://restrictednet.odot.state.or.us/BRMREPORTS/Reports/BridgeInspReportViewResult

3/7/2019