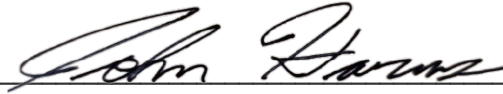


**Oregon Department of Transportation
Bridge Inspection Report**

District :	11	Structure :	OREGON WATER WONDERLAND, WOOD DUCK COURT	Bridge ID :	20783
Fac Crossed :	OREGON WATER WONDERLAND	Fac Carried :	WOOD DUCK COURT	Mile Point :	0.05 mi
Suff Rating :	7.4	Owner :	25 Other Local Agencies	Insp Date :	07/13/2023
AC Depth :	0.00	County :	Deschutes	Inspector 1 :	JOHN HARMS (C0079)
Bridge Length :	47.00 ft	Record Type :	1	Inspector 2 :	
		Insp Freq :	12		
		Bridge Width :	16.50 ft		

Signature: _____



Element Condition States (New AASHTO report)

Element	Structure Unit	Environment	Quantity	Units	CS 1	CS 2	CS 3	CS 4	Temp
31-Timber Deck	1	2	775	(SF)	0	204	539	32	
1140-Decay/Section Loss	1	2	78	(SF)	0	54	24	0	
1150-Check/Shake	1	2	349	(SF)	0	150	199	0	
1160-Crack (Timber)	1	2	48	(SF)	0	0	16	32	
1170-Split/Delamination (Timber)	1	2	300	(SF)	0	0	300	0	
107-Steel Opn Girder/Beam	1	2	141	(LF)	0	141	0	0	
1000-Corrosion	1	2	141	(LF)	0	141	0	0	
516-Weathering Steel	1	2	1410	(SF)	0	1410	0	0	
216-Timber Abutment	1	2	34	(LF)	0	17	17	0	
1150-Check/Shake	1	2	17	(LF)	0	17	0	0	
6000-Scour	1	2	17	(LF)	0	0	17	0	
330-Metal Bridge Railing	1	2	94	(LF)	94	0	0	0	
515-Steel Protective Coating	1	2	188	(SF)	188	0	0	0	
980-Approach Roadway Embank	1	2	1	(EA)	1	0	0	0	
997-Bridge Posting Signs	1	2	1	(EA)	1	0	0	0	
998-Adv. Warning Sign	1	2	1	(EA)	1	0	0	0	
999-Roadway Impact	1	2	1	(EA)	1	0	0	0	

Appraisal

Appraisal	NBI #	Rating
Scour	113	U Unknown Scour
Bridge Rail	36A	0 Substandard
Transitions	36B	0 Substandard
Approach Rail	36C	0 Substandard
Rail Ends	36D	0 Substandard
Structural	67	3 Intolerable - Correct
Deck	68	2 Intolerable - Replace
Clearance	69	N Not applicable (NBI)
Waterway	71	8 Equal Desirable
Approach Alignment	72	8 Equal Desirable Crit

NBI Category

Category	NBI #	Rating
Deck Condition	58	2 Critical
Superstructure	59	7 Good
Substructure	60	5 Fair
Channel	61	7 Minor Damage
Culvert/Retaining Walls	62	N N/A (NBI)

Remarks**31-Timber Deck SU 1 ENV 2**

Running boards have wear, and splits, and need replaced.

1140-Decay/Section Loss

Several areas of the running boards are missing, and some decay observed in the deck.

1150-Check/Shake

Checks are through out all deck elements.

1160-Crack (Timber)

Timber Cracks in the Running boards. Several 6x12 deck boards are cracked and in a neared failed condition. One deck board is failed creating a hole in the deck at the failed location.

1170-Split/Delamination (Timber)

Splits are throughout all timber deck elements.

107-Steel Opn Girder/Beam SU 1 ENV 2

Light Surface rust on beams---

216-Timber Abutment SU 1 ENV 2

Shakes n Checks thru out timber

6000-Scour

Timber Cribwalls on native soils. Some erosion at base.
UNDERMINING 12-18" At full length of the west abutment.

997-Bridge Posting Signs SU 1 ENV 2

Narrow Bridge Sign obstructs the load posting sign.

998-Adv. Warning Sign SU 1 ENV 2

Advanced warning signs in place.

999-Roadway Impact SU 1 ENV 2

One-way Bridge and Speed limit signs in place---

8058-BC01 Deck Condition SU 1 ENV 2

Moderate to sever defects throughout with local failures in the deck. Some areas in deck near failure.

8059-BC02 Superstructure Condition SU 1 ENV 2

Isolated minor defects.

8060-BC03 Substructure Condition SU 1 ENV 2

Widespread moderate defects; strength and performance are not affected.

Notes**Inspection Notes**

Reviewed for Item #113, stays a U, no information submitted, user #152, jrw, 11-27-07 Notification of posting received after inspection performed, Item 43 = A.

Bridge Notes

Private Structure-Public Access: Owner: Oregon Water Wonderland Unit 2. Contact: Chad Carpenter Mile High Community Management 376 SW Bluff Drive, Suite 4 Bend, Oregon 97709 Cell 541.948.6649 Office 541.598.7662 Detour map created and detour length edited Erick Cain 09/02/2009

Bridge Hydraulics Notes

No plans; insufficient foundation information. Scour code changes to 'U' - CRW 11/8/2019

Maintenance Recommendations

As of: 7/14/2023

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/High	Local Agency	31 Timber Deck Repair Decking	Replace timber running boards.	10000	Under Review	07/15/2022
Critical	Local Agency	31 Timber Deck Replace	Due to the local failures and overall condition of the remaining deck, the timber deck should be replaced as soon as possible..	0	Under Review	07/13/2023
Monitor	Local Agency	216 Timber Abutment Scour Repair	Monitor Erosion at base of timber crib walls. Consider installing rip rap armouring for protection	2500	Under Review	09/20/2007

*Completed items not included on default search

Load Rating

Rating Date :	11/11/2020	Posting Req :	0 >39.9% below
Design Load :	5 MS 18 (HS 20)	Posting Status :	P Posted for load
Operating Load :	11.3 ton	OR Method :	8 LRFR RF HL93
Inventory Rating :	8.7 ton	IR Method :	8 LRFR RF HL93

Truck	Rating Factor	% Below	Posting Required	Controlling Member	Actual Posting	Posting Date
Type 3	0.59	0 >39.9% below	Yes	Deck, span 2 of 4 -M at 0.01L	14.0	12/10/2021
Type 3S-2	0.66	1 30.0-39.9%below	Yes	Deck, span 2 of 4 -M at 0.01L	26.0	12/10/2021
Type 3-3	0.66	1 30.0-39.9%below	Yes	Deck, span 2 of 4 -M at 0.01L	26.0	12/10/2021

SU4	0.63	1 30.0-39.9%below	Yes	Deck, span 2 of 4 -M at 0.01L	16.0	12/10/2021
SU5	0.63	1 30.0-39.9%below	Yes	Deck, span 2 of 4 -M at 0.01L	19.0	12/10/2021
SU6	0.63	1 30.0-39.9%below	Yes	Deck, span 2 of 4 -M at 0.01L	21.0	12/10/2021
SU7	0.63	1 30.0-39.9%below	Yes	Deck, span 2 of 4 -M at 0.01L	21.0	12/10/2021
EV2	0.40	0 >39.9% below	No	Deck, span 2 of 4 -M at 0.01L		
EV3	0.21	0 >39.9% below	No	Deck, span 2 of 4 -M at 0.01L		

Load Rating Notes

For new local agency bridges use the HS-20 designation when there are no plans. Bert Hartman. Changed to 12 month inspection frequency due to updated load rating - J.E.H. This bridge has been posted. Chad sent ODOT an email on 12/10/21. (NB)

Load Rating Condition Comparison Chart

Category	NBI #	Rating Condition	Current Condition
Traffic Impact		CS1 Condition State 1	CS1
Deck Condition	58	6	2
Superstructure	59	7	7
Substructure	60	5	5
Temporary Repairs	103		
Wearing Surface Thickness		0.00	0.00

Inspection Schedule

Activity	Conducted On	Frequency	Next Inspection
Routine Inspection	07/13/2023	12	07/01/2024
X-Channel	07/28/2021	48	07/01/2025
Fatigue Prone	07/16/2019	120	07/01/2029

Oregon Department of Transportation Structure Inventory and Appraisal Report

Suff Rating: 7.4

**Bridge NO: 20783
Insp Date: 07/13/2023**

(2) Highway District	District 11	(42A) Type Service On	1	(76) Improvement Length	45.93 ft
(3) County	Deschutes	(42B) Type Service Under	5		

(4) City	00000	(43) Struct Main	3 Steel 02 Stringer/Girder	(90) Inspection Date	07/13/2023
(5) Inventory Route	141000000	(44) Struct Appr	0 Not Applicable 00 Not Applicable	(91) Inspection Frequency	12
(6) Feature INT	OREGON WATER WONDERLAND	(45) Number Main Spans	1	(92) Critical Feat Insp (A) Fracture Critical (B) Underwater Insp	
(7) Facility Carried	WOOD DUCK COURT	(46) Number Appr Spans	0	(94) Cost of Improvement	150503
(8) Structure Number	20783 000 00005	(47) Horizontal Clearance	14.00 ft	(95) Roadway Improvement	15050
(9) Location	WOOD DUCK/WOOD DUCK CT	(48) Maximum Span Length	47.00 ft	(96) Project Improvement	240804
(10) Vert Clearance	99.99 ft	(49) Structure Length	47.00 ft	(97) Year of Improvement	2011
(11) Mile Post	0.05 mi	(50A) Sidewalk Width LT	0.00 ft	(98) Border BRST-Code	
(12) Base Highway Network	0	(50B) Sidewalk Width RT	0.00 ft	(100) Defense Highway	0
(13) LRS Inventory Route	0000000000000	(51) Bridge Roadway Width	14.00 ft	(101) Parallel Structure	N
(16) Latitude	43° 49' 51.46"	(52) Deck Width	16.50 ft	(102) Direction of Traffic	3
(17) Longitude	121° 28' 7.50"	(53) Vert Clear Over Deck	99.99 ft	(103) Temporary Structure	
(19) Bypass Detour	99.99 mi	(54) Vert Clear Under Deck	N 0.00 ft	(104) Highway System	0
(20) TOLL	3 On free road	(55) Min Lat Underclear CD	N 0.00 ft	(105) Federal Lands HWY	0
(21) Custodian	County Highway Agency	(56) Min Lat Underclear	L 0.00 ft	(106) Year Reconstructed	
(22) Owner	Other Local Agencies	(58) Deck	2	(107) Deck Structure	8
(26) Func Class	09 Rural Local	(59) SuperStructure	7	(108) Wearing Surface	700
(27) Year Built	1984	(60) SubStructure	5	(109) Truck ADT	2%
(28) Lanes	on: 1 / under: 0	(61) Channel	7	(110) Designated National Network	0
(29) Average Daily Traffic	279	(62) Culvert	N	(111) Pier Protection	
(30) Year of ADT	2020	(63) Oper Rating Method	8	(112) NBIS Bridge Length	Y
(31) Design Load	5 MS 18 (HS 20)	(64) Operating Rating	11.30 ton	(113) Scour Critical Bridge	U
(32) Approach Roadway	14.00 ft	(65) Inv Rating Method	8	(114) Future ADT	318
(33) Bridge Median	0 No median	(66) Inventory Rating	8.70 ton	(115) Year of Future ADT	2025
(34) Skew	0°	(67) Structure Condition	3	(116) Vert-Lift Clearance	
(35) Structure Flared	0 No flare	(68) Deck Geometry	2	(117) Est Maint Cost	
(36) Traffic Safety Feature	0000	(69) Underclearance	N	(118) Culvert Length	
(37) Historical Significance	5	(70) Posting	0	(119) Culvert Inside Height	
(38) Navigation Control	0	(71) Waterway Adequacy	8	(120) Inspector	JOHN HARMS (C0079)
(39) Navigation Vert Clear	0.00 ft	(72) APPR RDWY Alignment	8	(122) Highway/CO RD	C0000

(40) Navigation Horz Clear	0.00 ft	(75) Type of Work	331	(125) Embankment Erosion	3
(41) Open Status	P				
Quality Assurance:					
WS Depth	0.00	(51) Bridge Roadway Width	14.00 ft	(70) Posting	0
(28) Lanes	on: 1 / under: 0	(52) Deck Width	16.50 ft	(71) Waterway Adequacy	8
(32) Approach Roadway	14.00 ft	(53) Vert Clear Over Deck	99.99 ft	(72) APPR RDWY Alignment	8
(36) Traffic Safety Feature	0000	(58) Deck	2		
(41) Open Status	P	(59) SuperStructure	7	(103) Temporary Structure	
(43) Struct Main	3 Steel 02 Stringer/Girder	(60) SubStructure	5	(108) Wearing Surface	700
(44) Struct Appr	0 Not Applicable 00 Not Applicable	(61) Channel	7	(113) Scour Critical Bridge	U
(45) Number Main Spans	1	(62) Culvert	N		

Repository Documents

BrMReports directory contents:

Bridge Clearance Documents: Not Available

Bridge Detours Maps: [20783.tif](#)

Bridge Images: [IM20783_997A.jpg](#) [IM20783_997B.jpg](#) [IM20783_998A.jpg](#) [IM20783_A0.JPG](#) [IM20783_A1.JPG](#) [IM20783_A2.JPG](#) [IM20783_A3.JPG](#) [IM20783_A4.JPG](#) [IM20783_A5.JPG](#) [IM20783_A6.JPG](#) [IM20783_B1.JPG](#) [IM20783_LR1.jpg](#) [IM20783_LR2.jpg](#) [IM20783_S1.JPG](#)

Job Hazard Assessment: Not Available

Cross Channel Documents: [XC20783.pdf](#)

Gusset Plate Documents: Not Available

Fracture Critical Inspection Documents: Not Available

Fatigue Prone Assessment: [FP20783.pdf](#)

Under Water: Not Available

Scour Plan Of Action: [POA_20783.pdf](#)

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