Oregon Department of Transportation
Bridge Inspection Report

District :	2B	**Structure :**	Burnside St (East Approach) over Hwy 1 & Conns	**Bridge ID :**	00511B
Fac Crossed :	EAST BURNSIDE APPROACH	**Owner :**	County Hwy Agency	**Fac Carried :**	BURNSIDE ST
Suff Rating :	39.5	**County :**	Multnomah	**Mile Point :**	0.00 mi
AC Depth :	0.00	**Record Type :**	1	**Insp Date :**	06/29/2021
Bridge Length :	859.00 ft	**Insp Freq :**	24	**Inspector 1 :**	Andrew Packard (C0054)
		Bridge Width :	86.00 ft	**Inspector 2 :**	Michael Beglin (Fickett)

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**	**61226**	**(SF)**	**28354**	**32511**	**361**	**0**	
1080-Delamination/Spall/Patched Area	**1**	3	11	(SF)	0	11	0	0	
1081-Soffit Spalls/Delams/Patches	**1**	3	25225	(SF)	0	25000	225	0	
1090-Exposed Rebar	**1**	3	1635	(SF)	0	1500	135	0	
1120-Effloresence/Rust Staining	**1**	3	1000	(SF)	0	1000	0	0	
1131-Soffit Cracking (RC, PSC)	**1**	3	5000	(SF)	0	5000	0	0	
513-Rigid Wearing Surface	**1**	3	42018	(SF)	36878	140	5000	0	
16-Re Conc Top Flange	**1**	**3**	**18684**	**(SF)**	**16423**	**2181**	**80**	**0**	
1081-Soffit Spalls/Delams/Patches	**1**	3	200	(SF)	0	200	0	0	
1090-Exposed Rebar	**1**	3	139	(SF)	0	102	37	0	
1120-Effloresence/Rust Staining	**1**	3	329	(SF)	0	286	43	0	
1131-Soffit Cracking (RC, PSC)	**1**	3	3185	(SF)	1592	1593	0	0	
513-Rigid Wearing Surface	**1**	3	15570	(SF)	15070	0	500	0	
107-Steel Opn Girder/Beam	**1**	**3**	**1458**	**(LF)**	**1458**	**0**	**0**	**0**	
517-Concrete Encased	**1**	3	23324	(SF)	10000	13284	40	0	
110-Re Conc Opn Girder/Beam	**1**	**3**	**2719**	**(LF)**	**2142**	**575**	**2**	**0**	
1090-Exposed Rebar	**1**	3	5	(LF)	0	5	0	0	

1120-Efflorescence/Rust Staining	**1**	3	16	(LF)	0	16	0	0
1130-Cracking (RC and Other)	**1**	3	546	(LF)	0	544	2	0
7000-Damage	**1**	3	10	(LF)	0	10	0	0
113-Steel Stringer	**1**	**3**	**9120**	**(LF)**	**9095**	**0**	**25**	**0**
1000-Corrosion	**1**	3	25	(LF)	0	0	25	0
517-Concrete Encased	**1**	3	36480	(SF)	33235	3100	145	0
116-Re Conc Stringer	**1**	**3**	**80**	**(LF)**	**70**	**10**	**0**	**0**
1080-Delamination/Spall/Patched Area	**1**	3	10	(LF)	0	10	0	0
152-Steel Floor Beam	**1**	**3**	**2724**	**(LF)**	**2698**	**0**	**26**	**0**
1000-Corrosion	**1**	3	26	(LF)	0	0	26	0
517-Concrete Encased	**1**	3	35405	(SF)	13810	15460	5900	235
155-Re Conc Floor Beam	**1**	**3**	**36**	**(LF)**	**31**	**5**	**0**	**0**
1080-Delamination/Spall/Patched Area	**1**	3	1	(LF)	0	1	0	0
1120-Efflorescence/Rust Staining	**1**	3	1	(LF)	0	1	0	0
1130-Cracking (RC and Other)	**1**	3	3	(LF)	0	3	0	0
202-Steel Column	**1**	**3**	**18**	**(EA)**	**18**	**0**	**0**	**0**
517-Concrete Encased	**1**	3	3600	(SF)	3225	360	15	0
205-Re Conc Column	**1**	**3**	**24**	**(EA)**	**11**	**11**	**2**	**0**
1080-Delamination/Spall/Patched Area	**1**	3	1	(EA)	0	1	0	0
1090-Exposed Rebar	**1**	3	2	(EA)	0	0	2	0
1120-Efflorescence/Rust Staining	**1**	3	2	(EA)	0	2	0	0
1130-Cracking (RC and Other)	**1**	3	11	(EA)	11	0	0	0
7000-Damage	**1**	3	8	(EA)	0	8	0	0
215-Re Conc Abutment	**1**	**3**	**108**	**(LF)**	**75**	**29**	**4**	**0**
1080-Delamination/Spall/Patched Area	**1**	3	3	(LF)	0	0	3	0
1130-Cracking (RC and Other)	**1**	3	30	(LF)	0	29	1	0
221-RC Spread Ftg	**1**	**3**	**8**	**(LF)**	**0**	**8**	**0**	**0**
6000-Scour	**1**	3	8	(LF)	0	8	0	0
234-Re Conc Pier Cap	**1**	**3**	**648**	**(LF)**	**533**	**115**	**0**	**0**

1120-Efflorescence/Rust Staining	**1**	3	65	(LF)	0	65	0	0
1130-Cracking (RC and Other)	**1**	3	50	(LF)	0	50	0	0
301-Pourable Joint Seal	**1**	**3**	**60**	**(LF)**	**60**	**0**	**0**	**0**
302-Compressn Joint Seal	**1**	**3**	**700**	**(LF)**	**690**	**10**	**0**	**0**
2310-Leakage	**1**	3	10	(LF)	0	10	0	0
305-Assem Jnt Wthut Seal	**1**	**3**	**70**	**(LF)**	**60**	**10**	**0**	**0**
2360-Adjacent Deck or Header	**1**	3	10	(LF)	0	10	0	0
311-Moveable Bearing	**1**	**3**	**54**	**(EA)**	**46**	**8**	**0**	**0**
1000-Corrosion	**1**	3	6	(EA)	0	6	0	0
2220-Alignment	**1**	3	2	(EA)	0	2	0	0
518-Steel Paint	**1**	3	30	(SF)	24	6	0	0
313-Fixed Bearing	**1**	**3**	**6**	**(EA)**	**0**	**6**	**0**	**0**
1000-Corrosion	**1**	3	6	(EA)	0	6	0	0
518-Steel Paint	**1**	3	18	(SF)	13	5	0	0
330-Metal Bridge Railing	**1**	**3**	**420**	**(LF)**	**420**	**0**	**0**	**0**
518-Steel Paint	**1**	3	840	(SF)	840	0	0	0
331-Re Conc Bridge Railing	**1**	**3**	**1362**	**(LF)**	**1362**	**0**	**0**	**0**
1130-Cracking (RC and Other)	**1**	3	500	(LF)	500	0	0	0
980-Approach Roadway Embank	**1**	**2**	**1**	**(EA)**	**1**	**0**	**0**	**0**
990-Miscellaneous Elements	**1**	**3**	**1**	**(EA)**	**1**	**0**	**0**	**0**
998-Adv. Warning Sign	**1**	**1**	**1**	**(EA)**	**1**	**0**	**0**	**0**
999-Roadway Impact	**1**	**1**	**1**	**(EA)**	**0**	**1**	**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	5 Above Tolerable
Clearance	69	3 Intolerable - Correct
Waterway	71	9 Above Desirable
Approach Alignment	72	8 Equal Desirable Crit

NBI Category

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

Remarks

12-Re Concrete Deck SU 1 ENV 3
RC DECK OVER SPANS 23 THROUGH 30....THE SOFFIT IS BLACKENED IN ALL SPANS....THE RAILROAD IS BELOW SPAN 26.

1080-Delamination/Spall/Patched Area
SEVERAL SMALL DIAMETER SPALLS IN DECK SURFACE SCATTERED THROUGHOUT....SPANS 29-30: SEVERAL PATCHES IN DECK IN WESTBOUND LANES. MOST SMALLER THAN 2'X2'.

1081-Soffit Spalls/Delams/Patches
AREAS OF SOFFIT DELAMINATION AND SPALLING SCATTERED THROUGHOUT, MANY WITH EXPOSED DECK BARS…. THERE ARE ALSO MANY SOFFIT PATCHES SCATTERED THROUGHOUT, MOST ARE HOLDING, BUT A FEW ARE STARTING TO FAIL....A MAJORITY OF THE DELAMINATIONS AND SPALLS ARE 2 TO 6-SF IN AREA AND CAUSED BY INSUFFICIENT CONCRETE REBAR COVER....IN SPANS 23 tHRU SPAN 26 FB 2 AND SPANS 27 THRU 30: THERE IS SIGNIFICANT SPALLING WITH EXPOSED REBAR IN BOTH THE INTERIOR AND EXTERIOR SOFFITS. THE EXPOSED BARS IN THESE SPANS HAVE BEEN CLEANED AND EPOXY COATED….IN SPAN 26 THE SPALLING IS MOST SIGNIFICANT IN THE EXTERIOR SOFFITS, THE EXPOSED BARS HERE HAVE NOT BEEN CLEANED AND COATED....SOFFIT CONCRETE NEEDS TO BE ROUTINELY SOUNDED FOR LOOSE AND DELAMINATED CONCRETE AND TO BE REPAIRED ACCORDINGLY.

1090-Exposed Rebar
VARYING LENGTHS OF EXPOSED BOTTOM MAT BARS SCATTERED THROUGHOUT THE INTERIOR AND EXTERIOR SOFFITS IN MOST SPANS. SOME WITH MINOR SECTION LOSS. ALL EXPOSED BARS, WITH THE EXCEPTION OF SPAN 26, HAVE BEEN CLEANED AND COATED....SPAN 30: (1) 2' LENGTH OF EXPOSED REBAR NEAR MID-SPAN ON DECK.

1120-Efflorescence/Rust Staining
SEVERAL HAIRLINE SOFFIT CRACKS WITH LEACHING IN ALL SPANS....SPAN 29: 4' TRANSVERSE CRACK EXHIBITING RUST STAINING BETWEEN FB0 AND FB1 NEARER FB1 & G2.

1131-Soffit Cracking (RC, PSC)
HAIRLINE SOFFIT CRACKING THROUGHOUT ALL SPANS.

513-Rigid Wearing Surface
MODERATE MAP CRACKING PRESENT IN SPANS 23-30 CENTER LANES WITH (2) FULL LENGTH LONGITUDINAL CRACKS UP TO 1/16" WIDE ALONG WHEEL LINES, LEFTMOST CRACK IS FULL LENGTH OF BRIDGE.

16-Re Conc Top Flange SU 1 ENV 3
TOP FLANGE IN SPANS 31 THROUGH 37.

1081-Soffit Spalls/Delams/Patches
SPANS 31 THRU 37 SOFFITS HAVE SVRL SMALL AREAS OF DELAMINATED REBAR COVER AND MANY PATCHES SCATTERED THROUGHOUT....SPANS 36 AND 37, SOME SPALLS AND DELAMINATED REBAR COVER....SOFFIT CONCRETE NEEDS TO BE ROUTINELY SOUNDED FOR LOOSE AND DELAMINATED CONCRETE AND TO BE REPAIRED ACCORDINGLY.

1090-Exposed Rebar
SHALLOW SPALLS W/ XPSD BARS SCATTERED THROUGHOUT MOST SPANS, SOME WITH MINOR SECTION LOSS... MOST INSTANCES HAVE BEEN CLEANED AND PATCHED OR COATED... SPAN 31 NORTH SIDEWALK: SVRL XPSD SOFFIT BARS IN SPALLS ADJACENT TO THE SOFFIT SUPPORTED CATCH BASIN... SPAN 32 SOUTH SIDEWALK: SVRL XPSD BARS AROUND AN AREA OF SOFFIT THAT WAS SPALLED/CHIPPED OUT TO ACCOMMODATE A DRAIN....

1120-Efflorescence/Rust Staining
ONE TO TWO H.L. TO NARROW TRANSVERSE SOFFIT CRACKS WITH LITE LEACHING EFFLOR. PER SOFFIT BAY, OVER A SHALLOW TRANSVERSE BOTTOM MAT BAR.....H.L. MAP CRACKING, SOME WITH LITE LEACHING EFFLOR. BETWEEN CLOSELY SPACED OLD TROLLEY LINE GIRDERS 8-9 AND 10-11 IN ALL SPANS....A FEW LEACHING CRACKS WITH INDICATIONS OF RUST STAINING.

1131-Soffit Cracking (RC, PSC)
HAIRLINE CRACKING IN MOST SOFFIT BAYS TYPICAL OF MINOR SURFACE TYPE SHRINKAGE CRACKING. ONE TO TWO H.L. TO NARROW TRANSVERSE SOFFIT CRACKS PER SOFFIT BAY, OVER A SHALLOW TRANSVERSE BOTTOM MAT BAR. H.L. MAP CRACKING BETWEEN CLOSELY SPACED TROLLEY TRACK GIRDERS 8-9 AND 10-11 IN ALL SPANS.

513-Rigid Wearing Surface
SPANS 31-37: (1) LONGITUDINAL CRACK UP TO 1/16" WIDE IN CENTER MOST LANE ALONG LEFT WHEEL LINE.

107-Steel Opn Girder/Beam SU 1 ENV 3
SPAN 23 THRU 30: SPAN 23 IS THE FIRST SPAN EAST OF THE BURNSIDE TRUSS....(2) CONCRETE ENCASED STEEL GIRDERS IN SPANS 23 THROUGH 29, AND (3) IN SPAN 30.

517-Concrete Encased
THE CONCRETE ENCASEMENT ALONG SEVERAL LENGTHS OF GIRDER BOTTOM FLANGE IS CRACKING

AND HAS DELAMINATION'S....MUCH OF THE DETERIORATION IS OCCURRING BELOW THE INTERFACE WITH THE FLOOR BEAMS....SEVERAL OF DETERIORATED SECTIONS HAVE BEEN NETTED TO CAPTURE LOOSE CONCRETE....ENCASEMENT DETERIORATION IN SPANS 23-25, SPAN 26 UP TO FB 2 AND SPANS 27-30 HAS BEEN REPAIRED AND WRAPPED WITH FRP....ENCASEMENT DETERIORATION IN SPAN 26 REMAINS....ALL GIRDER ENCASEMENT COVER SHOULD CONTINUE TO BE MONITORED AND SOUNDED ROUTINELY FOR LOOSE AND DELAMINATED CONCRETE, AND REPAIRED/MITIGATED ACCORDINGLY.

110-Re Conc Opn Girder/Beam SU 1 ENV 3
SPANS 31 THRU 37: THERE ARE (16) RC GIRDERS IN SPANS 31 THROUGH 35 AND 37....THERE ARE (14) GIRDERS IN SPAN 36.

1090-Exposed Rebar
A COUPLE REBARS EXPOSED IN SHALLOW SPALLS WITH MINOR SECTION LOSS PRESENT....MOST EXPOSED REBAR IS ON UNDERSIDE OF GIRDERS NEAR ENDS AND HAS BEEN COVERED WITH PAINT....SPAN 33 G7: (1) 6" LENGTH EXPOSED REBAR ON UNDERSIDE OF GIRDER, NEAR END.

1120-Efflorescence/Rust Staining
SPAN 33 G16, NEAR BENT 34: NARROW CRACK ALONG TOP FLANGE, END 2'. AREA HAS BEEN PATCHED BUT LEAKING FROM JOINT ABOVE IS CAUSING RUST STAINING FROM CRACK....SPAN 37, NEAR ABUT. 38: SOME MINOR NARROW CRACKING WITH EFFLOR.

1130-Cracking (RC and Other)
HAIRLINE SHEAR AND FLEXURE CRACKING IN MOST GIRDERS IN SPANS 31 THROUGH 37....SPAN 33 G16, NEAR BENT 34: NARROW CRACK ALONG TOP FLANGE, END 2', AREA HAS BEEN PATCHED.

7000-Damage
SPAN 34, G1: SEVERAL HIGH IMPACT LOADS.

113-Steel Stringer SU 1 ENV 3
CONCRETE ENCASED STEEL STRINGERS IN SPANS 23 THROUGH 30.

1000-Corrosion
SEVERAL STRINGERS WITH EXPOSED FLANGE STEEL AND MINOR SECTION LOSS....SPAN 23 STRINGER 13 AT BENT 23: EXPOSED BOTTOM FLANGE STEEL WITH LAMINAR CORROSION, AND 1" OF PACK RUST BETWEEN THE BOTTOM FLANGE AND THE BEARING SEAT....THE SEAT IS DEFLECTED DOWNWARD AND NEEDS TO BE REPAIRED....SPAN 25 STRINGER 12 @ BENT 26 HAS EXPOSED CORRODING BOTTOM FLANGE STEEL....AS OF THE 2017 INSPECTION THE EXPOSED STEEL IN SPANS 23-25 HAS BEEN CLEANED AND EPOXY COATED....SPAN 27 STRINGER 13 HAS A TOTAL OF 12' OF XPSD CORRODING BTM FLANGE STEEL BTWN FB'S 1 AND 4....SPAN 28 STRINGER 12 HAS 1' OF XPSD CORRODING BTM FLANGE STEEL NEAR FB7.

517-Concrete Encased
THE CONCRETE ENCASEMENT ALONG SEVERAL SHORT LENGTHS OF STRINGER BOTTOM FLANGE IS CRACKING AND HAS DELAMINATIONS....SPAN 23: STRINGER 9 HAS A 10"X2"X1" DEEP SPALL NEAR FB5....STRINGER 12 HAS 10' OF DELAMINATED BTM FLANGE BTWN FB0 & FB1 AND 2' @ FB5....SPAN 24: STRINGER 12 HAS 2' OF BTM FLANGE DELAMINATION NEAR FB4....SPAN 26: STRINGER 2 HAS 2' OF BTM FLANGE DELAMINATION NEAR FB4. STRINGER 12 HAS 3' OF BTM FLANGE DELAMINATION NEAR FB5....SPAN 27: STRINGER 1 HAS 3' EXPOSED BTM FLANGE STEEL BTWN FB1 & FB2 AND IS NETTED FROM FB2 TO FB5....SPAN 29: STRINGER 14 HAS HORIZONTAL CRACKING ALONG COLD JOINT/INTERFACE WITH SOFFIT ALONG THE OUTBOARD EDGE, MONITOR...ALL STRINGER ENCASEMENT COVER SHOULD CONTINUE TO BE MONITORED AND SOUNDED ROUTINELY FOR LOOSE AND DELAMINATED CONCRETE, AND REPAIRED/MITIGATED ACCORDINGLY.

116-Re Conc Stringer SU 1 ENV 3
SPAN 36 RC STRINGERS BELOW THE SIDEWALKS.

1080-Delamination/Spall/Patched Area
SEVERAL SPALLS AND LOOSE DELAMINATIONS IN THE STRINGERS HAVE BEEN NETTED.

152-Steel Floor Beam SU 1 ENV 3
CONCRETE ENCASED FLOOR BEAMS IN SPANS 23 THROUGH 30... FB NUMBERING FROM W TO E AS FOLLOWS: SPAN 23 FB 0-5, SPAN 24 FB 1-5, SPAN 25 FB 0-5, SPAN 26 FB 1-5, SPAN 27 FB 0-7, SPAN 28 FB 1-7 AND SPAN 29 FB 0-5.

1000-Corrosion
THE CONCRETE ENCASEMENT ALONG SEVERAL LENGTHS OF FLOOR BEAM BOTTOM FLANGE HAS SPALLED AWAY EXPOSING STEEL WITH SURFACE CORROSION....MANY AREAS ARE NETTED AND INHIBIT OBSERVATION OF ENCASEMENT AND XPSD SURFACES....EXPOSED STEEL SURFACES IN SPANS 23 TO 25 HAVE BEEN CLEANED AND EPOXY COATED....OBSERVED EXPOSED FLOOR BEAM STEEL WITH SURFACE CORROSION AND MINOR SECTION LOSS: SPAN 26: FB 1 @ SOUTH CANTILEVERED END AND FB'S 3 & 5 @ NORTH CANTILEVERED ENDS; SPAN 27: FB 0 JUST SOUTH OF BOTH GIRDERS 1 & 2 AND FB 4 @ NORTH CANTILEVERED END; SPAN 28: FB 6 @ MIDSPAN AND FB 7 JUST NORTH OF BOTH GIRDERS 1 & 2.

517-Concrete Encased
THE CONCRETE ENCASEMENT ALONG SEVERAL LENGTHS OF FLOOR BEAM BOTTOM FLANGE IS CRACKING AND HAVE DELAMINATIONS...
SEVERAL OF THESE LOCATIONS ARE NETTED TO CAPTURE LOOSE CONCRETE...

SPANS 23-25 AND SPAN 26 UP TO FB2, AND SPANS 27-30: INTERIOR FLOOR BEAMS - LOOSE ENCASEMENT HAS BEEN REMOVED AND EXPOSED STEEL HAS BEEN CLEANED AND EPOXY COATED; EXTERIOR (SIDEWALK) FLOOR BEAMS - DETERIORATED ENCASEMENT REMAINS, EXPOSED STEEL SURFACES HAVE BEEN CLEANED AND EPOXY COATED...
MODERATE ENCASEMENT DETERIORATION: SPAN 26 FBS 3-5; SPAN 26, FB5 N...
S DOWN THE ANGLED BOTTOM FLANGE TOWARDS THE GIRDERS...
FLOOR BEAMS OBSERVED TO HAVE MODERATE TO SIGNIFICANT ENCASEMENT DELAMINATION THAT SHOULD BE NETTED ARE: SPAN 24, FB1, FB3, and FB 5, N. EXTERIOR FB; SPAN 24, FB4 AND FB 5, S. EXTERIOR FB; SPAN 25, FB0, FB2 AND FB 3, N. AND S. EXTERIOR FB; SPAN 28, FB7, S. EXTERIOR FB...
ALL ENCASEMENT SHOULD CONTINUE TO BE MONITORED AND SOUNDED ROUTINELY FOR LOOSE AND DELAMINATED CONCRETE, AND REPAIRED/MITIGATED ACCORDINGLY.

155-Re Conc Floor Beam SU 1 ENV 3
CANTILEVER RC FLOOR BEAMS ARE FOUND IN SPAN 36... EXPOSED REBAR IN S. CANTILEVER FLOOR BEAMS HAS BEEN CLEANED & EPOXIED ON FB 1 & 2.

1080-Delamination/Spall/Patched Area
1-FT. OF DELAM/SPALLS ALONG THE NORTH SIDE ENDS HAS BEEN PATCHED.

1120-Efflorescence/Rust Staining
SPAN 30: FB 2, S. CANT: CRACKING AND DELAM W/ EFFLOR., END 1'.

1130-Cracking (RC and Other)
SPAN 30: FB 1, N & S CANT.: CRACKING AND DELAM, END 1'; FB 2, S. CANT.: CRACKING AND DELAM, END 1'; FB 4, N CANT. CRACKING AND DELAM, END 1'.

202-Steel Column SU 1 ENV 3

517-Concrete Encased
THE CONCRETE ENCASEMENT ON SEVERAL COLUMNS IS CRACKING, SPALLING, AND SOUNDS DELAMINATED WHEN SOUNDED WITH A ROCK HAMMER.....BENT 24 COLUMN 1: FULL HEIGHT NARROW CRACK DOWN CENTERLINE OF EAST FACE....CONCRETE DELAMINATED 6" TO 1' TO EACH SIDE OF CRACK....BENT 24 COLUMN 2: DELAMINATED ON 3 SIDES, 4-SQ FT ON THE EAST FACE, 3-SQ FT ON THE SOUTH FACE, 2-SQ FT ON THE WEST FACE.....BENT 25 COLUMNS 1 AND 2: MAP CRACKING DOWN CENTER 18" OF WEST FACE, FULL HEIGHT, AND SOUNDS DELAMINATED....BENT 25 COLUMN 2: DELAM PATCH BELOW THE BEARING ON THE WEST FACE, VERT CRACKS FULL HEIGHT OF PLINTH ALIGNED WITH EDGE OF THE BEARING PLATE, SEE PHOTO 00511B_B9....BENT 26, COLUMN 1: 3-FT X 2-FT CORNER DELAM....CONCRETE DELAMINATION/CRACKING AT JOINT WITH INTERSECTING CROSS BRACING MEMBERS....BENT 27, COLUMN 1: TOP CORNER ORNAMENTAL CORBELS HAVE WIDE CRACKS....CONCRETE DELAMINATION/CRACKING AT JOINT WITH INTERSECTING BRACING MEMBERS....BENT 29 COLUMNS 1 & 2: EAST FACE, AT TOP WHERE CROSS BRACING CONNECTS INTO COLUMN, CONCRETE COVER IS SPLIT AND DELAMINATED. THE TOP EDGE OF THE COLUMN CROSS BRACE IS EXPOSED AND HAS SURFACE CORROSION. THIS LOCATION IS BELOW A JOINT. WATER IS ABLE TO PENETRATE BEHIND AND DELAMINATE AND SPALL OFF THE CONCRETE COVER. THIS WILL CONTINUE UNTIL REPAIRED.

205-Re Conc Column SU 1 ENV 3

1080-Delamination/Spall/Patched Area
BENT 36. COL. 4, SE CORNER: 6" SPALL AT 3' FROM GROUNDLINE, LARGE AGG. POCKETS, NO EXPOSED REBAR

1090-Exposed Rebar
BENT 23, COL 1, E. FACE: (1) 1' OF LENGTH EXPOSED REBAR IN SPALL....BENT 23, COL 2, E. FACE: SEVERAL LARGE SPALLS GREATER THAN 6" IN DIAMETER AND 4" DEEP WITH EXPOSED STEEL AND SECTION LOSS....

1120-Efflorescence/Rust Staining
SEVERAL COLUMNS WITH HAIRLINE CRACKING AND EFFLO - NO RUST STAINING.

1130-Cracking (RC and Other)
MOST COLUMNS HAVE HAIRLINE CRACKING.

7000-Damage
BENT 33 AND BENT 34: ALL COLUMNS HAVE MINOR IMPACTS/SPALLS AROUND COLUMN EDGES FROM TRAFFIC.

215-Re Conc Abutment SU 1 ENV 3
(1) ABUTMENT (ABUT. 38) LOCATED AT EAST END OF BRIDGE.

1080-Delamination/Spall/Patched Area
LARGE SHALLOW CORNER SPALL AT NORTH SIDE BELOW EXTERIOR GIRDER. NO REBAR IS EXPOSED AND NO REPAIR IS NEEDED.

1130-Cracking (RC and Other)
SEVERAL FULL HEIGHT VERTICAL CRACKS EXTENDING FROM GIRDER ENDS ALONG THE ABUT... (1) 3/16" WIDE FULL HEIGHT CRACK BELOW GRDR 13....CRACKING APPEARS STABLE.

221-RC Spread Ftg SU 1 ENV 3

6000-Scour
BENT 24, COLUMN 1 FOOTING EXPOSED.

234-Re Conc Pier Cap SU 1 ENV 3
RC PIER CAPS AT BNTS 32 THROUGH 37....THE PIER CAPS AT BENTS 32, 33, AND 35 HAVE BEEN STRENGTHENED. THE LENGTHS OF CAP BETWEEN COLUMNS 1-2 AND COLUMNS 3-4 HAVE BEEN WIDENED AND DEEPENED WITH A REINFORCED CONCRETE STRUCTURAL RETROFIT.

1120-Efflorescence/Rust Staining
THERE IS LITE EFFLOR. LEACHING FROM SEVERAL OF THE H.L. CRACKS IN CAPS 34, 36, AND 37.

1130-Cracking (RC and Other)
CAP 34 HAS HAIRLINE VERTICAL CRACKING ALONG ITS LENGTH AT 2' TO 4' O.C... CAPS 36 AND 37 HAVE HAIRLINE WIDTH CRACKS RADIATING OUT OF THE BOTTOM CORNER OF THE GRDR TO CAP INTERFACE.

301-Pourable Joint Seal SU 1 ENV 3
SIDEWALK JOINTS AT BENTS 36, 37 AND 38.

302-Compressn Joint Seal SU 1 ENV 3
JOINTS AT BENTS 23, 25, 27, 29, 34, 36, 37 AND 38; AND AT SIDEWALK ABOVE BENT 34..
MINOR SANDS AND DEBRIS ALONG JOINT SURFACES. NO IMPACTION OBSERVED.

2310-Leakage
SHORT SEGMENTS OF TORN OR DEBONDED MATERIAL.

305-Assem Jnt Wthut Seal SU 1 ENV 3
SLIDING PLATE JOINTS AT SIDEWALKS ABOVE BENTS 23, 25, 27 AND 29.

2360-Adjacent Deck or Header
BENT 29 NORTH SIDEWALK: DELAMINATION AND MINOR SPALLING ALONG FULL LENGTH.

311-Moveable Bearing SU 1 ENV 3

1000-Corrosion
LITE TO MODERATE SURFACE CORROSION ON SEVERAL MOVEABLE BEARINGS.

2220-Alignment
BENT 25, SPAN 24 SIDE: BEARINGS ARE 3 DEGREES FROM PLUMB.

518-Steel Paint
LITE TO MODERATE SURFACE CORROSION ON SEVERAL MOVEABLE BEARINGS.

313-Fixed Bearing SU 1 ENV 3
PINNED AT BNTS 27, 29, AND 31...
BENT 27: CONCRETE BLOCK BELOW SOUTH ROCKER IS BREAKING UP.

1000-Corrosion
LITE TO MODERATE SURFACE CORROSION ON ALL THE FIXED BEARINGS.

518-Steel Paint
LITE TO MODERATE SURFACE CORROSION ON SEVERAL FIXED BEARINGS.

330-Metal Bridge Railing SU 1 ENV 3
STEEL PED RAILING

518-Steel Paint

331-Re Conc Bridge Railing SU 1 ENV 3
SEVERAL BALUSTERS AND COLUMNS ALONG NORTH AND SOUTH RAIL HAVE BEEN REPLACED AND PATCHED. STILL NEED TO SOUND RAILING PERIODICALLY TO REMOVE FUTURE LOOSE CONCRETE.---

1130-Cracking (RC and Other)
BALUSTERS THAT WERE NOT REPLACED AND RAILS HAVE MINOR VERTICAL CRACKING THROUGHOUT.

980-Approach Roadway Embank SU 1 ENV 2

990-Miscellaneous Elements SU 1 ENV 3
GRDR SEISMIC RETROFITS OVER BNTS 34, 36, AND 37... THE SPAN 31 CATCH BASIN HAS SEVERAL CORROSION HOLES IN VERTICAL FACE NEAR BOTTOM AND IS IN DISREPAIR.

999-Roadway Impact SU 1 ENV 1

Notes

Inspection Notes

BRIDGE ORIENTATION IS WEST TO EAST. 10/2/13: EAST APPROACH (#00511B) SPANS 23-29 ARE A 2-GIRDER SYSTEM OF BUILT-UP STEEL BEAMS COVERED WITH CONCRETE. SPAN 30 IS OF SIMILAR CONSTRUCTION BUT HAS 3 GIRDERS. SPANS 31-37 ARE CONCRETE T-BEAMS. 10/16/19: THE TWO GIRDER SYSTEM BEAMS HAVE BEEN DETERMINED BY ODOT STAFF TO ACT AS HYBRID BEAMS (STEEL AND CONCRETE) AND DEEMED NOT TO BE FRACTURE CRITICAL. THE FC REPORT WILL NO LONGER BE ASSOCIATED WITH THIS SECTION OF THE BRIDGE (RJK).... 06/29/2021: CURRENT LOAD POSTING IS SU4 UNITS: 23T, SU5 AND SU6 UNITS: 24T, SU7 UNITS: 25T. (ALP).

Bridge Notes

Re-designated by ODOT a couple years back and not FC. This is the concrete encased steel two-girder bridge over I-5 in Portland. It is the east approach structure to the Burnside truss over the Willamette river.

Bridge Hydraulics Notes

9/2/2020 Multi-span bridge on piles to unknown depth. 100-year scour depth is 5.3 feet and the avg. velocity is 1.1 fps per the single-section hydraulics analysis. No pile records, so no pile depth. Scour code changes to an "U". HMW

Maintenance Recommendations
As of: 10/21/2021

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/Schedule	Local Agency	12 RC Deck Rigid Overlay	SPANS 23-30: SEAL MAP CRACKING AND LONGIT. CRACKS IN RIGID OVERLAY.		Unknown	06/25/2019
Routine/High	Local Agency	12 RC Deck Patch Concrete	ROUTINELY CHECK CONCRETE COVER FOR SOUNDNESS. REMOVE AND REPAIR AS NECESSARY.		Approved	06/05/2013
Routine/Schedule	Local Agency	16 RC Top Flange Rigid Overlay	SPANS 31-37: SEAL LONGIT. CRACK IN CENTER LANE.		Unknown	06/25/2019
Routine/Schedule	Local Agency	16 RC Top Flange Patch Concrete	ROUTINELY CHECK CONCRETE COVER FOR SOUNDNESS. REMOVE AND REPAIR AS NECESSARY.		Approved	06/05/2015
Routine/High	Local Agency	107 Steel Open Girder/Beam Other	ROUTINELY CHECK CONCRETE COVER FOR SOUNDNESS. REMOVE AND REPAIR AS NECESSARY.		Approved	06/22/2011
Monitor	Local Agency	110 RC Open Girder/Beam Crack Injection	MONITOR, CONSIDER EPOXY INJECTION REPAIR FOR SHEAR CRACKING.		Unknown	06/14/2017
Routine/Schedule	Local Agency	113 Steel Stringer (Stringer/Floorbeam System) Other	CLEAN AND EPOXY COAT ANY EXPOSED STEEL.		Unknown	06/14/2017

Priority	Crew	Wrk Cnd	Notes	Est.cost	Status	Rec Date
Routine/High	Local Agency	113 Steel Stringer (Stringer/Floorbeam System) Other	ROUTINELY CHECK CONCRETE COVER FOR SOUNDNESS. REMOVE AND REPAIR AS NECESSARY.		Approved	06/22/2011
Routine/High	Local Agency	113 Steel Stringer (Stringer/Floorbeam System) Other	STRINGER 13 IN SPAN 23 @ BENT 23 BEARING SEAT NEEDS CLEANED, REPAIRED/REPLACED, AND SEALED.		Approved	06/05/2015
Routine/Schedule	Local Agency	152 Steel Floorbeam Other	CLEAN AND EPOXY COAT ANY EXPOSED STEEL.		Unknown	06/14/2017
Routine/High	Local Agency	152 Steel Floorbeam Other	APPLY NETTING TO FBS AS CALLED OUT IN THIS REPORT.		Unknown	06/14/2017
Routine/High	Local Agency	152 Steel Floorbeam Other	ROUTINELY CHECK CONCRETE COVER FOR SOUNDNESS. REMOVE AND REPAIR AS NECESSARY.		Approved	06/22/2011
Routine/Medium	Local Agency	202 Steel Column Other	BENT 25 COLS 1 AND 2: INVESTIGATE VERTICAL CRACKS AND DELAMINATION IN COL TOPS, BELOW BEARINGS. REPAIR AS NECESSARY.		Unknown	06/14/2017
Routine/Schedule	Local Agency	202 Steel Column Other	INVESTIGATE CRACKING IN BENTS 24 THRU 26. REPAIR AS NECESSARY.		Unknown	06/14/2017
Routine/Schedule	Local Agency	205 RC Column Patch Concrete	SPAN 23 COL. 1 & COL. 2: CLEAN AND EPOXY COAT EXPOSED REBARS		Unknown	06/25/2019
Monitor	Local Agency	215 RC Abutment Patch Concrete	MONITOR ABUTMENT CRACKING, CONSIDER PATCH REPAIRS.		Unknown	06/14/2017
Monitor	Local Agency	215 RC Abutment Patch Concrete	ABUT 38: MONITOR SHALLOW SPALL AT N. CORNER BELOW EXT. GIRDER		Unknown	06/25/2019
Routine/Schedule	Local Agency	313 Bearings Fixed Bearings Repair Supports	REPAIR CRACKING IN BNT 27 BEARING BLOCK.		Approved	06/05/2013

*Completed items not included on default search

Load Rating

Rating Date :	08/26/2020	**Posting Req :**	3 10.0-19.9%below
Design Load :	3 MS 13.5 (HS 15)	**Posting Status :**	P Posted for load
Operating Load :	17.3 ton	**OR Method :**	8 LRFR RF HL93
Inventory Rating :	13.3 ton	**IR Method :**	8 LRFR RF HL93

Truck	Rating Factor	% Below	Posting Required	Controlling Member	Actual Posting	Posting Date
Type 3	1.10	5 At/Above Legal Loads	No	Span 22 Outside Roadway, span 1 of 5 V at 0.6L		
Type 3S-2	1.09	5 At/Above Legal Loads	No	Span 22 Outside Roadway, span 1 of 5 V at 0.6L		
Type 3-3	1.43	5 At/Above Legal Loads	No	Span 22 Outside Roadway, span 1 of 5 V at 0.6L		
SU4	1.06	5 At/Above Legal Loads	No	Bent 32, span 2 of 5 +M at 0.4L	23.0	05/10/2021
SU5	1.00	5 At/Above Legal Loads	No	Bent 32, span 2 of 5 +M at 0.4L	24.0	05/10/2021
SU6	0.89	3 10.0-19.9%below	Yes	Bent 32, span 2 of 5 +M at 0.4L	24.0	05/10/2021
SU7	0.84	3 10.0-19.9%below	Yes	Bent 32, span 2 of 5 +M at 0.4L	25.0	05/10/2021
EV2	1.05	5 At/Above Legal Loads	No	Span 22 Outside Roadway, span 1 of 5 V at 0.6L		
EV3	0.64	1 30.0-39.9%below	Yes	Span 22 Outside Roadway, span 1 of 5 V at 0.6L		

Load Rating Notes

This bridge has been posted. Multnomah County sent ODOT an email on 5/10/21. (NB)

Load Rating Condition Comparison Chart

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

Inspection Schedule

Activity	Conducted On	Frequency	Next Inspection
Routine Inspection	06/29/2021	24	06/01/2023

Suff Rating: 39.5

Bridge NO: 00511B
Insp Date: 06/29/2021

(2) Highway District	District 2B	(42A) Type Service On	5	(76) Improvement Length	849.74 ft
(3) County	Multnomah	(42B) Type Service Under	8		
(4) City	59000	**(43) Struct Main**	**4 Steel Continuous 03 Girder-Floorbeam**	(90) Inspection Date	06/29/2021
(5) Inventory Route	151093260	**(44) Struct Appr**	**2 Concrete Continuous 04 Tee Beam**	(91) Inspection Frequency	24
(6) Feature INT	EAST BURNSIDE APPROACH	**(45) Number Main Spans**	**8**	(92) Critical Feat Insp (A) Fracture Critical (B) Underwater Insp	
(7) Facility Carried	BURNSIDE ST	(46) Number Appr Spans	7	(94) Cost of Improvement	7598656
(8) Structure Number	00511B932600000	(47) Horizontal Clearance	68.00 ft	(95) Roadway Improvement	759866
(9) Location	EAST END BURNSIDE BR	(48) Maximum Span Length	108.00 ft	(96) Project Improvement	12157850
(10) Vert Clearance	99.99 ft	(49) Structure Length	859.00 ft	(97) Year of Improvement	2011
(11) Mile Post	0.00 mi	(50A) Sidewalk Width LT	9.00 ft	(98) Border BRST-Code	
(12) Base Highway Network	0	(50B) Sidewalk Width RT	9.00 ft	(100) Defense Highway	0
(13) LRS Inventory Route	000000000000	**(51) Bridge Roadway Width**	**68.00 ft**	(101) Parallel Structure	N
(16) Latitude	45° 31' 22.73"	**(52) Deck Width**	**86.00 ft**	(102) Direction of Traffic	2
(17) Longitude	122° 39' 54.76"	**(53) Vert Clear Over Deck**	**99.99 ft**	**(103) Temporary Structure**	
(19) Bypass Detour	1.00 mi	(54) Vert Clear Under Deck	H 13.58 ft	(104) Highway System	1
(20) TOLL	3 On free road	(55) Min Lat Underclear CD	H 0.50 ft	(105) Federal Lands HWY	0
(21) Custodian	County Highway Agency	(56) Min Lat Underclear	L 0.50 ft	(106) Year Reconstructed	
(22) Owner	County Highway Agency	**(58) Deck**	**5**	(107) Deck Structure	1
(26) Func Class	14 Urban Other Princ	**(59) SuperStructure**	**5**	**(108) Wearing Surface**	**200**
(27) Year Built	1927	**(60) SubStructure**	**5**	(109) Truck ADT	10%
(28) Lanes	**on: 5 / under: 11**	**(61) Channel**	**N**	(110) Designated National Network	0
(29) Average Daily Traffic	58691	**(62) Culvert**	**N**	(111) Pier Protection	
(30) Year of ADT	2020	(63) Oper Rating Method	8	(112) NBIS Bridge Length	Y
(31) Design Load	3 MS 13.5 (HS 15)	(64) Operating Rating	17.30 ton	**(113) Scour Critical Bridge**	**U**
(32) Approach Roadway	**68.00 ft**	(65) Inv Rating Method	8	(114) Future ADT	88033
(33) Bridge Median	0 No median	(66) Inventory Rating	13.30 ton	(115) Year of Future ADT	2025
(34) Skew	0°	(67) Structure Condition	3	(116) Vert-Lift Clearance	
(35) Structure Flared	1 Yes, flared	(68) Deck Geometry	5	(117) Est Maint Cost	
(36) Traffic Safety Feature	**0000**	(69) Underclearance	3	(118) Culvert Length	
(37) Historical Significance	4	**(70) Posting**	**3**	(119) Culvert Inside Height	

(38) Navigation Control	0	**(71) Waterway Adequacy**	**9**	(120) Inspector	Andrew Packard (C0054)
(39) Navigation Vert Clear	0.00 ft	**(72) APPR RDWY Alignment**	**8**	(122) Highway/CO RD	009326
(40) Navigation Horz Clear	0.00 ft	(75) Type of Work	331	(125) Embankment Erosion	5
(41) Open Status	**P**				

Quality Assurance:

WS Depth	0.00	(51) Bridge Roadway Width	68.00 ft	(70) Posting	3
(28) Lanes	on: 5 / under: 11	(52) Deck Width	86.00 ft	(71) Waterway Adequacy	9
(32) Approach Roadway	68.00 ft	(53) Vert Clear Over Deck	99.99 ft	(72) APPR RDWY Alignment	8
(36) Traffic Safety Feature	0000	(58) Deck	5		
(41) Open Status	P	(59) SuperStructure	5	(103) Temporary Structure	
(43) Struct Main	4 Steel Continuous 03 Girder-Floorbeam	(60) SubStructure	5	(108) Wearing Surface	200
(44) Struct Appr	2 Concrete Continuous 04 Tee Beam	(61) Channel	N	(113) Scour Critical Bridge	U
(45) Number Main Spans	8	(62) Culvert	N		

Structure Inventory and Underpass Appraisal

Bridge NO: 00511B

(122) Highway/CO RD	001	(28B) Lanes	4
(5) Inventory Route	A11000050	(29) Average Daily Traffic	16500
(6) Features INT.	EAST BURNSIDE APPROACH	(30) Year of ADT	2018
(7) Facility Carried	BURNSIDE ST	(47) Horizontal Clearance	68 ft
(8) Structure Number	00511B932600000	(100) Defense Highway	1
(10) Vert Clearance	99.99 ft	(102) Direction of Traffic	2
(11) Milepoint	0 mi	(104) Highway System	1
(19) Bypass Detour	1 mi	(109) Truck ADT	26%
(20) TOLL	3 On free road	(110) Designated National Network	1
(26) Func Class	11 Urban Interstate		

Structure Inventory and Underpass Appraisal

Bridge NO: 00511B

(122) Highway/CO RD	002	(28B) Lanes	2
(5) Inventory Route	B11000801	(29) Average Daily Traffic	71650
(6) Features INT.	EAST BURNSIDE APPROACH	(30) Year of ADT	2018
(7) Facility Carried	BURNSIDE ST	(47) Horizontal Clearance	68 ft

(8) Structure Number	00511B932600000	(100) Defense Highway	1
(10) Vert Clearance	99.99 ft	(102) Direction of Traffic	1
(11) Milepoint	0 mi	(104) Highway System	1
(19) Bypass Detour	1 mi	(109) Truck ADT	4%
(20) TOLL	3 On free road	(110) Designated National Network	1
(26) Func Class	11 Urban Interstate		

Structure Inventory and Underpass Appraisal

Bridge NO: 00511B

(122) Highway/CO RD	001	(28B) Lanes	2
(5) Inventory Route	C17000050	(29) Average Daily Traffic	16500
(6) Features INT.	EAST BURNSIDE APPROACH	(30) Year of ADT	2018
(7) Facility Carried	BURNSIDE ST	(47) Horizontal Clearance	68 ft
(8) Structure Number	00511B932600000	(100) Defense Highway	1
(10) Vert Clearance	99.99 ft	(102) Direction of Traffic	2
(11) Milepoint	0 mi	(104) Highway System	1
(19) Bypass Detour	1 mi	(109) Truck ADT	26%
(20) TOLL	3 On free road	(110) Designated National Network	1
(26) Func Class	11 Urban Interstate		

Structure Inventory and Underpass Appraisal

Bridge NO: 00511B

(122) Highway/CO RD	001	(28B) Lanes	2
(5) Inventory Route	D17000050	(29) Average Daily Traffic	16500
(6) Features INT.	EAST BURNSIDE APPROACH	(30) Year of ADT	2018
(7) Facility Carried	BURNSIDE ST	(47) Horizontal Clearance	68 ft
(8) Structure Number	00511B932600000	(100) Defense Highway	1
(10) Vert Clearance	99.99 ft	(102) Direction of Traffic	2
(11) Milepoint	0 mi	(104) Highway System	1
(19) Bypass Detour	1 mi	(109) Truck ADT	26%
(20) TOLL	3 On free road	(110) Designated National Network	1
(26) Func Class	11 Urban Interstate		

Bridge Clearance Documents: Not Available
Bridge Detours Maps: Not Available
Bridge Images: IM00511B_A0.JPG IM00511B_A1.JPG IM00511B_A3.JPG IM00511B_A4.JPG IM00511B_A5.jpg IM00511B_A6.jpg IM00511B_A9.JPG IM00511B_B3.JPG IM00511B_B4.JPG IM00511B_B5.JPG IM00511B_B6.JPG IM00511B_B7.JPG IM00511B_B8.JPG IM00511B_B9.JPG IM00511B_C3.JPG IM00511B_C4.jpg IM00511B_C5.JPG

Job Hazard Assessment: Not Available

Cross Channel Documents: Not Available
Gusset Plate Documents: Not Available
Fracture Critical Inspection Documents: FC00511B.pdf
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