COFFMAN ENGINEERS

November 6th, 2026

Mr. Paul Tews
Cascade River Community Club
PO BOX 141
Marblemount, WA 98267

Project: Bernhardt Bridge Inspection Report
Skagit County, Washington

Subject: Summary of Bridge Inspection Report.

Dear Paul:

Coffman Engineers has prepared the enclosed inspection report for the Bernhardt Bridge, which carries Cascade Drive over the Cascade River. The field inspection was completed on September 10, 2026. This letter is provided as an introduction to the report and explains how the inspection was performed, how the information is organized, and how the findings should be used.

Purpose and Method of the Inspection

The inspection was performed using the procedures and reporting methods described in the WSDOT Bridge Inspection Manual. This manual provides a consistent method for observing, documenting, and reporting the condition of bridges in Washington. It is based on established federal bridge inspection practices and is intended to help bridge owners identify deterioration, monitor changes, and plan appropriate maintenance or repairs.

Although the Bernhardt Bridge is privately owned and is not identified in the report as being subject to the National Bridge Inspection Standards, the WSDOT methodology provides a recognized and systematic framework for evaluating its condition. The inspection followed a format similar to that used for public bridges so that important observations would be documented consistently and could be compared during future inspections.

A bridge inspection is primarily a condition assessment. Inspectors visually and physically examine accessible portions of the bridge, take measurements where appropriate, document observed deterioration, and compare the conditions of individual components. For the Bernhardt Bridge, the inspection included the timber deck and railings, timber stringers and girders, steel trusses and floor beams, bearings, concrete supports, and the river channel and scour protection. Photographs were taken to document the bridge's overall configuration and the specific conditions observed.

The main span is a steel pony truss that contains nonredundant steel tension members, frequently abbreviated as "NSTM." These are important structural members that may not have an alternate load path if one were to fail. The inspection therefore included a closer, hands-on

review of these members, their riveted connections, and associated gusset plates. Inspectors looked for corrosion, deformation, damaged or missing fasteners, cracking, and other visible conditions that could affect performance.

The inspection also included observations of the Cascade River channel and areas where flowing water can remove soil or rock from around the bridge supports. This process is known as “scour.” Scour is important because it can reduce the support available beneath an abutment or pier, even when the upper portion of the bridge appears unchanged.

Contents of the Report:

The first pages of the report provide an overview of the bridge, component ratings, detailed inspection notes, and recommended repairs. The remaining pages include photographs, the channel and scour evaluation, bridge diagrams, and the nonredundant steel tension member inspection documentation. These supporting materials show where conditions were observed and provide a record for comparison during future inspections.

Component Condition Codes

The Component Condition Ratings shown near the top of the report provide a broader assessment of the major parts of the bridge. These ratings summarize the overall observed condition of a major bridge component, such as the deck, superstructure, or substructure. WSDOT's inspection methodology uses numerical condition codes ranging from 0 through 9, with higher numbers representing better physical condition and lower numbers representing progressively greater deterioration.

BMS Elements

The table labeled “BMS Elements” breaks the bridge into individual components so that the condition of each part can be documented separately. BMS stands for Bridge Management System. Rather than assigning one rating to the entire bridge, the inspection identifies specific elements such as the timber deck, timber stringers, steel trusses, floor beams, bearings, gusset plates, concrete supports, and scour-related features. Each element is assigned a standard element number and description. The quantity of each element is then recorded and divided among condition states based on the deterioration observed during the inspection. This provides a more detailed picture of where deterioration exists and how much of a particular component is affected, rather than simply describing the bridge as being in good or poor condition. The Bernhardt Bridge report, for example, separately records the condition of its timber deck, steel truss, floor beams, gusset plates, concrete components, and other elements.

BMS Condition States

Each BMS element is divided into Condition States 1 through 4, abbreviated in the report as CS1, CS2, CS3, and CS4. These condition states describe the severity of deterioration observed on an individual bridge component. In simple terms, CS1 represents an element in good condition with little or no deterioration; CS2 represents minor deterioration or elements that have been previously repaired; CS3 represents more significant deterioration that may warrant maintenance, repair, or additional evaluation; and CS4 represents severe deterioration requiring a higher level of attention. Importantly, the condition state applies only to the quantity of the element placed in that category. BMS elements are further described in the 'Notes' section of the report.

Recommended Use of This Report

The inspection report is intended to support practical bridge management decisions. It should be used to plan maintenance, obtain repair recommendations and cost estimates, update the load rating, and establish a record against which future inspections can be compared. The report recommends that the privately owned bridge continues to receive a routine inspection at intervals not exceeding 24 months, with appropriate close inspection of the nonredundant steel tension members.

Based on the inspection findings, the owner's near-term priorities should be to:

- Maintain and enforce the existing 5-ton posting.
- Replace the missing floor-beam connection bolt.
- Tighten the loose lateral bracing.
- Evaluate and repair the scour protection at Abutment 1.
- Monitor Abutment 1 scour damage and review after each high water event. Document conditions and changes of the scour by taking pictures and filing with the bridge record.
- Clean and repaint all the steel portions of the bridge. The existing paint system has predominately failed. This is a good time to plan to repaint the bridge.
- Repair the localized concrete deterioration at Pier 2.
- Update the bridge load rating to account for documented steel section loss.
- Establish routine cleaning and inspection practices to slow future deterioration.
- Establish a file system to keep plans, reports, load rating, design details, inspection reports, maintenance activity and photographs of the bridge. The file system should be in a safe and secure location. Redundancy is a good option to consider in maintaining the records survivability.

Limitations of this Report

The inspection represents the observed condition of accessible bridge components on the date of the field work. Conditions hidden by paint, debris, overlapping materials, soil, water, or other obstructions may not be fully visible during a routine inspection. In addition, bridge condition can

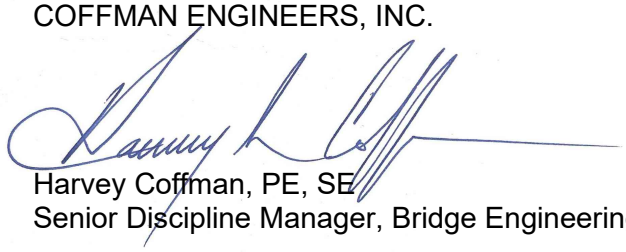
change because of flooding, vehicle impact, overloading, severe weather, fire, or other events. If such an event occurs, or if noticeable movement or new damage is observed, the bridge should be evaluated before waiting for the next scheduled inspection.

We appreciate the opportunity to assist the Cascade River Community Club with the stewardship of the Bernhardt Bridge. Please contact us if you have questions regarding the inspection findings, recommended repairs, load-rating evaluation, or the development of a maintenance and repair program.

Please call if you have any questions.

Sincerely,

COFFMAN ENGINEERS, INC.



Harvey Coffman, PE, SE
Senior Discipline Manager, Bridge Engineering

Enclosure:

September 2026 Bridge Inspection Report.

Structure No.		SID		Structure Name: Bernhardt Br	
Carrying	Cascade Dr.			Route On: Cascade Dr.	Mile Post
Intersecting	Cascade River			Route Under	Mile Post

Inspector's Signature HLC Cert # D2020 Cert Exp Date 3/2027 Co-Inspector's Signature

Current Inspections Performed

Report Type	Subtype	Rsk Mthd	Begin Date	Comp Date	Interval	Due Date	Hours	Inspector	Cert No	Co-Insp
Routine & NSTM			9/10/2026	9/10/2026				HLC	D2020	N/A

Component Condition Ratings

	8	Deck Overall
	8	Bridge Railings
	7	Superstructure Overall
	7	Bridge Bearings
	7	Substructure Overall
	5	Scour Condition
	4	Channel Condition
	4	Channel Protection

Appraisal

	C	Scour Vulnerability
	N	Scour Plan of Action
	N	Overtopping Likelihood
	F	Appr Roadway Align
		Fatigue Details
		Seismic Vulnerability

Bridge Coordinates: N48° 31' 65.0" W121° 21' 17.1" (±17 ft.)



11/6/2026

Miscellaneous Fields

	1910	Year Built
	0	Asphalt Depth
	48	Bridge Rail Height
	1	Number of Utilities
	N	Subject to NBIS
		Inspn QA Date (BIE09)

Inspection Flags

	Yes	Soundings
		Clearence
	N	Revise Rating
	N	Photos Flag
		Roadside Hardware Flag

Current Posting Status

P	Load Posting Status
12/12/2019	Posting Status Change Date

BMS Elements

Element	Element Description	Total	Units	CS 1	CS 2	CS 3	CS 4
	Deck Elements						
31	Timber Deck	2334	SF	2334	0	0	0
342	Timber Pedestrian Rail	282	LF	282	0	0	0
	Superstructure Elements						
111A	Timber Glulam Girder	360	LF	360	0	0	0
117	Timber Stringer	955	LF	955	0	0	0
120A	Steel Thru Truss	200	LF	0	192	8	0
152	Steel Floor Beam	95	LF	94	0	0	1
162	Truss Gusset Plates	38	EA	37	1	0	0
310	Elastomeric Bearing	4	EA	4	0	0	0
355	Damaged Bolts or Rivets - Smart Flag	1	EA	0	0	1	0
	Substructure Elements						
215	Concrete Abutment	2	LF	2	0	0	0
205B	Concrete Column w/ Steel Jacket	2	EA	0	2	0	0
221	Concrete Web Wall between Columns	16	LF	0	16	0	0
	Scour and Channel Elements						
361	Scour - Smart Flag	2	EA	1	0	1	0
	Miscellaneous Elements						
515A	Red Lead Alkyd Paint System	9000	SF	0	0	3000	6000

Notes

Element	Note
	General Notes
0	Bridge is oriented North to South with west and east truss designation. The main span is a steel pony truss bridge with Nonredundant Steel Tension Members, NSTM, See diagram identifing these members. While this is privately owned and operated bridge it is recommneded that it be inspected every 24 months as suggested in the National Bridge Inspection Program. NSTM is also know as fracture critical tension members that generally requires these members be inspected with in arms length. Bridge was originally built at different location and moved to this site. The bridge was dismantled at the connection between floor beam and truss. This is evidenced by the ASTM A325 bolts used in the reconnection. See Photo 23. These are the only bolts in the steel truss. All other connections are original rivets. There is no floor beam at U0 and U12. Stringers rest on abutment or pier wall on timber plank. Deck, floor system and span 2 replaced in 2019. Columns at Pier 2 were repaired by adding steel jacket full height (2019). Load Rating in 2019 at 10 Ton. Cascade River Community Club elected to restrict to 5 Tons.
	Deck Notes
31	Deck is 4 x 12 planks. Surface is slightly worn in wheel lines. Some minor checking and cracking in a few locations. Dirt and debris buildup in the 1" gap between planks over stringers. See photo 7.
342	Pedestrian Railing is built of pressure treated lumber with a cyclone metal fence covering the full height. Added with the deck & floor system replacement in 2019. See Photo 8.
	Superstructure Elements
111A	Glulam approach span is made up of 9 - 5 $^{1}/_{4}$" x 19$^{1}/_{2}$" Glulam stringers. There is a vapor barrier under the 4 x 6 deck timber planks over the stringers and against the steel/concrete bearing surfaces at the pier and abutments. Floor system was added with deck repair in 2019. Debris and dirt set on top of stringers between the deck planks. Stringers have a vapor barrier on the top edge under deck planks. Take care to not damage the vapor barrier when cleaning and removing the dirt and debris on stringer tops. See photos 9 & 10.
117	Stringers in truss span are 4 x 16 and set on a 4 x 6 timber plank attached to the top of the abutment or floor beams. There is a vapor barrier under the 4 x 6 timber planks over the stringers and against the steel/concrete bearing surfaces at the pier and abutments. Floor system was added with deck repair in 2019. Debris and dirt set on top of stringers between the deck planks. Stringers have a vapor barrier on the top edge under deck planks. Take care to not damage the vapor barrier when cleaning removing the dirt and debris on stringer tops.
120A	Truss show evidence of prior corrosion throughout with mild to heavy pitting on webs and legs of steel members. Paint system is peeling or failed throughout the truss. Appears to be two different paint applications as observed with two difference top coat colors. Some areas of steel surface exposed. There is debris, moss, lichen and dirt through out surfaces and trapped in built up structural elements. Truss needs a regular maintenance cleaning regiment to control buildup and improve the paint and steel service life. Photo 11, 12, 13, 23, 31-34. Truss CS2 based on general pitting damage. CS3 based on damage to diagonal members. These items do not require repairs at this time. West Truss bottom chord L0-L2 Angle bent angel leg on Rdwy side. East Truss Diagonals; U9-L10 Angle leg bent on rdwy side, ~1 lf. Photo 14. West Truss Diagonals; L2-U3 Angle leg bent ~ 2 lf on Rdwy side. L4-U3 Angle leg bent ~ 2 lf on rdwy side. Photo 15 U7-L8 Angle bent leg ~4 lf on Rdwy side. Photo 17 & Photo 20 L8-U9 Angle leg bent 4 lf on Rdwy side. Photo 19 U9-L10 both angles legs bent ~1lf All bottom cross braces are slightly loose with cross braces L4-W to L6-E, L6-W to L8-E, and between panel points 8 & 10 are very loose/sagging. Photo 23 & 24.
152	No Floorbeams at U0 & U12 stringers rest on timber plank on top of abutment/Pier wall. Floor beams are dirty with some surface rusting. Floorbeam flange measured at 0.235" and web at 0.475" with D-meter, typical. Floor beam L2 3 lf of laminar rust. Floorbeam L6 flame cut 2 $^{1}/_{2}$"x4$^{1}/_{4}$" hole at mid height of floorbeam at 108" from West truss, and the south bottom flange edge has approximately 1/16" to 1/8" section loss long the full length. Flame cut hole is near the mid-span and center height of beam therefore likely not an impact to the floorbeam strength. Photo 22.
162	All gusset plate measured as 1/2" thick, typical. Gusset plates of both trusses in general show signs of pitting that has been painted. Many rivet heads were not driven flush to plate throughout both trusses, original install. This does not affect the rivet capacity in the truss members. Gusset plates show moderate pre-existing pitting. See Photos 11 & 12. U7 west truss gusset plate bowed 1/2" in. See Photo 21. L6 West truss floorbeam connection to vertical bracket brace is missing one bolt of 4 total in connection, see photo 16.
310	Elastomeric bearing pads set under steel bearing plate. Plate, clip angles and rivet heads are all covered with debris with surface and edge rusting. See Photos 25 - 27.

355	Many rivets have sever loss of head due to prior corrosion. Many heads were not driven flush to gusset plate. Typical on both trusses. See Photos 11 & 12.
	Substructure Elements
215	Abutment concrete columns with concrete wall between. Similar to Pier 2 but without steel casing wrap on columns.
205B	Pier 2 columns were repaired by adding steel casing wrap (2019).
221	Bottom of wall has ~ 3 lf of poor concrete (honeycombed exposed aggregate) that is spalled. See photo 28.
	Scour and Channel Elements
361	Abutment 1 protection apron and block wall has been scoured and needs possible repair. See photos 29 & 30. Bed rock is present at bridge site. Pier 2 is founded on bedrock. Abutment footing at pier 1 is unknown. Abutment 1 concrete block wall is laced together with steel cable that is worked through holes drilled in concrete blocks and resident boulders.
	Miscellaneous Elements
515A	Bridge appears to have two paint systems. The second paint coat is predominantly failed with the remaining paint heavily peeling. See photos 31-34. The original Paint system has failed throughout truss and floorbeams down to bare metal. This is a good time to repaint the bridge. Recommned removing all paint to bare metal and recosting with a three part moisture cured urethan paint system.

Repairs

Repair No	Priority	R	Repair Descriptions	BMS	Noted	Maint	Verified
1	1		Abutment 1 protection apron and block wall has been scoured out and needs repaired consideration.	361	9/10/2026		
2	1		Replace missing bolt at L6 West truss floorbeam connection to vertical bracket brace. Replace in kind, ASTM A325.	162	9/10/2026		
3	2		Clean and paint all steel members of bridge. The paint system has failed in the majority of the steel. There is limited active corrosion and it is a good time to paint this bridge before structural damage occurs.	120A/515A	9/10/2026		
4	1		Lateral Braces are loose and need to be tightened. This can be accomplished by tightening the turn-buckles on each brace.	120A	9/10/2026		
5	3		Pier 2 Concrete web wall has honey combed and spalling concrete section at the bottom of wall near east column. Remove soft/loose concrete and patch.	221	9/10/2026		
6	3		Evaluate the existing bridge load rating to account for the section loss noted in truss members.	120A	9/10/2026		
7					9/10/2026		
8							
9							

APPENDIX 1

SITE PHOTOGRAPHS



Photo 1: Bridge Deck View Looking South and North approach load restriction sign.



Photo 2: Bridge Elevation Looking East



Photo 3: Bridge Elevation North End, Looking East



Photo 4: Bridge Elevation South End, Looking East



Photo 5: North Approach Roadway, Looking South

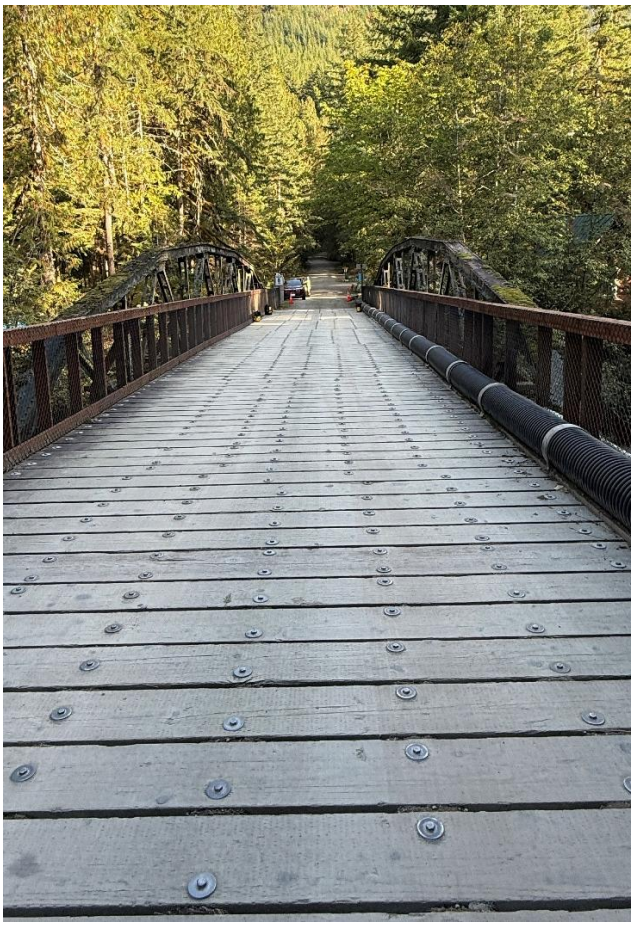


Photo 6: Bridge Deck Looking North



Photo 7: Bridge Deck Condition at Span 2 Abutment 2 Notice dirt in deck plank gaps over stringers.

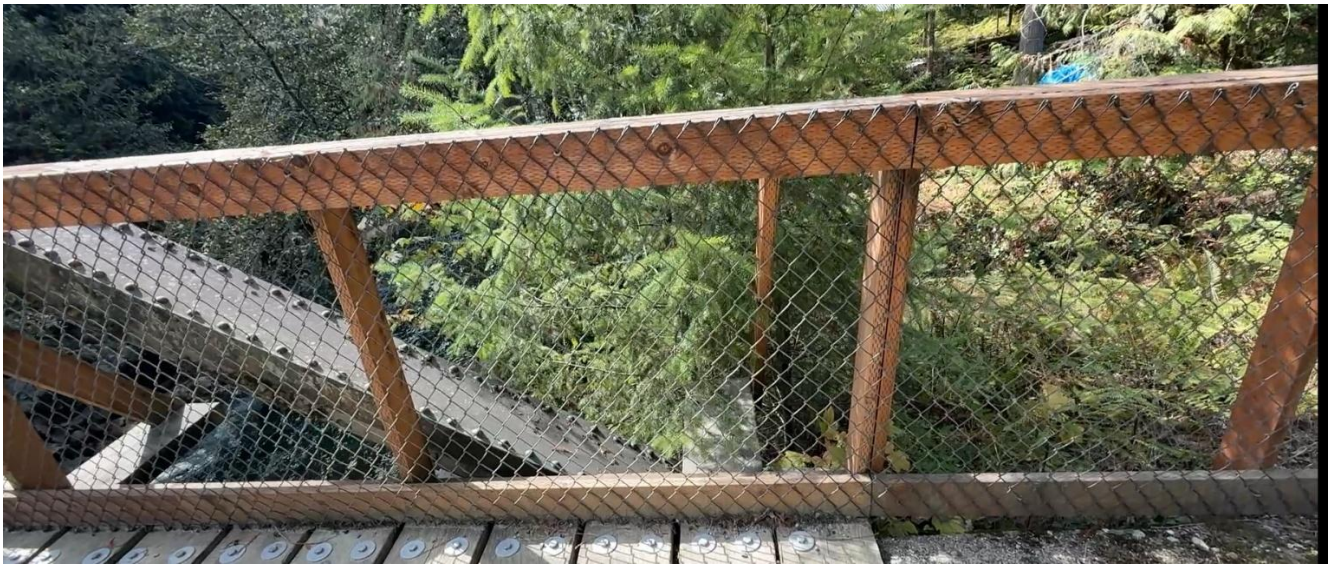


Photo 8: Pedestrian Railing, Typical



Photo 9: Span 2 - 5 ¼ “x 19 ½ “ Glulam Stingers



Photo 10: Span 2 - Glulam Stingers at Abutment 2



Photo 11: West Truss U9 Typical Rivet Head damage and Pitting of truss members and general paint failure.



Photo 12: West Truss U9 U9-L10 bent angle at gusset plate (left diagonal).



Photo 13: Typical surface pitting of steel throughout truss. Previous damage to truss.

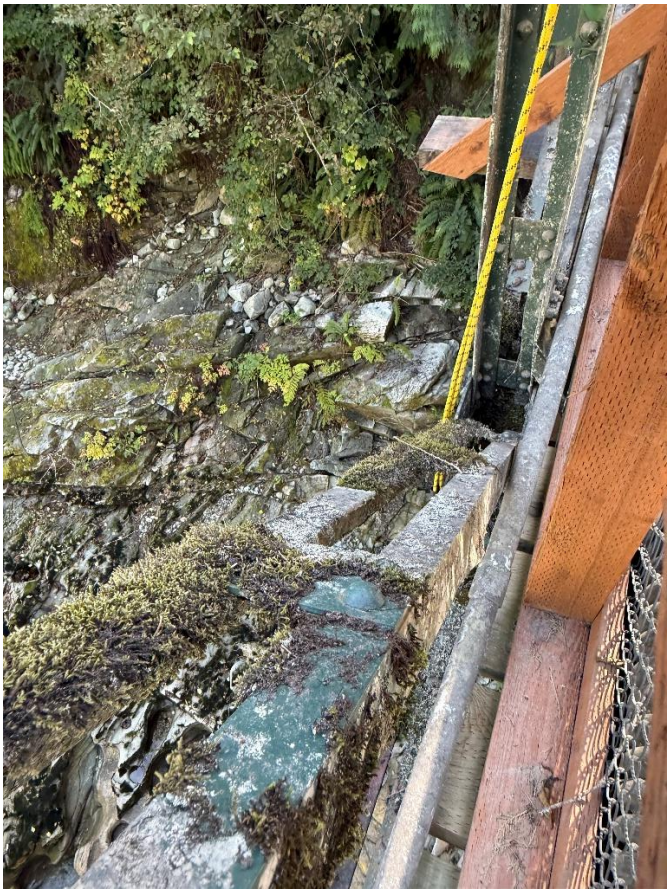


Photo 14: East Truss U9-L10 Bent Angle.



Photo 15: West Truss U3-L4 looking at L4. Angles bent near L4.



Photo 16: West Truss L6 floorbeam connection. Missing bolt in floorbeam connection bracket.



Photo 17: West Truss U7-L8 Bent angle legs near L8.



Photo 18: West Truss Bottom chord L6-L8, failed paint, old pitting and surface rust w/ moss.



Photo 19: West Truss L8-U9 bent angle.



Photo 20: West Truss at U7, U7-L8 both angle legs are bent.



Photo 21: West Truss U7 bent gusset plate ~ ½ " bow.



Photo 22: Floorbeam L6 2 ½ " x 4 ¼ " flame cut hole near mid-span & mid-height.



Photo 23: Floorbeam L10 connection to truss gusset w/ ASTM A325 bolt. Splice location for the reassembly of truss. Loose lateral brace under floorbeam.



Photo 24: Loose bottom lateral in L8-L10. Other lateral braces are loose typical.



Photo 25: L12 bearing west truss. Corroded bearing plate and clip angle/rivets.



Photo 26: West truss bearing L0. Elastomeric bearing pad.



Photo 27: East truss L12 bearing at pier 2.



Photo 28: Pier 2 Bottom of Concrete Web Wall. Honeycomb concrete is spalling and requires clean up by removal of loose concrete and patch.



Photo 29: Abutment 1 scour damage to the concrete wall.



Photo 30: Abutment 1 scour damage to the concrete wall.

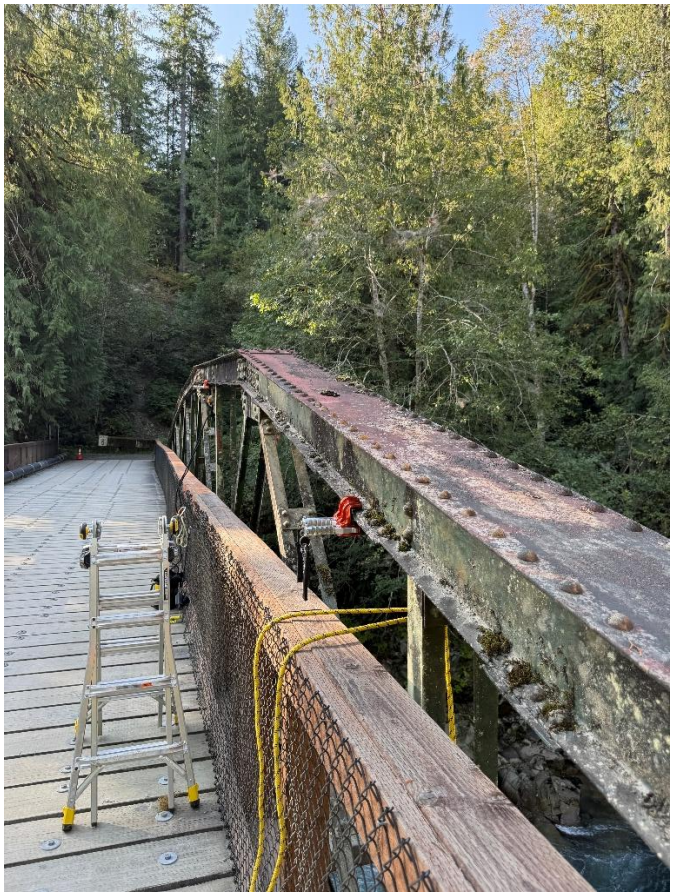


Photo 31: Typical paint system condition, west truss. Truss is covered in moss, lichen, mold and dirt. Top plate of top chord paint system failure.

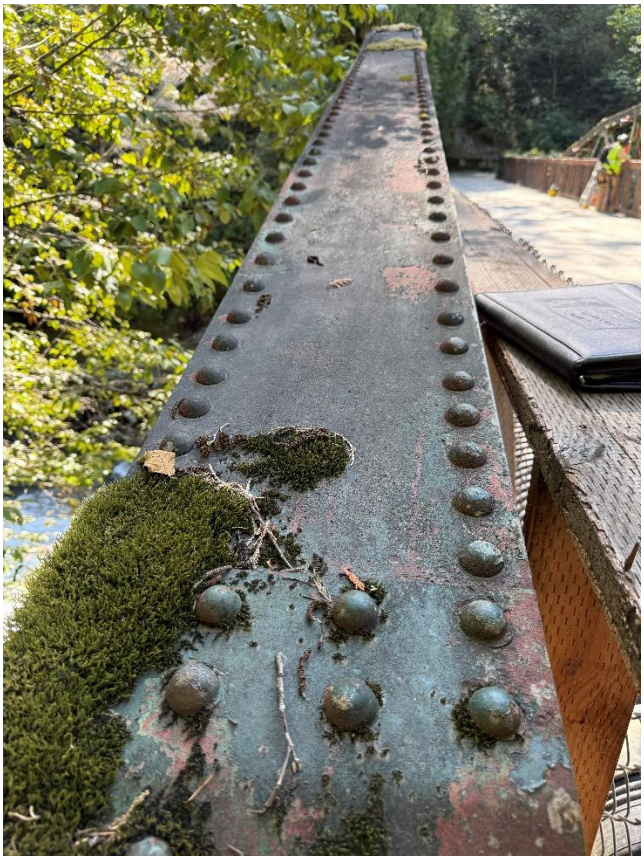


Photo 32: Typical paint system condition, east truss. Truss is covered in moss, lichen, mold and dirt. Top plate of top chord paint system failure.



Photo 33: Typical second paint coating failing. Note the difference in color between first paint (light green) and second paint (dark green).



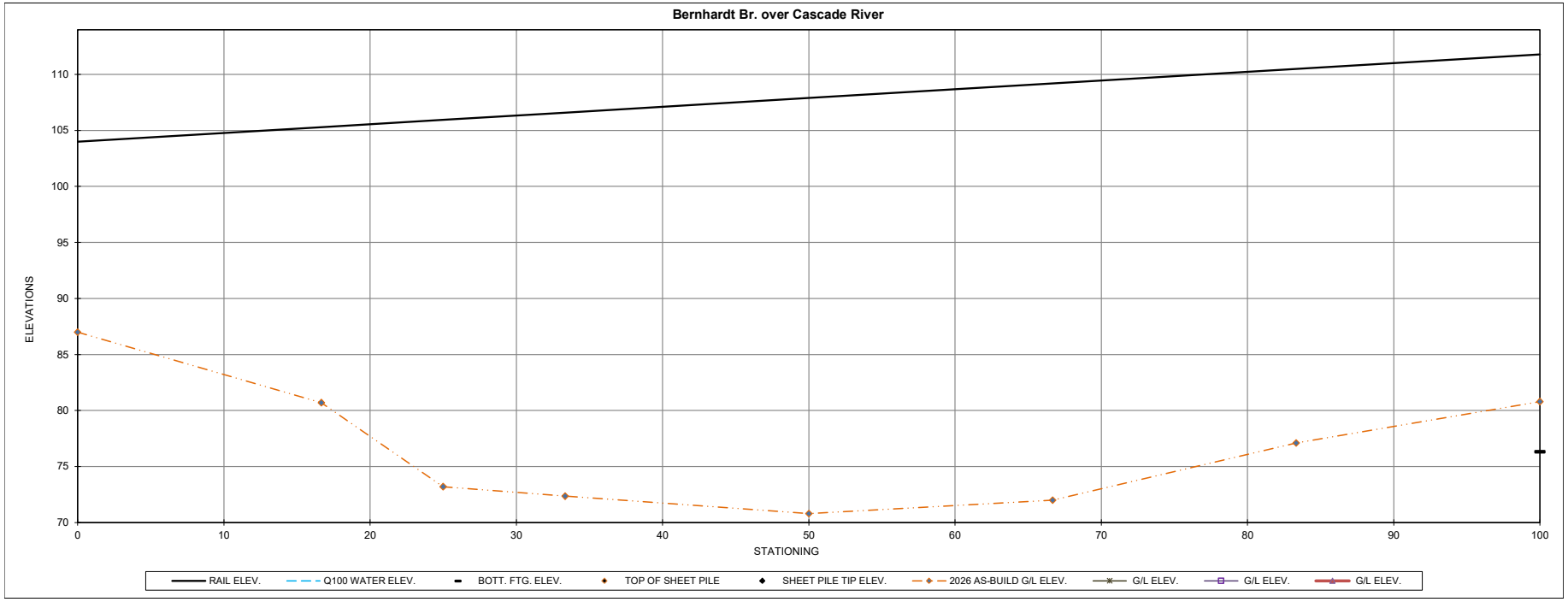
Photo 34: Typical second paint coating failing. Note the difference in color between first paint (light green) and second paint (dark green).



Photo 35: Load posting sign at south approach.

Appendix 3

Nonredundant Steel Tension Member Report


Bernhardt Br. over Cascade River
ELEVATIONS
110
105
100
95
90
85
80
75
70
0
10
20
30
40
50
60
70
80
90
100
STATIONING
RAIL ELEV.
Q100 WATER ELEV.
BOTT. FTG. ELEV.
TOP OF SHEET PILE
SHEET PILE TIP ELEV.
2026 AS-BUILD G/L ELEV.
G/L ELEV.
G/L ELEV.
G/L ELEV.

Washington State Department of Transportation

Scour Field Evaluation

Date of Evaluation:	Lead Inspector:	Co-Inspector:	Bridge Number:	Bernhardt Bridge
9/10/2026	HLC		Bridge Name:	CASCADE RIVER
			Structure ID:	-------

Channel Condition:	Location	Description of Condition
Alignment/Angle of Attack:		Minor
Thalweg/Meander:		Minor
Degradation:		N/A
Aggradation:		N/A
Debris Effecting Flow:		Minor
Bank Erosion/Instability:		Minor

Countermeasures:	Type[2]	Description of Condition
Upstream Channel:		N/A Steep banks with large bolders/bedrock
Upstream Right Bank[1]:		
Upstream Left Bank[1]:		
Under Bridge Channel:		Concrete apron/concrete ecology blocks tied together
Under Bridge Right Bank[1]:		
Under Bridge Left Bank[1]:		
Piers:		On bed Rock
Abutments/Wingwalls:		Abutments outside of High water.
Downstream Channel:		N/A Steep banks with large bolders/bedrock
Downstream Right Bank[1]:		
Downstream Left Bank[1]:		

[1] *Right and Left orientation when looking downstream.*

Soundings:	
Measurements Taken From:	U/S Top of Rail
Height from Deck (ft):	4.0
Distance to Water Surface (ft):	
Thalweg (ft):	46
Distance to thalweg (ft):	109.2 (L8)
Distance was measured from:	L0
Ahead or Back on Station?	A

Location:	**Measurement (ft)**
Pier 1/L0	17.0
L2	24.6
U3 (edge of water)	32.8
L4	34.3
L6	37.1
L8	37.2
L10	33.4
Pier 2 (Ht. ftg 4.5')	31.0

Scour:	Location	Description of Condition
Abutment	R	Ex. Slope and bank protection is undercut. Bottom Wall, Conc. ecology blocks, rolled on side. Blocks are linked together with bolders by single 1/2" dia. Steel cable.
Pier	2	footing exposed on bed rock
Abutment	L	vertical bank outside of HWM

[2] ***LWM***, *Large Woody Material;* ***MWM***, *Mobile Woody Material;* ***MB***, *Meander Bar;* ***CVW***, *Cross Vein Weir (aka Drop Structure);* ***HLR***, *Heavy Loose Riprap;* ***LLR***, *Light Loose Riprap;* ***HPR***, *Hand Placed Riprap;* ***FGR***, *Fully Grouted Riprap;* ***PGR***, *Partially Grouted Riprap;* ***QS***, *Quarry Spalls;* ***BWW***, *Bendway Weirs;* ***GB***, *Guide Banks;* ***CD***, *Check Dams;* ***BRR***, *Buried Rock Revetment;* ***COW***, *Cut-Off Wall;* ***CSP***, *Concrete Slope Paving;* ***ACM***, *Articulating Concrete Mattress;* ***GMB***, *Gabion Mattresses/Baskets;* ***GFM***, *Grout-Filled Mats.*

Washington State Department of Transportation

Scour Field Evaluation

Continuation

Dates of Evaluation (Begin/Completion):	Lead Inspector:	Co-Inspector:	Bridge Number:	Bernhardt Bridge
9/10/2026	HLC	0	Bridge Name:	CASCADE RIVER
			Structure ID:	-------

APPENDIX C

Table 54. Channel - defect severity guidance for component condition ratings.

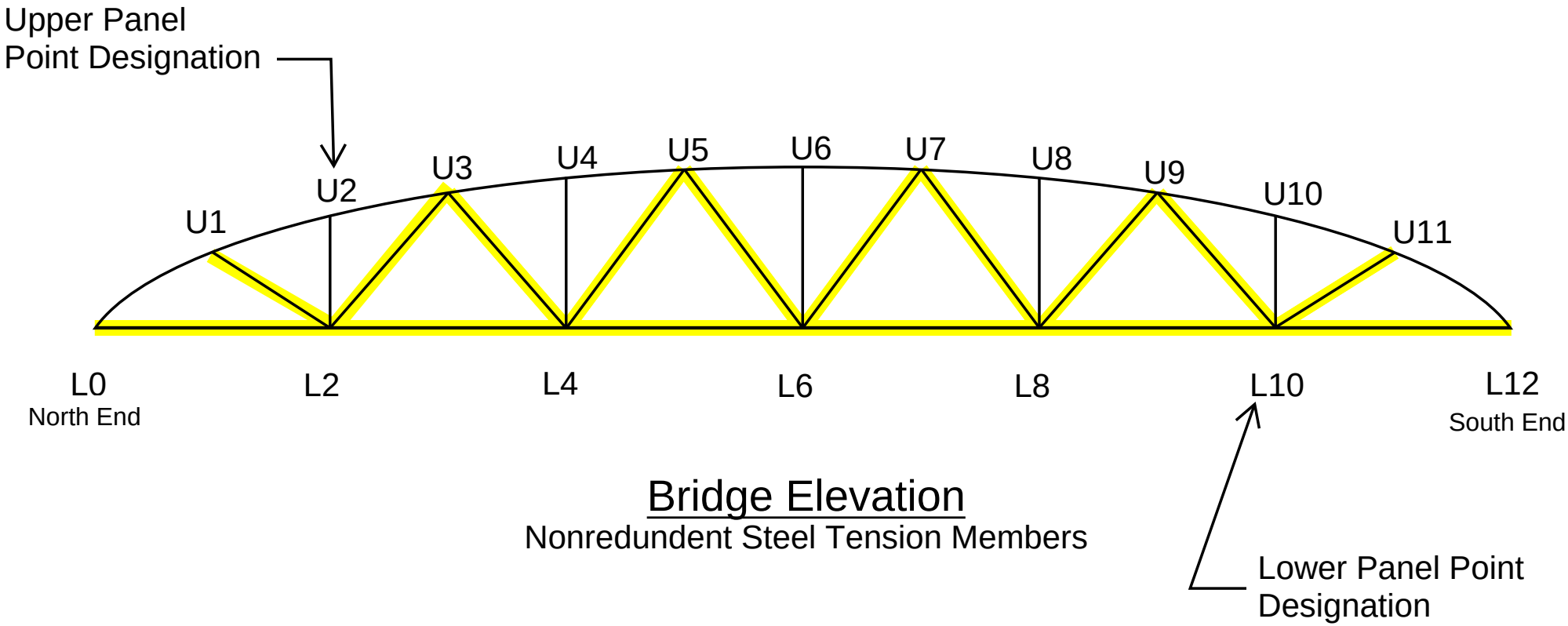
Defect	Minor	Moderate	Major
Alignment	Flow angle of attack 15-30 degrees with respect to the bridge substructure, or 5-15 degrees with respect to wall piers.	Flow angle of attack 30-45 degrees with respect to the bridge substructure, or 15-30 degrees with respect to wall piers.	Flow angle of attack more than 45 degrees with respect to the bridge substructure, or more than 30 degrees with respect to wall piers.
Migration	Thalweg has moved from its baseline location, but movement has arrested or does not threaten the bridge or approach roadway.	Thalweg movement has not arrested and impacts embankment stability.	Thalweg movement has begun to undermine approach roadway.
Degradation	Exists within tolerable limits or has arrested.	Sloughing of banks, resulting in vertical embankments on both sides of the channel. Bridge is not yet impacted.	Sloughing of banks, resulting in vertical embankments on both sides of the channel. Bridge is impacted.
Aggradation	Exists within tolerable limits or has arrested.	Exceeds tolerable limits. Hydraulic opening is significantly blocked, increasing potential for overtopping or channel restriction.	Hydraulic opening is mostly blocked. May cause frequent overtopping or channel restriction.
Debris	Restricts channel slightly, or is prone to build-up.	Large deposits exist and restrict the channel, causing increased water velocities, redirecting stream flow, or eroding banks.	Hydraulic opening mostly blocked, significantly redirecting stream flow or impacting waterway capacity.
Bank Erosion/ Instability	Erosion/instability that does not impact the bridge or approach roadway.	Significant erosion/instability that is progressing toward the bridge or approach roadway.	Stability of the approach roadway embankment is impacted.

Soundings Continued:

Location:	Measurement (ft)

Appendix 2

Ground Line Stream Cross Section and
Scour Evaluation Form



Bridge Elevation

Nonredundent Steel Tension Members

Washington State Department of Transportation

NON-REDUNDANT STEEL TENSION MEMBER INSPECTION REPORT

Bridge Name:	Bernhardt River	**Date:**	9/10/2026
Bridge No:		**Hours:**	
Structure ID:		**Inspector ID #:**	D2020
Structure Type:	STrus TTLB	**Lead Inspector Intials:**	HL Coffman
Agency:	CRCC	**Co-Inspector Intials:**	
Milepost:			

Inspected items: Truss Tension Members (Riveted)

Procedures:

Riveted Truss

1. As required, use mirrors or other equipment to check inside surfaces of NSTM's.
2. Check for loose or unevenly loaded member sub-elements.
3. Check all rivets at connection plates, with emphasis on first row. The first row is the row closest to the edge of the connection or gusset plate.
4. Check for any welds, including plug, tack, or repair welds. Record location of welds, regardless of condition, and document weld type and category.
5. Check NSTM members and associated connection or gusset plates for areas of heavy or pitted corrosion, nicks, gouges, sharp bends, and collision damage. Record location of all these conditions and estimated section loss, if applicable.
6. Check all heat straightened or repaired areas. Record location of these areas, regardless of condition.

Pins and Anchor Bolts

1. As required, use mirrors or other equipment to check inside surfaces of NSTM's.
2. Check for pitting, laminar rust, surface deformation, and pack rust. It is important to check the pin, pin nuts, and all members surrounding the pin for this kind of steel deterioration.
3. Check for mobility and noise of pin and surrounding members. If the pin is physically “frozen” it is important to note this because the added stress can affect other members in the structure.
4. Observe and record abnormalities like; alignment, pin wear, loose pin nuts, and amount of nut engagement. It’s important to note that full nut engagement is when the nut is flush with the pin or the pin is extending past the nut.
5. Check for paint system failure on pin nuts, pin, and surrounding members.

NSTM Location	NSTM Type	NSTM Per Girder or Truss Line	'Beist' Server Plans		
			Sh. No.	Contr.	Sh. Name
Span 2	Truss Tension Member	28	3	1576	Layout
	(Riveted)				Archived Standard Plan
					104 ft Steel Pony Truss
					G0580130.tif

Note: NSTM = Non-Redundant Steel Tension Member

Washington State Department of Transportation

NON-REDUNDANT STEEL TENSION MEMBER INSPECTION REPORT

Bridge Name:	Bernhardt River	**Date:**	9/10/2026
Bridge No.:	0	**Hours:**	1/0/1900
Structure ID:	0	**Inspector ID #:**	D2020
Structure Type:	STrus TTLB	**Lead Inspector:**	HL Coffman
Agency:	CRCC	**Co-Inspector:**	
Milepost:	0		

Truss Line	Span	Location	Feature Inspected	Remarks
East	1	L0-L2	Bottom Chord	Light surface corrosion/debris
East	1	L2-L4	Bottom Chord	Light surface corrosion/debris
East	1	L4-L6	Bottom Chord	Light surface corrosion/debris
East	1	L6-L8	Bottom Chord	Light surface corrosion/debris
East	1	L8-L10	Bottom Chord	Light surface corrosion/debris
East	1	L10-L12	Bottom Chord	Light surface corrosion/debris
East	1	U1-L2	Diagonal Member	Light surface corrosion/debris
East	1	L2-U3	Diagonal Member	Light surface corrosion/debris
East	1	U3-L4	Diagonal Member	Light surface corrosion/debris
East	1	L4-U5	Diagonal Member	Light surface corrosion/debris
East	1	U5-L6	Diagonal Member	Light surface corrosion/debris
East	1	L6-U7	Diagonal Member	Light surface corrosion/debris
East	1	U7-L8	Diagonal Member	Light surface corrosion/debris
East	1	L8-U9	Diagonal Member	Light surface corrosion/debris
East	1	U9-L10	Diagonal Member	Light surface corrosion/debris/Angle leg bent on rdwy side, ~1 lf
East	1	L10-U11	Diagonal Member	Light surface corrosion/debris
West	1	L0-L2	Bottom Chord	Light surface corrosion/debris, Minor pitting in L0 gusset
West	1	L2-L4	Bottom Chord	Light surface corrosion/debris
West	1	L4-L6	Bottom Chord	Light surface corrosion/debris
West	1	L6-L8	Bottom Chord	Light surface corrosion/debris
West	1	L8-L10	Bottom Chord	Light surface corrosion/debris
West	1	L10-L12	Bottom Chord	Light surface corrosion/debris
West	1	U1-L2	Diagonal Member	Light surface corrosion/debris
West	1	L2-U3	Diagonal Member	Light surface corrosion/debris/Angle leg bent on rdwy side, ~2 lf
West	1	U3-L4	Diagonal Member	Light surface corrosion/debris/Angle leg bent on rdwy side, ~2 lf
West	1	L4-U5	Diagonal Member	Light surface corrosion/debris
West	1	U5-L6	Diagonal Member	Light surface corrosion/debris
West	1	L6-U7	Diagonal Member	Light surface corrosion/debris
West	1	U7-L8	Diagonal Member	Light surface corrosion/debris/Angle leg bent on rdwy side, ~4 lf
West	1	L8-U9	Diagonal Member	Light surface corrosion/debris/Angle leg bent on rdwy side, ~4 lf
West	1	U9-L10	Diagonal Member	Light surface corrosion/debris/both angles legs bent ~1lf
West	1	L10-U11	Diagonal Member	Light surface corrosion/debris