CK-2157
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HUNTER 2.2km

2023 Inspection

CBR iPad Offline Ver 0.36B

BRITISH COLUMBIA

CBR Data

Latitude	Longitude
49°20'35.3"	-121°34'4.9"

Site Status	Active		
Insp. Status	Inspect		
Crossing Name	Hunter Creek		
FSR #	6086	Branch #	1
Road Name	HUNTER		
User km	2.2		
Previous Load Rating (tonnes)	64		
Structure Class	Temporary Bridge		
Portable	N		
Superstructure	Steel I-beam		
Deck Type	Timber - Untreated		
Abutment Left	Crib, Log or Untreated Timber		
Abutment Right	Crib, Log or Untreated Timber		
Spans	1		
Total Length (m)	32.6		
Deck Width (m)	4.3		

Updated Data

Latitude	Longitude
49°20'35.22"	-121°34'5.2"

HD Diff. (m)	6.5	Accuracy (m)	6

20 tonnes

Inspection

Date of Inspection	2023-04-25 9:37:18 AM	Recommended Next Inspection	2024
Inspector Name	Cameron VandenBrink, P.Eng.	Inspection Company	Chartwell Resource Group Ltd.

P.Eng comments

The timber deck was cored at random locations from the running surface and found to be in poor condition. The log crib is 38 years old and currently still in fair condition; however, it is approaching the end of it's industrial lifespan. The inspector has noted apparent rotation at the right bank abutment; however, there does not appear to be any difference in the photos from previous inspections or from the original installation photos - monitor. Considering the age and condition of the timber deck and the log crib abutments, I recommend a complete structure replacement. Limit loading to 20 tonnes and post updated load rating signs. Post missing bridge ahead sign; brush approaches; install guide logs at right approach (minimum 600mm diameter x 6m length). Until the structure is replaced, monitor the crib and riprap condition.

Replacing the timber deck (cross ties, subdeck and running planks) would result in an increased load rating (BCL-625 or 64 tonnes); however, the structure has not had any sustained log hauling in some years and the crib condition will need to be monitored shortly after the hauling commences. If this approach is considered, I recommend an inspection be completed 1 week after sustained hauling commences and 3 additional weekly inspections thereafter. If any settlement or further deterioration is noted in the abutments the load rating would likely have to be reduced and/or the structure replaced. Please send all inspections (completed by a qualified professional) to the Coast Engineering Group.

PERMIT TO PRACTICE: 1003022

Approach

Alignment	Fair	HC both approaches.
Bridge Ahead Signs Missing	○ 0 ● 1 ○ 2	Left approach. However bridge warning and load rating present.
Brushing Required	Y	Remove cedars growing around right abutment
Delineator Missing Left	● 0 ○ 1 ○ 2	
Delineator Missing Right	● 0 ○ 1 ○ 2	
Fender Condition	Fair	Combo of blocks, rocks and logs. Logs are undersized and should be replaced. Right bank up and downstream require larger rocks or new guidelogs installed. Currently not functional.
Posted Load Rating	63500	
Road Surface	Fair	Potholes on both approaches

Abutment

Log/Timber Cribs	Fair	Fair to poor. Right bank appears to have rotated into the approach fills by the angle of the visible tie backs. 50mm +/- rot.
Tie Backs	Fair	Fair to poor. Ends split, considerable rot. Right bank appears to have rotated
Bin Wall		
Pier		
Concrete		
Caps or Sills	Good	2-300x300 creosote timbers atop reinforced I beam. Bottom flange bolted to beam.
Piles or Posts		
Ballast Wall	Fair	
Wing Wall	Fair	Logs tied onto ballast walls
Bracing		
Hardware		
Fill	Fair	
Riprap	Fair	Large oversteepened on left bank. Monitor downstream toe. Right bank is poor with no riprap
Bearings	Fair	
Corrosion Protection		

Deck

Running Surface	Poor	Potholes on both approaches
Running Planks	Poor	Rotten
Sub Deck	Poor	Rotten
Ties	Poor	Rotting from the top down. Spot checked 5 locations, 1 sound at interface of sub deck. Rest have over 2” of rot. 2 jammed drill 4.5-5” into tie with wet rotten wood.
Nails	Poor	Protruding due to rotten planks. Some bent over, some sit proud and a few broken off.
Deck to Girder Bolts	Good	
Concrete Deck		
Grout Pockets		
Deck Joints		
Steel Deck Plate		
Gravel Surface		
Curb Rail/Blocks/Posts	Fair	
Hand Rails/Walkouts		
Hardware	Fair	
Overall Deck Condition	Poor	Due to timber deck condition. Deck is also covered in sediment and requires cleaning.
Gravel Depth (mm)		
Pier Deck		

Steel/Concrete

Girders	Fair	Minor sag in girders.
Diaphragms	Fair	11 bolted bays - galvanized
Bracing	Fair	
Under Trussing		
Hardware	Fair	
Welded/grouted shear connectors		

Log

Log Curbs	
Needle Beam	
Needle Lashing/ Shimming	

Needle Beam to Crib (m)

Needle Diameter (mm)

Stringer Number	Species	Peeled	Diameter (mm)	Rot Depth (mm)	Condition	Comment

Hazards

Estimated Present Water Level Depth (m)	1.2	High Water	☐	Debris	☐
Estimated Present Water Level Width (m)	13	Aggradation	☐	Scour	☒
Estimated High Water Level Clearance	1.6	Ice	☐		

Comments: Monitor riprap toe for scour on left bank.

Repairs and Monitoring

	Repair Item	Repair Description
1	pproach. oad rating signs. High	ost load rating signs
2	Approach. Approach fenders (install). # of units. Priority:Medium	Install guidelogs on downstream right approach. Fill gap between blocks and bridge end with guide log on upstream right approach. Min 600mm x 6m
3	Approach. Area/sight line brushing. m². Priority:Low	Remove cedar trees growing around right abutment.
4		
5		
6		
7		

Item	Monitor Description	Frequency
1	Log crib condition.	Anually
2	Riprap scour and right bank erosion	Anually
3		

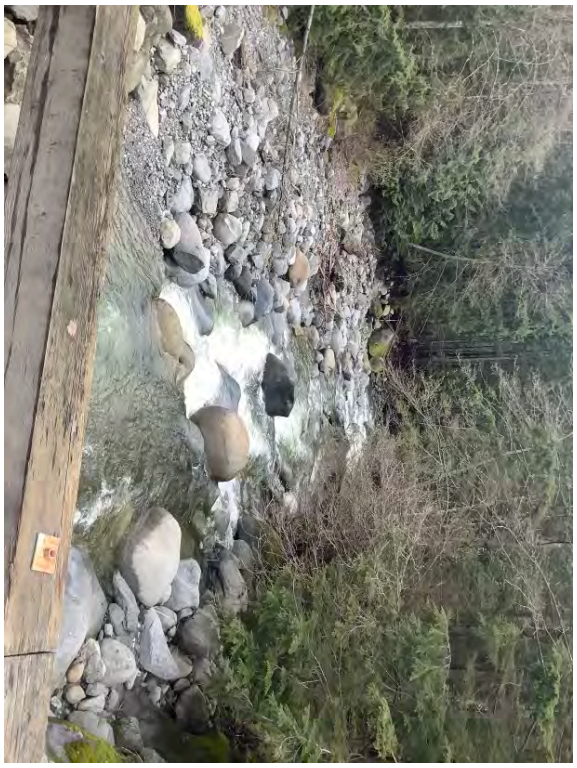
Load Rating Sign

Approach from Right Bank when facing downstream

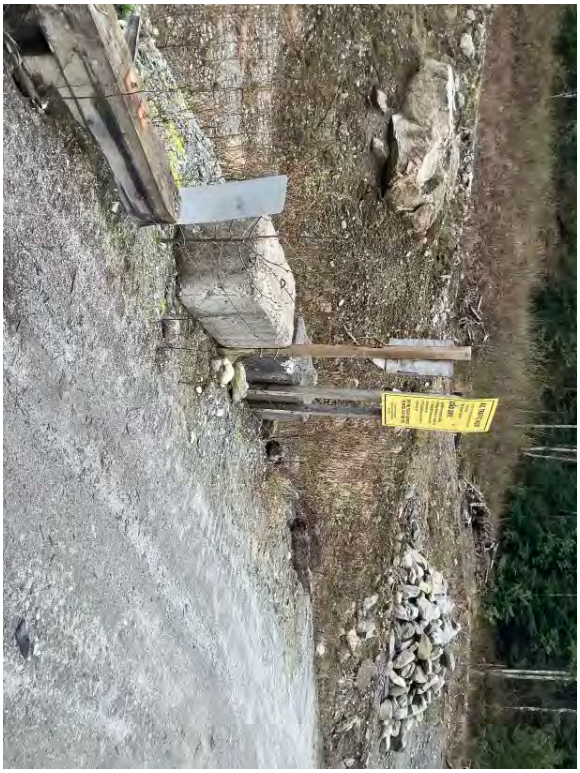
Deck

Upstream from Crossing

Left bank approach viewing from bridge deck



Downstream from Crossing



Approach Barrier, le t upstream

Right bank approach viewing from bridge deck

Approach Barrier, right upstream

Approach from Left Bank when facing downstream

Approach Barrier, left upstream

Downstream Profile

Bearing, Left

Downstream left riprap toe

Superstructure

Downstream left crib end

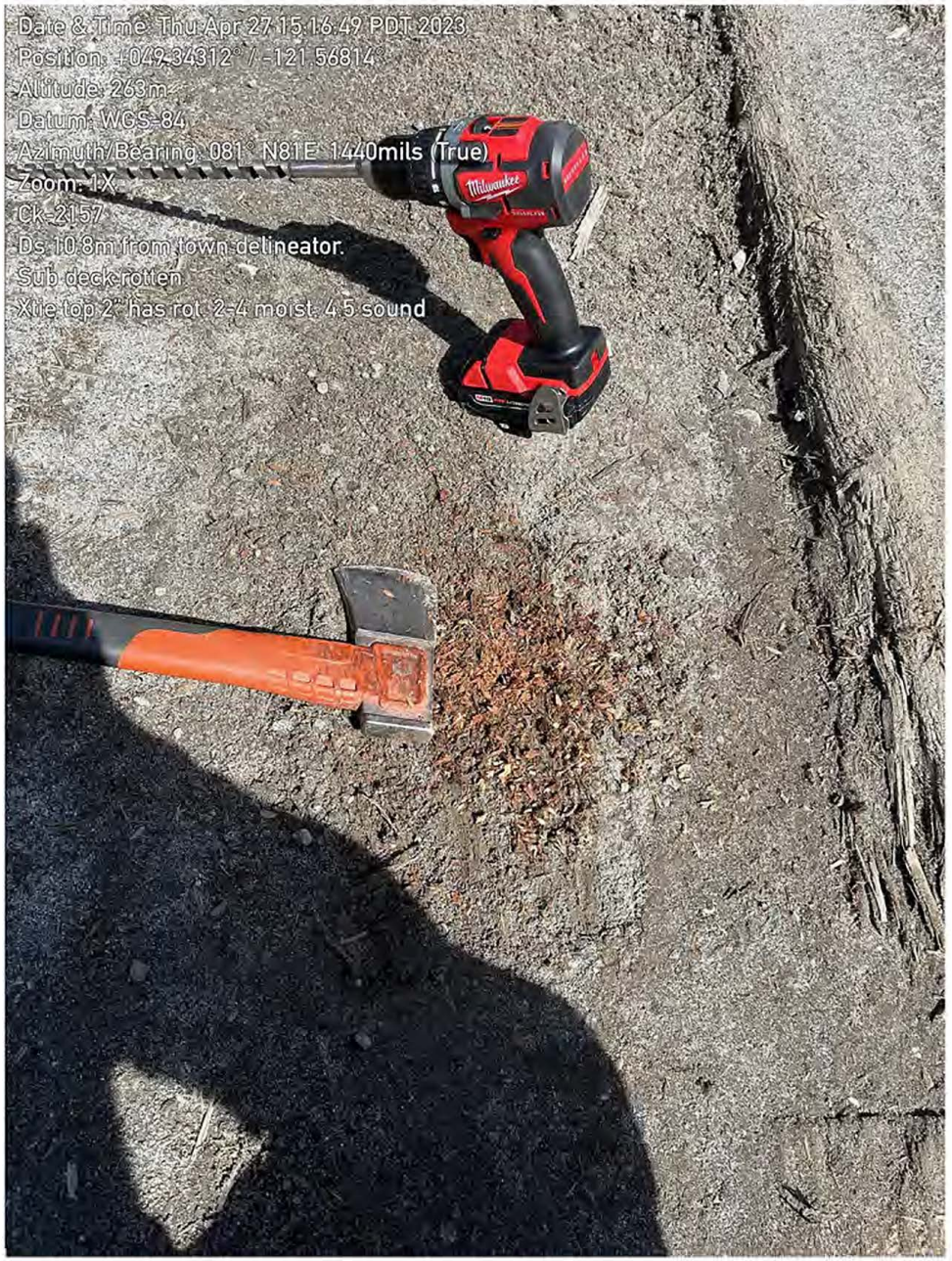
Right Bank Abutment when facing downstream

Bearing

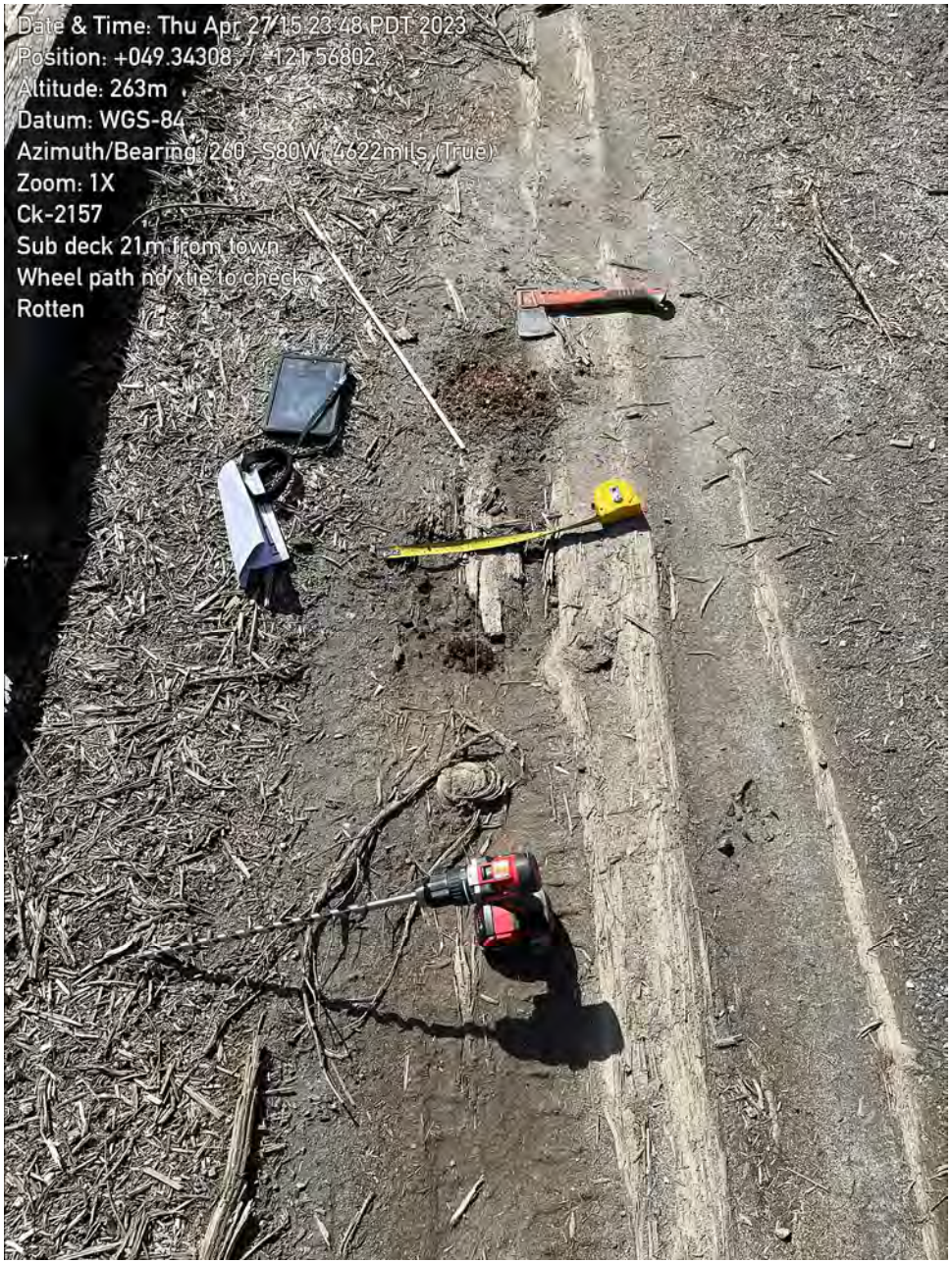
Right Bank Abutment when facing downstream

Deck condition from underneath

Date & Time: Thu Apr 27 15:08:31 PDT 2023
Position: +049.34310° / -121.56815°
Altitude: 266m
Datum: WGS-84
Azimuth Bearing: 254° S74W 4516mils (True)
Zoom: 1X
Ck-2157
Us: 10.8m from town delineator.
Sub deck rotten
Xtie sound


Date & Time: Thu Apr 27 15:16:49 PDT 2023
Position: +049.34312° / -121.56814°
Altitude: 263m
Datum: WGS-84
Azimuth Bearing: 081° N81E 1440mils (True)
Zoom: 1X
Ck-2157
Ds: 10.8m from town delineator.
Sub deck rotten
Xtie top 2" has rot 2-4 moist. 4-5 sound

Date & Time: Thu Apr 27 15:23:40 PDT 2023
Position: +049.34309 / -121.56803
Altitude: 263m
Datum: WGS-84
Azimuth/Bearing: 222° S42W 3947mils (True)
Zoom: 1X
Ck-2157
Sub deck 21m from town
Wheel path no xtie to check
Rotten


Date & Time: Thu Apr 27 15:23:48 PDT 2023
Position: +049.34308 / -121.56802
Altitude: 263m
Datum: WGS-84
Azimuth/Bearing: 260° S80W 4622mils (True)
Zoom: 1X
Ck-2157
Sub deck 21m from town
Wheel path no xtie to check
Rotten

Date & Time: Thu Apr 27 15:25:45 PDT 2023
Position: +049.34308° / -121.56808°
Altitude: 262m
Datum: WGS-84
Azimuth/Bearing: 148° S32E 2631mils (True)
Zoom: 1X
Ck-2157
Us 20.5 from town
Wheel path, sub deck rotten
3" of rot on top of xtie drilling down

Date & Time: Thu Apr 27 15:33:30 PDT 2023
Position: +049.34310° / -121.56806°
Altitude: 261m
Datum: WGS-84
Azimuth/Bearing: 039° N39E 0693mils (True)
Zoom: 1X
Ck-2157
Da 20.5 from town
Wheel path: sub deck rotten
5" into tie. Wet rotten wood.hanning drill

Date & Time: Thu Apr 27 15:41:57 PDT 2023
Position: +049 34311° / -121.56793°
Altitude: 263m
Datum: WGS-84
Azimuth/Bearing: 152° S28E 2702mils (True)
Zoom: 1X
Ck-2157
Is 26.9 from town
Wheel path, sub deck rotten
4.5" into tie. Wet rotten wood jamming drill