



**NEVADA COMMISSION FOR THE RECONSTRUCTION OF THE V&T RAILWAY  
("V&T Railway Commission")  
Agenda Report**

**Date Submitted:** June 20, 2024

**Meeting Date Requested:** June 26, 2024

**Time Requested:** 5 Minutes

**To:** NEVADA COMMISSION for the RECONSTRUCTION of the V&T RAILWAY Commissioners

**From:** David Peterson

**Subject Title:** Discussion, presentation and possible action regarding a report and visual inspection of the V&T Railways and V&T Railway Bridge (G-2898) conducted by Wood Rodgers.– David Peterson ([admin@vtrailway.com](mailto:admin@vtrailway.com))

**Staff Summary:** A visual inspection of the V&T Railway was conducted by Wood Rodgers from Gold Hill to the East Gate Depot. *Jim Koch of Wood Rodgers will present findings of the visual inspection performed between January 31, 2024, and May 10, 2024. The V&T Commission is asked to comment on the report and direct staff to address the proposed corrective actions.*

**Type of Action Requested:**

() Resolution

() Ordinance

() Formal Action/Motion

() Other (Specify) Presentation Only

**Recommended Board Action:** I move to direct staff to make corrective actions as discussed on the record.

**Applicable Statute, Code, Policy, Rule or Regulation:**

**Fiscal Impact:**

**Explanation of Impact:**

**Funding Source:**

**Supporting Material/Attachments:** 20240626\_VT Item 12 \_Inspection\_Report

**Prepared By:** Cheryl Bailey, Executive Assistant



May 31, 2024

Nevada Commission for the Reconstruction of the V&T Railway  
P.O. Box 1711  
Carson City, NV 89702

**Subject: V&T Railway – Visual Inspection Report**

Dear Commissioners:

A visual inspection of the V&T Railways conducted on the culvert, crossings, slopes, embankments, Hwy 50 Bridge crossing, and tunnel from Gold Hill to the East Gate Depot, Nevada was performed between January 31, 2024 and May 10, 2024.

A visual inspection of the V&T Railway Bridge (G-2898) crossing Highway US-50 in Carson City, Nevada was performed on May 10, 2024.

This visual inspection was conducted by observing the bridge structure from below at a safe distance from traffic on the shoulder of US-50 and from atop the bridge at track level. The bridge was observed during a train crossing on May 10, 2024. Observation of the bridge during the train's crossing revealed no noticeable movement.

The bridge was found to be in good condition. Minor maintenance is recommended to address a few existing conditions. The findings from the inspection are presented in the attached report titled: "V&T Railway (Bridge G-2898) – Visual Bridge Inspection Report" along with an included photo exhibit.

During the annual inspection, the use of a special inspection "High Rail" vehicle was used for travel on the railway. The inspections were conducted by making intermittent stops along the alignment at each location. Our team visually observed the conditions of each item and noted any deficiencies or corrective actions on the attached inspection sheets.

Most of the checklist items were clean, intact, or functioning properly and will not require any additional maintenance or corrective actions. There were a few areas that needed minor maintenance, which included cleaning out fallen rock, vegetation, and minor sediment buildup. No noted rail correction items were found during our inspections. Corrective actions that may need additional maintenance or continuous monitoring include:

- STA: 972+50 to 976+75 – Major rock debris near the rail. Removal of large boulders and monitor slope for loose rocks.
- STA: VCs 957+00 – Add ballast rock to approximately twenty feet of rail.

- STA: VCs 957+00 – The culvert outlet was buried on the downhill side. The piping should be exposed and cleaned out.
- STA: 880+50 to 884+50 – Major rock debris near the rail. Removal of large boulders and monitor slope for loose rocks.
- STA: 739+00 to 740+00 – Slope failure occurred during the winter months. The slope should be cleaned away from the ballast rock and monitored for additional movement.

Overall, the inspection was relatively clean with only minor to moderate correction items, except those listed above. The commission should consider addressing the items above during the summer months and closely monitor any changes or deficiencies through higher precipitation months.

Please contact our office if you should have any related questions or comments.

Sincerely,

**Wood Rodgers Inc.**



Jim Koch, CEM

Project manager, Associate



David Edgington, P.E.

Associate

Enclosures:    Inspection Reports  
                      NDOT 2023 Bridge Inspection Report

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 1

**CULVERT DATA**

MILEPOST:	16.36
ENG'S STATION:	"VT" 63+16
ROUTE:	
SIZE:	18"
TYPE:	RCP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Clear Ballast debris at inlet. Armor inlet with 4" rock.			
OUTLET		Clean out minor debris			
BARREL		Good			
DEBRIS		Minor debris			
VEGETATION		Minor vegetation			
RIP RAP		Minor erosion			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 2

**CULVERT DATA**

MILEPOST:	15.72
ENG'S STATION:	"VT" 29+19
ROUTE:	
SIZE:	24"
TYPE:	RCP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Clear vegetation			
OUTLET		Clean out minor debris			
BARREL		Good			
DEBRIS		Minor debris			
VEGETATION		Minor vegetation			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington , Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_ , Foreman  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 3

**CULVERT DATA**

MILEPOST:	15.43
ENG'S STATION:	"VR" 13+74
ROUTE:	
SIZE:	36"
TYPE:	RCP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate debris and rocks in inlet			
OUTLET		Minor debris on outlet			
BARREL		Moderate debris and sediment in barrel			
DEBRIS		moderate			
VEGETATION		Minor vegetation			
RIP RAP		Slight erosion on inlet side			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 4

**CULVERT DATA**

MILEPOST:	15.35
ENG'S STATION:	"VCs" 999+65
ROUTE:	
SIZE:	42"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 5

**CULVERT DATA**

MILEPOST:	15.21
ENG'S STATION:	"VCs" 992+00
ROUTE:	
SIZE:	42"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment and vegetation			
OUTLET		Good			
BARREL		Good			
DEBRIS		moderate sediment			
VEGETATION		moderate			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 6

**CULVERT DATA**

MILEPOST:	15.08
ENG'S STATION:	"VCs" 985+14
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Good			
BARREL		Good			
DEBRIS		Minor sediment			
VEGETATION		Good			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 7

**CULVERT DATA**

MILEPOST:	14.96
ENG'S STATION:	"VCs" 978+60
ROUTE:	
SIZE:	42"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Minor vegetation			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Minor vegetation on outlet side			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 8

**CULVERT DATA**

MILEPOST:	14.63
ENG'S STATION:	"VCs" 961+69
ROUTE:	
SIZE:	42"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Major sediment, minor vegetation			
OUTLET		Major vegetation			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Vegetation on both inlet and outlet			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 9

**CULVERT DATA**

<b>MILEPOST:</b>	<b>14.55</b>
<b>ENG'S STATION:</b>	<b>"VCs" 957+00</b>
<b>ROUTE:</b>	
<b>SIZE:</b>	<b>12"</b>
<b>TYPE:</b>	<b>CMP</b>

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Completely blocked by vegetation and debris			
OUTLET		No outlet exposed. Found outlet just below ballast rock			
BARREL		Clean out			
DEBRIS		Major debris			
VEGETATION		Vegetation on both inlet and outlet			
RIP RAP		Place additional riprap on inlet side			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Needs attention			
TRACK ABOVE		Good			
BALLAST ABOVE		Needs additional ballast rock			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 10

**CULVERT DATA**

MILEPOST:	14.51
ENG'S STATION:	"A2" 24+61
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment and vegetation			
OUTLET		Major vegetation			
BARREL		Good			
DEBRIS		Minor sediment			
VEGETATION		Vegetation on both inlet and outlet			
RIP RAP		Good			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 11

**CULVERT DATA**

<b>MILEPOST:</b>	<b>14.49</b>
<b>ENG'S STATION:</b>	<b>"VCs" 953+88</b>
<b>ROUTE:</b>	
<b>SIZE:</b>	<b>3'x4'</b>
<b>TYPE:</b>	<b>Box</b>

**COMMENTS**

Box Culvert

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor vegetation and debris			
OUTLET		Minor debris			
BARREL		Good			
DEBRIS		Minor			
VEGETATION		Vegetation on both inlet and outlet			
RIP RAP		NA			
HEADWALL		Good			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:







Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	14.15
ENG'S STATION:	"VCs" 936.25
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	14.04
ENG'S STATION:	"A3" 10+87
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		moderate sediment			
DEBRIS		moderate			
VEGETATION		minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:





Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	13.79
ENG'S STATION:	"VCs" 917+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Minor sediment			
BARREL		minor sediment			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	13.69
ENG'S STATION:	"VCs" 912+00
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Good			
BARREL		Moderate sediment			
DEBRIS		Moderate			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	13.57
ENG'S STATION:	"VCs" 905+25
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Moderate			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	13.43
ENG'S STATION:	"VCs" 897+87
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Moderate			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

<b>MILEPOST:</b>	13.27
<b>ENG'S STATION:</b>	"VCs" LT "A4" 10+91
<b>ROUTE:</b>	
<b>SIZE:</b>	12"
<b>TYPE:</b>	CMP

**COMMENTS**

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**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Moderate			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_ 13

<b>CULVERT DATA</b>	
MILEPOST:	13.23
ENG'S STATION:	"VCs" 887+50
ROUTE:	
SIZE:	18"
TYPE:	CMP

COMMENTS

<b>RECORD OF INSPECTION</b>			<b>CORRECTIVE ACTION TAKEN</b>		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	12.87
ENG'S STATION:	"VCs" 869+45
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Good			
BARREL		Minor sediment			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

CULVERT INSPECTION REPORT

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA	
MILEPOST:	12.73
ENG'S STATION:	"VCs" 861+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

CULVERT INSPECTION REPORT

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA

MILEPOST:	12.37
ENG'S STATION:	"VCs" 842+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

COMMENTS

--

RECORD OF INSPECTION

CORRECTIVE ACTION TAKEN

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	12.12
ENG'S STATION:	"VCs" 829+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA	
MILEPOST:	11.79
ENG'S STATION:	"VCs" 811+50
ROUTE:	
SIZE:	18"
TYPE:	CMP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Missing lower Flared end			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	11.74
ENG'S STATION:	"VCs" 809+50
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

CULVERT DATA	
MILEPOST:	11.54
ENG'S STATION:	"VCs" 798+50
ROUTE:	
SIZE:	12"
TYPE:	CMP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	11.35
ENG'S STATION:	"VCs" 788+50
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Major			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

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Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	11.19
ENG'S STATION:	"VCs" 780+00
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

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**Nevada Commission for Reconstruction of the V&T Railway**

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

<b>MILEPOST:</b>	11.03
<b>ENG'S STATION:</b>	"VCs" 771+50
<b>ROUTE:</b>	
<b>SIZE:</b>	12"
<b>TYPE:</b>	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Minor sediment			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	10.78
ENG'S STATION:	"VCs" 758+00
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Minor sediment			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	10.75
ENG'S STATION:	"VCs" LT "A9" 33+64
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		moderate			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	10.71
ENG'S STATION:	"VCs" LT "A16" 7+55
ROUTE:	
SIZE:	60"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

CULVERT INSPECTION REPORT

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA	
MILEPOST:	10.69
ENG'S STATION:	"VCs" 753+41
ROUTE:	
SIZE:	60"
TYPE:	CMP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	10.53
ENG'S STATION:	"VCs" 744+82
ROUTE:	
SIZE:	24"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Good			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

<b>MILEPOST:</b>	<b>9.89</b>
<b>ENG'S STATION:</b>	<b>"VCs" LT "BC" 20+10</b>
<b>ROUTE:</b>	
<b>SIZE:</b>	<b>12"</b>
<b>TYPE:</b>	<b>CMP</b>

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Completely buried			
BARREL		Moderate sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

CULVERT INSPECTION REPORT

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA	
MILEPOST:	9.79
ENG'S STATION:	"VCs" 706+00
ROUTE:	
SIZE:	36"
TYPE:	CMP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington , Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_ , Foreman  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	9.48
ENG'S STATION:	"VCs" LT "A21" 10+98
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	9.43
ENG'S STATION:	"VCs" 687+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Major sediemnt			
OUTLET		Major sediemnt			
BARREL		Major sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	9.26
ENG'S STATION:	"VCs" LT "TK" 6+92
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Major sediemnt			
OUTLET		Major sediemnt			
BARREL		Major sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

CULVERT DATA	
MILEPOST:	9.14
ENG'S STATION:	"VCs" 672+00
ROUTE:	
SIZE:	30"
TYPE:	CMP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

CULVERT DATA	
MILEPOST:	8.98
ENG'S STATION:	"VCs" LT "CY" 10+12
ROUTE:	
SIZE:	24"
TYPE:	RCP

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

<b>MILEPOST:</b>	<b>8.91</b>
<b>ENG'S STATION:</b>	<b>"VCs" 659+36</b>
<b>ROUTE:</b>	
<b>SIZE:</b>	<b>24"</b>
<b>TYPE:</b>	<b>CMP</b>

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	8.81
ENG'S STATION:	"VCs" 654+46
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Moderate vegetation on inlet			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

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**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	8.72
ENG'S STATION:	"VCs" 649+50
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington , Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_ , Foreman  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	8.5
ENG'S STATION:	"VCs" 638+72
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Moderate sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington , Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_ , Foreman  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	8.46
ENG'S STATION:	"VCs" 635+89
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	8.16
ENG'S STATION:	"VCs" 614+50
ROUTE:	
SIZE:	36"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Sediment			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	8.05
ENG'S STATION:	"VCs" 614+03
ROUTE:	
SIZE:	36"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Sediment			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.95
ENG'S STATION:	"VCs" 609+00
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Sediment			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.71
ENG'S STATION:	"VCs" 596+50
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington , Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_ , Foreman  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.66
ENG'S STATION:	"VCs" LT "TZ" 9+87
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Moderate sediment			
OUTLET		Moderate sediment			
BARREL		Moderate sediment			
DEBRIS		Sediment			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.62
ENG'S STATION:	"VCs" 591+50
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Minor sediment			
BARREL		Minor sediment			
DEBRIS		Sediment			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.54
ENG'S STATION:	"VCs" 587+37
ROUTE:	
SIZE:	42"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Minor			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington , Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_ , Foreman  
Signature

APPROVED: \_\_\_\_\_ , Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.45
ENG'S STATION:	"VCs" 582+50
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Major sediment			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Moderate vegetation			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	7.4
ENG'S STATION:	"VCs" 580+79
ROUTE:	
SIZE:	12"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Major sediment			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Moderate vegetation			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

CULVERT DATA	
MILEPOST:	6.7
ENG'S STATION:	"VCs" 540+50
ROUTE:	
SIZE:	18"
TYPE:	HDPE

COMMENTS

RECORD OF INSPECTION			CORRECTIVE ACTION TAKEN		
COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
 Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
 Signature

Use additional sheets as required:



Nevada Commission for Reconstruction of the V&T Railway

CULVERT INSPECTION REPORT

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA

MILEPOST:	6.55
ENG'S STATION:	"VCs" 535+50
ROUTE:	
SIZE:	18"
TYPE:	CMP

COMMENTS

--

RECORD OF INSPECTION

CORRECTIVE ACTION TAKEN

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

<b>MILEPOST:</b>	<b>6.21</b>
<b>ENG'S STATION:</b>	<b>"VCs" 517+00</b>
<b>ROUTE:</b>	
<b>SIZE:</b>	<b>18"</b>
<b>TYPE:</b>	<b>CMP</b>

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	5.88
ENG'S STATION:	"VCs" 499+83
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Minor sediment			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Minor vegetation			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

**Nevada Commission for Reconstruction of the V&T Railway**

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

<b>MILEPOST:</b>	5.6
<b>ENG'S STATION:</b>	"VCs" 485+00
<b>ROUTE:</b>	
<b>SIZE:</b>	18"
<b>TYPE:</b>	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	5.44
ENG'S STATION:	"VCs" 476+50
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington \_\_\_\_\_, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

**CULVERT INSPECTION REPORT**

Inspection Date: \_\_\_ 1/31/2024

Pictures: \_\_\_\_\_

Sheet \_\_\_ 13

**CULVERT DATA**

MILEPOST:	4.99
ENG'S STATION:	"VCs" 453+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

**COMMENTS**

--

**RECORD OF INSPECTION**

**CORRECTIVE ACTION TAKEN**

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

Nevada Commission for Reconstruction of the V&T Railway

CULVERT INSPECTION REPORT

Inspection Date: 1/31/2024

Pictures: \_\_\_\_\_

Sheet 13

CULVERT DATA

MILEPOST:	4.76
ENG'S STATION:	"VCs" 441+00
ROUTE:	
SIZE:	18"
TYPE:	CMP

COMMENTS

--

RECORD OF INSPECTION

CORRECTIVE ACTION TAKEN

COMPONENT	CONDITION	NOTATIONS	DATE	ACTION TAKEN	BY:
INLET		Good			
OUTLET		Good			
BARREL		Good			
DEBRIS		Good			
VEGETATION		Good			
RIP RAP		NA			
HEADWALL		NA			
DITCH/CHANNEL		Good			
STRUCTURE		Good			
TRACK ABOVE		Good			
BALLAST ABOVE		Good			
OTHER					

BY: J. Koch / D. Edgington, Culvert Inspector  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

BY: \_\_\_\_\_, Foreman  
Signature

APPROVED: \_\_\_\_\_, Roadmaster / Officer In Charge  
Signature

Use additional sheets as required:

## V&T RAILWAY CROSSING INSPECTION CHECKLIST 2023-2024

	Crossing #	Milepost	Engineer's Station	Route	Notes	Date Checked	Is Maintenance Recommended	Description of Recommended Maintenance
1.	929-463T	5.40	"VCs" 474+70	PR	Good Condition	2/1/24	N	Lyon County Road
2.	929-464A	6.53	"VCs" 534+00	HT	Good Condition	2/1/24	Y	Clear flangeways (routine task)
3.	928-465G	7.67	"VCs" 594+05	TZ	Good Condition	2/1/24	Y	Clear flangeways (routine task) Planks at RT side approach need shouldered with base
4.	929-050V	8.26	"VCs" 625+48	LH	Good Condition	2/1/24	Y	Clear flangeways (routine task)
5.	929-466N	8.99	"VCs" 664+00	CY	Good Condition	2/1/24	Y	Clear flangeways (routine task)
6.	929-467V	9.26	"VCs" 678+26	TK	Good Condition	2/1/24	Y	Clear flangeways (routine task)
7.	929-468C	9.48	"VCs" 689+53	A21	Good Condition	2/1/24	Y	Clear flangeways (routine task)
8.	929-469J	9.89	"VCs" 711+18	BC	Good Condition	2/1/24	N	
9.	929-470D	10.75	"VCs" 756+42	A9	Good Condition	2/1/24	Y	Aggregate base approach ramps need built up flush with planks both sides of crossing
10.	929-471K	11.79	"VCs" 811+85	A6	Good Condition	2/1/24	Y	Planks both side approach need shouldered with base
11.	929-472S	13.27	"VCs" 889+72	A4	Good Condition	2/1/24	N	
12.	929-473Y	14.04	"VCs" 930+52	A3	Good Condition	2/1/24	Y	Clear flangeways (routine task) Lyon County Road
13.	929-474F	14.51	"VCs" 955+30	A2	Good Condition	2/1/24	Y	Aggregate base approach ramps need built up flush with planks both sides of crossing
14.	929-475M	14.73	"VCs" 966+90	A1	Good Condition	2/1/24	Y	Planks at RT side approach need shouldered with base
15.	929-476U	16.15	"VT" 52+81	Private	Good Condition	2/1/24	N	
16.	929-477B	16.65	"VT2" 83+36	Gold Hill NA	Good Condition	2/1/24	N	

**Additional Notes:**

All crossings were found to be in good condition with no immediate maintenance work needed. Most flangeways contained at least minor dirt accumulation. All flangeways will be cleared prior to train operations. Basic components and signage for the crossings are inspected during routine track inspections and flangeways are cleared regularly by Willaman.

Inspected  
by

Signature



Jim Koch  
Print

Date: 1/31/2024



**2013 MAJOR SLOPE INSPECTION**

**Phase 3A**

Milepost Start	Engineer's Station Start	Milepost End	Engineer's Station End	Side	Date Checked	Maintenance Recommendation/Defect (Defect identified by code)	Corrective Action Needed	Description
4.631	VCs 434+00	5.238	VCs 436+50	LT	1/31/2024	Minor rock debris	Clean out rock	
4.631	434+00	5.238	436+50	RT	1/31/2024	Minor rock debris	Clean out rock	
4.825	444+25	5.056	450+50	LT	1/31/2024	Minor rock debris	Clean out rock	
5.15	445+50	5.154	448+30	RT	1/31/2024			
5.428	457+00	5.324	462+50	LT	1/31/2024			
5.011	479+00	5.082	484+00	LT	1/31/2024	Minor slope sediment	Clean out sediment	
5.011	479+00	5.082	484+00	RT				

**Phase 2C**

5.63	VCs 486+50	5.816	496+30	LT	1/31/2024			
5.636	486+80	5.806	495+80	RT	1/31/2024	Minor slope sediment	Clean out sediment	
6.473	531+00	6.529	534+00	LT	1/31/2024			
6.473	531+00	6.529	534+00	RT	1/31/2024			
6.568	536+00	6.966	557+00	RT	1/31/2024			
6.664	540+00	6.815	549+00	LT	1/31/2024	Moderate vegetation	Cut back vegetation	
6.815	549+00	7.004	559+00	LT	1/31/2024			
7.004	559+00	7.112	564+70	LT	1/31/2024			
7.004	559+00	7.116	564+90	RT	1/31/2024			
7.334	577+00	7.401	580+00	LT	1/31/2024			
9.012	665+00	9.05	667+00	LT	1/31/2024			
9.378	684+30	9.429	687+00	LT	1/31/2024			
9.378	684+30	9.429	687+00	RT	1/31/2024			
9.542	693+00	9.618	697+00	LT	1/31/2024	Minor rock debris	Clean out rocks	
9.836	708+50	9.882	710+90	LT	1/31/2024			
9.895	711+60	10.017	718+00	LT	1/31/2024			
10.055	720+00	10.154	725+25	LT	1/31/2024	Minor rock debris	Clean our rocks	
10.073	721+00	10.149	725+00	RT	1/31/2024	Moderate rock debris	Clean out rocks	
10.291	732+50	10.343	735+25	LT	1/31/2024			
10.282	732+00	10.342	734+25	RT	1/31/2024			
10.414	739+00	10.476	742+25	LT	1/31/2024	Slope failure between Sta 739-740	Remove loose material and monitor	
10.803	759+50	10.935	766+50	LT	1/31/2024			
10.803	759+50	10.935	766+50	RT	1/31/2024			



**Phase 2A-2B continued**

Milepost Start	Engineer's Station Start	Milepost End	Engineer's Station End	Side	Date Checked	Maintenance Recommendation/Defect (Defect identified by code)	Corrective Action Needed	Description
14.991	980+50	15.076	985+00	LT	1/31/2024	Minor rock debris	Clean out rocks	
14.991	980+50	15.076	985+00	RT	1/31/2024	Minor rock debris	Clean out rocks	
15.275	995+50	15.327	998+25	LT	1/31/2024	Minor rock debris	Clean out rocks	
15.275	995+50	15.327	998+25	RT	1/31/2024			
					1/31/2024			
15.387	VT 11+50	15.428	VT 13+70	LT	1/31/2024			
15.387	VT 11+50	15.428	VT 13+70	RT	1/31/2024			
15.432	VT13+90	15.601	VT 22+80	LT	1/31/2024			
15.429	VT 13+70	15.601	VT 22+80	RT	1/31/2024			
15.643	VT 25+00	15.722	VT 29+20	LT	1/31/2024			
16.016	VT 44+70	16.160	VT 52+30	LT	1/31/2024			
16.04	VT 46+00	16.139	VT 51+20	RT	1/31/2024			
16.368	VT63+30	16.491	VT 69+80	LT	1/31/2024			
16.366	VT 63+20	16.523	VT 71+50	RT	1/31/2024			
16.608	C 16+20	NA	C35+03	LT	1/31/2024			

**Signed:**



**Date:** January 31, 2024

## V&T RAILWAY MSE RETAINING WALL INSPECTION FORM

**Structure:** Overman Pit Fill  
**Project No:** R8225-06-58  
**Year Built:** 2005  
**Date Inspected:** 4/12/24  
**Inspector(s):** Jim Koch

**Location:** Storey County, NV     **Lat.** 35° 17' 10.35"     Approximate Center of MSE Wall  
                  Gold Hill Area         **Long.** -119° 39' 40.78"

Wall Construction Type:	Rockery	MSE	Wood	CMU	Segmental CMU
		X			

**Begin Station**     VCs     NA     Approx. Mile Post     16.286 Left  
**End Station**        VCs     NA     Approx. Mile Post     16.234 Left

**Condition Codes**     (0= Worst→ 9=Best)

**Notes**

1. Safety Walks:	8	Excess ballast scattered across walkway paths
2. Railing/Barrier	9	Railings appear to be plumb and footings firmly in place. all welds appear to be intact and overall railing is sound.
3. Materials		
Concrete		
Steel Reinforcement	8	Reinforcement is weathered but intact.
Wood		
Rockery		
Grout		
Backfill	8	Backfill of wall is in place, signs of embankment settlement apparent. Minor indications of migration of backfill through wall.
4. Footing/Toe	9	Footing intact with no apparent signs of movement.
5. Top of Wall	9	

**ADDITIONAL COMMENTS AND NOTES**

Continued monitoring of embankment for settlement or movement is recommended.

**Defect Description:**

**Defect Location:**

**Required Action(s):**

**Required Notifications:**

**Signed:**



**Date:**

April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV

**Lat.** 39° 15' 48.31" (Lat Long approx. center of tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
Tunnel Section Construction Type:	x					
	Cut and Cover					

<b>Begin Station</b>	VCs	854+60	Approx. Mile Post	12.605
<b>End Station</b>	VCs	855+73	Approx. Mile Post	12.627
<b>Length</b>		113 ft.		

**Liner Type** Concrete Arch With Form Work Consisting of I Beam and Sheet Steel  
 I Beams Inside of Sheet Steel, Crown form is rolled 3/8 inch steel.

**Portal** Concrete

**Tunnel Width** 18 feet      **Track Wt.** 119#

**Tangent**      **Track Type** Jointed

**Curvature** 10 Degrees      **Ballast** Class 4

Condition Codes (0 = Worst → 9 = Best)	Notes and Comments
1. Portal      9	Diches and track have light debris -
2. Underside of Roof      9	
3. Sidewalls	
Right      9	
Left      9	
4. Footings	
Right      9	
Left      9	
5. Other	

**Defect Description:** None      **Defect Location:**

**Required Action(s) :** Continue monitoring 855+73 roof- seepage observed over past winters at interface of of tunnel to cut and cover section.

**Required Notifications:**

**Signed :**      **Date :** October 21, 2022

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV

**Lat.** 39° 15' 48.31" (Lat Long approx. center of tunnel)  
**Long.** -119° 39' 27.68

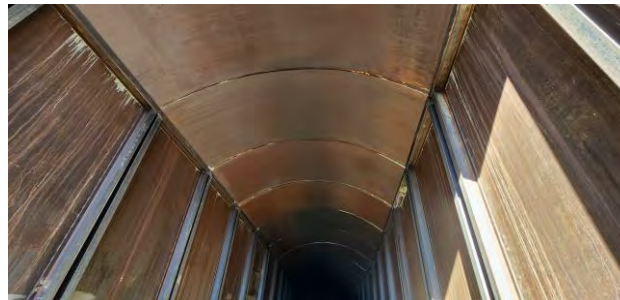
**TUNNEL SEGMENT NO.**

1	2	3	4	5	6
x					

**Tunnel Section Construction Type:** Cut and Cover



VCs 854+60



VCs 855+70

**Signed :**

**Date :**

October 21, 2022

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 2892.208  
**Year Built:** 2008  
**Date Inspected:** October 21, 2022  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV     
 **Lat.** 39° 15' 48.31"     
 (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
		x				

**Tunnel Section Construction Type:** Formed Concrete Liner  
**Rock Type and Description:** Meta-Andesite, highly to moderately fractured. Some thin quartz veining

<b>Begin Station</b>	VCs	855+73	Approx. Mile Post	12.627
<b>End Station</b>	VCs	857+59	Approx. Mile Post	12.662
<b>Length</b>		186 ft		

**Liner Type** Concrete Arch With Form Work Consisting of I Beam and Sheet Steel  
 Beginning at 857+75 I Beams outside of Sheet Steel. Tunnel transitions from 18 to 16 feet Sta. 856+68 to 856+64 Pt of tangent VCs 856+64  
 Crown rolled 3/8 in steel formwork inside

**Portal**  
**Tunnel Width** \*18 feet- 16 feet      **Track Wt.** 119#  
**Tangent** Beg. VCs 856+64      **Track Type** Jointed  
**Curvature** 10 Degrees      **Ballast** Class 4

Condition Codes	(0= Worst→ 9=Best)
1. Portal	NA
2. Underside of Roof	9
3. Sidewalls	
Right	9
Left	9
4. Footings	
Right	9
Left	9
5. Other	

**Notes and Comments**  
 VCs Sta 856+90 to 857+36-  
 water seepage at roof/wall transition

**Defect Description:** None      **Defect Location:**

**Required Action(s):** Continue monitoring 855+73 roof- seepage observed over past winters at interface of of tunnel to cut and cover section.

**Required Notifications:**

**Signed:**      **Date:** April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 2892.208  
**Year Built:** 2008  
**Date Inspected:** October 21, 2022  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV
 
**Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

**TUNNEL SEGMENT NO.**

1	2	3	4	5	6
	X				

**Tunnel Section Construction Type:**

Formed Concrete Liner

**Rock Type and Description:**

Meta-Andesite, highly to moderately fractured. Some thin quartz veining



VCs Sta 856+90 to 857+36



VCs Sta 856+18 to 856+50

**Signed:**

**Date:**

April 12, 2024



## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV
 **Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
			X			

**Tunnel Section Construction Type:** Rock Bolts and Shotcrete  
**Rock Type and Description:** Meta-Andesite, highly to moderately fractured. Some thin quartz veining

<b>Begin Station</b>	VCs	857+59	Approx. Mile Post	12.662
<b>End Station</b>	VCs	857+85	Approx. Mile Post	12.667
<b>Length</b>		26 ft		

**Liner Type** Rock bolts- Mostly No. 8 dwydag 10 foot epoxy cement, some split bolts  
 With 6 in nominal shotcrete over welded wire mesh and wire fence mesh  
 Bolting starts approximately 6 feet from floor- 5' by 5' pattern of 15 foot long epoxy bolts approx. spingline to springline.

<b>Portal</b>				
<b>Tunnel Width</b>	16 feet	<b>Track Wt.</b>	119#	
<b>Tangent</b>	X	<b>Track Type</b>	Jointed	
<b>Curvature</b>		<b>Ballast</b>	Class 4	

Condition Codes (0= Worst→ 9=Best)	Notes and Comments
1. Portal NA	No spalling observed Minimal rock (6"-12") debris at left footwall
2. Underside of Roof 9	
3. Sidewalls	
Right 9	
Left 9	
4. Footings	
Right 9	
Left 9	
5. Other	

**Defect Description:** None **Defect Location:**

**Required Action(s):** Observe floor for any rockfall and crown for any spalling of shotcrete ( Noted above)

**Required Notifications:**

**Signed:** **Date:** April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV

**Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

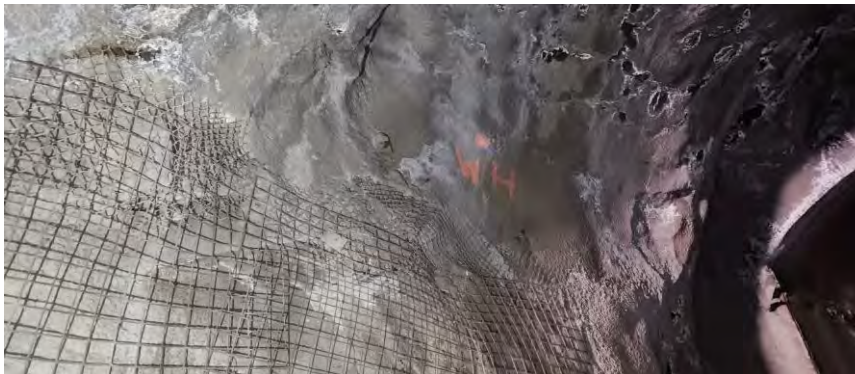
TUNNEL SEGMENT NO.	1	2	3	4	5	6
			x			

**Tunnel Section Construction Type:** Rock Bolts and Shotcrete  
**Rock Type and Description:** Meta-Andesite, highly to moderately fractured. Some thin quartz veining

<b>Begin Station</b>	VCs	857+59	Approx. Mile Post	12.662
<b>End Station</b>	VCs	857+85	Approx. Mile Post	12.667
<b>Length</b>		26 ft		



VCs 857+59 minor rock debris and seepage



VCs 857+75, Left

**Signed:**

**Date:** April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Ji Koch

**Location:** American Flat  
 Lyon County, NV
 **Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
				x		

**Tunnel Section Construction Type:** Concrete Arch without form work on sidewalls.(Slip lined construction)

**Rock Type and Description:** Meta-Andesite, highly to moderately fractured. Some thin quartz veining

<b>Begin Station</b>	VCs	857+85	Approx. Mile Post	12.667
<b>End Station</b>	VCs	858+45	Approx. Mile Post	12.679
<b>Length</b>		60 ft		

**Liner Type** Concrete Arch

<b>Portal</b>	NA	<b>Track Wt.</b>	119#
<b>Tunnel Width</b>	16 feet	<b>Track Type</b>	Jointed
<b>Tangent</b>	X	<b>Ballast</b>	Class 4

**Condition Codes** (0= Worst→ 9=Best)

- 1. Portal NA
- 2. Underside of Roof 9
- 3. Sidewalls
  - Right 9
  - Left 9
- 4. Footings
  - Right 9
  - Left 9
- 5. Other

**Notes and Comments**

VCs Sta 858+16, Left - Minor seepage

**Defect Description:** None **Defect Location:**

**Required Action(s):** Monitor Seepage at VCs Sta 858+16 Left

**Required Notifications:**

**Signed:**

**Date:** April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Ji Koch

**Location:** American Flat  
 Lyon County, NV

**Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
				x		

**Tunnel Section Construction Type:** Concrete Arch without form work on sidewalls. (Slip lined construction)

**Rock Type and Description:** Meta-Andesite, highly to moderately fractured. Some thin quartz veining

<b>Begin Station</b>	VCs	857+85	Approx. Mile Post	12.667
<b>End Station</b>	VCs	858+45	Approx. Mile Post	12.679
<b>Length</b>		60 ft		



VCs Sta 858+16 Minor seepage



Transition from Segment 3 to 4

**Signed:**

**Date:** April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV
 **Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
					X	

**Tunnel Section Construction Type:** Rock Bolts and Shotcrete  
**Rock Type and Description:** Meta-Andesite, highly to moderately fractured. Some thin quartz veining

<b>Begin Station</b>	VCs	858+46	Approx. Mile Post	12.679
<b>End Station</b>	VCs	859+39	Approx. Mile Post	12.695
<b>Length</b>		93 ft		

**Liner Type** Rock bolts- Mostly No. 8 dwydag 10 foot epoxy cement, some split bolts, with 6 in nominal shotcrete over welded wire mesh and wire fence mesh. Shotcrete 12 in nominal first 15 feet each end. Bolting starts approximately 6 feet from floor- 5' by 5' pattern of 15 foot long epoxy bolts approximately spingline to springline.

<b>Portal</b>				
<b>Tunnel Width</b>	16 feet	<b>Track Wt.</b>	119#	
<b>Tangent</b>	X	<b>Track Type</b>	Jointed	
<b>Curvature</b>		<b>Ballast</b>	Class 4	

Condition Codes (0= Worst→ 9=Best)	Notes and Comments
1. Portal NA	VCs Sta 858+75 left minor amount rock caught in rock bolt mesh monitor additional roof seepage Monitor seepage area at interface with Segment 6.
2. Underside of Roof 9	
3. Sidewalls	
Right 9	
Left 9	
4. Footings	
Right 9	
Left 9	
5. Other	

**Defect Description:** None **Defect Location:**

**Required Action(s):** Clean out rock behind wire mesh, continue to monitor roof seepage

**Required Notifications:**

**Signed:** **Date:** April 12, 2024



## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV
 
**Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

	1	2	3	4	5	6
<b>TUNNEL SEGMENT NO.</b>					X	
<b>Tunnel Section Construction Type:</b>	Rock Bolts and Shotcrete					
<b>Rock Type and Description:</b>	Meta-Andesite, highly to moderately fractured. Some thin quartz veining					



VCs Sta 858+70 additional seepage since previous inspection



Transition from segment 6 back to 5 (downstation)

**Signed:**

**Date:**

April 12, 2024

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV     
 **Lat.** 39° 15' 48.31"     
 (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

TUNNEL SEGMENT NO.	1	2	3	4	5	6
Tunnel Section Construction Type:						x

Tunnel Section Construction Type: Cut and Cover

<b>Begin Station</b>	VCs	859+39	Approx. Mile Post	12.696
<b>End Station</b>	VCs	860+25	Approx. Mile Post	12.713
<b>Length</b>		86 ft		

**Liner Type** Concrete Arch With Form Work Consisting of I Beam and Sheet Steel  
 I Beams Inside of Sheet Steel, Crown form is rolled 3/8 inch steel.  
**Portal** Concrete  
**Tunnel Width** 16 feet     
 **Track Wt.** 119#  
**Tangent** X     
 **Track Type** Jointed  
**Curvature**     
 **Ballast** Class 4

Condition Codes	(0= Worst→ 9=Best)
1. Portal	9
2. Underside of Roof	9
3. Sidewalls	
Right	9
Left	9
4. Footings	NA
Right	
Left	
5. Other	

**Notes and Comments**

Clean ditch on left - minor amonut of soil and rock debris

**Defect Description:** None     
 **Defect Location:**

**Required Action(s):** Clean ditch at portal on left.

**Required Notifications:**

**Signed:**     
 **Date:** October 21, 2022

## V&T RAILWAY TUNNEL INSPECTION FORM



**Structure:** Tunnel No. 2  
**Project No:** 4414001  
**Year Built:** 2008  
**Date Inspected:** April 12, 2024  
**Inspector(s):** Jim Koch

**Location:** American Flat  
 Lyon County, NV

**Lat.** 39° 15' 48.31" (Lat. Long. Approx. Center of Tunnel)  
**Long.** -119° 39' 27.68

**TUNNEL SEGMENT NO.**

1	2	3	4	5	6	
					x	

**Tunnel Section Construction Type:** Cut and Cover



Clean ditch on left - large amount of soil and rock debris



Segment 6 overall view upstation

**Signed:**

**Date:**

October 21, 2022





# Visual Bridge Inspection Report

## V & T Railway (Bridge G-2898) – Milepost 7.22

### GLOBAL BRIDGE INSPECTION

Description	Comments/Observations
<input type="checkbox"/> Are all of the spans in alignment with each other?	Yes
<input type="checkbox"/> Are there any indications of settlement in the superstructure or substructure?	None observed
<input type="checkbox"/> Are there any indications of tilt or twist?	None observed
<input type="checkbox"/> Is there any evidence of crowding between the back walls?	None observed
<input type="checkbox"/> Is there any evidence of bunching of the spans together?	None observed
<input type="checkbox"/> How is the alignment of the track throughout the bridge length?	Straight and in line with track beyond the bridge each way

### DETAILED INSPECTION CHECKLIST

(✓ to note which items were checked for this inspection)

#### Alignment

Element	Observations
<input type="checkbox"/> ___ ✓horizontal and vertical on approach	No misalignments observed
<input type="checkbox"/> ___ ✓on structure	No misalignments observed
<input type="checkbox"/> ___ ✓surface	No misalignments observed
<input type="checkbox"/> ___ ✓clearances	No misalignments observed

## Visual Bridge Inspection Report

### V & T Railway (Bridge G-2898) – Milepost 7.22

#### Support

Element	Observations
<input type="checkbox"/> ✓Behind abutment (hanging ties) at end stringer brackets	N/A – No stringer
<input type="checkbox"/> ____ Stringer flanges	N/A – No stringer

#### Fastening to deck.

Element	Observations
<input type="checkbox"/> ✓Movement (sliding)	No deck fastening – ballasted deck
<input type="checkbox"/> ✓Hook bolts	No deck fastening – ballasted deck
<input type="checkbox"/> ✓Rail anchors on and off structure	No deck fastening – ballasted deck

#### General conditions.

Element	Observations
<input type="checkbox"/> ✓Ties	Good
<input type="checkbox"/> ✓Rails	Good
<input type="checkbox"/> ✓Joints	Good
<input type="checkbox"/> ✓Inner guard rails (if used)	Good
<input type="checkbox"/> Outer guard timbers	N/A
<input type="checkbox"/> ✓Spacer straps	N/A
<input type="checkbox"/> Spacer blocks between ties	N/A

## Visual Bridge Inspection Report

### V & T Railway (Bridge G-2898) – Milepost 7.22

#### Walkways/Platforms

Element	Observations
<input type="checkbox"/> ___ Surface Holes?	N/A – No walkways present
<input type="checkbox"/> ___ ✓Surface trip hazards particularly at knee braces?	N/A – No walkways present
<input type="checkbox"/> ___ Handrail posts	N/A – No walkways present
<input type="checkbox"/> ___ Hand rails	N/A – No walkways present
<input type="checkbox"/> ___ Cables	N/A – No walkways present
<input type="checkbox"/> ___ Fastenings from approach to span	N/A – No walkways present

#### Top flanges (compression)

Element	Observations
<input type="checkbox"/> ___ ✓Is there section loss from collision damage?	No. No evidence of collision
<input type="checkbox"/> ___ ✓Are cover plates still attached to flange?	Yes
<input type="checkbox"/> ___ ✓Do cover plates have any missing/loose fasteners?	None observed
<input type="checkbox"/> ___ ✓Is the weld at flange transitions cracked?	None observed
<input type="checkbox"/> ___ ✓Is the flange buckling due to lack of knee braces?	No

## Visual Bridge Inspection Report

### V & T Railway (Bridge G-2898) – Milepost 7.22

#### Web

Element	Observations
<input type="checkbox"/> ___ ✓Is there any section loss where ballast contacts the web?	The ballast does not contact the web of the bridge girder
<input type="checkbox"/> ___ ✓Web buckling from lack of stiffeners?	None observed where accessible
<input type="checkbox"/> ___ ✓Web buckling from lost/damaged knee braces?	None observed where accessible
<input type="checkbox"/> ___ ✓Are there shear cracks in end "d" distance?	None observed
<input type="checkbox"/> ___ ✓Are there loose fasteners in web splices?	None observed
<input type="checkbox"/> ___ ✓Any weld cracks at welded connections?	None observed
<input type="checkbox"/> ___ Any web cracks at ends of partial depth stiffeners?	N/A

# Visual Bridge Inspection Report

## V & T Railway (Bridge G-2898) – Milepost 7.22

### Bottom Flange

Element	Observations
<input type="checkbox"/> ___ ✓Is there any section loss in center of span?	None observed
<input type="checkbox"/> ___ ✓Any stress concentrations from accident damage?	No
<input type="checkbox"/> ___ ✓Accident damage?	No
<input type="checkbox"/> ___ ✓Are cover plates intact and attached to flange? Missing, loose or sheared fasteners?	Cover plates intact, no visible missing, loose or sheared fasteners
<input type="checkbox"/> ___ ✓Are the welds at flange transitions intact?	Yes
<input type="checkbox"/> ___ ✓Are there any cracks at bearing area?	None observed

## Visual Bridge Inspection Report

### V & T Railway (Bridge G-2898) – Milepost 7.22

#### Knee Braces

Element	Observations
<input type="checkbox"/> ___ Any section loss adjacent to floor beams?	Knee brace inaccessible at this location due to ballast tub and cover plate
<input type="checkbox"/> ___ ✓Any collision damage or missing knee braces?	No
<input type="checkbox"/> ___ ✓Any cracks in connection angles to web?	None observed
<input type="checkbox"/> ___ ✓Any missing or loose fasteners?	None observed
<input type="checkbox"/> ___ Are knee braces still connected to floor beams?	Connections not accessible from above due to ballast tub and cover plate. The most recent NDOT bridge inspection from below made no reference to missing connection at this location.

#### Bottom Laterals

Element	Observations
<input type="checkbox"/> ___ ✓Any section loss at stringer and end connections?	Connection location not accessible. Floor system consists of load bearing floor beams blocking between floor beams vs stringers
<input type="checkbox"/> ___ Is there any spreading or section loss of back-to-back angles?	N/A
<input type="checkbox"/> ___ Any missing connectors for built-up laterals?	None observed from below at ground level. The most recent NDOT bridge inspection from below made no reference to missing connection at this location.
<input type="checkbox"/> ___ ✓Any damaged laterals?	None observed

## Visual Bridge Inspection Report

### V & T Railway (Bridge G-2898) – Milepost 7.22

#### Floor System

Element	Observations
<input type="checkbox"/> ___ ✓Are transverse beams intact? Corroding?	Yes as observed from ground level below. No corrosion observed.
<input type="checkbox"/> ___ Are the connections between transverse beams and stringers intact?	Floor system consists of load bearing floor beams blocking between floor beams vs stringers. Connections between floor beams and blocking appear to be intact.
<input type="checkbox"/> ___ ✓Is deck in good condition? Corroding?	No apparent issues. Deck is ballast covered and mostly inaccessible. Inspection from below at ground level identified no apparent issues.
<input type="checkbox"/> ___ Is deck attached at knee braces? Corroding?	Area of connection not accessible for inspection.

#### Bearings

Element	Observations
<input type="checkbox"/> ___ ✓Bearing Types	Steel reinforced elastomeric pad
<input type="checkbox"/> ___ ✓Is there excessive corrosion at the bearings?	Minor rust only at points of component contact and fasteners
<input type="checkbox"/> ___ ✓Does it appear that the bearings have shifted or twisted?	No
<input type="checkbox"/> ___ ✓Is there any debris that will prevent the bearings from operating correctly?	No
<input type="checkbox"/> ___ ✓Are bearings plumb, tilting, rotated?	Bearing appear plumb and properly aligned



## Visual Bridge Inspection Report

### V & T Railway (Bridge G-2898) – Milepost 7.22

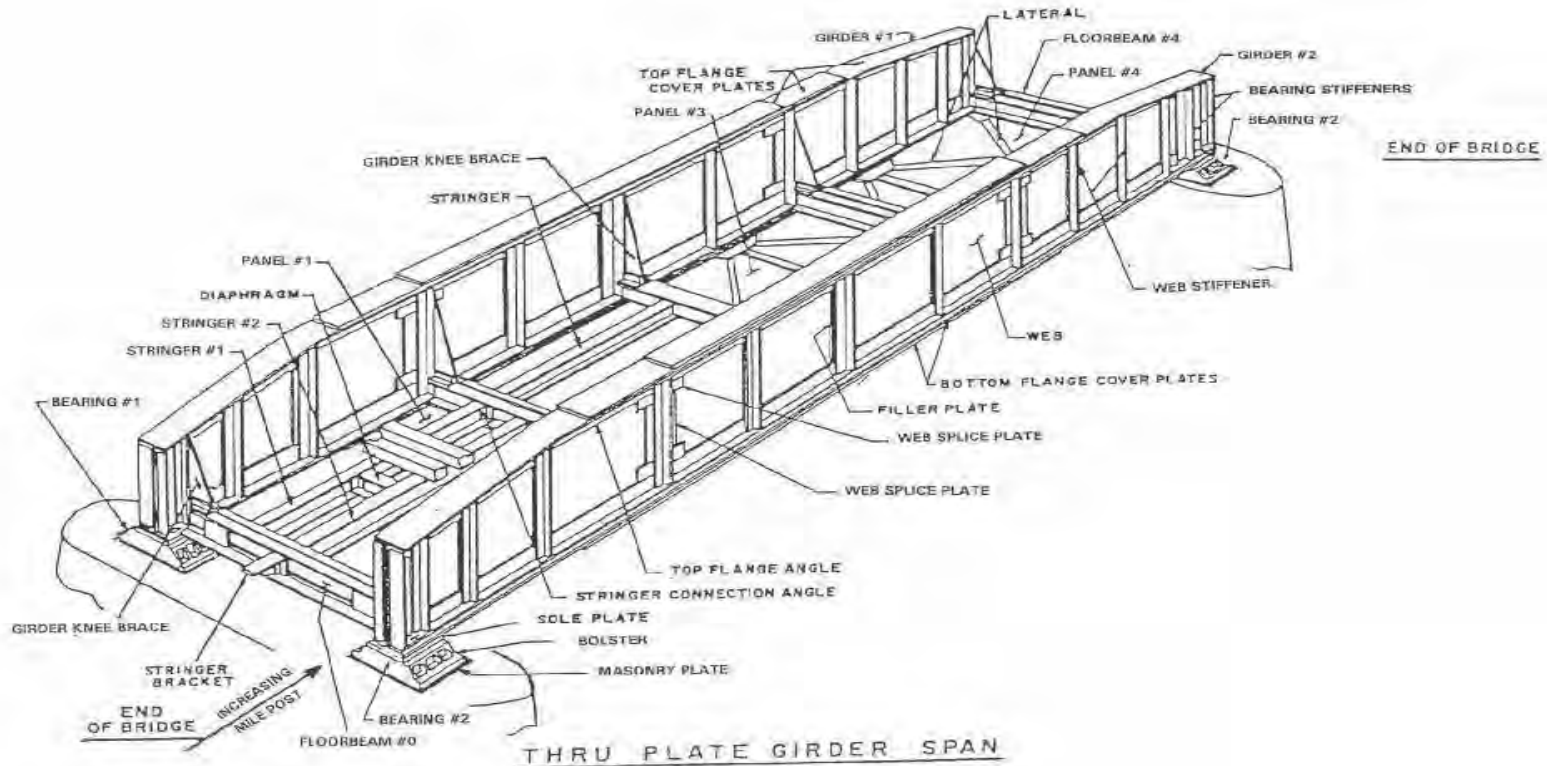
#### Concrete Substructures

<input type="checkbox"/> ____ ✓Is there any sign of cracking in the abutments, wingwalls or center pier?	Minor cracking in wingwalls due to shrinkage observed. Cracking has been present with no apparent movement for nearly 7 years.
<input type="checkbox"/> ____ ✓Is there any sign of spalling or scaling in the abutments, wingwalls or center pier?	Very minor spauling observed on both North and South abutment. Similar to previous inspection report.
<input type="checkbox"/> ____ ✓Is there any exposed reinforcing?	No
<input type="checkbox"/> ____ ✓Is there any sign or undermining, scour or erosion at the abutments or wingwalls?	None observed
<input type="checkbox"/> ____ ✓Is there any sign of settlement, rotation or lateral movement in the abutments, wingwalls or center pier?	None observed
<input type="checkbox"/> ____ ✓Is there any evidence of slope failure adjacent to the abutments or wingwalls?	None observed

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# Visual Bridge Inspection Report

## V&T Railway Bridge G-2898 – Mile Post 7.22



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## **Visual Bridge Inspection Report V & T Railway (Bridge G-2898) – Milepost 7.22**

### **Common TPG Span Defects**

1. Damaged knee braces from wide loads.
2. Damaged bottom girder flanges and bottom laterals when spanning over highways.
3. Corrosion pockets with section loss to bottom flanges adjacent to bottom lateral connection plates.
4. Girder end deterioration above the bearing area.
5. Section loss in bottom laterals and stringer bottom flanges where connected.
6. Broken and loose fasteners at bottom lateral-to-stringer connection.

### **Inspection Notes**

1. Evidence of minor collision or impact at west end of south abutment observed. No apparent structural damage. Minor scratches observed but no cracking.
2. Concrete staining on wingwalls and abutment showing the effects of weathering and possible snow removal from highway. Portions of the surface are coarse and darkened in absence of stain.
3. Alignment of bridge and tracks appear to be straight and true with no inflections either horizontal or vertical witnessed.
4. All lighting operational
5. Areas of coating absent due to peeling or weathering and minor rust present at points of connection between components and fasteners.
6. No bridge deflection observed during live load observation.

**V&T Railway Bridge - Annual Inspection 2023-2024**  
**NDOT Bridge Designation G-2898 @ US Highway 50 Crossing**  
**VTRW Milepost 7.22**



**VTRW Bridge Facing East along Eastbound Highway 50**

**Various amounts of paint chip showing weathering.**





**West Wingwall @ South Abutment Facing East along Eastbound Highway 50**

**Original concrete staining weathered, apparent partial recoating, minor rust staining due to weathering of handrailing**



**South Abutment Facing East**

**West end of abutment shows signs of minor collision, scarring**

**Original concrete stain moderately weathered**





**South Abutment East Wingwall Facing West**

**Dark areas of wingwall show where original concrete stain is significantly weathered, some rust present due to weathering of handrail**



**South Abutment, Center Pier & North Abutment Facing West**

**Minor amount of paint chipping noted.**





**Center of Track Facing Southeast/Down Station towards Carson City Depot**

**Track & bridge showing good alignment**



**Knee Brace and Ballast Tub Plate on Left Side of Bridge @ North Span, Facing Southwest**

**Minimal rust forming on fasteners and panels**





**Main Girder and Ballast Tub Plate @ Left Side of Bridge Facing Northwest**

**Very Minor rust forming on fasteners and panels**



**North Abutment East Wingwall Facing Northwest**

**Dark areas of wingwall show where original concrete stain is significantly weathered, rust due to weathering of handrail**





**Main Girder At North span Facing East**  
**Rust forming and Paint Peeling on fasteners and panels**



**Train approaching Bridge from North**  
**No deflection noted from live load crossing**



Bridge Number G2898  
 Bridge Location V&T RAILWAY Over US 50  
 Inspection Date 05/31/2023



	Yes	No
This report identifies deficiencies requiring urgent corrective action	<input type="checkbox"/>	<input checked="" type="checkbox"/>
This bridge is scour critical	<input type="checkbox"/>	<input checked="" type="checkbox"/>
This bridge contains fracture critical components	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Report Contents

Inspection Report Cover Sheet  
  Signs and Utilities Inspection Report  
  Load Rating Summary  
 Element Level Inspection Report  
 Maintenance Recommendation Report  
 Structure Inventory & Appraisal Report  
 Waterway Measurement Report  
 Underwater Inspection Procedures  
 Other:   
 Bridge Photographs  
 Complex Bridge Inspection Procedures  
 Supplemental Drawings  
 Fracture Critical Member Inspection Procedures

Type of Inspection:  
 Initial  
 Routine  
 In-Depth  
 Underwater  
 Fracture Critical  
 Complex  
 Other Special

Inspectors		Initials
Team Leader Name:	Thornsberry, Joel	<i>JT</i>
Assistant Name:	Marr, Myron	<i>mm</i>
Assistant Name:		
Assistant Name:		
Reviewing P.E. Name	Henning, Brandon	<i>BH</i>
Date of Review:	08/01/2023	

Reviewing P.E. Seal and Sign

I hereby certify that these documents were prepared or approved by me.

Inspector: Thornsberry,Joel  
 Inspection Date: 05/31/2023

Structure Number: G2898  
 Facility Carried: V&T RAILWAY

**Bridge Inspection Report**

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>30-Steel Deck Corrugated/Orthotropic/Etc.</b>	2 - Low	2970	sq. ft.	2970	0	0	0
Bridge has a ballasted deck with a steel deck plate atop the girders. The steel deck is not visible from the top.							
<b>515-Steel Protective Coating</b>		2970	sq. ft.	2970	0	0	0
The coating is visible from below the deck, not from above. - No significant deficiencies.							
<b>107-Steel Open Girder/Beam</b>	2 - Low	239	ft.	135	103	1	0
<ul style="list-style-type: none"> <li>- Topical corrosion exists along girder flanges, welds, and at many fasteners throughout both spans (CS 2 - 101 ft).</li> <li>- Shallow gouges, likely construction related, occur in isolated locations along bottom flanges of Girders 1 and 2.</li> <li>- One misdrilled hole is located at the Girder 2 web located near Abutment 1 between the 1st and 2nd outboard intermediate stiffeners (CS 2 - 1 ft).</li> <li>- Top-side, on Span 2, Girder 2 near Pier 1, a bolt is missing at the girder to deck connection (CS 3 - 1 ft, Photo 4).</li> <li>- Girder to diaphragm connection exhibits isolated locations of pigeon debris.</li> <li>** The following comment from the 2017 inspection report could not be located during 2019, 2021, and 2023 inspections**</li> <li>- Approximately 32' from Abutment 1, the top flange of the east girder exhibits a single, self-arrested, cracked stitch weld (CS 2 - 1 ft).</li> </ul>							
<b>515-Steel Protective Coating</b>		239	sq. ft.	0	139	0	100
<ul style="list-style-type: none"> <li>- The girders exhibit blistering paint and surface corrosion (CS 2 - 139 sq ft, CS 4 - 100 sq ft). The welds and fasteners also exhibit surface corrosion (Photo 5). Some locations exhibit touch-up paint that has been likely applied to address areas of paint failure.</li> <li>- The balance of the painted areas exhibit dulling and are viewed as being substantially effective.</li> </ul>							
<b>152-Steel Floor Beam</b>	2 - Low	1421	ft.	1220	201	0	0
<ul style="list-style-type: none"> <li>- Floor beam count starts at the 1st full width beam.</li> <li>- At isolated locations, connections exhibit corrosion and the top flange of the floor beam exhibits corrosion at the junction with the soffit of the steel deck (CS 2 - 200 ft, Photos 6 and 7).</li> <li>- Bent flange exists at Floor Beam 2, in Span 1, and appears to be construction related and could have occurred during installation (CS 2 - 1 ft, Photo 8).</li> </ul>							
<b>515-Steel Protective Coating</b>		1421	sq. ft.	1221	0	0	200
- At isolated locations, the top flange of the floor beam exhibits surface corrosion indicating coating failure (CS 4 - 200 sq ft, Photos 6 and 7).							
<b>210-Reinforced Concrete Pier Wall</b>	2 - Low	23	ft.	21	2	0	0
<ul style="list-style-type: none"> <li>- Vertical and longitudinal cracks to 1/64" wide occur along pier walls.</li> <li>- The east and west pier wall faces exhibit isolated hairline to 1/64" wide map cracking at less than 1' spacing (CS 2 - 2 ft).</li> </ul>							
<b>215-Reinforced Concrete Abutment</b>	2 - Low	49	ft.	37	10	2	0
<ul style="list-style-type: none"> <li>- Vertical cracks to 1/32" wide occur along abutment backwalls, isolated locations exhibit 1/64" wide cracking spaced closer than 1' apart (CS 2 - 10 ft).</li> <li>- Exposed corroded reinforcing steel tips, without measurable section loss exists near the bearing seat toward the northwest corner (CS 3 - 2 ft, Photo 9).</li> <li>- On top of Abutment 2, next to Bearing 1 exhibits concrete overpour that could appear to be an unsound patch to 1' L x 7" W (Photo 9).</li> </ul>							

Inspector: Thornsberry,Joel  
 Inspection Date: 05/31/2023

Structure Number: G2898  
 Facility Carried: V&T RAILWAY

**Bridge Inspection Report**

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>220-Reinforced Concrete Pile Cap/Footing</b>	2 - Low	74	ft.	74	0	0	0
Element not visible. Total length estimated at 10' per instance.							
<b>234-Reinforced Concrete Pier Cap</b>	2 - Low	26	ft.	13	13	0	0
- Vertical and longitudinal cracks to 1/64" wide, some with efflorescence along pier cap. Isolated locations exhibit cracking spaced closer than 1' apart (CS 2 - 13 ft).							
<b>310-Elastomeric Bearing</b>	2 - Low	8	each	0	8	0	0
2 elastomeric bearings at each abutment, and 4 elastomeric bearings at the pier. - Bearing assemblies typically exhibit surface corrosion at the attachment hardware and at the bearing plates (CS 2 - 8 each). - At Abutment 2 Bearing 2 and Pier 1 Bearing 1 the elastomeric pad exhibits separation (up to 1/4") between the pad and the bearing plate (Photo 9).							
<b>515-Steel Protective Coating</b>		8	sq. ft.	0	0	0	8
- The protective coating typically exhibits failure and surface corrosion at the attachment hardware and at the bearing plate (CS 4 - 8 sq ft, Photos 5 and 10).							
<b>616-Concrete Coating</b>	2 - Low	1	lump sum	0	1	0	0
- At isolated locations of painted concrete the coating exhibits cracking and localized delaminations, this is most noticeable at the west side of the Pier Cap. The coating is substantially effective (CS 2 - 1).							
<b>645-Deck Lighting System</b>	2 - Low	12	each	0	12	0	0
Element rated for 12 cantilever lights illuminating the V & T RAILWAY lettering on the outboard girder webs, 6 lights are on each side of the structure. - Lighting was not on during the 2023 daylight inspection to verify operation. - Topical rust occurs on cantilever lights (CS 2 - 12 EA).							
<b>646-Under Deck Lighting System</b>	2 - Low	4	each	4	0	0	0
One light is at each abutment; one light is on each side of the pier. - Lighting was not on during 2023 daylight inspection to verify operation. - The plates that under deck lights are attached to exhibit surface corrosion, no section loss.							
<b>660-Steel Diaphragms</b>	2 - Low	132	each	97	35	0	0
Element evaluated for lateral bracing and the longitudinal diaphragms between floor beams. - At isolated locations, over the pier, the diaphragms exhibit mis-drilled holes, 5 places (CS 2 - 5 EA). - Topical corrosion occurs at localized areas along lateral bracing and at diaphragm connection plates, bolts, nuts and rivets (CS 2 - 30 EA, Photo 7). - Bracings at Abutment 1 Bearing 2 and Abutment 2 Bearing 1, exhibit 1' L x 2" H cutouts to fit bracings over Abutments.							
<b>680-Reinforced Concrete Retaining Walls</b>	2 - Low	226	feet	204	22	0	0
- Vertical and longitudinal cracks typically up to 1/64" W exist in the wingwalls, some closer than 1' spacing (CS 2 - 20 ft). - The southeast and southwest wingwalls each exhibit one vertical 1/32" wide crack (CS 2 - 2 ft).							
<b>694-Debris on Seats</b>	2 - Low	3	each	3	0	0	0
- Dirt, debris, and pigeon droppings exist around the bearing seats, typically less than 3" deep.							
<b>760-Metal Approach Barrier Rail</b>	2 - Low	4	each	3	1	0	0
- Metal fences are mounted to the top of the retaining walls at each of the four corners. - At the southwest wingwall, the attachment anchors exhibit out of plane bending (distortion) (CS 2 - 1 each).							

Inspector: Thornsberry,Joel  
 Inspection Date: 05/31/2023

Structure Number: G2898  
 Facility Carried: V&T RAILWAY

**Bridge Inspection Report**

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>775-Approach Roadway Embankment</b>	2 - Low	1	lump sum	1	0	0	0
- No significant deficiencies.							
<b>801-Protective Systems</b>	2 - Low	0	Sq ft	0	0	0	0
515-Steel Protective Coating		136	sq. ft.	106	0	0	30
Steel protective coating as applied to: Steel Diaphragms - 136 SF Approach Rails - 4 each - The diaphragms, primarily at fastener connection points exhibit rust staining and failed protective coating (CS 4 - 30 sq ft, Photo 6). - A patina has formed on approach weathering steel.							
<b>9997-General Comments</b>	2 - Low	1	EA	1	0	0	0
- Contact V&T Railroad to see if they would like anyone on site during inspections.							





State of Nevada  
Department of Transportation

Bridge No.: G2898

Date: 05/31/2023



Photo 1: West Elevation



Bridge No.: G2898

Date: 05/31/2023

Photo 2: South Approach



State of Nevada  
Department of Transportation



Bridge No.: G2898

Date: 05/31/2023

Photo 3: South General Superstructure



Bridge No.: G2898

Date: 05/31/2023

Photo 4: Missing bolt on Girder 2 near Pier 1



State of Nevada  
Department of Transportation



Bridge No.: G2898

Date: 05/31/2023

Photo 5: Typical failed coating and corrosion of the girder and bearings



Bridge No.: G2898

Date: 05/31/2023

Photo 6: Typical failing steel protective coating and corrosion of the deck to floor beam interface





State of Nevada  
Department of Transportation



Bridge No.: G2898

Date: 05/31/2023

Photo 7: Typical failing steel protective coating and corrosion on floor beams and diaphragms



Bridge No.: G2898

Date: 05/31/2023

Photo 8: Small construction dent in Floorbeam 2 Span 1



State of Nevada  
Department of Transportation



Bridge No.: G2898

Date: 05/31/2023

Photo 9: Exposed rebar in cheek wall and concrete overpour on top of Abutment 2 near Bearing 1



Bridge No.: G2898

Date: 05/31/2023

Photo 10: Separation of pad and masonry plate at Pier 1 Bearing 1



## Fracture Critical Inspection Procedures Report

Bridge Number G2898

Bridge Location V&T RAILWAY Over US 50

Inspection Date 05/31/2023

### Fracture Critical Elements Inspected and Inspected Frequency

	Elements Inspected	Inspection Frequency
1	GIRDERS	24

### Inspection Procedures Used

HANDS-ON/VISUAL EXAMINATION, USING BUCKET TRUCK, OF SUPERSTRUCTURE MEMBERS:  
- TENSION MEMBERS (LONGITUDINAL GIRDERS SPANNING ABUTMENT 1, PIER 1, AND ABUTMENT 2) FOR CORROSION, SECTION LOSS, AND CRACKS  
- LOOK FOR REPAIRS, ESPECIALLY WELDED REPAIRS APPLIED TO OLD NON-WELDABLE MEMBERS  
- CHECK ALIGNMENT OF ALL MEMBERS, NOTING ALL BOWED MEMBERS  
- CHECK FOR COLLISION DAMAGE WHICH COULD REDUCE LOAD-CARRYING CAPACITY

NOTE: TRANSVERSE FLOOR BEAMS, THOUGH NOT FRACTURE CRITICAL, WERE INSPECTED USING FRACTURE CRITICAL INSPECTION PROCEDURES

### Inspection Results

\* For inspection results, see commentary contained within the Element Level Inspection Report

Last Modified: 08/21/2023

## Structure Inventory and Appraisal

Bridge No.: G2898

1. State Code	329 (Nevada)	63. Rating Method	5 (No rating analysis or evaluation)
2. District	02 (District 02)	64. Operating Rating	
3. County	510 (Carson City)	65. Rating Method	5 (No rating analysis or evaluation)
4. Place Code	09700 (Carson City)	66. Inventory Rating	
5. Inventory Route	221000500	67. Struc Eval	3 (Intolerable)
6. Feature Intersected	US 50	68. Deck Geometry	N (Not applicable)
7. Facility Carried	V&T RAILWAY	69. Underclearance, Vert & Horiz	9 (Superior to present desirable criteria)
8. Structure No.	G2898	70. Posting	5 (Equal to or above legal loads)
9. Location	EAST OF CARSON CITY	71. Waterway Adequacy	N (Not Applicable)
10. Min Vertical Clearance	20.9 ft.	72. Approach Alignment	7 (Better than present minimum criteria)
11. Milepoint	0.000		
12. Base Hwy Network	1 (Inventory Route is on the Base Network)	75A. Type Of Work	
13A. LRS Inv Route	000000050	75B. Work Done By	
13B. Subroute No.	00	76. Len of Struc Impr	
16. Latitude	39 ° 12 ' 32.59 "	90. Inspection Date	05/31/2023
17. Longitude	-119 ° 40 ' 56.82 "	91. Frequency	24
19. Detour Length	62.1	92A. FC Frequency	24
20. Toll	3 (On Free Road)	92B. UW Frequebcy	
21. Maintenance Resp	21 (Other State Agencies)	92C. SI Frequency	
22. Owner	21 (Other State Agencies)	92A-1. FC Required	Y
26. Functional Class	12 (Urban)	92B-1. UW Required	N
27. Year Built	2009	92C-1. SI Required	N
28A. Lanes On	0	93A. FC Inspection Date	05/31/2023
28B. Lanes Under	4	93B. UW Inspection Date	
29. Avg Daily Traffic	27300	93C. SI Date	
30. Year of ADT	2021	94. Bridge Impr Cost	
31. Design Load	8 (Railroad)	95. Rdwy Impr Cost	
32. Appr. Roadway Width		96. Total Proj Cost	
33. Median		97. Year of Impr Cost	
34. Skew	16 degrees	98A. Border Bridge Code	
35. Structure Flared	0	98B. % Responsibility	0
36A. Bridge Railings	N (NA/Safety feature not required)	99. Border Bridge No.	
36B. Transitions	N (NA/Safety feature not required)	100. STRAHNET	0 (Not a STRAHNET route)
36C. Approach Guardrail	N (NA/Safety feature not required)	101. Parallel Structure	N (No parallel structure)
36D. Approach GuardRail Term	N (NA/Safety feature not required)	102. Direction of Traffic	2 (2-way traffic)
37. Historical Significance		103. Temp Structure	
38. Navigation Control	N (Not applicable, no waterway)	104. Hwy Sys Inv Route	1 (Structure/Route is on NHS)
39. Vertical Clearance		105. Fed Lands Hwys	
40. Horiz. Clearance		106. Year Reconstructed	0000
41. Posting Status	A (Open)	107. Deck Type	N (Not Applicable)
42A. Type of Service On	2 (Railroad)	108A. Wearing Surface	N (NA)
42B. Type of Service Under	1 (Highway, with or w/out pedestrian)	108B. Deck Membrane	N (NA)
43A. Main Span Material	3 (Steel)	108C. Deck Protection	N (NA)
43B. Main Span Design	3	109. Truck ADT	3 %
44A. Appr. Span Material	0 (Other)	110. Desig National Net	
44B. Appr. Span Design	00 (Other)	111. Pier Protection	
45. No. of Spans Main Unit	002	112. Bridge Length	Y
46. No. of Appr. Spans	0000	113. Scour Critical Bridges	N (Not over waterway)
47. Horiz. Clearance	38.7 ft.	114. Future ADT	67011
48. Length Max Span	59.7 ft.	115. Year Future ADT	2040
49. Structure Length	119.7 ft.	116. Min Nav Vert Clear	
50. Curb/Sdwb Width	LT RT	201. Contract Number	
51. Width Curb to Curb		202. Seismic Risk	
52. Deck Width Out to Out		203. Structure Name	
53. Min. Vert. Clearance Over		204. Culvert Barrel Height	
54A. Min. Vert. Underclear	H (Highway beneath structure)	205. Culvert Barrel Width	
54B. Min. Vert. Underclear	20.9 ft.	206. Culvert Barrel Length	
55A. Min. Lat. Underclear Right	H (Highway beneath structure)	207. Total Deck Area	
55B. Min. Lat. Underclear Right	14.7 ft.	208. Last Access Required Inspection Date	05/31/2023
56. Min. Lat. Underclear Left	3.9 ft.	209. Access Required Inspection Frequency	24
58. Deck	N (Not Applicable)	210. Date of Next Access Required	05/31/2025
59. Superstructure	7 (Good Condition (some minor problems))	211. Bridge Inventory Direction	South to North
60. Substructure	7 (Good Condition (some minor problems))		
61. Channel/Channel Prot	N (Not Applicable)		
62. Culvert	N (Not Applicable)		

Sufficiency Rating: 0.00      FO: N      SD: N