Archaeology Advice Memo

Memo

To: Dr Ann McEwan

From: TJ O'Connell

cc: n/a

Date: 21/12/2023

Re: Mokihinui-Seddonville railway line (NZAA Site Number L28/36)

Purpose

The purpose of this archaeological advice memo is to provide comment on the nature and form of Mokihinui-Seddonville railway line archaeological site (NZAA Site Number L28/36) and to provide comment on associated archaeological significance. This advice memo is a high-level desk-based exercise and does not constitute a full archaeological assessment of the site. This memo relies heavily on a review of a previous archaeological assessment prepared for the site (Nichol & Watson 2013) and information available through ArchSite. A site visit was not undertaken.

This advice memo does not include an assessment of Māori cultural values. Statements are made as to the location and nature of archaeological sites and their archaeological values. There are no statements on the cultural significance of the study area nor are the views of tāngata whenua represented in this appraisal. An assessment of cultural significance will not necessarily correlate with an assessment of the archaeological significance of the area as it will refer to a different value set.

Location

Mokihinui-Seddonville railway line (NZAA Site Number L28/36) is located at Seddonville, to the north of Westport on New Zealand's West Coast. The railway line is located on the south side of the Mōkihinui River (Figure 1-2).

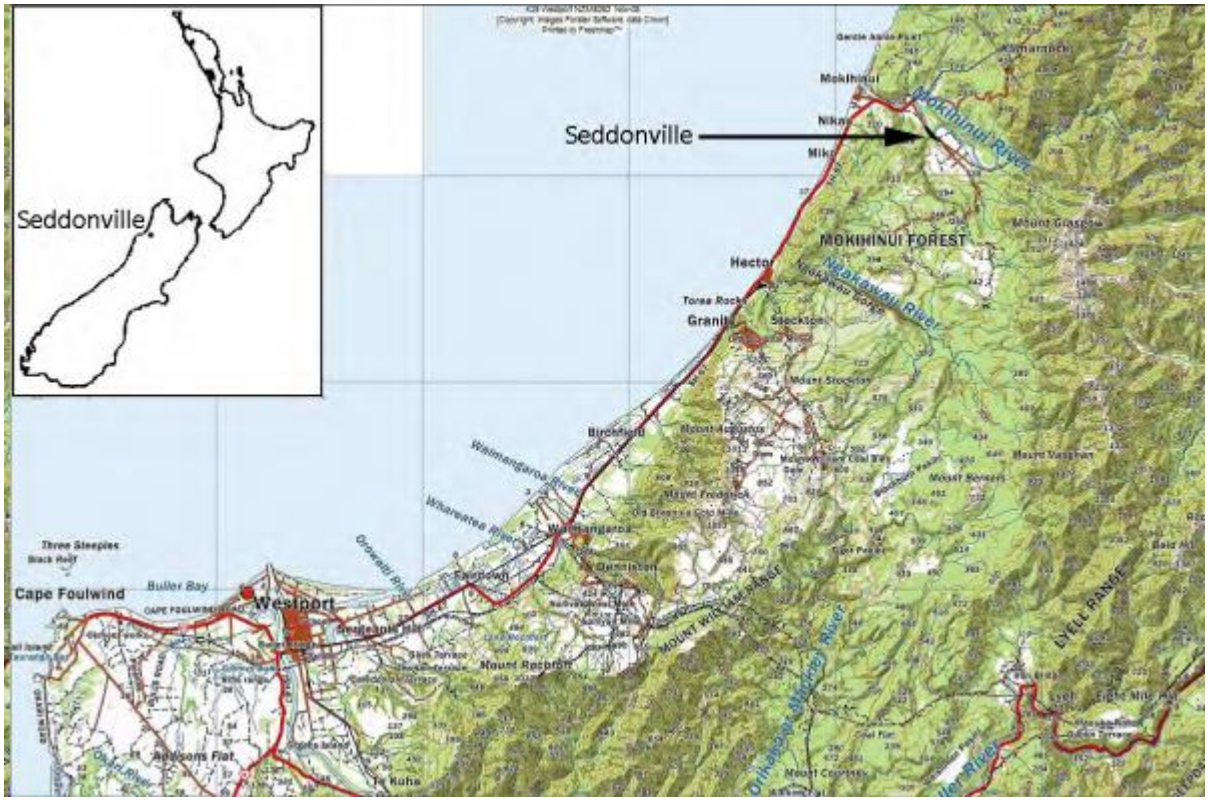

Figure 1. The Buller region, showing the location of Seddonville. Source: Nichol & Watson 2013.

Figure 2. The red line on this aerial photograph shows the location and extent of the Chasm Stream railway line. The two bridges that remain in situ on the line cross Chasm Stream and Page Stream. Source: Nichol & Watson 2013.

Ka Huru Manu

Ka Huru Manu (the Ngai Tahu Cultural Atlas) was consulted. It identifies Mōkihinui River directly north of the Chasm Stream section of the Mokihinui-Seddonville railway line as a culturally significant water way. The atlas also depicts Mokihinui Native Reserve 2.1 km to the ESE of the railway line. These cultural sites indicate to the Māori occupation and use of the wider study area in the past.

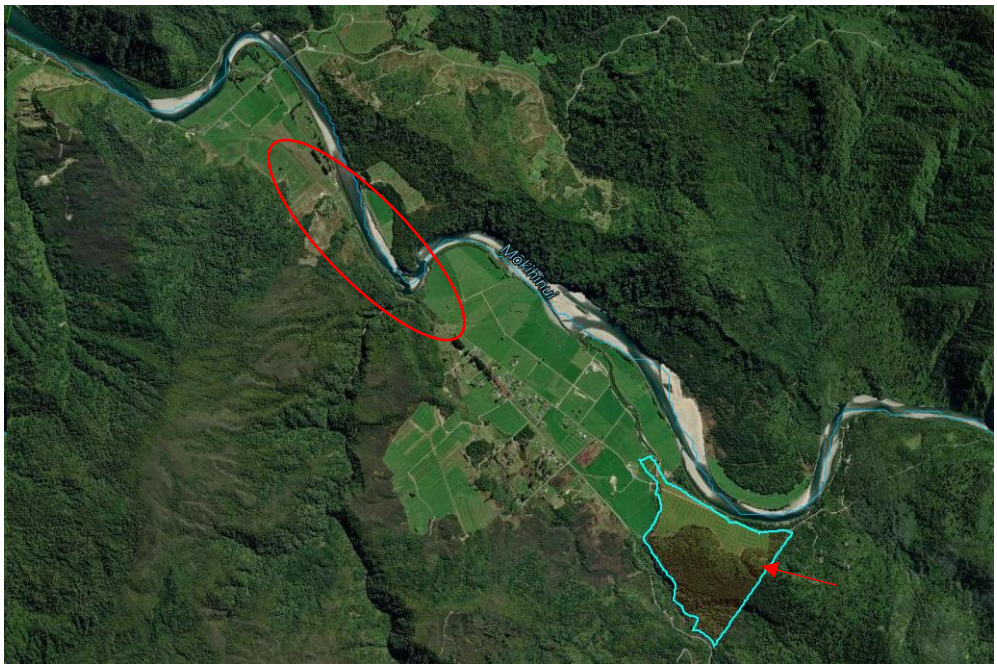

Figure 3. Section of the map accessed through Ka Huru Manu, showing Mokihinui River (a culturally significant waterway) and Mokihinui Native Reserve (highlighted by red arrow) near the study area (red ellipse).

NZAA Site Recording Scheme

Chasm Stream section of the Mokihinui-Seddonville railway line is recorded as an archaeological site in the New Zealand Archaeological Associations database of recorded archaeological sites known as ArchSite (NZAA Site Number L28/36, see Figure 3). Summary details of information contained within the site record form is presented in Table 1.

Figure 4. Chasm Stream section of the Mokihinui-Seddonville railway line is recorded as an archaeological site in the New Zealand Archaeological Associations database of recorded archaeological sites known as ArchSite (NZAA Site Number L28/36).

Table 1. Summary detail from NZAA Site Record for L28/36

Site ID	NZTM	Type	Detail
L28/36	E 1514739 N 5400235	Transport/ communication	The Chasm Stream railway line is 900 m long, and runs along the south bank of the Mokihinui River. The former railway line is in good condition. It ranges in width from 3 m wide (including a side drain) to 6.7 m (at the west end). It is only 6.7 m wide for a short distance. In some places, the original ballast surface is visible. No sleepers or rails remain in situ. Most of the Chasm Stream railway line is benched, or in cuttings. There are five cuttings, the longest of which is 87 m long, and the deepest was approximately 10 m deep. Each of the cuttings has a side drain and the longest cutting has a drain on both sides for part of its length. This cutting also had a cut-out through the north wall, which allowed water from the drain to run out of the cutting. The cut-out is 7 m long and 550 mm wide, and the corresponding drain is 500 mm wide and 150 mm deep. There are no drains on the embankments (where the water would have been able to percolate down through the ballast, or run off the sides). There is one tunnel, which is 3.1 m wide and 73 m long. No drains were visible in the tunnel. At the east end of the tunnel was a mid-late 20th century concrete retaining wall. There are also two modern footbridges on the Chasm Stream railway line, both of which are built from a combination of 'railway' and modern materials. Amongst the re-used fabric in the bridge are the beams on the outside edges of the bridge platform and the beams that support the bridge. No date stamps were visible on any of these elements. Footbridge 2 has been built over what was clearly an old culvert. There is also stone revetting on the corner of the railway formation on the east side of this bridge, and concrete between the edge of the stone channel and the revetting. The form and nature of this channel suggested that it was built during the railway era, and possibly during the 19th century. In the river below this footbridge were four or five railway cars, which appeared to have been dumped here deliberately, possibly to shore up the river bank, as the current swirls and eddies in here. When these were dumped is not known, although the cars appeared to date to the 20th century. Bridge 37 is a three-span bridge, supported by four piers, that curves to the left. In summary, then, Piers 1 and 4 of Bridge 37 are the only components of the bridge that can confidently be said to date to the 19th century, although it is quite possible that any of the undated fabric also dates to that century. Bridge 38 has four spans sitting on five piers. The spans are the same built-beam spans as on Bridge 37, although these ones have cross bracing underneath. There are timber ballast guards at each end of the bridge, with piers immediately in front of them. It is difficult to say when the other timbers were installed, and whether or not any pre-1900 fabric remains in situ on the bridge, but the possibility cannot be discounted.

Nichol & Watson 2013

Nichol & Watson (2013) previously completed an archaeological assessment of the Chasm Stream section of the Mokihinui-Seddonville railway line (NZAA Site Number L28/36). Colliers commissioned this assessment on behalf of LINZ, to determine whether or not – and to what extent – the archaeological provisions of the Historic Places Act apply to the Chasm Stream railway line which comprises the line itself, two bridges and a tunnel. The archaeological assessment included a site survey by Katharine Watson and Alex Scahill in 2013. They describe the Chasm Stream railway line located between the Mokihinui-Seddonville Road and the Mokihinui River.

History: Nichol & Watson (2013) describe how in June 1885 part of the Buller Coal Reserve on the south side of the Mokihinui River at Coal Creek was leased by the Mokihinui Coal Company Ltd. The company immediately set to work constructing a railway line from their mine at Coal Creek to a point on the Mokihinui River approximately one mile (1.61 km) above the river mouth. The railway line cost around £25, 000 to construct. Where the railway terminated on the Mokihinui River the company also constructed a wharf and staiths. Newspaper reports indicate the formation (i.e. the earthworks) for the line was complete in November 1885. Two bridges, one across Chasm Stream and the other across Page's Stream, and a tunnel were constructed for the line. The timber used for both the sleepers and the bridges was cut from trees growing along the route. The section of line between Chasm Stream and Pages Stream had to be reconstructed when it was found that both the Chasm Stream bridge and the cutting were too high. Both the bridge and the cutting were lowered 10 inches before work on the line continued.

Nichol & Watson (2013) report how In 1898 the Mokihinui Coal Company mine closed, the Westport Cardiff mine had a high output and in 1899 they extended their workings over Chasm Stream (AJHR 1898 C1: 15, 1899 C3: 168). However, their success was short-lived. After continuously encountering faults and soft coal the company ceased operations in September 1899. The following year the mine was flooded when a fire was identified in part of the mine. The Westport Cardiff Coal Company went into liquidation and the mine was sold to the government. The closure of both mines had a negative effect on the township of Seddonville, as the majority of residents had been employed on the Mokihinui coal field. The closures also meant that there was almost no freight being run along the railway line. The residents of Seddonville petitioned the government to open a state mine at Mokihinui. The government was looking to select a location for a state coal mine as a result of the State Coal Mines Act 1901 and so the Seddonville State Mine was opened in 1903. However, the same problems encountered by the Mokihinui and Westport Cardiff companies – faults and soft coal – also plagued the state mine and it was closed in 1914. Despite the decline in freight, trains continued to run along the Westport-Mokihinui Railway until the 1980s.

One of the industries that helped keep the line open was, once again, coal mining, this 13 time in the form of the Charming Creek coal mine. This mine opened in the 1920s, and used its own tramway (now the Charming Creek walkway) from the mine to Ngakawau to transport coal until about 1958. From the late 1950s, the Charming Creek Road (from the mine to Seddonville) and the Westport-Mokihinui railway line was used to transport coal. The company built a private siding at Seddonville to facilitate this operation. In April 1976, the Charming Creek Coal Company was informed that the Ngakawau-Seddonville railway line would be closed in July of that year. The company protested this development, based on the cost of moving the siding, and the lack of other suitable options, not to mention the fact that the mine only had 5-6 years left. In the end, these protests were successful and the line – and mine – remained open until 1 May 1981. The section of railway line between the old Mokihinui Coal Company mine and Seddonville was closed in 1974, and the Ngakawau-Seddonville line was closed in 1981. Following the closure of the Ngakawau-Seddonville line – and the subsequent lifting of the rails – the Chasm Stream railway line was turned into a walkway by the New Zealand Walkways Commission, and the management of the walkway was transferred to the Department of Conservation

(DOC) in 1987, when that department came into being. In the early 2000s, a local community group also became involved in managing the walkway. DOC ended its role at Chasm Stream in 2011 (DOC 2011). Correspondence held in the DOC file indicates that Telecom laid a cable down the centre of the embankment in the early 2000s.

Little historical information relating to the construction and/or maintenance of the Chasm and Page stream bridges was located by Nichol & Watson (2013), with no newspaper references to either bridge, or the tunnel. Plans supplied by Colliers indicate that the renewal of Bridge 37 (the bridge over Chasm Stream) was proposed in 1901, when it was proposed to install a plate iron girder bridge, but the original form of the bridge is not shown (see A3 fold-out plan). Similarly, there is a plan for one of the piers on Bridge 38 (the bridge over Page Creek), dated to 1903 (see A3 fold-out plan). It is not known if this was drawn as part of the wholesale modification of the bridge, or if just one pier was replaced at this time. Work on other bridges on the section of railway between Westport and Seddonville in recent years has indicated that a number were modified substantially in 1900-1901 (Loader 2010).

Survey: The Chasm Stream railway line is 900 m long, and runs along the south bank of the Mokihinui River. The former railway line is in good condition. It ranges in width from 3 m wide (including a side drain) to 6.7 m (at the west end). It is only 6.7 m wide for a short distance. In some places, the original ballast surface is visible. No sleepers or rails remain in situ. Most of the Chasm Stream railway line is benched, or in cuttings. There are five cuttings, the longest of which is 87 m long, and the deepest was approximately 10 m deep. Each of the cuttings has a side drain and the longest cutting has a drain on both sides for part of its length. This cutting also had a cut-out through the north wall, which allowed water from the drain to run out of the cutting. The cut-out is 7 m long and 550 mm wide, and the corresponding drain is 500 mm wide and 150 mm deep. There are no drains on the embankments (where the water would have been able to percolate down through the ballast, or run off the sides).

There is one tunnel, which is 3.1 m wide and 73 m long. No drains were visible in the tunnel. At the east end of the tunnel was a mid-late 20th century concrete retaining wall.

There are also two modern footbridges on the Chasm Stream railway line, both of which are built from a combination of 'railway' and modern materials. Amongst the re-used fabric in the bridge are the beams on the outside edges of the bridge platform and the beams that support the bridge. No date stamps were visible on any of these elements. Footbridge 2 has been built over what was clearly an old culvert.

There is also stone revetting on the corner of the railway formation on the east side of this bridge, and concrete between the edge of the stone channel and the revetting. The form and nature of this channel suggested that it was built during the railway era, and possibly during the 19th century.

In the river below this footbridge were four or five railway cars, which appeared to have been dumped here deliberately, possibly to shore up the river bank, as the current swirls and eddies in here. When these were dumped is not known, although the cars appeared to date to the 20th century.

Bridge 37 is a three-span bridge, supported by four piers, that curves to the left. In summary, then, Piers 1 and 4 of Bridge 37 are the only components of the bridge that can confidently be said to date to the 19th century, although it is quite possible that any of the undated fabric also dates to that century.

Bridge 38 has four spans sitting on five piers. The spans are the same built-beam spans as on Bridge 37, although these ones have cross bracing underneath. There are timber ballast guards at each end of the bridge, with piers immediately in front of them. It is difficult to say when the other timbers were

installed, and whether or not any pre-1900 fabric remains in situ on the bridge, but the possibility cannot be discounted.

Archaeological Values: Nichol & Watson (2013) determined that overall, the Chasm Stream railway line is of moderate archaeological value. They note that the components that make up this railway line are not rare, and their condition is in some cases difficult to assess, as is their context. They are of low or moderate information potential and moderate-high amenity value.

Archaeological value	Railway formation		Tunnel		Bridge 37		Bridge 38	
	Value	Notes	Value	Notes	Value	Notes	Value	Notes
Condition	Moderate	Rails & sleepers lifted but the formation has not been subject to scouring, slumping, etc.	Moderate-high		Low-moderate?	Difficult to assess because the amount of pre-1900 fabric remaining cannot be determined.	Low-moderate?	Difficult to assess because the amount of pre-1900 fabric remaining cannot be determined.
Context								
Rarity	Low		Moderate	There are 5 tunnels on the SNL, and 18 on the Midland line. Only 1 of these dates to the 19th century, the rest being on 20th century sections of railway line.	Low-moderate	21 pre-1900 bridges remain on the SNL, but these are the only bridges that remain on the Mokihinui-Seddonville section.	Low-moderate	25 pre-1900 bridges remain on the SNL, but these may be the only bridges that remain on the Mokihinui-Seddonville section.
Information potential	Low	Excavation of test trenches could yield the exact details of the embankment formation, benching, etc, observed during the survey.	Low	Full dimensions of the tunnel could be recorded to yield information about tunnel requirements & the amount of rock blasted.	Moderate	Detailed analysis & recording would yield detailed information about the construction & maintenance of the bridge & changes over time. Possibility of timber analysis.	Moderate	Detailed analysis & recording would yield detailed information about the construction & maintenance of the bridge & changes over time. Possibility of timber analysis.
Cultural associations	Low	None known.	Low	None known.	Low	None known.	Low	None known.
Amenity value	Moderate-high		Moderate-high		Moderate-high		Moderate-high	
Overall	Moderate		Moderate		Moderate		Moderate	

Figure 5. Summary of the archaeological values of the railway formation, tunnel and Bridges 37 and 38. Source: Nichol & Watson 2013.

Heritage New Zealand Digital Library

There are no archaeological reports relating to the Mokihinui-Seddonville railway line (NZAA Site Number L28/36) included in the Heritage New Zealand Digital Library.

Conclusion and Recommendations

All pre-1900 archaeological sites are protected under the provisions of the Heritage New Zealand Pouhere Taonga Act 2014, whether the sites are recorded or not. It is illegal to destroy, damage or modify archaeological sites without an authority from the HNZPT. Being of pre-1900 construction the Mokihinui-Seddonville railway line (NZAA Site Number L28/36) meets the legal definition of an archaeological site and is subject to the protection of the provisions of the Heritage New Zealand Pouhere Taonga Act 2014.

The Nichol & Watson (2013) report constitutes a complete and comprehensive archaeological assessment. After a review of its contents, we conclude in agreement with their assessment of archaeological values namely the site likely has overall moderate archaeological values with moderate-high amenity values. It is considered that the site does have high amenity value given its use as a walkway incorporating a combination of typical 19th century rail line features that survive in relatively good condition i.e. railway formation, tunnels and bridges. The construction of rail lines such as the Mokihinui-Seddonville railway line in response to coal mining activities was an important and distinctive

aspect of the West Coast's 19th century transport history. It is unclear where else locally a similar combination of typical railway features survive in a place that is accessible to the public. As such we consider that the site proposes High Amenity Value which could be further enhanced through signage and interpretation at the site. It is noted that the Nichol & Watson assessment was completed over 10 years ago. Without a new site visit and archaeological survey, it is not possible to make comments on the current condition of the different components of the archaeological site i.e. railway formation, tunnels and bridges.