

**BULLER PLATEAUX CONTINUATION PROJECT,
WESTPORT, SOUTH ISLAND:
ARCHAEOLOGICAL AND HISTORIC HERITAGE
ASSESSMENT
(APPENDIX: HISTORICAL AND ARCHAEOLOGICAL
BACKGROUND)**

Prepared for Bathurst Resource Ltd

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INTRODUCTION

Project Background

Bathurst Resources Ltd (including subsidiary companies, Bathurst Coal Ltd, and Buller Coal Ltd) and joint venture partner BT Mining Ltd (collectively referred to as Bathurst) is seeking authorisation through the Fast-track Approvals Act 2024 (FTAA) to progress the development and mining of coal resources across the wider Buller Plateaux, known as the Buller Plateaux Continuation Project (the Project or BPCP). The Buller Plateaux are located approximately 15km northeast of Westport on the West Coast of the South Island (Figure 1).

The Project covers areas across both the Denniston Plateau and Stockton Plateau, collectively referred to as the Buller Plateaux. The Project covers five Project sub-areas: Stockton (including the Ngākawau Coal Handling Facility and Aerial Ropeway); Mount Frederick South, Escarpment Extended; the Upper Waimangaroa Haul Road and Cypress (Figure 2).¹

This Historical and Archaeological Background Appendix Report was commissioned by Bathurst and prepared as part of the required archaeological and historic heritage assessment of effects accompanying an application under the FTAA. It provides the historical background and a summary of archaeological/heritage survey and research in the general area of the BPCP Project on the Denniston and Stockton Plateaux and informs Parts 1–5 of the BPCP Archaeological and Historic Heritage Assessment. This will ensure that the significance of and effects on historic heritage values are assessed against a robust evidence base.

¹ Note only continuation of the existing Cypress Mine authorised under existing consents; however Wildlife Act Authorities are required to be renewed, as well as variations to existing conditions to ensure integration with the BPCP.



Figure 1. The location of the Denniston Plateau, Mt Frederick and Stockton Plateau (source: Google Earth 2025)

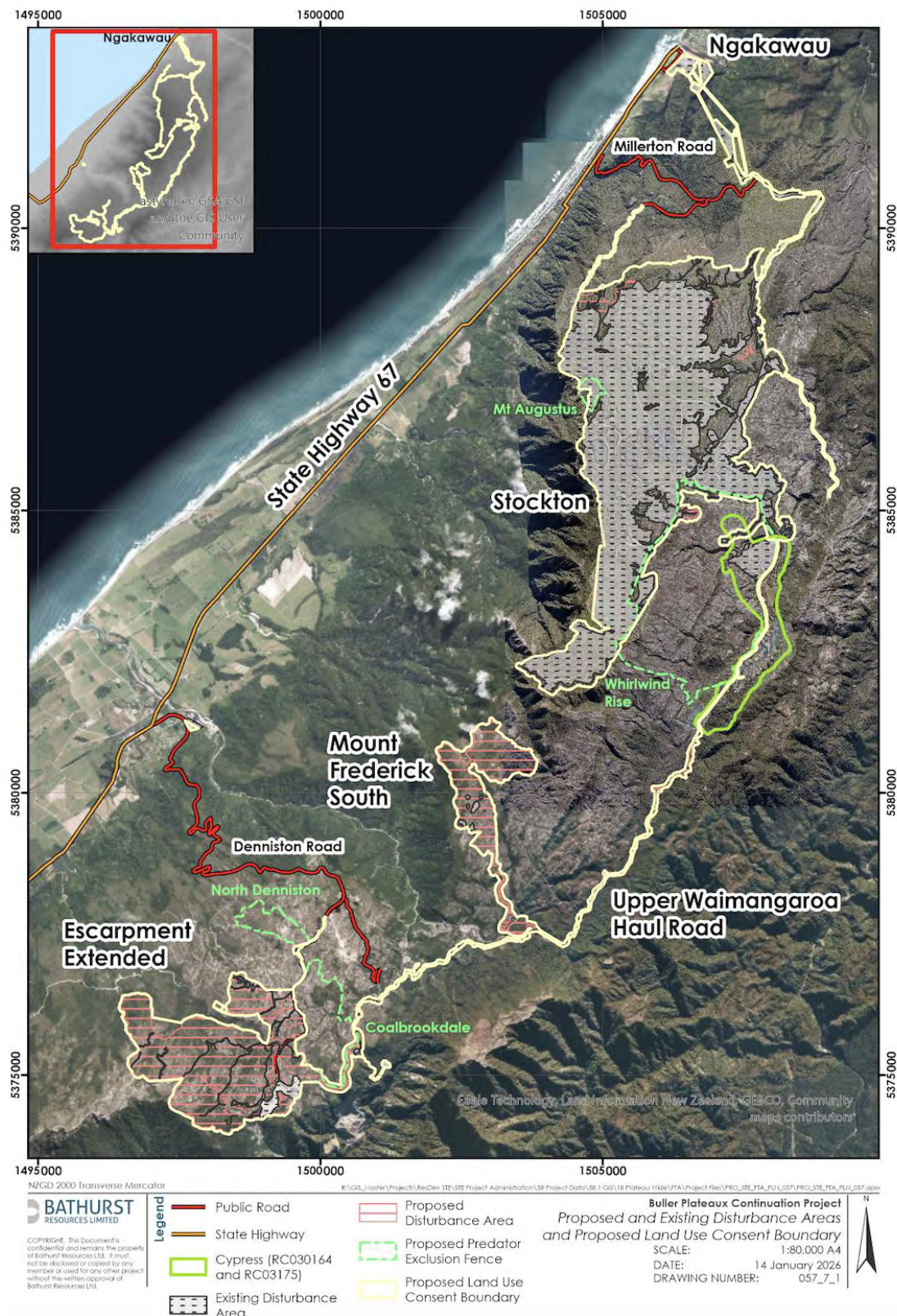


Figure 2. BPCP Project area and the proposed disturbance and consent areas (source: Bathurst)

THE DENNISTON PLATEAU

General Historical Background

The history of European coal mining on the Denniston Plateau is extensive and has been outlined in detail elsewhere.² Coal mining on the plateau began in the 1870s and has continued until the modern day, gradually spreading out across the plateau. Coal was transported across and down from the plateau via a range of different methods, including rope road, aerial cableway and the famous Denniston Incline. The Denniston Plateau was home not only to mines, but to several settlements, including Denniston, Burnett's Face and Coalbrookdale.

A summary sourced from the various reports is provided here for background and context to this report (see also Appendix 1 to this report: Denniston Plateau and Stockton Plateaux Mining Timeline). A map of the mines and the extent of underground historic workings on the Denniston Plateau discussed below are shown in Figure 4 and Figure 4.

Māori settlement of Te Tai Poutini (the West Coast) dates back to the earliest Māori settlement of Aotearoa, with archaeological sites from this time found at several river mouths. Traditional history recounts that these earliest settlers were Waitaha, descendants of the explorer Rākaihautū, who had arrived on the waka *Uraro*. In the late 16th/early 17th centuries, Ngāti Mamoe made their way south to Te Wai Pounamu (the South Island), integrating with Waitaha through a process of intermarriage and conflict. They were followed shortly thereafter by Ngāi Tahu, who used a similar process to establish mana whenua. Ngāti Waewae (a hapū of Ngāi Tahu) would eventually settle on and make Te Tai Poutini their home (Anderson 1998; Nathan 2016b; Tau and Anderson 2008; Taylor 1952: 186).

Māori settled throughout Te Tai Poutini, with major occupation sites often located at river mouths, such as the Kawatiri (Buller), Māwheranui (Grey) and Hokitika rivers, as well as rivers in South Westland. Pounamu (greenstone) was one of the important features of the area, with the main sources being in and around the Arahura and Taramakau rivers. Pounamu and other resources were traded with East Coast Ngāi Tahu, with the main routes being via Nōti Taramakau (Harpers Pass) and Tioripātea (Haast Pass), with the former leading to Canterbury and the latter to Central Otago. There was also an important coastal route, the Te Tai Poutini coastal pathway (Te Rūnanga o Ngāi Tahu 2023a).

In pre-European times Māori travelled along the Papahaua Range in Westland, and through the coal plateau, but the mineral was of little interest to them as they made no use of it.³

European interest in Te Tai Poutini was limited at the outset of the colonial period in Aotearoa, no doubt due in part to the rugged terrain and dense bush cover. The first detailed exploration by Europeans came in 1846, when Thomas Brunner and Charles Heaphy explored much of the West Coast with Kehu, their Māori guide. This exploration was driven by a desire for more agricultural land, as was the subsequent 'purchase' of the West Coast from Ngāi Tahu (Nathan 2016a). This purchase, of nearly 7 million acres, was orchestrated by James Mackay and is known as the Arahura Deed. It was completed in 1860. Under the terms of this deed, the Crown paid £300 for the land. Ngāi Tahu only

² Particularly HNZPT NZ Heritage List # 7049 <https://www.heritage.org.nz/the-list/details/7049>; Wright 2001, Watson and Wright May 2004; Petchey 2007; InSitu Jun 2010. Also see Bibliography.

³ <https://www.heritage.org.nz/the-list/details/7049>.

agreed to the sale on the condition that they would retain ownership of the entire length of the Arahura River, along with other reserves, including at Māwhera (now Greymouth). Instead, just 2000 of the 14,000 acres of the Arahura River were set aside for Ngāi Tahu, along with another 4724 acres of reserve lands (Te Rūnanga o Ngāi Tahu 2023b).

In the end, it was not agriculture that would bring large numbers of Europeans to Te Tai Poutini, but gold. Gold was first discovered on the West Coast in the late 1850s, but a rush did not ensue until the mid-1860s (Nathan 2016a). Heaphy and Brunner, exploring the West Coast in 1849, noted a coal seam in a small stream near the Nile River south of Westport. Then in 1859 John Rochfort, an engineer who was doing surveys for the Nelson Provincial Council in the south-western sector of its territory, discovered coal in the Buller region. Rochfort found coal deposits in two places near the Waitakere River (later known as the Nile) and climbed a peak (now Mt Rochfort) on the Papahaua Range just north of the Buller River.

The following year a German geologist, Julius Haast, was engaged by the Government to make a geological survey of the Buller region with the discovery of coal of prime interest. He found fragments of coal in the Waimangaroa River and traced them upstream to an 8 foot 2 inch (2.5m) thick seam of high quality bituminous coal. Haast named the locality Coalbrook Dale⁴ after a coal mining village in Shropshire, England, and a cliff above the seam Burnett's Face after his assistant James Burnett.

Two years later Burnett completed a detailed survey, estimating that there were 72 million tons (73,155,600 tonnes) of extractable coal in the area of Coalbrookdale alone. He also suggested a means of getting it down to the coastal plain from the 2000 foot (610m) altitude plateau – a self-acting railway system that would employ the weight of loaded trucks descending to haul empty trucks up again. However, nobody was willing to invest in such technology in what was still a wilderness at that stage.

It took a series of gold rushes in 1866-67 to attract wide interest in the Buller district and its other mineral resources. In 1873 a 'coal viewer' named Robert Blair Denniston was engaged by the New Zealand Government to survey the coal resource in the upper Waimangaroa. He not only did that, but also instigated the formation of what eventually became the Westport Coal Company, based in Dunedin. By 1878 this company was extracting coal from the Banbury Mine and two years later began sending it down from the plateau via the type of incline that had been advocated by Burnett. From its foot the coal trucks were taken to the port of Westport on the Mt Rochfort Railway, built by the New Zealand Government to exploit numerous coal seams found in the Buller region northeast of Westport.

In 1882 the Banbury mine was driven right through to Burnett's Face, from where more developments began, including the Iron Bridge and Coalbrookdale mines. They both had their own endless-rope haulage systems, delivering coal to a main rope road running through the old Banbury workings (and later over the surface) to the brakehead at the top of the Denniston Incline.

The Denniston settlement, which had begun about 1878 with a huddle of cottages on an escarpment between the original mine and the brakehead, rapidly spread onto the exposed plateau above. Another township grew during the 1880s at Burnett's Face, handy to the

⁴ The spelling of the name soon changed to a single word – Coalbrookdale.

new mines and rope roads, while Coalbrookdale further up the valley also had its homes and hotel.

In 1885 Denniston was the largest producer of coal in New Zealand but the peak year of production was 1910, when the output was 348,335 tonnes.

Coalbrookdale Mine had two sections, known as Cascade and Whareatea. By 1926 the Whareatea workings had progressed so far westward from the entrance that the company decided to put in a new entrance to give miners a shorter journey from the surface to their workplaces. This entrance (known as The Steps because of the 142 timber steps between surface and workings) was reached along a new road from Denniston aboard 50-seater 'char-a-bancs' – Minerva buses known to the miners as 'fifties'.

In 1927 the Westport-Cascade mine started working a continuation of the Denniston seam from Cascade Creek, south of Coalbrookdale. Coal was delivered to the railway in the Buller River valley via a 7½ mile (12km) flume down Cascade Creek. Where practicable, coal was sluiced from the workings to the flume, minimising handling in the mine. The flume would remain in use for 28 years and the stated advantages of hydraulic mining would be confirmed in the western extremities of the Coalbrookdale workings decades afterward.

The State Mines Department bought the Westport Coal Company's assets in 1948 and set about upgrading the mines as well as boring for new seams. Because Iron Bridge had closed in 1944 and Coalbrookdale was becoming concentrated in the Whareatea area, it was decided to do away with the long underground and surface haulage systems.

A new working entrance was driven adjacent to the Whareatea Steps, conveyors and bins were constructed, and in 1954 a monocable aerial bucket line began delivering coal across the plateau to the incline. From 1953 on, what had been the Coalbrookdale mine was referred to in official reports as the Whareatea State Mine.

A new mine, the Plateau or Sullivan, was opened 1.6km northward of Whareatea along the aerial system in 1953. It was the first fully mechanised mine in New Zealand, using belt and chain conveyors underground, rather than the old hand trucking rail system, and delivering it to the surface via another conveyor, similar to the system used at Whareatea. The aerial ran through the Sullivan bins to pick up coal.

When the rope road closed, the settlements along its route, Coalbrookdale and Burnett's Face, were abandoned. The same gradually happened to Denniston itself as improving transport options such as buses and private cars allowed workers to live down close to sea level and commute up 'The Hill'.

In 1963 the Escarpment mine was opened a short distance south of Whareatea. Coal was trucked to the Whareatea bins from where the output of both mines was sent away on the aerial. A few private parties (for example, the Birchall's party) mining parts of the seam from the surface between the two mines added their output to the mix.

In 1967 the incline was closed and motor lorries took coal down the Denniston road from the Brakehead bins. A year later the aerial was also abandoned and the lorries were loaded directly at the mines – from new bins in the case of the Whareatea.

The Whareatea mine closed in 1971, and the private Birchall's party who tried it finished after two years, leaving just the Escarpment and Sullivan at work.

In 1979 the Escarpment was redeveloped as Denniston's first State hydro mine, using powerful pumps instead of the natural water pressure (or blow-ups) applied at Cascade half

a century before and in State mines at Stockton and Millerton since the 1950s. Coal blasted from the seams was trucked or sluiced to a sump inside the mine, from where it was pumped through pipes to bins on the surface. This method extended the Escarpment's life by three years.

At the same time, preparations were also being made toward what has been referred to as the 'secret' reopening of the Whareatea as a hydro mine. When that method proved successful at the Escarpment, work at the Whareatea gained momentum. As a result, just as the Escarpment headed for closure in 1982, mines officials in Wellington learned that pillars left in the Whareatea workings 11 years earlier were about to be extracted by hydro methods. The safety advantages that had applied at Cascade back in the 1930s made the reopening possible.

The new Whareatea system employed a new 150 kW (200hp) Australian-made stainless steel pump capable of pumping out one tonne of coal per minute, while a 126 kW (170hp) New Zealand-built pump handled the silt-laden overflow. The pump room was a huge, hollowed-out cavern inside the mine. Coal was blasted, and then sluiced along to the dip or lowest point, from where it was pumped out. About 5 percent of the old mine was reworked, an area measuring about 800m by less than 400m. The fact that this section had been flood-prone in the past became an advantage, while places that had been too difficult and dangerous to work before, even partially collapsed areas, could be mined. Hydro mining also resulted in record outputs.

Changes were also made at the Sullivan Mine. As the workings spread westward a new entrance was made in the valley of Rapid Creek in 1980, giving miners a shorter underground journey to their workplaces. Being about 60m lower than the old entrance, it clearly presented possibilities for hydraulic mining as well. Four years later a stone drive was put in a short distance downstream and by 1986 a new hydro mine, named the Sullivan West, was in full production.

Near the end of 1988 the Whareatea mine closed, but no decommissioning or rehabilitation work was carried out. When production ceased at Sullivan West in late 1996 it was placed on 'care and maintenance'. Equipment was salvaged for use at other sites and items of historic value were given to museums.

Decommissioning work began at the Whareatea and Sullivan mines in July 1998, with the sealing of portals and demolition of unsafe structures. This work was suspended the following month as remaining manpower and equipment were relocated to Stockton.

The most recent mining operations on the Denniston Plateau took place in the Escarpment Mine permit area from 2014 to 2016. The Escarpment Mine (ESC) is currently on care and maintenance.

Today, only the privately owned Cascade Mine is still operating, with coal being trucked out via Burnett's Face and the Denniston Road.

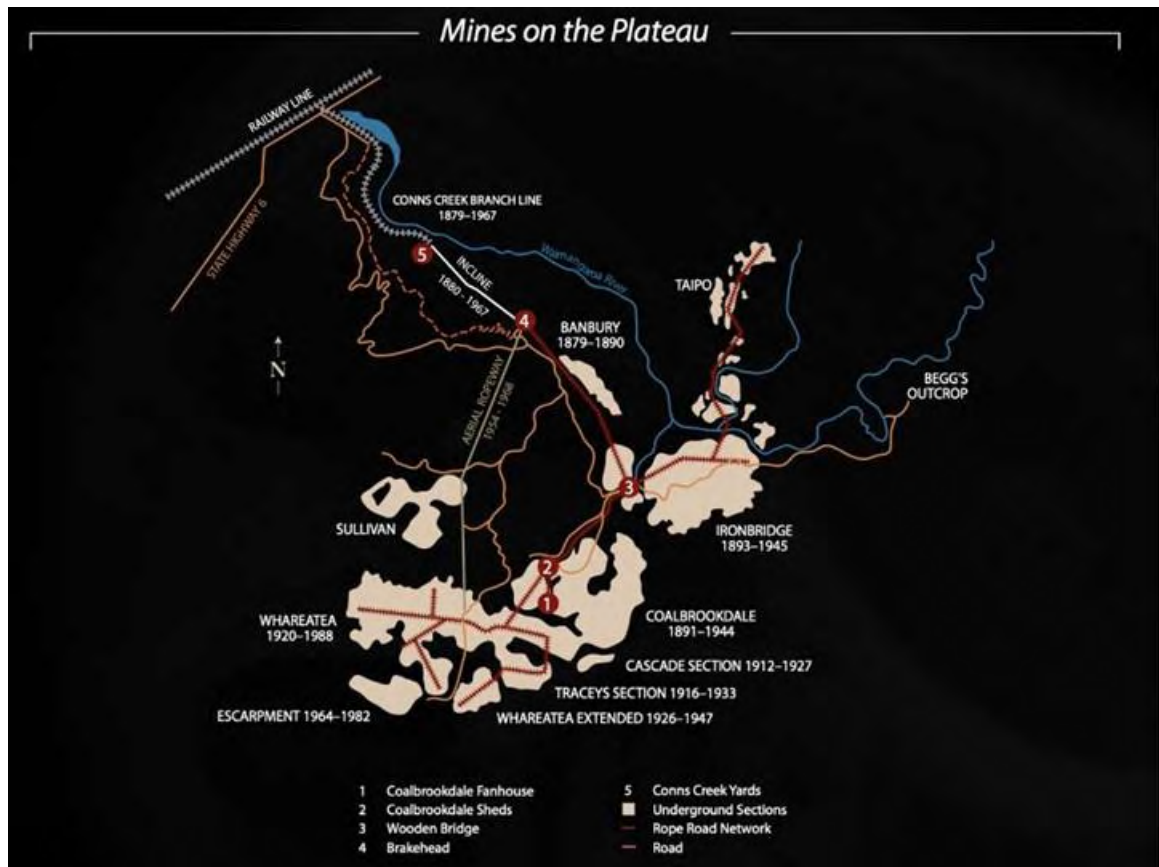


Figure 3. Map of the mines on the Denniston Plateau⁵

⁵ <https://www.doc.govt.nz/globalassets/documents/conservation/historic/by-region/west-coast/denniston/journey-through-denniston-part1.pdf> - Map based on drawings by J. Neil in the book 'Denniston Miners Union: A Centennial History', 1984.

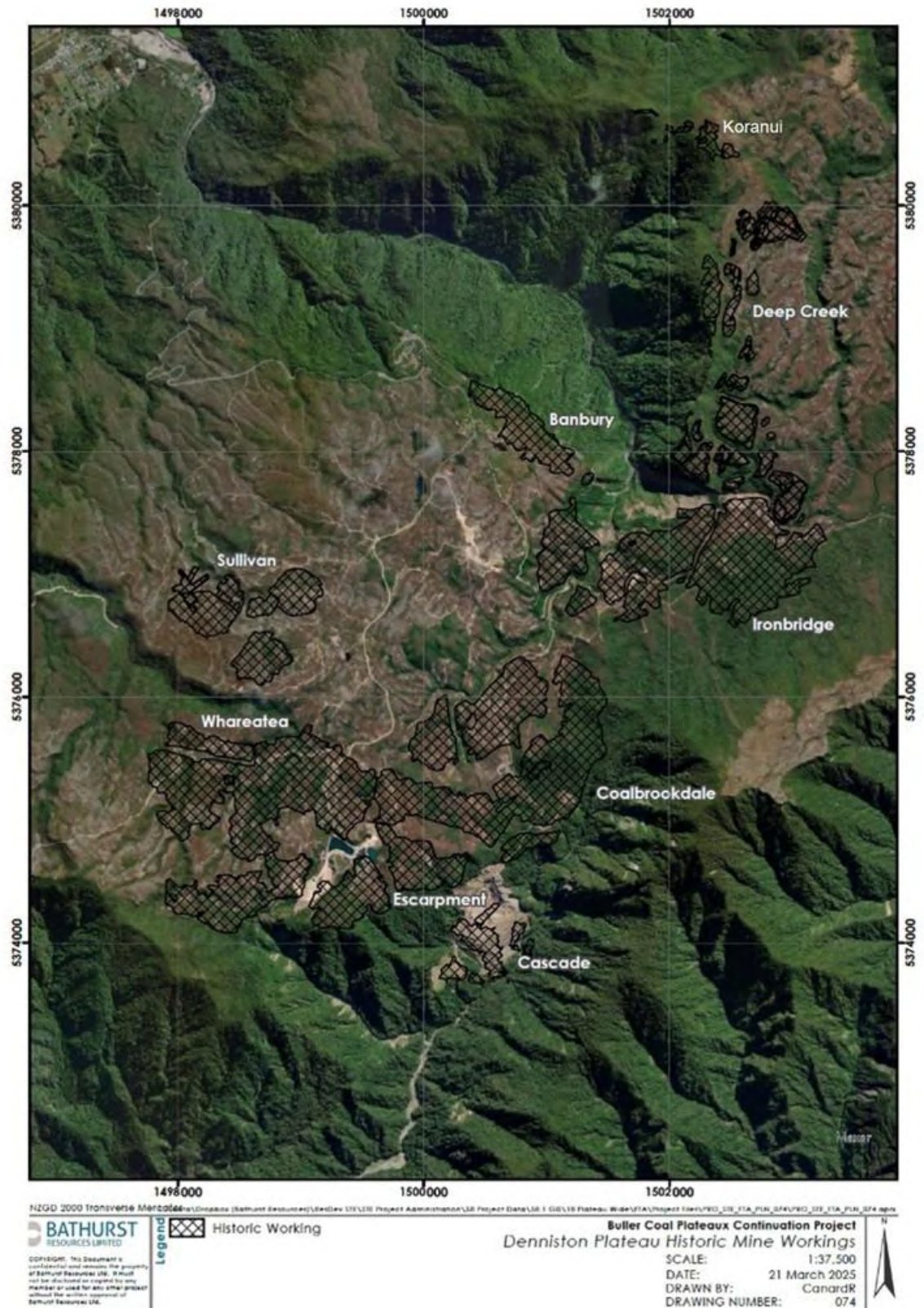


Figure 4. Denniston Plateau extent of historic underground mine workings associated with each mining area (source: Bathurst)

Historic Heritage and Archaeological Values and Significance

The historic heritage and archaeological significance of the Denniston Plateau and its individual sites has been highlighted numerous times by a number of heritage professionals as a result of previous research, survey and the assessment of effects on historic values for modern mining applications on the plateau. Those values are summarised here based on the considerable literature available (see Bibliography).

The advent of large-scale resource use such as coal mining assisted in developing and sustaining the young colony of New Zealand in the late 19th century. The stories of the people who settled at Denniston to open the mine are the stories of early European immigration to New Zealand (NZHPT 2007:33). The place of Denniston in these early days of the development of New Zealand is well understood and it is acknowledged that Denniston has national historic significance (In Situ Heritage 2010:1).

However, the history of the coal industry in New Zealand or Denniston cannot be understood by considering only one aspect of its development. The history of the industry spans the late 19th century boom years replete with expensive, yet innovative solutions to accessing the high grade coal of West Coast (such as the Denniston Incline), through the lean years of the Great Depression, and a gradual late 20th century decline of coal mining (see Sherwood and Philips 2009 for an outline of the national state of the industry) (Breen Oct 2010).

Coal mining was a key industry in the development of New Zealand in the late 19th century. Denniston had a significant place in the development of the coal industry in the Buller region, and its success was an important catalyst for big business investment in coal mining in the area. Mining on the Plateau spanned from the infancy of the industry to its decline in the 1990s. Consequently, the history of the coal industry at Denniston is emblematic of the national ebb and flow of coal mining in New Zealand as a mainstay of the economy (Breen Oct 2010)

Denniston is a nationally significant place, with international links to underground mining culture (InSitu Heritage 2010:1). It is the premier historic coal mining site in New Zealand comprising numerous historic coal mining, settlement and transport sites. Its historic coal mining landscape spans a depth of time (all periods of mining are represented) and it is more complete (much remains of mine sites from all periods and some of these remains are rare) than any other in New Zealand. The area has been identified as one of New Zealand's most important industrial archaeological landscapes and an outstanding historic site (Breen Oct 2010; Wilson and Burgess 2007:7; NZHPT 1993).

Denniston is also the oldest mining settlement on the Buller coal plateau and holds a major place in the history of the coal mining industry in New Zealand through the sustained quality and quantity of its output and the special features associated with its operation.⁶ Large scale coal mining at Denniston played an important part in many aspects of the history of the country, such as settlement and immigration, development of the nation, the trade union movement, technological innovation and contribution to an important resource extraction industry (Breen Oct 2010; NZHPT 2007:33).

⁶ <https://www.heritage.org.nz/the-list/details/7049>.

The importance of the wider contextual values of Denniston Plateau has also been acknowledged. It is impossible to properly understand one of the mining sites on the plateau (and its significance) in isolation from the others. The significance of these workings derives largely from the fact that they are part of the Denniston coal mining landscape – a nationally significant landscape. Much physical evidence of each of these mines remains, and of the various transport systems that connected them. While the Denniston Plateau is mostly celebrated for its early history and Incline, it is one of the few places in New Zealand that has such a long history of coal mining and where so much tangible evidence of that history remains (Watson Apr 2009:23; Watson Aug 2010:21).

One of the notable elements of significance of the archaeological sites on the Denniston Plateau is the excellent integrity of sites as a whole. The relative completeness of the coal mining system that remains (although various components have been lost), the reasonable condition of the majority of the sites, the excellent internal and external context of the landscape, the depth of time present from inception in 1878 to closure in the 1990s in the wider archaeological industrial coal mining landscape and high community esteem for the site make it nationally important (Petchey 2007). Elsewhere in the Buller area, the historic remains of large scale coal mining landscapes are being destroyed by modern mining. As such, there are no other historic coal mining landscapes in New Zealand that rival what still remains at Denniston. The survival of the complete systems makes Denniston a highly significant archaeological landscape (Petchey 2007).

The area encompassed by Denniston is extensive, covering a large area of land on the Denniston Plateau, the steep slopes below the Denniston township and the flat land at Conns Creek. The Crown is the principal land owner on the Denniston Plateau, with public conservation land administered by Department of Conservation (DOC) and other land holdings by the Ministry of Economic Development, Ministry of Education, Bathurst, Land Information New Zealand and Buller District Council. A number of smaller sections, mostly those in the original Denniston township, are owned by individuals. Current mining licenses are in existence over most of the Denniston plateau (InSitu Heritage 2010:1-2).

DOC, as landowner, and the voluntary group Friends of the Hill Inc. manage, individually and in partnership, a museum, historic structures and walks around the key historic heritage sites at Denniston. DOC recognised the importance of Denniston, being one of the Department's icon heritage sites, which are places that tell the story of New Zealand's distinct identity, and provide visitors with an outstanding opportunity to gain insights into New Zealand's history and heritage (InSitu Heritage 2010:1). DOC has gazetted parts of the plateau as a historic reserve, and highlight it as one of the most important places it looks after on the West Coast, by 'actively conserving' a number of sites for their historic values.⁷ DOC has placed a number of well-illustrated interpretation panels around the area and plans to add more to tell the full story of Denniston's past. Remaining roads and tracks contribute to the history and link the various components.⁸

The Buller District Plan (BDP) (Operative Jan 2000, amended Sept 2011) (BDP) is relevant to the Denniston Plateau area. The Buller District Council has listed the following in the Schedule of Historic Buildings and Structures (Part 14.2) on the Denniston Plateau: the Banbury Arch (250), Stone Retaining Wall (291) and the Denniston Incline Plaque (306).

⁷ <https://www.doc.govt.nz/parks-and-recreation/places-to-go/west-coast/places/denniston-area/history/>.

⁸ <https://www.heritage.org.nz/the-list/details/7049>.

The Te Tai o Poutini Plan (TTPP) is the proposed combined Buller, Grey and Westland District Council Plan, which will replace the current individual district plans in 2027. TTPP Schedule One: Historic Heritage Items and Areas and Archaeological Sites (Te Rāangi Tuatahi: Ngā Rawa me ngā Whenua Tuku Iho) has scheduled the Denniston Historic Area (HH5), for archaeological, historical, social and technological values. The extent of the TTPP scheduled area reflects the NZ Heritage Listed Area – Denniston Heritage Area (see below).

A number of historic coal mining sites on the Denniston Plateau are actively managed by DOC including the Coalbrookdale area (fan house, mine entrance and rope roads), Burnett's Face, the surface rope road across the plateau, the Denniston bins, the Denniston Incline, the bridle track and Conns Creek.

In terms of heritage sites, the Denniston Plateau is extremely rich, with the remains of both the industrial systems and communities that once existed on the Plateau. What this means is the Plateau can be studied in detail from an archaeological perspective and the systems of industrial operations or social interaction (to name two possibilities) can be examined. In this respect the Denniston Plateau is an ideal location, and the archaeological remains there are significant (Petchey 2007:81).

The lack of other development on the Denniston Plateau due to its remote location (apart from ongoing mining) and the absence of the reworking of the underground mines by opencast mining causing large-scale land modification have allowed the retention of previous mine workings and the survival of good archaeological evidence. Abandoned mine sites are apparent through landscape modification, surface infrastructure and other material present across the vast geographical area of the Denniston Plateau. These remains reflect each phase of mining activity, presenting the story of coal mining from the earliest era in New Zealand through the 20th century expansion, innovation and eventual decline.

The only other place comparable to the mining landscape of Denniston Plateau for scale of mining and a continuum of history of mining is on the Stockton Plateau. However, the Stockton mining sites have been significantly affected by modern mining, with very little of the wider historic landscape remaining (Breen Mar 2013).

While most archaeological sites on the Denniston Plateau relate to aspects of mining activity the settlement areas, and particularly the Denniston Township, have important archaeological values, as the living conditions here differed from others of similar date because of the unusual environment.⁹ The social history of Denniston has been well recorded and many places and items remain to tell its story. It was one of the most isolated and difficult mining towns to live in in the country. Elements of the various townships remain at 'The Camp', Denniston, Marshallvale, Burnett's Face and Coalbrookdale. Apart from remains of dwellings, the sites of commercial or public buildings or recreational activities can be identified to gain a picture of the life settlers evolved for themselves.

The Denniston archaeological landscape also has excellent information and amenity potential. The history of coal mining on the Denniston Plateau played an important part in many aspects of the history of the West Coast and New Zealand, including those noted above (settlement and immigration, developing the nation, the trade union movement, technological innovation and contribution to an important resource extraction industry). There are also associations with significant people in the West Coast and New Zealand

⁹ <https://www.heritage.org.nz/the-list/details/7049>.

History, starting with Sir Julius von Haast, who initially surveyed the site, John Lomas, who played a major role in the development of unionism, William Larnach, who was one of the founding shareholders and the Young Brothers, who designed the Incline.

Denniston Listed Historic Area

In recognition of the importance of Denniston, parts of the Plateau have been Listed under the HNZPTA as the Denniston Historic Area, a Category I historic place (NZ Heritage List No. 7049) (Figure 5). The extent of the Listing concentrated on the mainly 19th century mines and mining infrastructure as the features of highest significance. It includes the Denniston Incline; the brakehead; the Banbury arch, mine mouth and rail link; Burnett's Face; Coalbrookdale; the rope road; the bath houses; and the settlement of Denniston; as well as The Camp. The historic area's boundary runs from the base of the incline to the centre of activities at the brakehead and then continues along the route to major mining areas at Burnett's Face and Coalbrookdale. It includes features which are representative of the unique history of the Denniston mining locale.¹⁰ This listing recognises the high historical, archaeological and technical values of the Denniston landscape and describes Denniston as 'one of New Zealand's most significant industrial sites' (Wilson and Burgess 2007).

The high significance of the Listed Historic Area is due to the relative completeness of the coal mining system that remains (although various components have been lost), the reasonable condition of the majority of the sites, the excellent internal and external context of the landscape and the high community esteem for the site. The landscape also has excellent information potential and amenity potential (Petchey 2007).

The Heritage NZ List entry states:

'It is considered that this place qualifies as a Category I historic place. Denniston is a place of outstanding heritage significance because of its history as an early major coal extracting industry that succeeded through use of its remarkable self-activating, cable operated incline. The technological achievements of the men who began mining activities at Denniston in 1879 were remarkable. The stone features, the incline, and other mining and transporting techniques used at Denniston illustrate the outstanding technical values of the place. Its inaccessible and inhospitable location, which made the lives of those who lived and worked there miserable, has given it a special place in New Zealand history. The environment and working conditions encouraged the early development of unionism, an important feature of New Zealand's past. It is readily accessible to visitors and provides exceptional opportunities for public education.'¹¹

¹⁰ <https://www.heritage.org.nz/the-list/details/7049>.

¹¹ <https://www.heritage.org.nz/the-list/details/7049>.

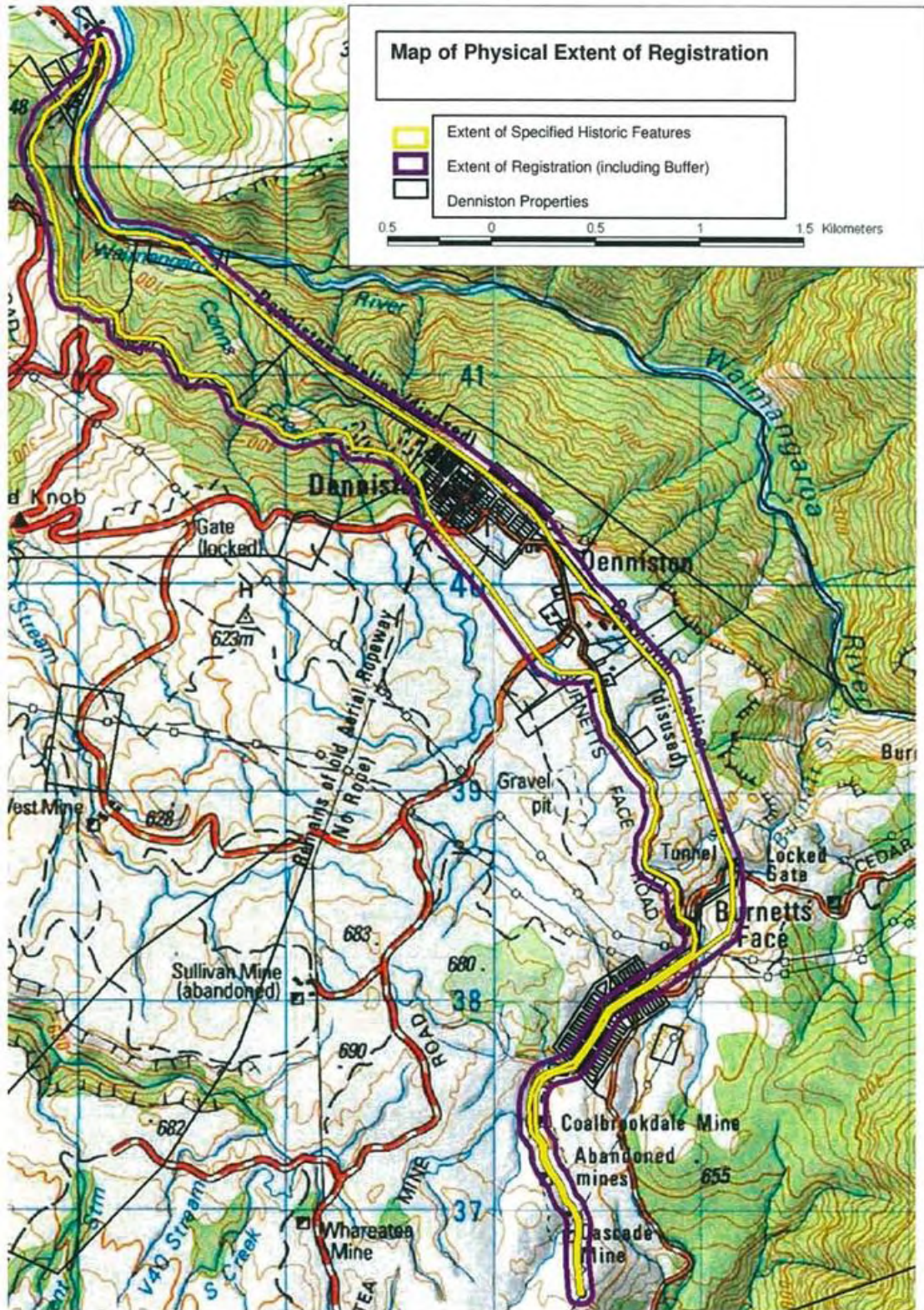


Figure 5. The extent of the Heritage NZ Listed (purple outline) Denniston Historic Area (NZ Heritage List No. 7049) (source: <https://www.heritage.org.nz/the-list/details/7049>)

Previous Archaeological Work

A great deal of research and previous archaeological survey have been carried out on the Denniston Plateau, which is summarised here. This previous work is the main source of information on the historic heritage and archaeological sites on the Denniston Plateau and within the BPCP Area for this report.

For background, the book *Coaling from the Clouds* (Meyer 1971) contains a very good account of the history and operation of the Denniston Incline and Waimangaroa branch railway, and a more general history is given in *The Denniston Affair* (Munro 1951).

In 1983 Terry and Sonia Sumner prepared a comprehensive survey of historic coal mining sites on the Denniston Plateau for the Department of Lands and Survey, resulting in the ‘Coalfields Park Report’ (Sumner and Sumner 1983). In 1992, Ray Hooker carried out a survey of the Coalbrookdale area as a result of proposals to construct a walkway at Burnett’s Face (Hooker 1992). The survey covered the lower kilometre of the Coalbrookdale Valley and resulted in a number of sites being entered onto the New Zealand Archaeological Association (NZAA) site record file.

The ‘Denniston Concept Plan’ (Wright 2001) is a report prepared for the Department of Conservation, West Coast Conservancy which contains a wealth of information about the physical remains on the Denniston Plateau.

One of the more comprehensive archaeological surveys was of the 20th century mining on Denniston Plateau carried out by Watson and Wright (May 2004) for Solid Energy as part of resource consenting to rehabilitate the mines sites at Denniston. The focus of the work was at the Whareatea, Sullivan and Sullivan West mines.

In 2005 the DOC commissioned a report on the heritage appreciation and conservation of the Denniston Township (Green Oct 2005) and in 2007 detailed recording of coal mining and settlement sites in the Denniston Historic Area was undertaken for DOC (Petchey 2007), along with an investigation of damage to the rope road and nearby archaeological sites (Wright and Watson 2007) and an archaeological assessment that investigated the impacts of a DOC proposal at Burnett’s Face and other areas of the plateau (Watson 2008). In 2007 the NZ Historic Places Trust prepared the Review Report for a Historic Place, Denniston, West Coast (Wilson and Burgess Dec 2007).

In 2010 DOC Buller Kawatiri Area Office commissioned a conservation plan for Denniston (InSitu Heritage 2010) to establish a strategic and informed approach to the management of historic places at Denniston by enabling the conservation of heritage values and avoiding unwarranted and/or undesirable modification of heritage places.

More recently, survey and assessment of the effects on historic values have been carried out for the modern mining applications at the Escarpment Mine (Watson Apr 2009, Jun 2010 and Aug 2010) and for the Buller Coal Ltd haul road proposal from the Escarpment Mine to the Denniston Plateau (Watson May 2012; Clifford and Barr Apr 2014).

In 2022 the authors prepared a report for Bathurst to characterise the historic heritage and archaeological significance of the Denniston Plateau in general, identify the known sites within the Buller Plateau Project area and discuss the specific historic heritage, archaeological values and significance (Tatton and Clough Apr 2022).

The Koranui Incline was recorded as part of the ‘Coalfields Park Report’ written by Sumner and Sumner (1983) and has been entered into the NZAA site recording scheme as site L29/14. During the course of their survey the Sumners walked the incline (from the bottom up) and recorded those features found on it. This survey does not appear to have

been as detailed as other surveys they undertook as part of the ‘Coalfields Park Report’ and contains no photographs of the incline at that date, and little information about feature associated with the incline (Watson Dec 2009:6).

In 2009 Katharine Watson undertook a detailed archaeological survey of the Koranui Incline for Solid Energy Ltd who were undertaking a drilling programme in the area (Watson Dec 2009).

Recorded Archaeological Sites

The New Zealand Archaeological Association’s (NZAA) site record database (ArchSite) records a number of archaeological sites on the Denniston Plateau and in the vicinity of the Project sub-areas (see Figure 6 and Appendix 1). The number of recorded sites is not exhaustive as it essentially reflects survey coverage and current knowledge, and primarily relates to the HNZPTA definition of an archaeological site (provided later in this report). However, it should be noted that many sites on the Denniston Plateau recorded on the NZAA ArchSite database do not meet the HNZPTA definition of an archaeological site as they post-date 1900.

It should also be noted that some recorded archaeological sites include numerous individual heritage places/features over large areas, such as K29/57 Denniston Township and K29/59 Denniston aerial cableway. While not recorded as archaeological sites, it is worth noting that many of the underground workings also remain in situ.

Many other historic heritage sites located on the plateau are not recorded on the ArchSite database because they post-date 1900 (the approach to recording post-1900 sites on ArchSite has been inconsistent). Figure 7 is a plan from Les Wright’s (2001) ‘Denniston Concept Plan’ prepared for the Department of Conservation (DOC) West Coast Conservancy showing other heritage features that have been identified on the Denniston Plateau by previous study. The numbering of heritage features on this plan is unique to Wright’s report and some heritage features shown do duplicate recorded archaeological sites on ArchSite.

Under the headings of each of the Project sub-areas (Escarpment Extended; the Upper Waimangaroa Haul Road, Mount Frederick South and Stockton), the historic background of the recorded archaeological and other historic features within and in close proximity to these areas are discussed in detail. Both the ArchSite and Wright numbers are referenced where relevant.

The NZAA site record forms have been updated and new site records created for all sites that are discussed in the Parts 1–5 of the BPCP Archaeological and Historic Heritage Assessment reports.

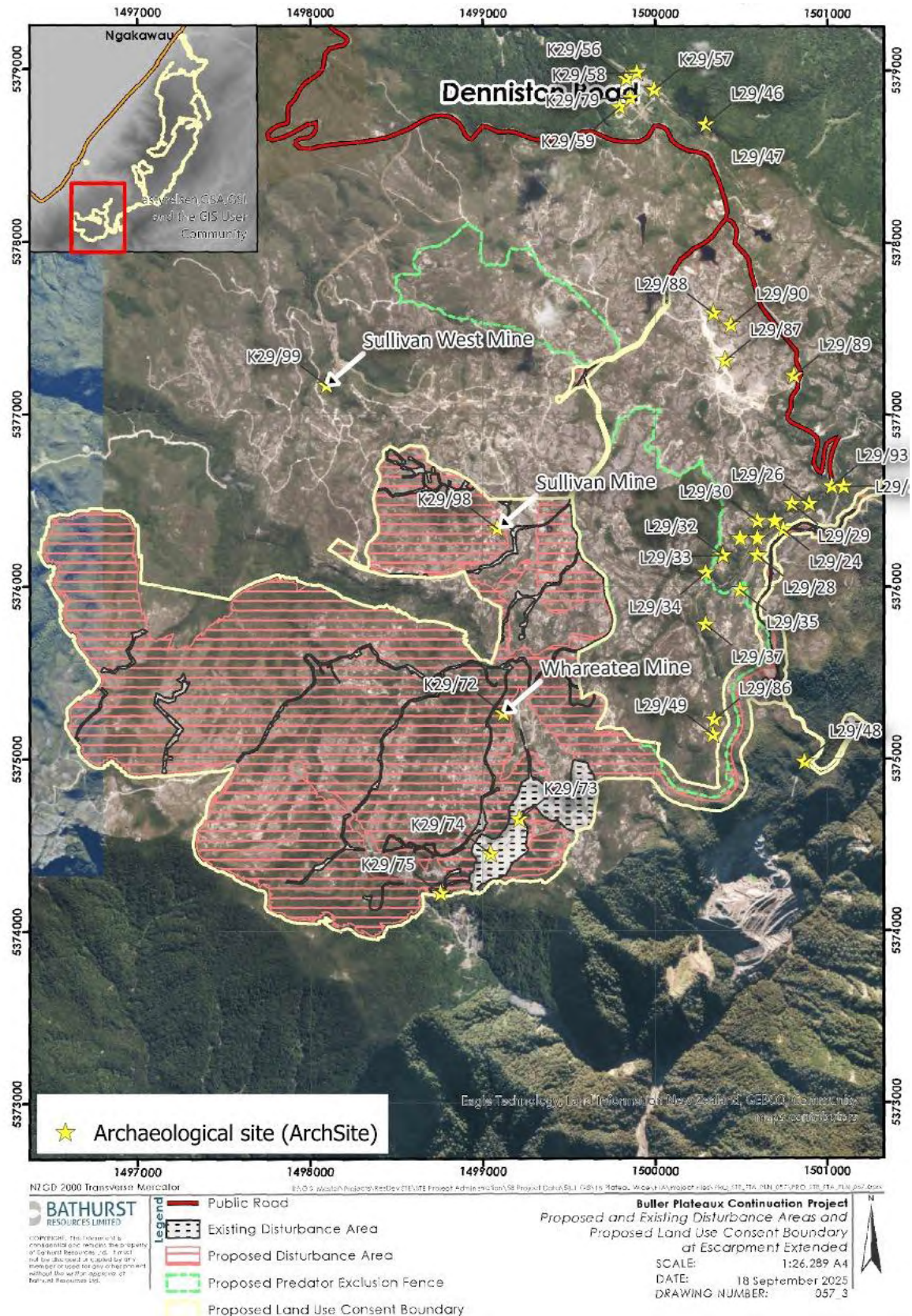


Figure 6. The location of recorded archaeological sites on the NZAA ArchSite database on the Denniston Plateau (2025) in relation to the ESE and UWHR (Southwestern) (source: Bathurst and ArchSite)

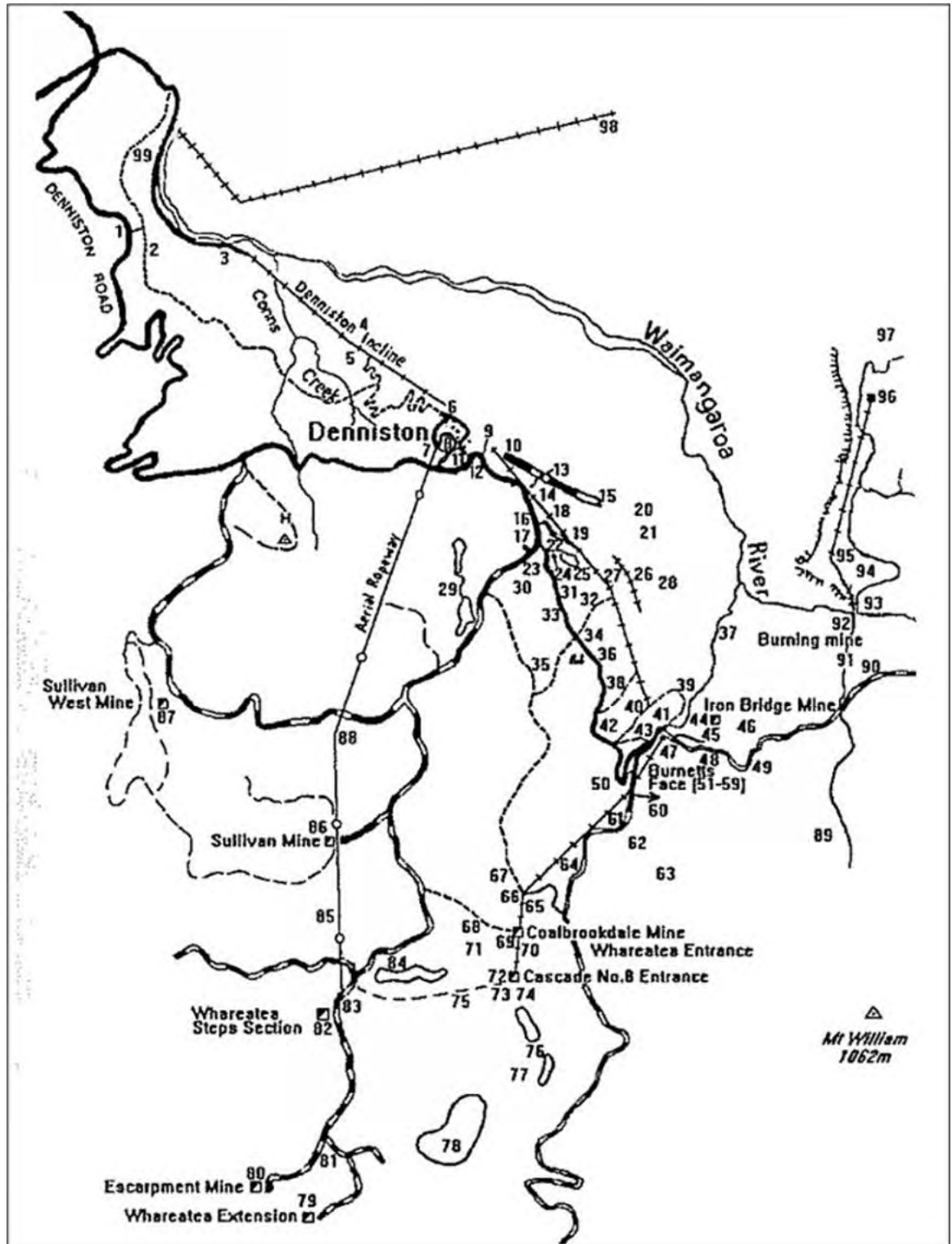


Figure 7. Map from DOC 'Denniston Concept Plan' showing the heritage features recorded on the Denniston Plateau (Wright 2001 for DOC West Coast Conservancy)

Māori Cultural Values

This historical and archaeological background report is part of an assessment of effects on archaeological and historic heritage values and does not include an assessment of Māori cultural values. It is noted that an assessment of Māori values should only be made by the tangata whenua and this has been provided by tangata whenua as a separate Cultural Impact Assessment (Te Rūnanga o Ngāti Waewae 2026). Māori cultural concerns may encompass a wider range of values than those associated with archaeological sites.

The historical association of the general area with the tangata whenua is evident from the recorded sites, traditional histories and known Māori place names. Te Rūnanga o Ngāti Waewae are the Papatipu Rūnanga with manawhenua in the Kawatiri (Buller) district (Te Rūnanga o Ngāti Waewae 2026:4). As with other areas of Te Tai Poutini (the West Coast of the South Island), occupation came largely as a result of the presence of the valued pounamu, and the coastal hills and plateau areas north of the Kawatiri (Buller) River were part of the larger network of trails, trading routes, pa and kainga sites, mahinga kai, and other areas of cultural significance (Te Rūnanga o Ngāti Waewae 2026:10; Tumahai Jul 2010:8).

Coastal areas provided tangata whenua with shellfish, the rivers primarily provided eels, whitebait and fish, and the river mouths were good places for cultivations. Bird-snaring parties regularly travelled along the inland rivers. Hunting parties from the Nelson area were known to travel down the Orikaka (Mackley) River, where the honey and seeds of the kowhai, rata, and miro on the river's banks attracted large numbers of kaka, tui, bellbird, pigeons and robins (Tumahai Jul 2010:8). At the Whareatea River a small pa was located on one bank, with a guest whare on the other to accommodate travellers from other iwi (Te Rūnanga o Ngāti Waewae 2026:10; Mitchell 1948).

Māori also came from Hokitika to the Orikaka River to hunt birds. These parties were known to secure large numbers of birds during such trips; enough for their winter supply (Mitchell 1948). The abundance of mahinga kai in this area is evidenced by the names of waterways in the vicinity of the Waimangaroa valley, including Weka Creek, Kiwi Creek, Keruru Stream, and Orikaka, which is likely associated with the abundance of forest birds along the waterway, in particular kaka (Te Rūnanga o Ngāti Waewae 2026:10). Customary title over the area evidenced by the wahi ingoa, or place names, that mark the landscape (Tumahai Jul 2010:23).

Trails linked Ngāti Waewae settlements to the social and economic life of the tribe and tied them into networks of trade which extended well beyond the South Island. Trails were not just routes across terrain; they had to follow food resources. Knowledge of the route included knowledge of safe routes, camping places, safe places to cross the river, and the locations of food and other resources (Tumahai Jul 2010:29).

Coastal and inland trails in this area were well known to Māori and also used in later years by early European travellers and their Māori guides. The Kawatiri trails are also nearby, connected to trails that used the Māwhera (Grey), Inanaghua and Kawatiri Rivers as an inland route from Arahura to Nelson (Tumahai Jul 2010:23). In addition, early Europeans reported a Māori trail up the Orikaka and over the range to the Waimangaroa as an alternative to the lower Buller Gorge (Department of Conservation 1998).

The extensive knowledge, use of and relationship of Māori to this area was evident to early Europeans such as Heaphy and Brunner, who were taught by tangata whenua how to live off what the land and sea could provide. On his journey down the Poutini Coast trail to

Kawatiri River, Heaphy's party was fed at the Ngakawau River by travellers from Arahura (Te Rūnanga o Ngāti Waewae 2026:10; Jolly Feb 2003:12).

Historically many whanau of Ngāti Waewae would go on to maintain a strong presence on Te Tai Poutini undertaking mahinga kai, explorations with Pakeha surveyors and participating in the various industrial activities of pākeha settlers, including farming and mining.

Ngāti Waewae were to continue their mastery of mineral knowledge by re-prospecting their lands and providing pākeha with information on gold and coal deposits. There are multiple accounts of Māori travellers delivering gold and coal samples to the colonial office in Nelson. As the mining activity proliferated, Tai Poutini Māori were active participants. Adjacent to the Stockton plateau is the Waimangaroa catchment, bearing the placename Korakoranui within it. This place name was bestowed by Māori working on a mechanical incline to transport coal (Te Rūnanga o Ngāti Sep 2022:8-9).

There are currently no known archaeological sites of Māori origin recorded within the BPCP. The project footprint does not include any wāhi tapu sites known to Ngāti Waewae (Rūnanga o Ngāti Waewae 2026:25). However, the absence of evidence is not necessarily evidence of absence. Particularly, as much of the historic mining evidence and disturbance is associated with underground mining on the Denniston Plateau.

ESCARPMENT EXTENDED

Monocable Aerial Cableway (K29/59)

Historical Background

The Monocable Aerial Cableway was an electrically powered monocable aerial system designed by the British Ropeway Engineering Co. Ltd of London and built in 1950-1953 by the Public Works Department, Westport, and the State Mines Denniston engineers to transport coal from the distant Whareatea and Sullivan Mines to the Denniston Brakehead (Figure 7 and Figure 8). It replaced the surface rope road. The aerial ropeway was itself replaced by road transport in 1968.

The cableway was 2.29 miles (3.68km) long, comprising drive and loading stations at the Whareatea end (Figure 9), an intermediate loading station at the Sullivan Mine bins (Feature 27) (Figure 10), an angle station 1.29 miles (2.07 km) from the Denniston Incline brakehead, a terminal tower inside the brakehead bins and 38 support towers. The towers ranged in height from 16 to 72 feet (5 to 22m), the majority between 26 and 56 feet (8 and 17m). Steel buckets of 15 hundredweight (762kg) capacity spaced 182 feet (55.5m) apart on a rope travelling at 12 miles per hour (7.4 km/h) delivered 100 tons (101.6 tonnes) of coal per hour to the brakehead. The system carried coal from the Whareatea, Sullivan and Escarpment mines to the incline brakehead from 1954 until 1968, when it was abandoned and gradually scrapped. There were still 14 standing towers in 1982 (Sumner and Sumner 1983) but most were taken down for steel to build supports for hydro pipes at the Whareatea (Paul Comeskey, pers. comm. in Watson and Wright May 2004:26).



Figure 8. At the brakehead end of the aerial, a complex system kept the cable taut. Many elements of the tensioner (Feature A40) remain, including the large wheel (inset lower right) visible in front of the tower. (Photo courtesy of Brian Kerr. In Watson and Wright May 2004:88)

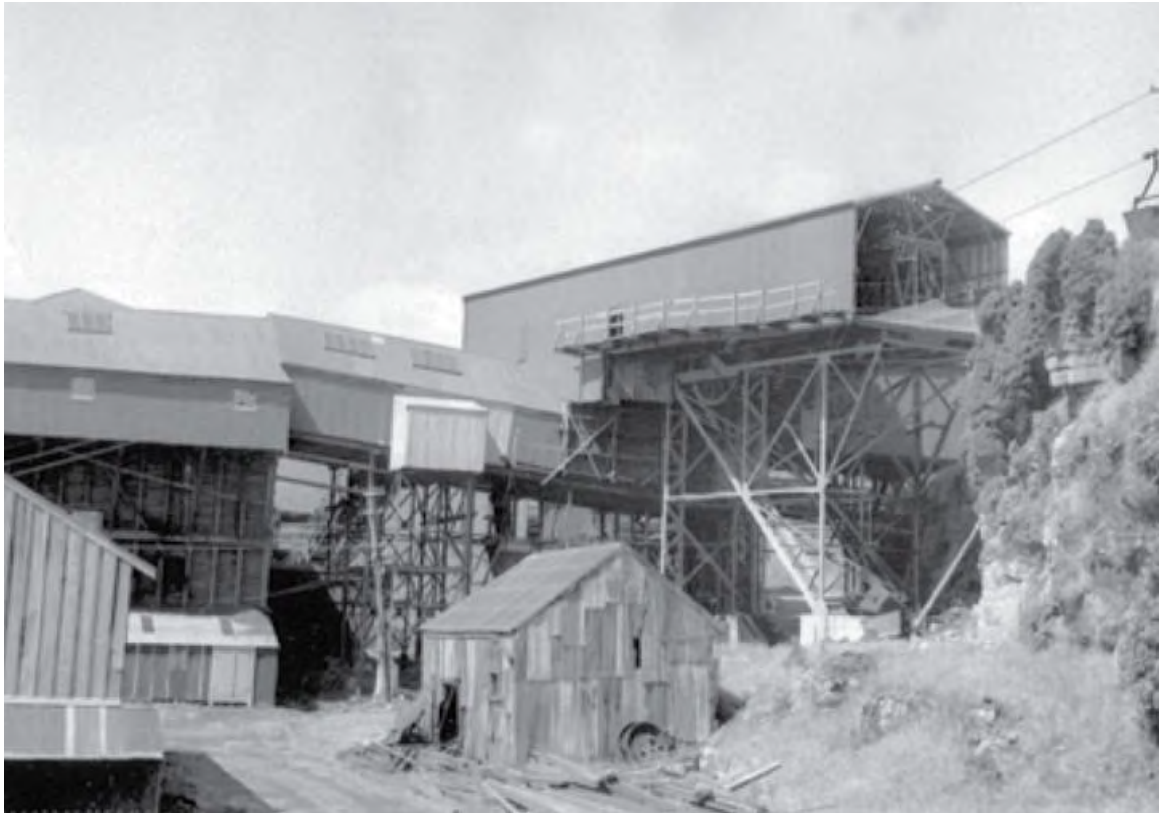


Figure 9. The aerial cableway drive station (Feature A1) at the Whareatea Mine (1950s)
(<https://www.doc.govt.nz/globalassets/documents/conservation/historic/by-region/west-coast/denniston/journey-through-denniston>)



Figure 10. The Sullivan Mine Loading Station with the aerial cableway towers in the background
(<https://www.doc.govt.nz/globalassets/documents/conservation/historic/by-region/west-coast/denniston/journey-through-denniston>)

Whareatea Mine (K29/72)

Historical Background¹²

(see Figure 11 - Figure 19)

The name 'Whareatea' was first used for a section of the Coalbrookdale Mine. Coalbrookdale opened in 1889 and the Whareatea section opened in 1903 (Figure 4) (Watson and Wright 2004: 10, 12). The Whareatea became a mine in its own right when a new working entrance and associated infrastructure were established next to The Steps (which had previously functioned as the entrance to the Whareatea section of the Coalbrookdale) in 1953 (L. Wright, pers. comm. in Watson and Wright May 2004).

Whareatea Mine was an underground mine that was operational from 1926 to 1988, progressing through three stages as The Steps entrance to the Whareatea section of Coalbrookdale (1926-1953); Bord and pillar mine (1953-1971); and a hydro mine (1982-1988) (with water initially supplied from the historic Escarpment Mine but later from Lake Brazil). It can be contended that the Whareatea Mine actually went through four stages of development, with an earlier one prior to The Steps being built. From 1907 the mine was known as the Whareatea section of the Coalbrookdale Mine (Wright 2008:41; Sumner and Sumner 1983:97).

Each stage involved a different set of above-ground infrastructure. The first stage required the least infrastructure and at this time the area appears to have consisted of little more than The Steps entrance and the road to the entrance. This road was put in prior to The Steps being opened and was used to transport the miners to and from work.

Following the State takeover of the Westport Coal Company there was a considerable amount of investment in the Whareatea, and this area became the main mine portal rather than just The Steps entrance (which became a fan drift rather than an entrance). To this end, a new entrance was driven and a coal transport system built. This consisted of a conveyor to carry coal from the mine to a hopper, from which a second conveyor then carried the coal to the bins (Figure 12 and Figure 13). From the bins, the coal was loaded onto the aerial cableway and carried across the plateau to the Incline brakehead. These first bins were also used by the Escarpment Mine from 1963 and by private parties working in the area. There was a change to the coal transport system in 1968, with the closure of the aerial cableway. At this point, new bins were built and received coal directly from the first conveyor (Figure 16). Coal was loaded into trucks from the new bins and carted across the plateau. Following closure of the mine in 1971, the original bins were demolished and the second bins removed (evidence of both remains). Horses were also used in the mine during this period.

The re-opening of the mine in 1982 with a new technology saw a revamping of the facilities at the Whareatea and few of the structures associated with the 1954-1971 period remained in use. The same entrance continued to be used and The Steps continued to function as a fan drift, as well as being used for three pipes associated with the hydro system (Figure 15). Two of these pipes were used for carrying out coal and waste material while the third was used for returning water to the sump. The conveyor that had been used to carry coal from 1954-1971 was replaced with a stone conveyor. Coal was now transported from the mine (via The Steps) to a boil box and then along a distributor to the dewatering pads. The water was flumed away from here. Once dewatered, the coal was loaded into trucks with a

¹² Primarily sourced from Watson and Wright May 2004.

front-end loader. Water for the hydro mining was initially brought in from the Escarpment and later from Brazil's Dam (after the water supply from the Escarpment proved inadequate), which had been built for hydro mining at the Escarpment. Before entering the mine, the water passed through a fines filtration tank. There was also a fines settling pond during the hydro period, used for recovering fine coal.

In 2013 Buller Coal Limited (BCL), a subsidiary of Bathurst Resources, was granted an access arrangement with the Minister of Conservation for opencast coal mining on the Denniston Plateau (Escarpment Mine) within Mineral Permit 51279. Resource consent was approved for the upgrade and use of the Whareatea Road with consent conditions requiring the road avoid the historic features adjoining the road within the Whareatea Mine (Watson May 2012; Bathurst Resources Ltd Apr 2015).



Figure 11. Whareatea miners Jack Cockfield (left) and Charlie Neighbours, who set production records during the hydro era (source: 'New Zealand Coal' Vol. 30: No. 2, Winter 1986 in Watson and Wright May 2004)



Figure 12. Whareatea c.1960 with the mine conveyor gantry running from the building at the mine entrance in the middle background to the left. The early underviewers' office is to the right of the entrance and the early workshop is at right (Department of Conservation, Westport in Watson and Wright May 2004:65)



Figure 13. Southward view at Whareatea showing the conveyor gantry with the higher roof built to accommodate the modifications of 1968 at left and the truck loading hoppers just visible below it. Left of the post carrying the 'Whareatea' sign is a footbridge spanning the creek. The mine entrance building is in the right background. (Friends of the Hill in Watson and Wright May 2004:65)



Figure 14. A northward view of the Whareatea fines filtration tank with flumes from the Escarpment (left) and Whareatea pads visible, along with hydro pipes and the pump shed at left. The mine offices and workshop and the storeroom on the stables' foundation are farther back, left of centre beyond the hydro pipes from the mine. (Solid Energy, Westport, photo B2002 in Watson and Wright May 2004:71)



Figure 15. Steps fanhouse during the 1980s with hydro pipes running from the fan drift. In the centre background are the office and workshop, with the store on the stables' foundation beyond and the winch shed at right. In the foreground is the small lean-to pumphouse with a pipe from the dam out of picture at left. (Solid Energy, Westport, photo B2003. in Watson and Wright May 2004:62)



Figure 16. Loading coal from the Whareatea pads. The truck is standing on the lower part of the apron, from where the photo above was taken. (Solid Energy, Westport, photo B2007 in Watson and Wright May 2004:69)

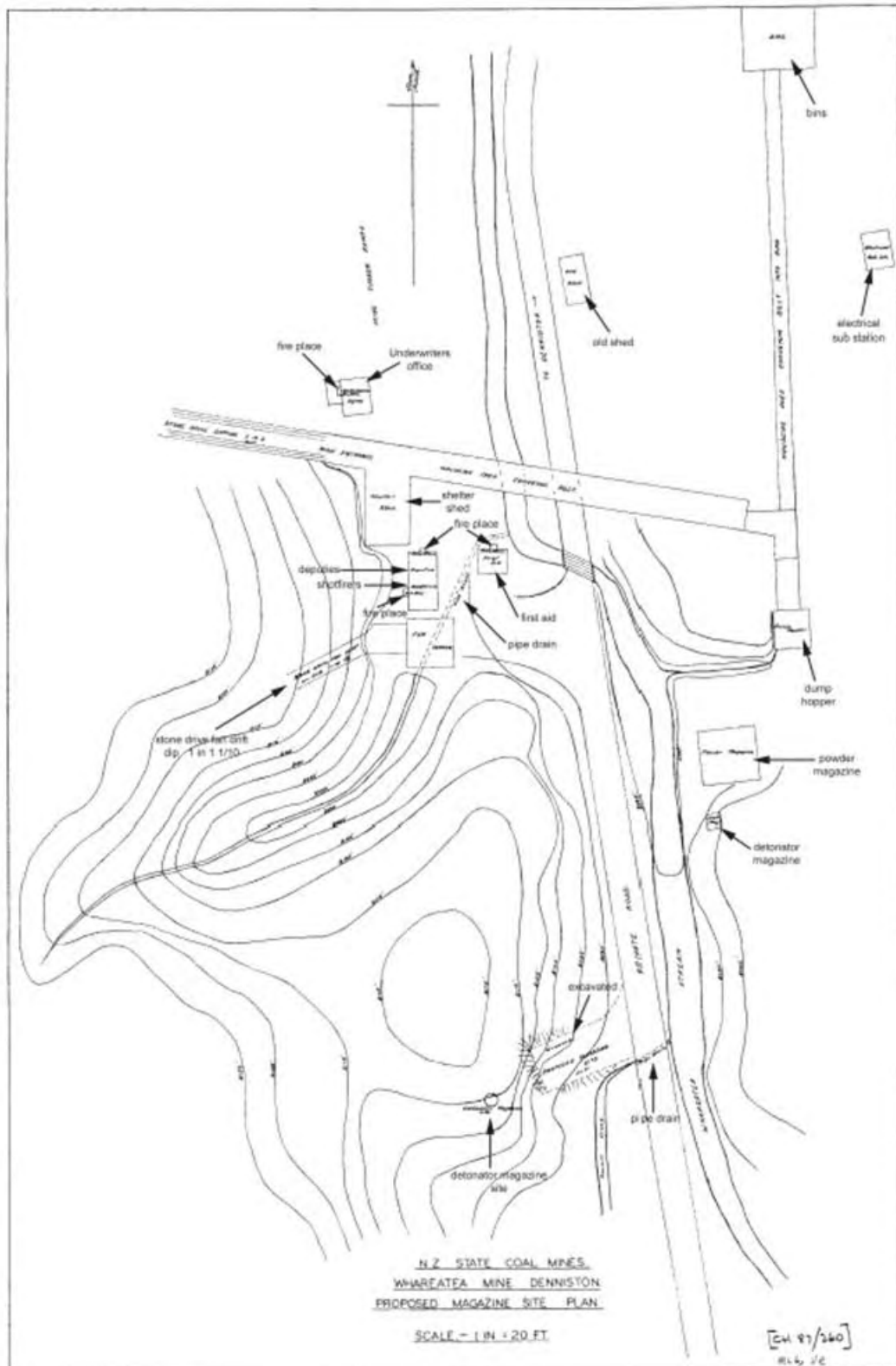


Figure 17. Whareatea Mine surface layout site plan, pre-1968 (CH87/260 Archives New Zealand)

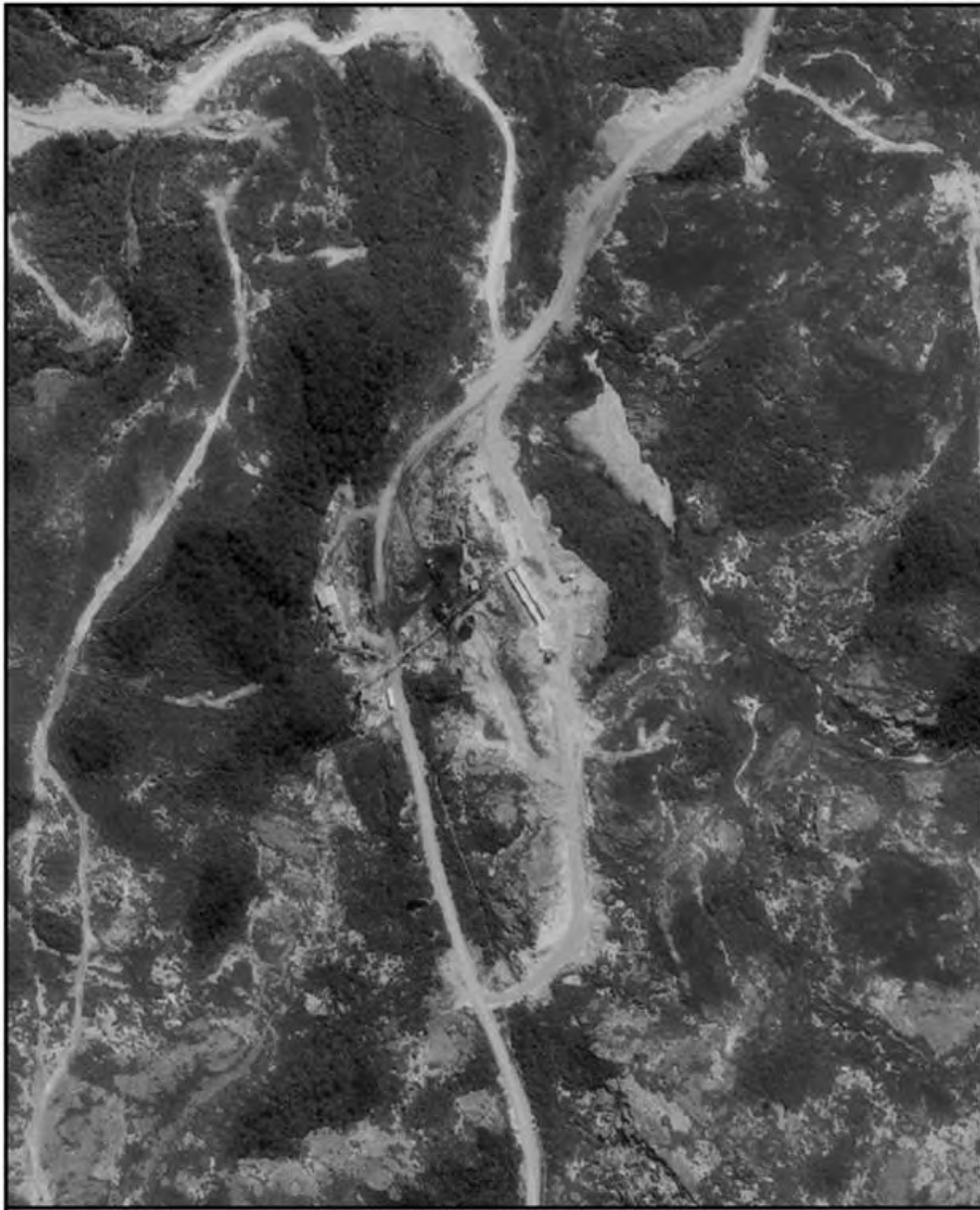


Figure 18. The Whareatea Mine surface remains in October 1982 (source: NZ Aerial Mapping Ltd in Watson and Wright May 2004)

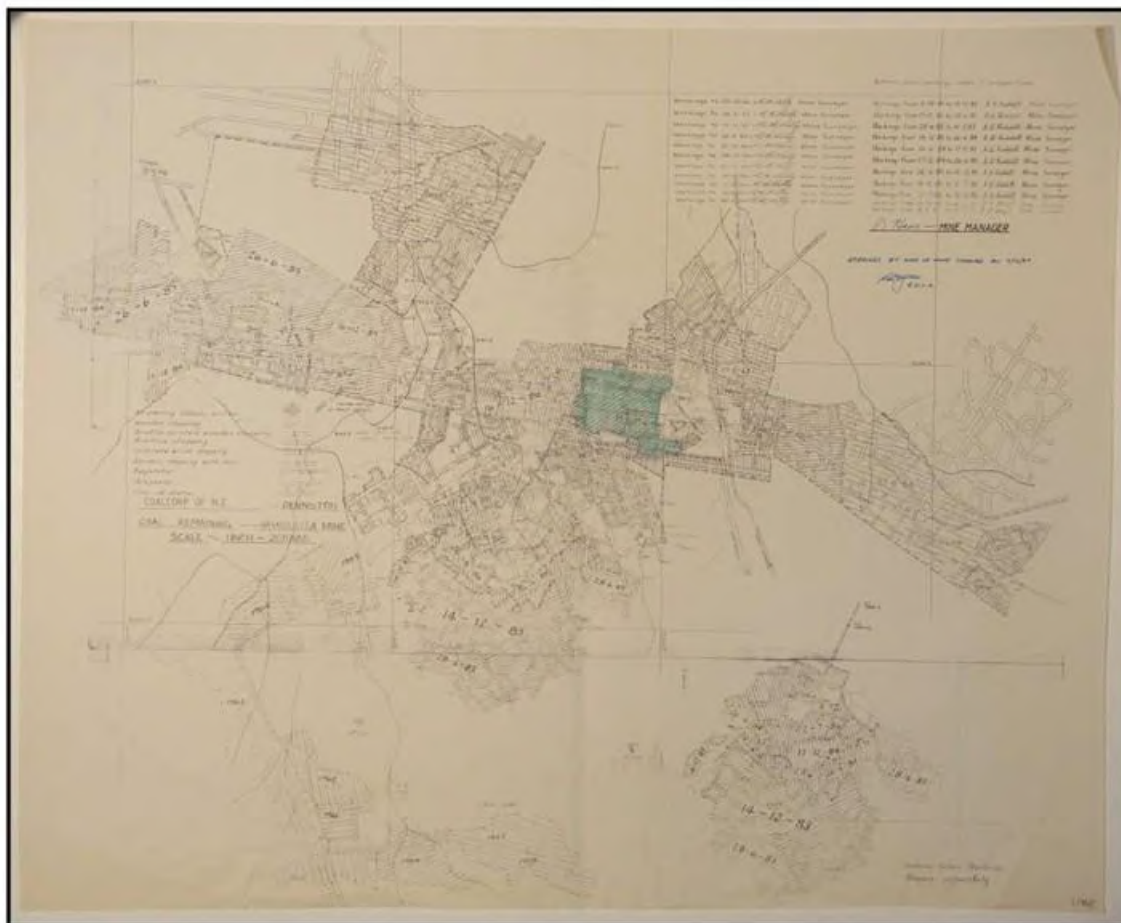


Figure 19. The extent of the Whareatea workings when the mine closed, December 1987 (source: CH851/78d, Archives New Zealand)

Sullivan Mine (K29/98)

Historic Background¹³

(see Figure 20 - Figure 22)

The Sullivan Mine is a 20th century underground coal mine. It was opened in 1953 approximately 1.6km north of Whareatea Mine along the Monocable Aerial Cableway System, which ran through the Sullivan bins to pick up the coal (Figure 4). It was the first fully mechanised mine in New Zealand, using belt and chain conveyors underground, rather than the old hand trucking rail system, and delivering it to the surface via another conveyor, similar to the system used at Whareatea.

As the workings spread westward a new entrance was made in the valley of Rapid Creek in 1980, giving miners a shorter underground journey to their workplaces. Being about 60m lower than the old entrance it clearly presented possibilities for hydraulic mining as well. Four years later a stone drive was put in a short distance downstream and by 1986 a new hydro mine, named the Sullivan West, was in full production.

¹³ Sourced primarily from Watson and Wright May 2004

When production ceased at Sullivan West (K29/99) in late 1996 it was placed on ‘care and maintenance’. Equipment was salvaged for use at other sites and items of historic value were given to museums. Decommissioning work began at the Whareatea and Sullivan mines in July 1998, with the sealing of portals and demolition of unsafe structures. This work was suspended the following month as remaining manpower and equipment were relocated to Stockton.



Figure 20. Sullivan bins from the east in 1984 with conveyor gantries to the mine behind and the truck bin at right. To the right of a gantry support, about the centre the mine conveyor tensioner is visible although mostly obscured by the truck bin gantry. Aerial towers still stand on top of the bins. ('New Zealand Coal' Vol. 28: No. 1, Autumn 1984. In Watson and Wright May 2004:74)



Figure 21. A view down the Sullivan Mine entrance late in the mine's life, with the rails at centre and conveyor at right. Materials and equipment were stored in the large entrance shed (Solid Energy, Westport, photo B2020. In Watson and Wright May 2004:74)



Figure 22. The Sullivan Mine winch shortly before removal from its foundation (on site but not in situ). The winch shed has been destroyed (Watson and Wright May 2004:77)

UPPER WAIMANGAROA HAUL ROAD

Iron Bridge Mine (L29/98)

Historical Background¹⁴

The Iron Bridge Mine is the beginning of the workings which extend to the Burning Mine, Kiwi Mine, over the Waimangaroa River and up the flanks of Mt Frederick (Figure 4, Figure 23 and Figure 24). In 1882 the Banbury Mine was driven right through to Burnett's Face from where more developments began, including the Iron Bridge and Coalbrookdale mines. The Iron Bridge, which was to give the mine its name, was under construction across Burnett's Creek (also called the south branch of the Waimangaroa River) in 1887 (Figure 25).

In November 1888 the mine was being worked by 62 men in conditions of poor ventilation. By the following year the ventilation had been upgraded and the Iron Bridge Mine was providing most of the Westport Coal Company's production. Trade picked up and in 1895 91 men were at work in the mine. Their production was increased in 1896 by the use of electrically driven pick holing machines. However, these machines were not totally satisfactory and in 1897 they were supplemented and eventually replaced by air-driven picks.

The workings of Iron Bridge Mine substantially expanded by 1899, reaching the area at present showing most fire activity (Burning Mine) south of the Waimangaroa River to the haul road (Figure 26 and Figure 27). A bridge spanning the Waimangaroa River to reach the outcrops on the opposite bank was built. The coal was lowered under the force of gravity to the level of the old mine and then conveyed by horse and attached to the Iron Bridge endless haulage rope. At the same time the Kiwi Compressor was constructed in a central position to supply power to the workings. The expansion was such that extra steam power was added in 1901.

The rapid expansion continued in 1902 when a Schiele fan was erected and major reorganisation of the haulage system began. A 'New Track' (Cedar Creek Road) connecting Denniston to the Waimangaroa was opened and there were extensive tunnel and bridge works to deviate the Iron Bridge main haulage line from the mine to a central loading station on the Coalbrookdale main line at Burnett's Face, where it was transferred to the main overland ropeway to the Denniston Brakehead. Two steel-girder bridges spanned the Burnett Stream – one to a new Iron Bridge Mine entrance, the second over Cedar Creek Road.

The miners were working an exceptionally thick seam known as Big Pillar as well as the Kiwi sections at this time. In 1904 another section – the Dundee Dip – was heading towards Mt William. By 1905 the bridge over the Waimangaroa River was proving inadequate to handle the coal available in the Deep Creek sections. It was planned to upgrade facilities, but this would be expensive and difficult and was not expected to be completed until June 1907.

In 1922 Deep Creek sections were responsible for the greater part of the mine's output. Many surface jigs (a two-ended rope haulage system) were in use, during the year, one of

¹⁴ Primarily sourced from Sumner and Sumner 1983; Wright 2001; Bruce-Smith 2022.

which was going towards Taipo. In addition, three huts and a residence for the deputy were erected near the workings. However, five years later the concentration of effort had switched back to the older workings of Kiwi, No.1 Pillar, Young's and Kruger's and by 1928 premonitions of the fires that were to make working of the mine impossible occurred when there was a serious fire outbreak in Kruger's.

World War I marks virtually the end of major development of the main Iron Bridge Mine, Kiwi, Deep Creek and Taipo sections. However, coal extraction from the various sections of the newer and older parts of the mines continued to World War II. Spontaneous combustion fires in the older workings, a problem since the 1920s in the Iron Bridge Mine, forced its closure in 1944. The Kiwi and Young's sections were the last areas worked. The salvage of materials was completed early in 1945. In 1952 the fires had intensified over the whole mine area and the Mines Department in response had trenched Ehlers and Little Waimangaroa Creeks and diverted them into the workings.

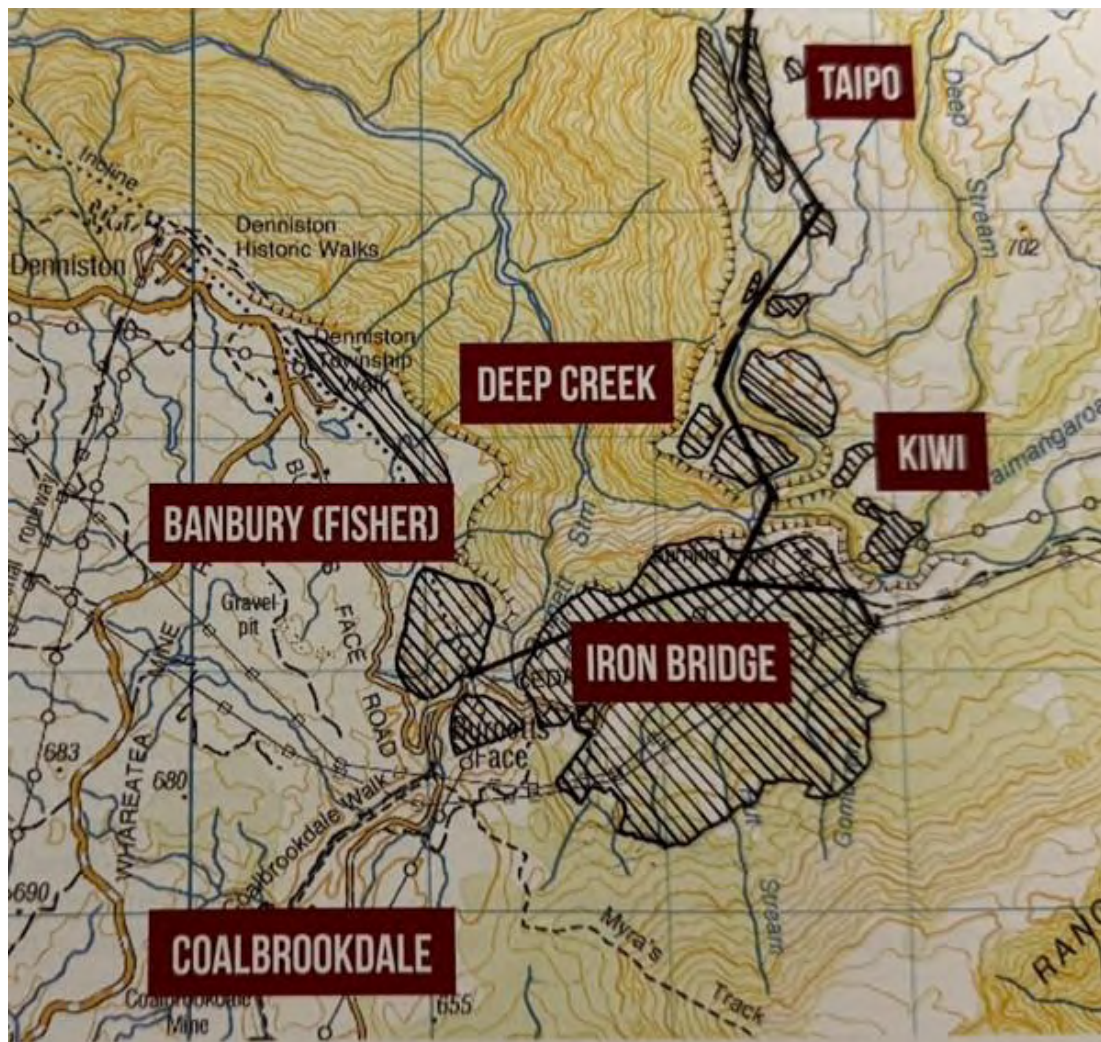


Figure 23. The location and extent of the Iron Bridge, Deep Creek, Kiwi and Taipo underground coal mine workings (black hatching) (source: Bruce-Smith 2022:19)

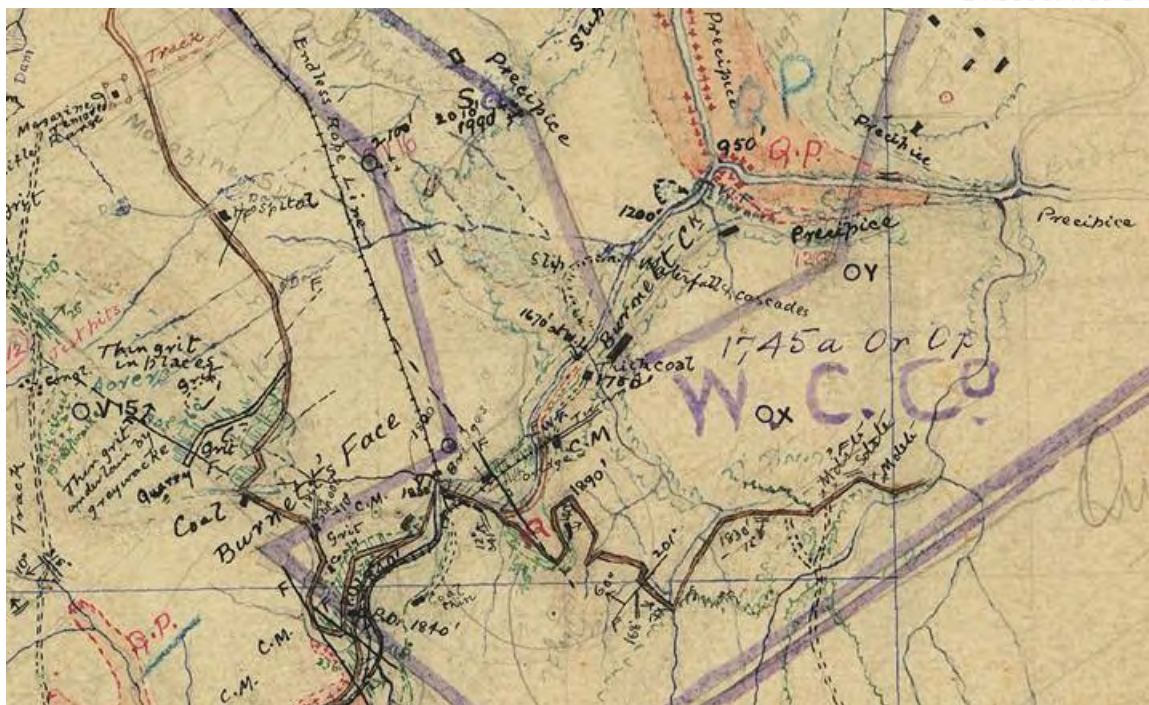


Figure 24. Detail from a plan 'Kawatiri District South East Sheet' (n.d) showing the Iron Bridge Mine east of Burnett's Face and Burnett Creek (source: Bathurst Archives)



Figure 25. Entrance to the Iron Bridge Section, Denniston (Photographic Collection Ref: 1/2-190085-G [PColl-10563-121-019) Alexander Turnbull Library)



Figure 26. Looking down on Iron Bridge Mine infrastructure. On the left is a toilet, left is the blacksmith's shop and stables, an iron-roofed mine entrance in the centre and a white bathhouse in the right. The bridge on the right goes to Burnett's Face (source: Bill Andrew Collection, Friends of the Hill)

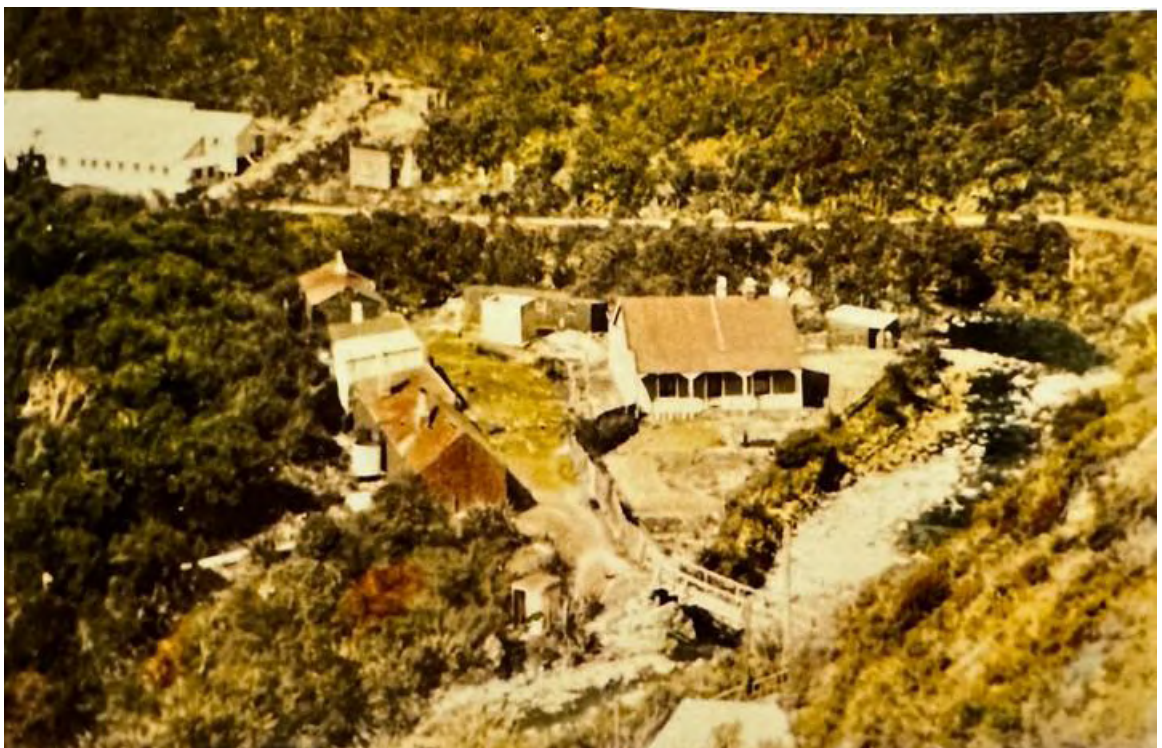


Figure 27. Looking down on the Cedar settlement in the bow of the Burnett Stream. Cedar Creek Road is on the right and Iron Bridge bath house is on the top left (source: Bill Andrew Collection, Friends of the Hill)

MOUNT FREDERICK SOUTH

Koranui Mine (L29/14)

Historical Background¹⁵

The Koranui Coal Mining Company was one of a number of coal mining ventures that developed in the Buller region during the 1860s, 1870s and 1880s to exploit the coal deposits recorded by Haast and Burnett (Figure 4). The Koranui Mine and its incline were a short-lived affair, but its story is much more than a story of a small, failed coal mine. The mine, and its assets, were to become an important bargaining chip between the Union Steam Ship Company and the Westport Coal Company.

Coal mining alongside the Waimangaroa River had begun by 1874, with drifts in the area worked by at least three parties. One of these drifts, worked by Sim and Mulholland, developed into the Wellington Mine, which was producing coal by 1877 (Morgan and Bartrum 1915: 32). This mine was located on the north bank of the river. At the same time, companies were beginning to attempt to mine on the Denniston Plateau, with both Cable, Drummond and Company and the Coalbrookdale Company taking up leases in the 1870s (McLean 1990: 87).

Eventually, sufficient pressure was brought to bear on the Government and work on the Mt Rochfort Railway began in 1874. The section of railway from Westport to Waimangaroa was complete by 5 August 1876 and the line was opened as far as Ngakawau on 26 September 1877 (Meyer 2008a: 9-12). Work began on a second, branch railway line in 1875. This line ran from Waimangaroa up the Waimangaroa River (on the true left) to a point opposite the Wellington Mine. It was built by the Wellington Coal Company to enable them to transport their coal (and later coke) to the port. Following the completion of the branch in 1877, the Wellington Mine entered into an agreement with the Government about the operation of the line. The Government was to supply the rolling stock, motive power, keep the line at the correct level and work the line while the company would take care of the line maintenance (Meyer 2008b: 16). The Westport Colliery Company began work on the extension of the branch line to the bottom of their incline (the Denniston Incline) in 1878, the same year that work on the incline began (Meyer 2008b: 19).

Amongst those who invested in the potential coal resources of the Waimangaroa area in the early to mid-1870s was a group of men who held a prospecting licence adjacent to the Wellington Mine. These men took up a second licence in the same area, but on the other side of the Wellington Mine, in 1875, giving them a total of 3,278 acres in the area. In September 1875 the licence-holders, who included Organ and Humphrey (no first names supplied), proposed allowing others to buy into the licence and then use the funds raised to commence prospecting in the area (*GRA* 29/9/1875).

Nothing more was heard of this area until a lease was granted to the Koranui Coal Company (at this stage a private venture) in November 1876 (*GRA* 11/11/1876). By the second year of the lease the leaseholders were to be producing 10,000 tons of coal. The quantity of coal produced was then to increase by 5000 tons every year for five years (*WCT* 23/1/1877). Shortly after this a decision was made to form a public company and the prospectus

¹⁵ Primarily sourced from Watson Dec 2009; Sumner and Sumner 1983.

appeared in newspapers around New Zealand in April 1877 (*GRA* 8/3/1877; *WCT* 2/4/1877). Amongst the provisional directors listed in the prospectus were the aforementioned Humphrey and Organ, as well as J. Henry, a Member of the House of Representatives; H. Jones, manager of the Bank of New South Wales; and J. Mills, of the Union Steam Ship Company and one of the few non-Westport directors. The company was to have capital of £25,000, in 5000 shares of £5 each. The prospectus estimated that the lease contained 3,600,00 tons of coal, which it proposed to transport to Westport via a tramway, the Wellington Mine's branch railway and the Mt Rochfort Railway. The prospectus also noted that the Westport harbour was of a suitable depth for large ships (*WCT* 2/4/1877).

Selling shares in the new company proved difficult. On 1 June, the *Grey River Argus* described the company as 'so nearly a failure that it is a doubtful point whether operations should be started on the small capital subscribed, or abandoned altogether' (*GRA* 1/6/1877). However, John Rochfort began the survey for the Koranui Incline in October (*GRA* 5/10/1877). The company was not floated, however, until December 1877 or early 1878, at which time the promoters felt that there was sufficient capital to do so, although subsequent events would show this was not the case (*GRA* 14/12/1877). After a false start tenders for the construction of a 200 chain (4km) formation for the incline were called again in April 1879 (*GRA* 8/4/1879). This tender was let in two contracts, one for 125 chains (2.5km) and the other for 74 chains (1.5km), costing £1400 and £1000 respectively. There was an additional contract for the construction of a bridge across the Waimangaroa (£1050; *EP* 4/7/1879). A month after tenders were called for, the company placed 200 shares on the market to pay for these works (*EP* 17/5/1879).

Newspaper articles noted that a number of small-scale mines had started up in the Buller region in the preceding years (including the Koranui, the Albion, the West Wanganui, the Ngakawau and the Wellington) but that none had been particularly successful. They were hampered because of their small scale and the number of inexperienced, local shareholders who did not have sufficient expertise or funds to invest in the development of the mines (*GRA* 28/6/1879). Despite its various troubles the Koranui Coal Company was able to report at its annual general meeting in 1880 that 120 chains (2.4km) of the tramway had been completed.

In early 1880 the adjacent Wellington Mine fell victim to the poor quality of its coal, which was so friable as to be useless by the time it reached its market (*EP* 30/3/1880; Meyer 2008b: 16). By this time the Wellington Coal Company was managed by Captain W.R. Williams, who was also the owner of the Black Diamond Line, a shipping company set up to transport coal around New Zealand. Williams had become a director of the Koranui Coal Mining Company in 1879 (*EP* 31/5/1879, *EP* 29/3/1880). When the Wellington Coal Company went into liquidation at the end of March 1880, it was Williams who subsequently purchased the mine (at auction on 20 April) and its infrastructure (including the branch railway) for £4750 (*PBH* 21/4/1880).

Coal mines in the 19th century that did not have a ready market on their doorstep were reliant on rail and sea transport networks to distribute their coal. Captain Williams's involvement in the Wellington and Koranui mines was very likely to secure coal supplies for the Black Diamond Line, which initially operated solely in the coal trade but later expanded to carrying passengers and freight (McLean 1990: 85-95).

The Wellington Mine's branch railway was to prove significant in the early history of coal mining up the Waimangaroa, for whoever owned the line controlled access to the Mt

Rochfort Railway and thus to the port and markets. The owner of the line could also charge others – chiefly the Westport Coal Company – for the use of the line. This railway was no doubt the reason that Williams purchased the mine, for he does not appear to have mined any coal here. The Koranui Coal Mining Company was to purchase the Wellington Mine property from Williams later in 1880, no doubt to secure control of the branch railway and possibly at Williams's urging (*EP* 2/8/1880).

The year 1881 saw further development at the Koranui Mine, including the installation of a 40 horsepower steam engine and winding gear built by Richardson and Company, of the Phoenix Foundry. This engine was working by September 1881 and was fed by two 17 foot (5.2m) long boilers (*EP* 5/2/1881, 24/9/1881). Happily, the company had been able to report striking coal in its drive in October (*EP* 27/10/1881). Although 1881 saw a flurry of activity it was not until October 1882 that the tramway was opened. By the end of 1882, 133 tons of coal and 66 tons of slack had been extracted from the mine (*AJHR* 1883 H11: 24).

The Mines Inspector visited the mine in April 1883 and was moved to comment: 'My fears as to the backward state of the prospecting works appear to have been too well founded' (*AJHR* 1882 H11: 8). By this time, work was underway on the third drive, the earlier two having proved unsuccessful (*AJHR* H11: 8). By September, however, there were 40 men working at the mine, which had a daily output of 70 tons, and the company was building a boarding house on the plateau (*GRA* 4/9/1883). Output at the mine was to slow in the following months, however, as work focused on upgrading the incline (*GRA* 23/11/1883).

In spite of the fact that the company was now producing coal, its financial position had not improved. A further share offer was unsuccessful and in 1884 the company was wound up. Work at the mine did not cease immediately as it was mid-July before tenders for the purchase of the mine and its infrastructure were being called. The mine was advertised as having a 42 year lease dated 1 January 1876 over 660 acres and adjoining leases of 800 acres and 20 acres. Amongst the infrastructure were the incline, bridges, buildings and offices, engines, wire, ropes, horses and other plant, as well as the branch railway (*EP* 22/7/1884). The only tender received was from Captain Williams, who successfully purchased the mine for £16,500, the amount being equal to the total of the company's existing debts (*Star* 6/8/1884).

Williams then sold the Black Diamond Line, the Koranui Mine and the branch railway to the Union Steam Ship Company (USSCo) in June 1885. For the USSCo, the purchase of the Black Diamond Line would remove a competitor in the coastal trade, and the purchase of the mine and railway would give the company a powerful negotiating position with regard to the Westport Coal Company, which was by now in serious financial trouble (McLean 1990: 88-90).

The USSCo continued to operate the Koranui Mine and maintained high outputs (Figure 28). The high output of the Koranui mine meant that the USSCo required less coal from the Westport Coal Company – until this time the USSCo had been the Westport Coal Company's largest customer. The increased output also reduced the number of railway wagons available to the Westport Coal Company and the amount of space on the colliers, most (if not all) of which now belonged to the USSCo (McLean 1990:91).

The pressure was too much for the already struggling Westport Coal Company, and they entered into negotiations with the USSCo. By late August 1886 the negotiations had reached the point where the Westport Coal Company had agreed that the USSCo would

take over its colliers (of which there were three; *GRA* 25/8/1886). Negotiations continued, and in December 1886 the USSCo announced that it would cease operations at Koranui (Figure 29). In February 1887 the USSCo finalised its relationship with the Westport Coal Company. It purchased the latter's three colliers for £25,000 and sold the Koranui Mine and the railway line to the Westport Coal Company for £13,000. Hence forward, the Westport Coal Company would mine the coal and the USSCo would purchase much of that coal for its steamers and ship the remainder to market (McLean 1990:91).

The Koranui Mine has not been worked since the end of December 1886. Instead, the mine was abandoned and much of its infrastructure removed, whether at the time it was abandoned or subsequently. But for the involvement of Captain Williams and its association with the Conns Creek branch railway, the story of the Koranui would no doubt have been little different from that of other small coal mines of the Buller region, stymied by transport difficulties and small-scale investment, as described in the *Grey River Argus* in 1879.

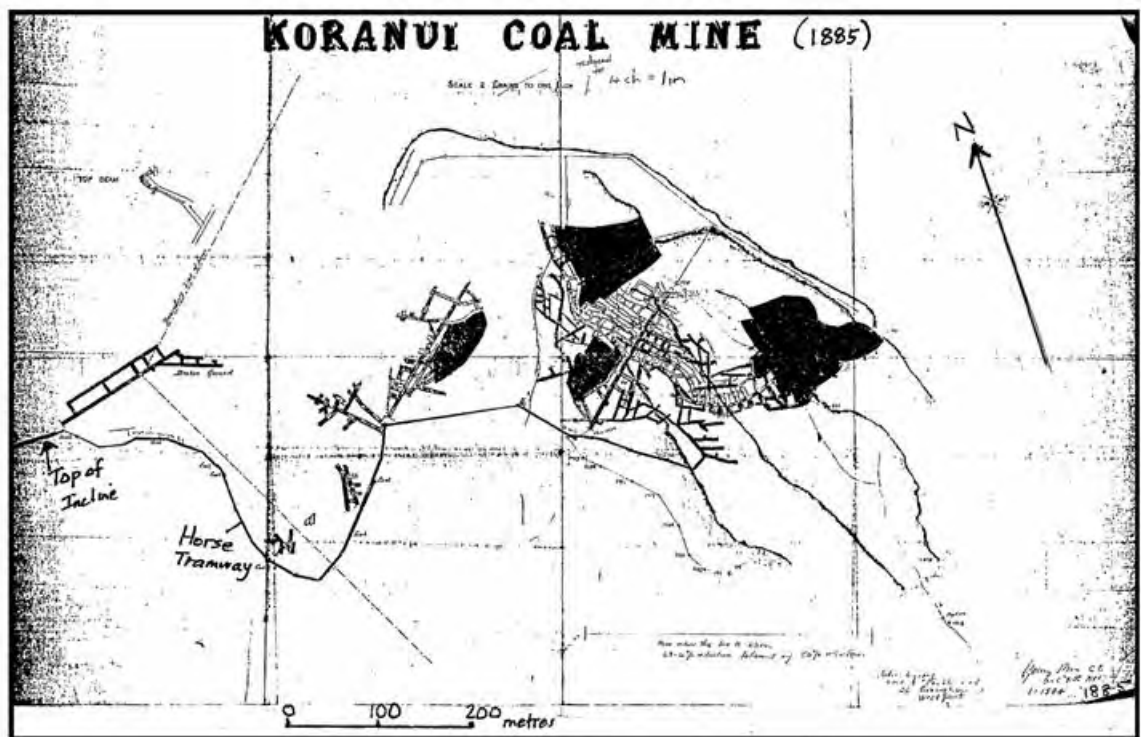


Figure 28. An 1885 map showing the Koranui Coal Mine, top of the Koranui Incline and the Horse Tramway to the mines (source: Solid Energy)

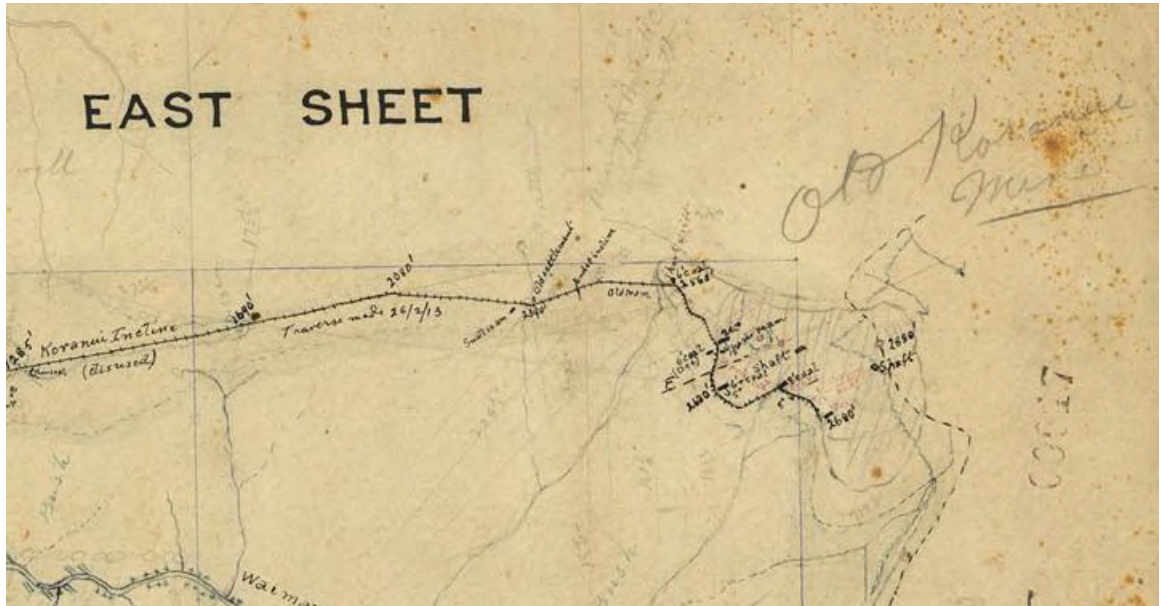


Figure 29. Detail from a plan 'Kawatiri District South East Sheet' (n.d) showing the top of the Koranui Incline and tramway with associated main drive and portals (source: Bathurst Archives)

Taipo Mine (Deep Creek) (L29/100)

Historical Background¹⁶

(see Figure 30 - Figure 34)

Taipo is the local name of the mine workings across (north) of the Waimangaroa River on the flank of Mt Frederick. This mine was worked and accessed as an extension of mining and a rope-haulage system associated with the Deep Creek and Kiwi workings of the Iron Bridge Mine (Figure 23).

The exploitation of the Deep Creek sections of the Iron Bridge Mine on the lower flank of Mt Frederick seems to have begun in 1899 when a wooden bridge was built across the Waimangaroa River from the Iron Bridge Mine. The bridge had a span of 30 foot (9.1m) and a gradient of 1 in 4.

By November 1905 the haulage road had been extended to the Waimangaroa River and preparations for erecting a girder bridge were under way. However, a rock tunnel and a bridge over Deep Creek were also necessary. The work was expensive and difficult and not expected to be finished until June 1907.

In 1914-1915 coal production was from areas north of the Waimangaroa River at Kiwi and Deep Creek. Areas of unworked coal in the direction of the old Koranui Mine at Taipo was being connected to the endless-rope haulage system (Figure 30).¹⁷ By 1916 a large area of coal awaited exploitation on the north side of the Waimangaroa towards the Koranui Mine; the extension of the necessary haulage arrangements was practically completed, but slow

¹⁶ Summarised from Sumner and Sumner 1983; Bruce-Smith 2022.

¹⁷ Mines Statement by the Hon. W.D.S MacDonald, Minister of Mines, *AJHR* 1916 Session I, C02, p.66.

owing to labour being unobtainable.¹⁸ In 1921 a main heading was planned to go north-west from the 47-acre block to Kiel's Flat and the Kiel's Flat section at Taipo was opened in 1924, with 20 colliers employed in the Deep Creek new mine sections.¹⁹ The coal from the Taipo Mine was lowered under the force of gravity to the level of the old mine and then conveyed by horse and attached to the Iron Bridge endless haulage rope.

By 1922 most of the Iron Bridge production was coming from the Deep Creek sections. The haulage was complete to the top of the 2 acre block. Many surface jigs (a two-ended rope haulage system) were in use during the year, one of which was going towards the 74 acre block. The section at Kiel's Flat was opened in 1924 with 24 pairs of colliers employed in the Deep Creek new mine sections.

The map notes on Figure 30 say that the jig and horse road went from the Iron Bridge main rope road inside the mine to the far side of Deep Creek bridge; it was designated for conversion to a rope road. A new portion of road would be made from the far side of the Deep Creek bridge to the fault at Area B.

In 1927, however, the older areas of the Iron Bridge Mine were producing most coal. Deep Creek consisted of small, isolated blocks or areas near the surface of the hill. The *NZ Geological Survey Bulletin* No .17 had noted in 1915 that:

‘In the watershed of Deep Creek, and on the higher slopes of Mt. Frederick, the coal is apparently in patches, separated by areas of erosion, or in some cases by ground in which the coal has thinned or been replaced by shale.’

In Deep Creek section, a dip stone-drive was put down in 1930, a distance of four chains from Kiel's Flat, to tap the bottom seam, which varied from 5 foot to 16 foot (1.5 to 4.9m) in thickness and which was of good quality (Figure 34). However, by 1931 the Mines Statement reports state that this development had been disappointing due to the appearance of stone bands in the coal. However, an improvement was now indicated. Pillar-extraction had been completed in the 24-acre section, and eight pairs of miners were engaged in solid work at the extreme end of the area in the bottom seam.

World War I marks virtually the end of major development of the main Iron Bridge Mine, Kiwi, Deep Creek and Taipo sections. However, coal extraction from the various sections of the newer and older parts of the mines continued until World War II.

¹⁸ Mines Statement by the Hon. W.D.S. MacDonald, Minister of Mines, *AJHR* 1917 Session I, C-02, p.77.

¹⁹ Mines Statement by the Hon. G.J. Anderson, Minister of Mines, *AJHR*, 1925 Session I, C-02, p.47.

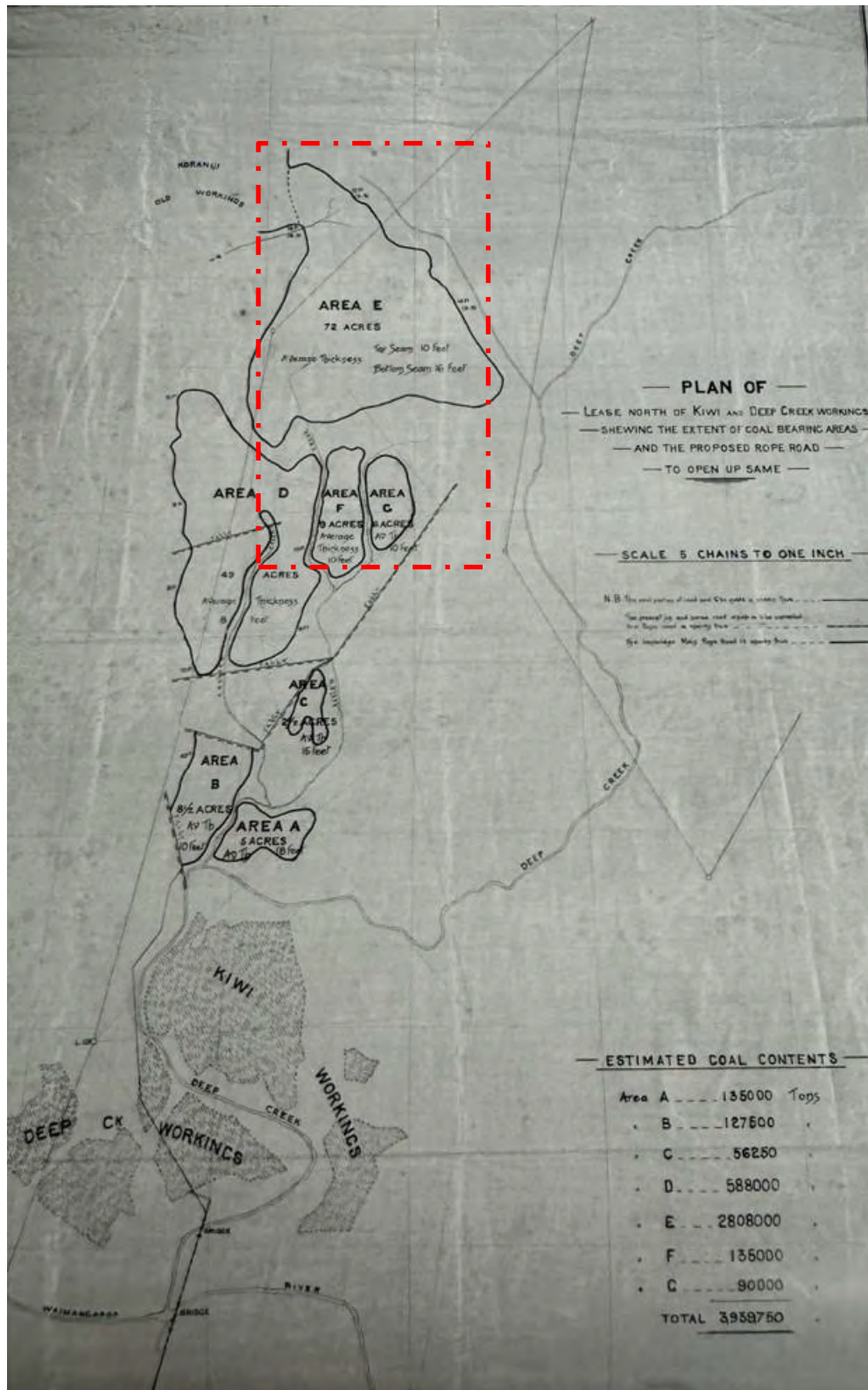


Figure 30. Buller Coalfield – Lease North of Kiwi and Deep Creek Workings showing the extent of coal bearing areas and proposed rope road to open up the same area. The approximate area of the Taipo Mine is outlined in red (Plan drawn by L.D.M. 3.4.1916 - Archives NZ/Te Rua Mahara o te Kawanatanga Christchurch Regional Office CAIM, CH87, Box 6/261: R183996381)



Figure 31. A group of miners at Taipo Mine. Left to right: B. Fleming, T. Roberston, R. Webster, B. Hannah, W. Smyth, R. Robertson, J. Hannah and H. Hughes (source: Friends of the Hill. Courtesy of R. Stephens, in Bruce-Smith 2022:62)



Figure 32. Kiwi Mine jig for the rope road (source: Series PA1-o-990, #20, Alexander Turnbull Library, Wellington)



Figure 33. Driving horses that hauled the coal bins with Earl Marr and Pat Webster at Kiwi Mine (source: Friends of the Hill, Denniston. Courtesy of R. Stephens, in Bruce-Smith 2022:59)



Figure 34. Detail from plan of Main Lease Iron Bridge (Jul 1945) State Coal Mines Survey Office, Granity, showing the Taipo Mine workings in the Deep Creek area (Bathurst Archives S00014403 / 04-01-012)

THE STOCKTON PLATEAU

General Historical Background

The background history of coal mining on the Stockton Plateau has been thoroughly researched and outlined by other authors in numerous other documents in greater detail, but is summarised here for context (see Bibliography).²⁰

See above, The Denniston Plateau General Historical Background, for a general mining history of the Buller Region.

The first mining in the immediate vicinity of the Stockton Plateau began in 1872, when a mine called the Albion was opened near Crane's Cliff where Mine Creek joins the Ngakawau River in the valley below the plateau. The coal was shipped in small vessels, which had difficulty entering and leaving the Ngakawau River. The Albion Company soon suspended operations mainly because of transport costs.

Surveys of the Buller Coalfield by Denniston, Cox and Cooper (1873-1878) established the existence of thick coal seams south of Millerton and based on their surveys the Westport Coal Company applied for, and was granted, a coal mining lease over most of what is now known as the Millerton Block.

Other mines developed in the area during the 1870s – 1880s, including on the Waimangaroa River (the Wellington and Koranui mines). Of note is the formation of the Westport Colliery Company in 1878. The first mine worked by this company was the Banbury Mine (known initially as the Fisher Mine) near Denniston. In September 1881 this company morphed into the Westport Coal Company and continued to progress its works at Denniston, as well as purchasing the Koranui Mine in 1886 (Morgan and Bartrum 1915: 32-33). By 1890 the Westport Coal Company had a near-monopoly on coal production in the Buller area (Crawshaw 1998: 1).

It is not known when the Westport Coal Company took up its lease on the Stockton Plateau but the coal mining history of the Millerton-Stockton area dates from 1891, when construction of the Millerton Incline commenced.

The Millerton Incline carried the coal from the company's new mine on the plateau – known as the Millerton Mine – down to the bins, which would be built at what was to become the town of Granity. From here the coal would be railed to the port at Westport for shipping. It was to be five years before the first load of coal was brought down the incline. In the meantime, the incline itself had to be built (which proved to be more difficult than anticipated), as did the bins, screens and sidings at the base of the incline, a rope road to carry the coal from the mine mouth to the top of the incline, and various other elements of mining infrastructure.

Commercial mining at Millerton began on 30 June 1896 in the Eastern or Dip section of the mine (now known as the Old Dip section) (Crawshaw 1998: 4, 8). At the time when the Millerton mine opened, most miners were living in the small coastal town of Granity, at the base of the incline, with 39 miners living at Millerton, near the top of the incline (Crawshaw 1998: 11).

²⁰ Primarily sourced from Sumner and Sumner 1983; Watson May 2023; Henley 2005; Crawshaw 1998.

In 1898, the workings in the Old Dip Section hit the Jorgensen Fault. The decision was made to put a steep drive through the fault to intercept the coal seam to the south of the fault, in what would become known as the Mine Creek area. At around this time, a pack track was put in that went from Millerton to the point on Mine Creek where much of the mine's infrastructure was to be constructed (S. Henley, pers. comm. in Watson May 2023). Construction of this infrastructure began in 1899 and it was operational by 1901. Shortly after this, work began on a new rope road to carry the coal to the top of the incline (in order to replace the steep Old Dip rope road). The Mine Creek rope road was completed in 1909. The main drive south from Mine Creek reached Mangatini Creek in October 1906. Surface facilities were constructed here and mining to the south of the Mangatini Creek began two years later (S. Henley, pers. comm. in Watson 2007).

It was at around this time that the first threat to the Westport Coal Company's monopoly on coal mining on the Stockton Plateau occurred. The Westport-Stockton Coal Company was floated in 1905 and proposed mining the area to the south and east of the Westport Coal Company's lease. In spite of a prospectus 'full of extravagant claims' that were 'at best dubious and at worst plain falsifications', the company was successfully floated (Crawshaw 1998:19-20) and the mine was opened on 6 October 1908 (Morgan and Bartrum 1915:35).

One of the 'novelties' of the new company was its use of electricity, including to power a railway line, known locally as the Electric Loco Line. This was to carry coal from the mine (the Westport-Stockton mine) to the top of a self-acting incline (at 'Swampy Flat'). From Swampy Flat, the coal went down the self-acting incline to the bins at Ngakawau, the settlement that grew at the base of the incline and the Westport-Stockton Coal Company's equivalent to Granity. The original length of line was constructed in 1908 with the power being supplied by a powerhouse at Ngakawau (still standing). This was the first electric railway line in New Zealand (Churchman 1995:8). The Electric Loco Line would be used (almost without pause) until 1953 and the inception of the aerial ropeway (Crawshaw 1998:19-22; Henley 2005).

The next big year in the history of the Stockton Plateau was 1914, when World War I broke out and the production of coal (along with the number of men employed) reached the highest level in its history, 358,000 tonnes of coal and 587 men employed. Production on the plateau was not to reach this level again until 1989 (Henley 2005).

As Crawshaw (1998) tells it, the story of coal mining on the plateau throughout the early years of the 20th century was dominated by strikes and go-slows, particularly for the Westport Coal Company. Nonetheless, other developments at the mine continued. In the 1920s, the main coal producing areas were the Old Dip, Mangatini, Mangatini West and Mine Creek, which was the largest producer (Crawshaw 1998:47). The end of the 1920s was to signal the end of the 'boom times' for Stockton Plateau, as the Depression affected industries throughout New Zealand and the world and cleaner, cheaper fuels (that were less affected by the striking miners) were developed (Crawshaw 1998:55).

A third company commenced mining operations on Stockton Plateau in 1925, when the Westport Main Coal Company opened a mine that soon became known as the Rockies Mine. This mine was never particularly successful and had closed by 1936 (Henley 2005).

Alongside all this physical infrastructure were the settlements where the miners lived on the plateau. There were two of these, Stockton (1906) and Darlington (see Figure 36 for their locations). A 1919 survey plan of Stockton shows six houses at the town, along with

a boarding house and school (LINZ 1919). There were 60 children at this school by 1922, a number of whom travelled there via the loco line, which passed right next to both settlements (*GRA* 23/3/1922: 7; LINZ 1910, 1919). Miners also used the loco line to travel to and from work (*Press* 7/4/1919: 6). Darlington was established specifically for workers building the Electric Loco Line, beginning with 15 huts. The settlement quickly became known as Tin Town, as most of the huts were clad in tin (Sumner and Sumner 1983: 255).

The Westport-Stockton Coal Company's initial production rates were high, but fell after two or three years as the coal seam thinned to the east. In response to this, the company developed the C and D Tunnel mines, to the south of Mangatini Stream, which necessitated an extension to the mine's haulage system, and a bridge for the loco line was built across Mangatini Stream in May 1910, known as Mumm's Bridge. Horses, however continued to be the main means of moving coal underground (*AJHR* 1913 C2: 88). In 1913, work began at New Mine, which was further to the southeast, and led to a further extension of the Electric Loco Line, and necessitated the construction of No. 4 Substation.

In 1923 the company elected to replace both the Electric Loco Line and Incline with a flume that would carry the coal across the plateau and down to the bins (*GRA* 28/3/1923: 7). The flume was to be 6½ miles long (10.4 km), with a 10½ chain tunnel (211.2 m), and required a new bins site and a dam at Fly Creek (Crawshaw 1998: 49). The cost (at a total of more than £70,000, £60,000 more than estimated) was only one of the problems with the flume. After operating for just four months, the flume was abandoned and the company returned to using the Electric Loco Line. The Westport-Stockton Coal Company never fully recovered from the financial disaster of the flume, although they continued to mine on the plateau for some time (Crawshaw 1998: 49-50).

The Depression hit the coal mining industry badly. By the end of the 1930s, the Westport-Stockton Coal Company's profits were falling (Crawshaw 1998: 72). The onset of World War II must have helped the flagging profits, but not sufficiently, for on 26 June 1944, something of a bombshell was dropped – the government had purchased the Westport-Stockton Coal Company (*Press* 26/6/1944: 6). One of the changes on the plateau following the change of ownership was the first opencast mining, although underground mining continued for a time. In the early years of the State's ownership, pillar extraction was carried out in Fly Creek, the Webb underground mine was reopened (at 'D' Hill, which had been mined from 1923 to 1926) and an underground mine (called McCabe's) was opened in 1947. Meanwhile, opencast mining was being carried out at 'E' Hill (the Webb Mine; Henley 2005). Four years after the takeover of the Westport-Stockton Coal Company, the Westport Coal Company was also taken over by State Mines.

Following the takeover of both mine leases, the State embarked on the construction of the aerial cableway. The cableway had been planned by the Westport-Stockton Coal Company but, as with so many things, the war got in the way. Following the war, State Coal elected to proceed with the aerial and construction commenced in 1949 and completed four years later. In spite of early problems, the aerial cableway as a whole operated until 2001, when the section between No. 2 and No. 5 stations was closed, being replaced by trucks (Henley 2005). The remainder of the aerial cableway has since ceased to be used, although the aerial towers remain in situ.

In just over 20 years from the State takeover of the Westport Coal Company, the Millerton mine would be closed, having produced 10 million tonnes of coal. At the same time that this mine was closed, the Mt William underground mine was opened by State Coal Mines. This mine, which used hydro mining techniques, operated until 1980. Of the other mines

on the plateau, McCabe's was closed in 1969, Fly Creek in 1970, and the New Webb underground mine (which had opened in 1964) closed in 1971. Following the closure of the Mt William mine, all the coal was produced by opencast mining. Other areas have since been opened up on the plateau and the total coal production from the area to January 2005 was 38 million tons (Henley 2005).

Previous Archaeological Work

There has been a great deal of research and previous archaeological survey carried out on the Stockton Plateau, which is summarised here. This previous work was a main source of information on the historic heritage and archaeological sites on the Stockton Plateau and within the BPCP Area for this report.

A history of mining on the Stockton Plateau was written by Norman Crawshaw (1998) to celebrate one hundred years of mining on the plateau. This history, however, is best described as a 'labour' history, as it tends to focus on the history of relations between the miners and the mining companies. A pamphlet produced by Solid Energy (Henley 2005) provides information about the development and growth of coal mining at Stockton and Millerton. The *New Zealand Geological Survey Bulletin* No. 17 provides useful information about the early discoveries and mining of coal around Westport (Morgan and Bartrum 1915).

More detailed information on the operation of the mines is contained in the *Appendix to the Journal of the House of Representatives*. The Bathurst Archives hold a wealth of information on the coal mines on the Denniston and Stockton Plateaux, including Solid Energy files and resources.

A significant amount of archaeological recording has been carried out on the Stockton plateau, starting with the seminal work of Sonia and Terry Sumner in 1983 (Sumner and Sumner 1983). The Sumners surveyed the plateau as part of an archaeological survey of the Denniston and Stockton Plateaux, in the context of the possibility of creating a coalfields park. Although they did not enter this data into the NZAA site recording scheme (now known as ArchSite), Ray Hooker did some years later, updating some of the information at the same time.

Starting in the mid-2000s, as Solid Energy began to expand their mining operations, further archaeological work was carried out across the plateau, including survey and assessment of the effects on historic values by modern mining activities and infrastructure. These included surveys at the Cypress Mine, where the electric tramway crossing of Fly Creek; Plover Stream Dam, St Pats Dam and penstocks/flumes below dam were recorded (Hooker 1997, 2001); the Mine Creek Settlement (Watson 2007); Mangatini Settlement (Watson 2007a); Stockton Township (Watson 2010b); the Stockton Plateau Hydro Project (Watson 2008a); the 2-5 Haul Road (Mosley 2010); Stockton Liquid Energy Development (Watson 2009); and St Pats (Watson 2010a).

Other work included a draft concept plan for Millerton (Wright 2002), a summary of Stockton and recommendations for heritage sites (Henley 2006).

In 2009-2010 Watson undertook a topographic survey and archaeological investigation of part of the Mine Creek Settlement (L28/17) under Heritage NZ Authority prior to opencast mining by Solid Energy due to underground fires compromising access to the settlement. A preliminary investigation report has been completed (Watson Mar 2010).

In 2023 Watson carried out an archaeological assessment of the proposed Millerton North Water Infrastructure Project for BT Mining Ltd (Watson May 2023 Draft).

There has been less preservation of historic sites at Millerton-Stockton and Seddonville, but a 500-hectare historic and ecological reserve was established at Millerton in 2003 and added to in 2005 (by DOC and Solid Energy). Much of the infrastructure of the Millerton Mine lies within this reserve, including the portals of the Old Dip and Mine Creek mines, parts of the rope roads for each mine, the bathhouse and the pack-track.

Recorded Archaeological Sites

The New Zealand Archaeological Association's (NZAA) site record database (ArchSite) records a number of archaeological sites on the Stockton Plateau and in the vicinity of the Stockton Project sub-area (Figure 35 and **Error! Reference source not found.**). The number of sites is not exhaustive as it essentially reflects survey coverage and current knowledge, and primarily relates to the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) definition of an archaeological site (provided in Part 5 of this report). However, many sites recorded on ArchSite do not meet the HNZPTA definition of an archaeological site as they post-date 1900.

Like the Denniston Plateau it should also be noted that some recorded archaeological sites include numerous individual heritage places/features over large areas. While not recorded as archaeological sites, it is worth noting that many of the underground workings also remain in situ.

Many other historic heritage sites located on the plateau are not recorded on the ArchSite database because they post-date 1900 (the approach to recording post-1900 sites on ArchSite has not been consistent). Figure 36 is a plan of the Stockton Coal Mining Licence (CML) Historical Coal Mining plan, which is the result of a contextual study of existing archaeological and other heritage information on the entire Stockton Plateau.²¹

Under the discussion of the Stockton Project sub-area the recorded archaeological and other historic features in close proximity are mapped and discussed in more detail. The NZAA site record forms have been updated and new site records created for all sites that are discussed in the Parts 1–5 of the BPCP Archaeological and Historic Heritage Assessment reports.

²¹ An Archaeological Mitigation Plan was part of the agreement of protocols between the New Zealand Historic Places Trust (now Heritage NZ) and Solid Energy concerning their dealings with each other in connection with the Stockton Hydro Electricity Generation Scheme, and the consent area.

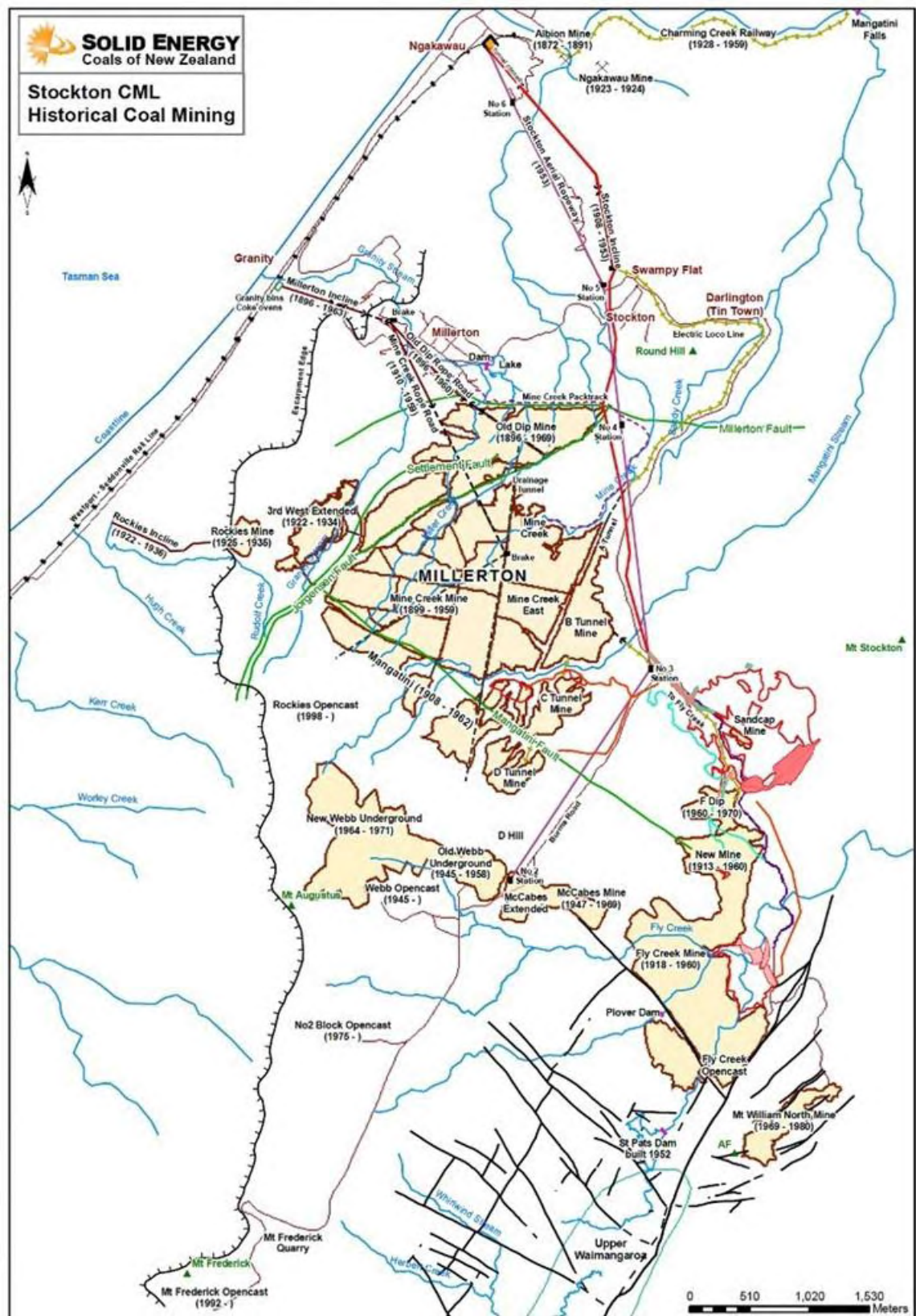


Figure 36. The Stockton Plateau Historic Coal Mining plan, showing the location of historic mines and associated infrastructure (source: Solid Energy New Zealand Ltd)

Table 1. Details of the archaeological sites shown on Figure 35. The short description of the physical remains of each site reflects the information in the site record form for the site. Those sites that will be affected by the proposed Stockton Project sub-area are highlighted (source: NZAA ArchSite, 2025)

ArchSite #	Name	Description	Company
L28/6	Charming Creek Railway	Early 20th century tramway in the Ngākawau gorge. Connected to Watson's sawmill. Remains largely intact and in situ.	
L28/8	Millerton Incline	Lower section of the Millerton incline, built 1891-93. The formation remains, along with a tunnel and stone walling.	Westport Coal Company
L28/9	Old Dip Mine	Coal mine portal and self-acting tramway, constructed c.1893-95. Ran from the Old Dip mine portal to the transfer station at Millerton. The remains also include a bins site and a pack track.	Westport Coal Company
L28/10	Mine Creek Mine	Mine portal. Just south of Millerton. Opened c.1898-99. The archaeological remains consist of the portal and the tramway/upper incline.	Westport Coal Company
L28/11	Millerton Bathhouse	Bathhouse building remains. Built 1920. There is a dam nearby.	Westport Coal Company
L28/12		Stone dam, built c.1905. Just south of Millerton. Probably built to supply water to another dam on the Millerton incline.	Westport Coal Company
L28/13	Millerton Dam	Dam, built c.1905-06. No information about its function, etc.	
L28/14	Rockies Mine	A horse tramway, various coal mine workings (mostly opencast) and mining machinery. The mine operated 1924-34.	Westport Main Coal Company
L28/15	Rockies Incline	Incline tramway (self-acting) to transport coal from the Rockies mine to the bins next to the railway line.	Westport Main Coal Company
L28/16	Jorgens drive	A tramway.	
L28/17	Mine Creek	Mining settlement. Partly excavated and part of the site has been flooded. Some building sites remain, including part of the boiler house.	Westport Coal Company
L28/18	Granity Coke Ovens	Built c.1909-10. One of the original six was extant at the time of recording.	Westport Coal Company
L28/19	Stockton Incline	Built 1906-07. There has been some disturbance, but it is still possible to follow most of the formation.	Westport-Stockton Coal Company
L28/20	Electric Loco Line	Built 1906-07.	Westport-Stockton Coal Company
L28/32	Tintown/Darlington	Mining settlement, initially associated with the electric loco construction. Site largely destroyed by haul road construction.	Westport-Stockton Coal Company
L28/33		Millerton - Mine Creek pack track. Built in about 1898 to provide access from Millerton to the new mine portal at Mine Creek.	

ArchSite #	Name	Description	Company
L29/21	Mangatini Creek	Mining settlement. Occupied c.1906 – c.1935. Remains at the time of recording consisted of a culvert and wing walls, as well as some chimney bases.	Westport Coal Company
L29/50	Fly Creek	Coal mine. Worked from the 1920s until 1970, mostly underground, but as a hydro mine from 1953. Bins, fluming and tramway remain, along with bulldozed bridge abutments, a portal, buildings and two dams.	Westport-Stockton Coal Company, State Coal
L29/82	Coal Island	Underground coal mine, first worked in the 1920s. Closed in 1922, then worked as an opencast mine in 1948 by State Coal. Has not been worked since. Some underground workings still extant at the time of recording. Also a dam, old road formations and the remains of a power/telegraph line.	Westport-Stockton Coal Company, State Coal
L29/83	Mt William	Development of the mine began in 1969, with the first coal produced on 29 Aug 1969. Closed on 30 September 1980. Numerous features remain.	State Coal
L29/97	Sandcap Mine	Historical details are sparse, but it was being worked by 1919. Portals remain, along with two tramways, a winch foundation and seven power poles, along with other scattered remains.	Westport-Stockton Coal Company

STOCKTON

Electric Loco Line (L28/20)

Historical Background²²

One of the features of the Westport-Stockton Coal Company was its use of electricity as the main source of power for the mine, including for haulage (the Electric Loco Line), the coal cutters and the ventilation fan in 'B' Tunnel, along with other machinery. The company was not the first mine to use electricity in New Zealand – gold mines had been generating and using electric power since the late 1880s, but it was less commonly used in coal mines, except for lighting.

The Electric Loco Line was used to carry coal from the company's underground workings to the top of a self-acting incline (at 'Swampy Flat'; Figure 37 and Figure 38). From the brakehead at Swampy Flat, the coal went down the self-acting incline to the bins at Ngakawau. There were three sidings for the loco line here, to facilitate the transfer of tubs onto the incline. The incline consisted of the upper and lower inclines, with a tunnel at the bottom end of the lower incline. The upper incline was 40 chains (about 800m) long and the lower inclines was 33 chains (660m) long, while the tunnel was 28 chains (560m) long. From the incline, the coal was transferred via the bins to the railway line at Ngakawau. Construction of this railway line had begun in 1874, with the Mt Rochfort Railway, a line that ran from Westport to Waimangaroa. It was extended to Ngakawau in 1877 (Loader 2009: 5). This made transporting coal from Ngakawau to Westport (and its harbour) a relatively straightforward matter.

From Swampy Flat at the top of the incline the first section of the Electric Loco Line ran to the south end of B Tunnel (Figure 38). Work must have started on the line late in 1906 or early in 1907 and, by the end of 1907, 1 mile (1600m) had been constructed, with the eventual length of the first section being 2¼ miles (3600m; *AJHR* 1907 C3A: 4, 9). The average grade of the line was 1:21.2, and the maximum grade reached was 1:12.

The railway formation was built to be wide enough to carry two lines (of a 3 foot (c.9.1m) gauge, 6 inches (c.15.2cm) less than the standard gauge in New Zealand; Sumner and Sumner 1983: 297), as it was hoped that the mine would eventually be producing 2000 tons (1814.4 tonnes) a day. The rails were supplied by an English firm, Cammell, Laird and Company, and were apparently rolled to order to meet the needs of the loco line. Most of the sleepers were locally sawn yellow pine, with imported hardwood used for crossings, curves and joints.

The locomotives on the line weighed 20 tons (c.18.1 tonnes) and had been purchased from the General Electric Company (Crawshaw 1998: 22; *Star* 6/10/1908: 1). These locos were capable of pulling 20 tubs, each with a capacity of 30 cwt (1524kg), and could travel at 8 miles/hour (12.1km). The tubs were manufactured locally, at the Birchfield foundry. The locos had wheel brakes and Fell brakes, and a coupled Fell brake car. A Fell centre rail, however, was initially only installed on the steepest sections of the line, and it was soon found that one was required on more sections of it, forcing coal production to stop shortly after the mine had opened, while more centre rail was laid (Harris 2008). The overhead

²² Sourced from Watson 2008a, 2009, 2010a and May 2023, Sumner and Sumner 1983, Harris 2008, Crawshaw 1998

trolley system of haulage was used on the line (Crawshaw 1998: 22; *Star* 6/10/1908: 1). The trolley-wire was General Electric's grooved No. 0000 and was 7 foot 8 inches (2.34m) above the tramway. This was relatively low for a trolley wire but was determined by the clearance available underground (Harris 2008). The wire was bare above ground but covered inside the mine. It ran parallel to a stranded cable (*AJHR* 1909 C3A: 11).

No. 1 Substation was located between Swampy Flat and the mouth of A Tunnel, No. 2 Substation was at the mouth of the latter and No. 3 Substation was at the furthest end of B Tunnel (*Star* 6/10/1908: 1).

The Westport-Stockton Coal Company's initial production rates were high, but fell after two or three years as the coal seam thinned to the east. In response to this, the company developed the C and D Tunnel mines, to the south of Mangatini Stream (Figure 39). This work necessitated an extension to the mine's haulage system, and a bridge for the loco line was built across Mangatini Stream in May 1910, known as Mumm's Bridge. The haulage system in C Tunnel mine was an endless rope system, with an electric brake. The endless rope system was also used in the D Tunnel mine, with a hand-powered brake. These two systems were connected via a short incline (*AJHR* 1911 C3A: 9).

In 1913, work began at New Mine, which was further to the southeast, and led to a further extension of the Electric Loco Line, and necessitated the construction of No. 4 Substation (Figure 39). Part of this section of the loco line ran through a tunnel, named Mumm's Tunnel. The final extension of the loco line came in 1923, when the Fly Creek mine opened (*GRA* 16/2/1923: 4). Most of this extension was underground, but a short section of the Electric Loco Line was above ground at the bins site for the Fly Creek Mine.

In 1923 the Westport-Stockton Coal Company elected to replace both the Electric Loco Line and incline with a flume that would carry the coal across the plateau and down to the bins (*GRA* 28/3/1923: 7). After operating for just four months, the flume was abandoned and the company returned to using the Electric Loco Line.

1929 saw the beginning of what was to be an ongoing programme of repairs, maintenance and upgrading on the loco line and its associated infrastructure. Matters were not helped by an earthquake at this time, when '[A] considerable amount of damage was done to the tunnels, loco-track, and mine generally' (DOC Hokitika Archive: *AJHR* 1929). The rolling stock was also upgraded in 1935, when 70 new mine trucks were purchased.

Further 'extensive repairs and renewals' were carried out on the Electric Loco Line in the 1940s and 1950s when No. 4 Substation was destroyed by fire. This must have been particularly frustrating for the now State-owned colliery, with work on the aerial cableway (the new haulage system; see below) already underway. The ongoing references to the need for repairs to the loco line no doubt reflect the heavy wear and tear to which it was subjected, and must have been one of the reasons it was replaced.

Following the takeover of both mine leases, State Coal embarked on the construction of the aerial cableway. This replaced the Electric Loco Line and the Stockton Incline, although the Millerton Incline would continue to operate until 1963, after which the coal from the Millerton Mine was carted by road (Sumner and Sumner 1983: 79). In spite of early problems, the aerial cableway as a whole operated until 2001, when the section between No. 2 and No. 5 Substations was closed, being replaced by trucks (Henley 2005).



Figure 37. The Electric Loco Line in operation (source: Harris 2008)

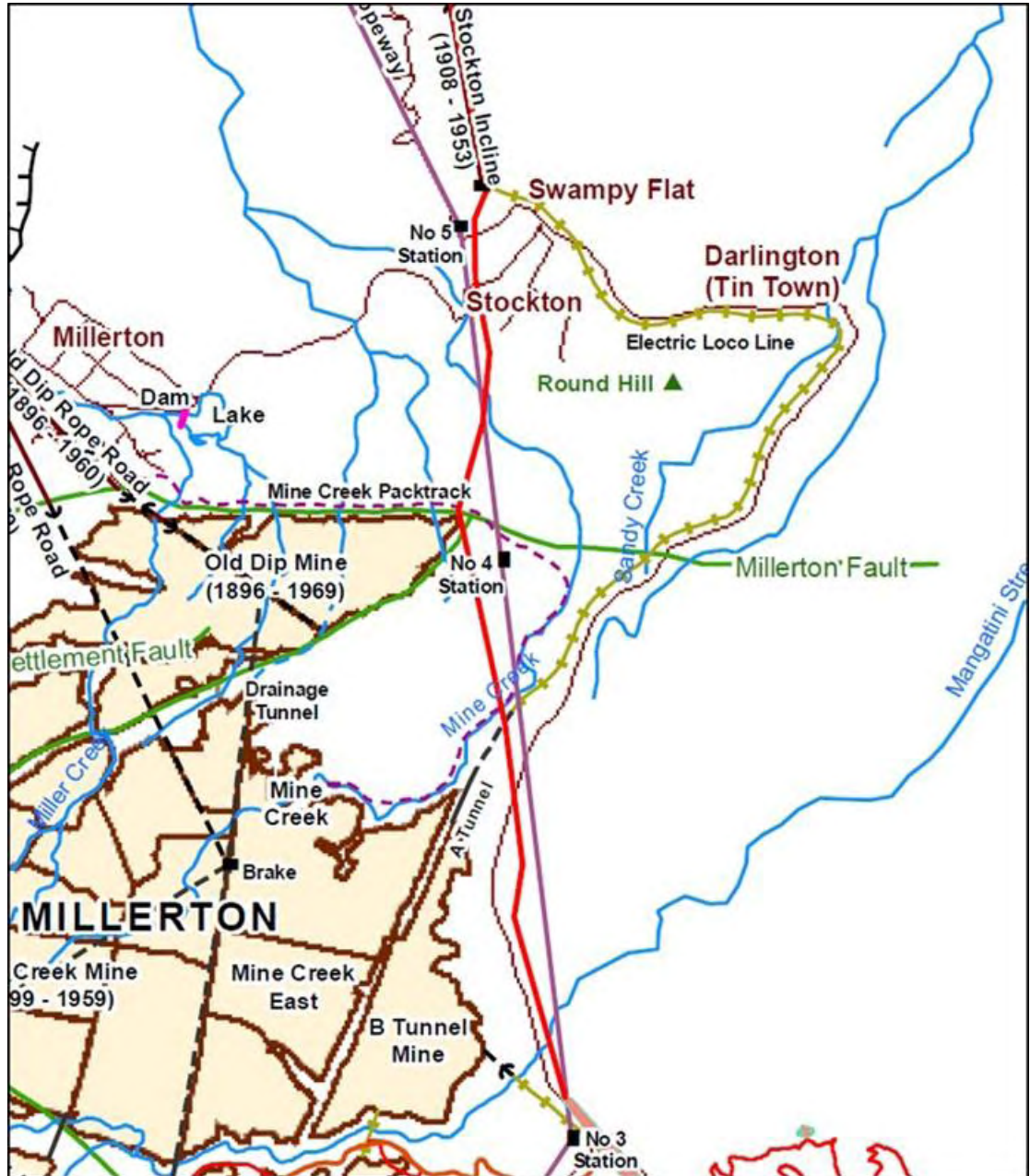


Figure 38. The original above ground section of the Electric Loco Line (in green), between the top of the Stockton Incline at Swampy Flat and A Tunnel. This section continued underground to the south end of the B Tunnel mine (source: detail from The Stockton Plateau Historic Coal Mining plan, showing the location of historic mines and associated infrastructure – Solid Energy New Zealand Ltd)

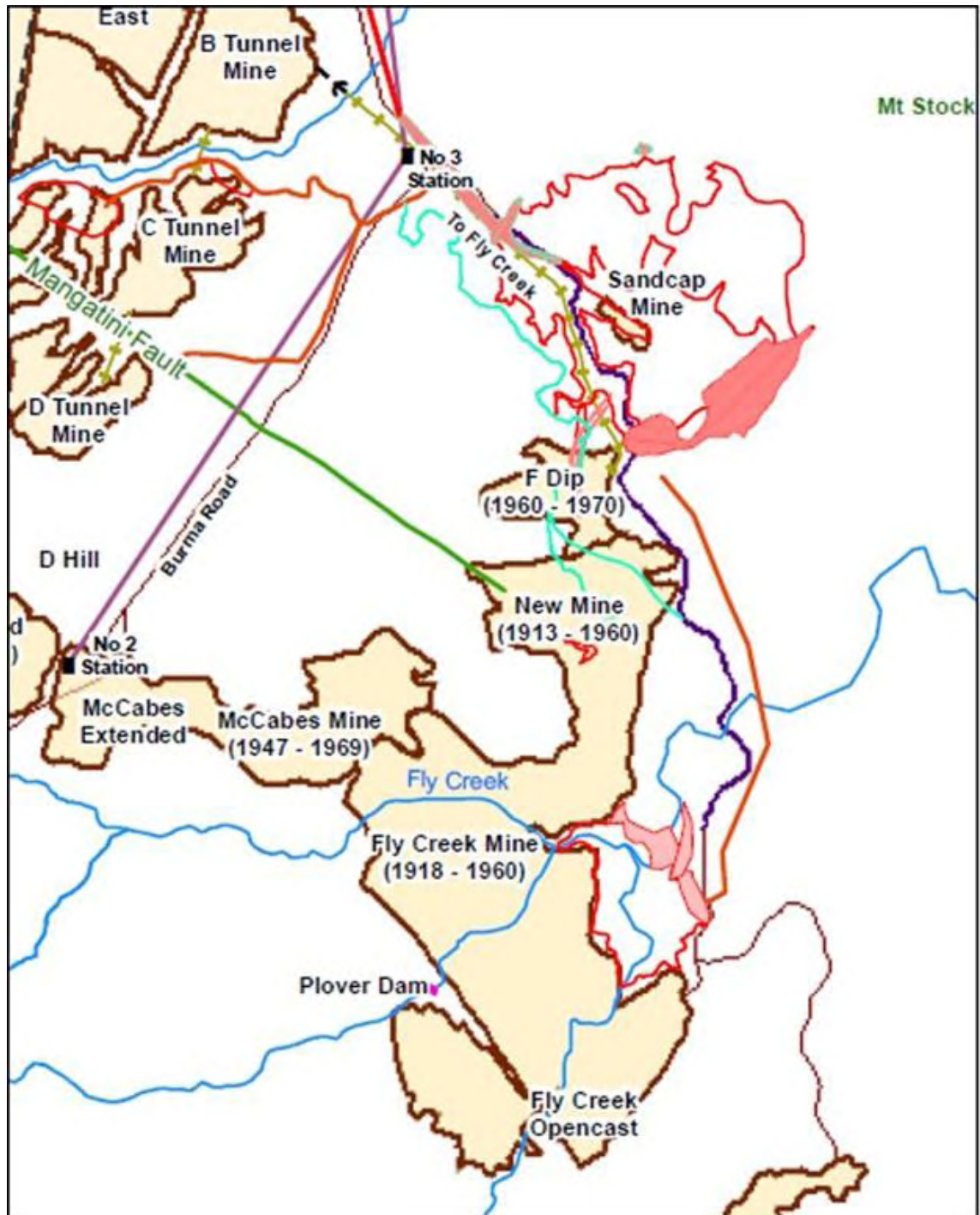


Figure 39. The extensions to the Electric Loco Line (olive green), with one to C Tunnel mine (c.1910) and the other to New Mine (c.1913). The haulage system between C and D Tunnel mines was a short incline, not the Electric Loco Line (as shown here) (source: detail from The Stockton Plateau Historic Coal Mining plan, showing the location of historic mines and associated infrastructure – Solid Energy New Zealand Ltd)

Mine Creek Settlement (L28/17)

Historical Background²³

In 1898, the Westport Coal Company's workings in the Old Dip Section hit the Jorgensen Fault. The decision was made to put a steep drive through the fault to intercept the coal seam to the south of the fault, in what would become known as the Mine Creek section of the mine. At around this time, a pack track was put in that went from Millerton to the point on Mine Creek where much of the mine's infrastructure was to be constructed (S. Henley, pers. comm. in Watson 2007). Construction of this infrastructure began in 1899, with the annual report to the Mines Department for that year stating that 'foundations are already cut in the solid rock formation' (*AJHR* 1900²⁴ C3A:13). In the same report, the mine manager (Jonathon Dixon) reported that the boiler shed and air compressor house at Mine Creek had been built (Figure 40 and Figure 41). The boiler shed was to have three Babcock and Wilcox boilers (86hp each), one of which was already in position and a second was ready to be erected. The air compressor shed was to have six Leyner compound air compressors, some of which had also been installed. The mine was to be ventilated by a 10ft Schiele exhaust fan, which would be erected close to the compressor and boiler houses. The water for the air compressors' cooling chambers and the boilers was to be supplied from a concrete dam across Mine Creek, with a storage capacity of 500,000 gallons (*AJHR* 1900 C3A:13).

The following year's report to the Mines Department commented that 'developments towards Mine Creek are permanently and efficiently completed, with the exception of winning or opening out the coalfield' (*AJHR* 1901 C3A:10). The report further noted that there were two boilers and three air compressors (which supplied the percussive pick-machines used for mining), figures that differed from those outlined as the anticipated plant the previous year. The fan that had been erected was, however, the same as that described in 1899 (*AJHR* 1901 C3A:10). During the next 12 months, the brickwork for the fan was finished, which resulted in a significant improvement to the ventilation of the mine. Improvements (not described in the Mines Report) also led to 'increased steam and machine power' for the air compressors (*AJHR* 1902 C3A:8). Although the reports to the Mines Department do not mention it, Mine Creek also had a blacksmith's shop (Hawes 2004:129).

Little is known of the social history of Mine Creek, although Hawes (2004:129-130) records some stories of the place and its people. There is less information about the tangible elements of Mine Creek's social history, such as the houses, including who occupied them, when they were built, how the materials were bought in, who owned the buildings, etc. A 1918 report on mining townships states that 'The company have not put up houses to rent [at Mine Creek]', but also states that houses were rented for 23 shillings a week (and it cost 25 shillings a week to stay at the boarding house; Seager 1918: 14-15). This suggests that people other than the Westport Coal Company were building houses at Mine Creek and renting them out. The same report noted that there were 20 people living at Mine Creek at that time, and that there was enough accommodation for 50 people (Seager 1918: 14).

²³ Sourced from Watson 2007 with much of the information originally from Crawshaw (1999) and Hawes (2004), both of which contain few references to their sources, meaning that the information could not be verified.

²⁴ In general, annual reports were published in the *AJHR* the year after they were written.

It is not clear when people began to live at Mine Creek, but it is possible that people were living there while the infrastructure was being built and that more came following the start of mining. A number of historic photographs of the settlement exist but Watson (2007) was not been possible to date any of these (Figure 42 - Figure 44 are three of these photographs). A letter from one member of the mine management (George Joachim) to another member of the mine management (George Fletcher) in September 1906 indicates that there was a boarding house at the settlement by this time, that it was privately owned, and that it was closed by 1906 (in Crawshaw 1998:18).

Hawes (2004:129-130) records that groceries were brought to Mine Creek via the rope road, as was alcohol, which was delivered fortnightly. The absence of soil made establishing gardens difficult and the settlement was so rocky that holes for clothes lines had to be blasted with dynamite. Hawes (2004:128) also notes that there was a library at Mine Creek. As with the library at Mangatini (see Watson 2006) this library is likely to have been part of another building.

Figures from the census (quoted in Crawshaw 1998:146) give some indication of the make-up of the community from 1911 through to 1936. The population of the settlement reached its peak at 70 in 1911, including 10 females. Mine Creek's population varied over the next 15 years, but basically fell – there were 14 inhabitants in 1916, 27 in 1921 and 10 in 1926 (the figures for each year include only two females). By 1936 there were no recorded inhabitants for Mine Creek.

The township appears to have been abandoned in the 1930s and the powerhouse somewhat later (Sumner and Sumner 1983).

Watson (2007) located a number of photographs of the Mine Creek settlement and obtained digital copies of these images, some of which are reproduced below in this report. However, she was not able to locate the original of the photos in Crawshaw (2000) as no references were provided in the book. Unfortunately, she was also not been possible to date any of these photographs, other than relative to each other.

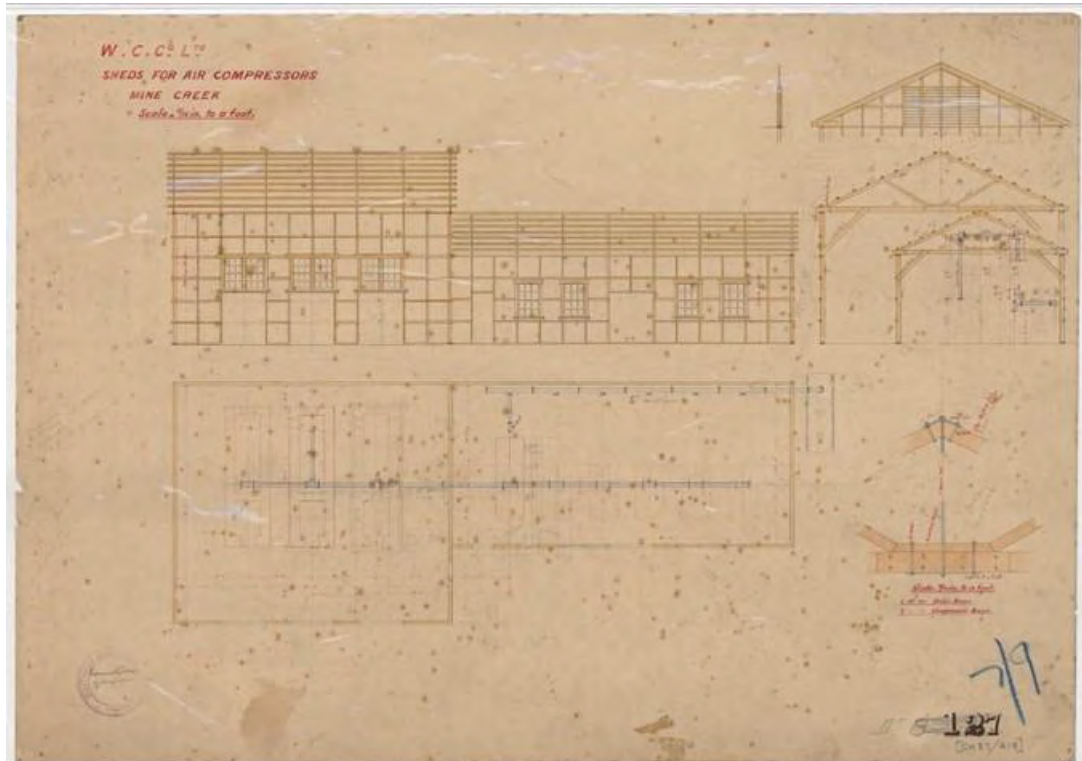


Figure 40. Elevation of the air compressor sheds and basic internal layout (Archives New Zealand, Christchurch in Watson 2007: fig 2.)



Figure 41. The air compressor and fan drive sheds on the true right of Mine Creek. The square top of the brick ventilation flue is visible behind the fan drive shed, which was home to the Schiele fan. There is a brick or concrete structure to the south of this shed. A metal pipe leading up to the flue is visible on the hillside. There is a rail line between the sheds and Mine Creek. A metal pipe leading up to the flue is visible on the hillside. There is a rail line between the sheds and Mine Creek (source: Coaltown Museum Ref: MN56)



Figure 42. The earliest known photograph of Mine Creek, looking north over the settlement. The view is partially obscured by smoke from the power house boilers (foreground). The larger building on the flat on true left of Mine Creek is believed to be the boarding house. A pack track is visible on the western side of the settlement (source: Coaltown Museum Ref: MN15).



Figure 43. Looking south over the settlement of Mine Creek. The power house and ventilation flue are in the background (right) on the true right of Mine Creek, and a pack track above, which leads down to a bridge over the creek. The boarding house is central with an ornate verandah surrounded by other sheds/huts. There is an industrial looking corrugated iron building on the slope (right) (source: Crawshaw 2000:33).



Figure 44. View down into Mine Creek, from the west of the settlement. The boarding house is the main building, as well as other various sheds/huts. A tramway can be seen heading south from the aforementioned large building, and has coal tubs on it. The mine entrance can be seen behind this and there are sheds along the line (source: Granity Museum)

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Abbreviations

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<i>EP</i>	<i>Evening Post</i>
<i>DOC</i>	<i>Department of Conservation</i>
<i>GRA</i>	<i>Grey River Argus</i>
<i>HNZPT</i>	<i>Heritage New Zealand Pouhere Taonga</i>
<i>LINZ</i>	<i>Land Information New Zealand</i>
<i>NZHPT</i>	<i>New Zealand Historic Places Trust (now HNZPT)</i>
<i>PBH</i>	<i>Poverty Bay Herald</i>
<i>Star</i>	<i>Greymouth Evening Star</i>
<i>WCT</i>	<i>West Coast Times</i>

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APPENDIX 1: DENNISTON AND STOCKTON PLATEAUX MINING TIMELINE²⁵

- 1860 Coal discovered by Julius von Haast and James Burnett in Coalbrookdale.
- 1862 Burnett completed a detailed survey and estimate.
- 1871 First survey camp on Denniston.
- 1873 First load of coal brought down from Denniston to Westport by packhorse.
- 1877 Wellington Coal Co. first placed coal on the market.
- 1878 Westport Colliery Co. formed.
First mining at Fisher (later Banbury) mine and coal stockpiled in sacks at mine mouth.
Six coke ovens erected at Granity.
- 1879 Denniston Incline surveyed and built.
- 1880 Fisher Mine renamed Banbury
Wellington Coal Co. merged with Koranui Co.
First coal sent down the Denniston Incline, mid-April.
Construction of Koranui Incline begins.
- 1881 Westport Colliery Co. reconstructed as Westport Coal Co.
- 1882 Drive completed through the Banbury workings to Burnett's Face.
First school opened in 'The camp' at Denniston.
- 1883 Koranui Incline began operating.
Postal Services started on Denniston.
Horses in the Banbury replaced by endless chain.
- 1884 'Billy Playfair' strike at Denniston (1884-1885).
- 1885 Koranui Mine was bought by Union Steamship Co.
Denniston bridle track completed.
First police station opened on Denniston.
- 1886 Koranui Mine sold to Westport Coal Co.
Banbury Mine ceased operations.
Burnett's Face first recorded as a settlement.
- 1887 Iron Bridge under construction (Iron Bridge Mine)
Endless chain replaced by endless rope (by 1887).
Rope road from Coalbrookdale to bins via Banbury completed.

²⁵ Sumner and Sumner 1983: Appendix VI; Watson and Wright May 2004.

- Koranui Mine closed down
- 1888 Waimangaroa Mine opened on South bank of Waimangaroa River.
Anglican Church built on Boswell Street, Denniston.
- 1889 Coalbrookdale and Iron Bridge mines opened.
Roman Catholic church built at top of Church Street, Denniston.
- 1890 Maritime strike.
W.C.C. directors announce intention to develop Granity Creek.
Wellington Mine reopened.
Methodist Church built on Gilliea Street, Denniston.
- 1891 Coalbrookdale first mine in N.Z. to produce 1m tons coal.
Seddon's Coal Mines Bill.
First shot fired in construction of Millerton-Granity incline.
New school opened on Denniston.
- 1892 Burnett's Face school opened.
- 1893 Waimangaroa and Wellington Mines closed.
Millerton township surveyed and sites auctioned.
Post office opened at Millerton.
Masonic Lodge established at Denniston.
Both tunnels on Millerton Incline completed.
- 1894 Industrial Conciliation and Arbitration Act.
- 1895 Denniston largest coal production in N.Z. - 215,770 tons.
- 1896 First coal produced from Millerton Mine.
Bins at Granity in process of erection - capacity 3,000 tins.
Highest census figures for Coalbrookdale.
- 1897 First hotel 'The Criterion' opened on Millerton.
- 1898 First school built at Millerton.
- 1899 Granity got its present name – hitherto called Granity Creek.
Public Hall and Library built at Burnett's Face.
- 1900 Banbury route unsatisfactory.
Wooden bridge erected over the Waimangaroa River.
Dam built at Mine Creek.
Kiwi compressor built.
- 1901 Lamp-station and other offices built at Mine Creek.
- 1902 'New Track' to Denniston opened. (Munro)
- 1903 Work commenced in the Wareatea area.
- 1904 Overland rope-road from Burnett's Face to Denniston completed.

- 1905 New Brakehead bins completed at Denniston.
Westport-Stockton Coal Co. formed and began development work.
- 1906 Volunteer Hall built on Denniston.
Drive at Millerton extended into Mangatini Gorge.
- 1907 Wooden bridge over Waimangaroa Gorge to be replaced by girder bridge.
- 1908 Westport-Stockton opened their mine.
First silent movie shown in Volunteer Hall at Denniston.
Presbyterian Church on Gillies Street, Denniston opened.
- 1909 'The big fire' at the Brakehead, Denniston – several properties destroyed.
The first fire broke out at Millerton – in the Mine Creek section of the mine.
- 1910 Peak output from Denniston of 348,335 tons.
Denniston hospital built.
First horse drawn coach service started to Denniston.
- 1911 Peak population of Burnett's Face of 627.
First car to carry passengers between Granity and Millerton.
Highest census figures for Mine Creek.
- 1912 Mangatini Recreation Hall opened.
- 1914 Area of unworked coal at Koranui linked up with the haulage at Kiwi and Deep Creek.
- 1915 First motorised transport on Denniston 'New Track' (road).
Stockton school opened.
- 1918 Stockton Post Office opened.
- 1920 Power house built at Marshallvale.
- 1921 Millerton bath-house construction began.
Stockton bath-house construction began.
Several workmen's cottages built at Stockton township.
- 1922 Bath-houses built at Iron Bridge and Coalbrookdale near the mine mouths.
Mine Creek and Mangatini townships abandoned early 1920s.
- 1923 Extensions to the bins at the Brakehead – several buildings demolished.
Cascade Mine began operating – Westport-Cascade Coal Co.
Fly Creek started operating.
- 1924 Marshallvale settlement established.
- 1925 Westport-Granity Mining syndicate began operating 'Rockies' mine.
- 1926 'The Steps' entrance to the Wareatea opened.
Millerton Bowling Green opened.
Westport-Granity Mining Syndicate became the Westportmain Coal Co.
A serious fire broke out in the Evans section of Millerton Mine.

- 1927 Highest census figures for Denniston and Millerton.
Westport-Cascade hydro mine opened.
- 1928 Denniston Bowling Green is opened.
Westportmain opencasting at 'Rockies'.
- 1929 Murchison earthquake – Buller mines idle for two weeks.
Volunteer Hall at Millerton burned down.
- 1930 Secondary and Manual Training block added to school at Denniston.
- 1935 Fluming replaced electric locos for a year at Stockton.
- 1936 Westportmain ('Rockies') closed.
Denniston power house began supplying power to Millerton and Stockton mines.
Highest census figures for Cascade and Stockton.
- 1939 New bath-house built at Denniston near the power house.
- 1940 Burnett's Face and Denniston schools combine
Denniston Power House began, generating electricity for Buller District.
- 1941 Road to Cascade Mine constructed.
- 1944 Westport-Stockton Coal Co. taken over by Mines Department.
- 1945 Iron Bridge Mine ceased operations.
Mangatini Section of Millerton Mine abandoned at the end of the war.
- 1946 Cascade section of Coalbrookdale Mine ceased operations.
- 1948 Millerton Mine taken over by the Government Mines Department as result of
Nationalisation of Coal Mines Act.
Denniston Mines taken over by Government Mines Department.
Community Centre established on Denniston.
- 1949 New Anglican Church built on Ormiston Street.
- 1950 Rope-road between Burnett's Face and Brakehead closed.
Work started on mono-cable aerial ropeway.
- 1951 Electric locos at Stockton ceased operation.
Attempts made to stop the fires in the Iron Bridge Mine.
Waterfront strike – 67 days lost when miners came out in sympathy with the watersiders.
- 1952 Monocable aerial ropeway started operating.
Plateau (later Sullivan) mine opened.
Burnett's Face Post Office ceased.
- 1953 First section of Bicable aerial Ropeway at Stockton came into operation.
Hydro mining began at Fly Creek Mine.
Opencast mine operating begun at Birchalls Extensions near the Wareatea Mine
Cook's lease being worked by Marshall & Co.
- 1954 Aerial put into service from near Whareatea Steps entrance in January.

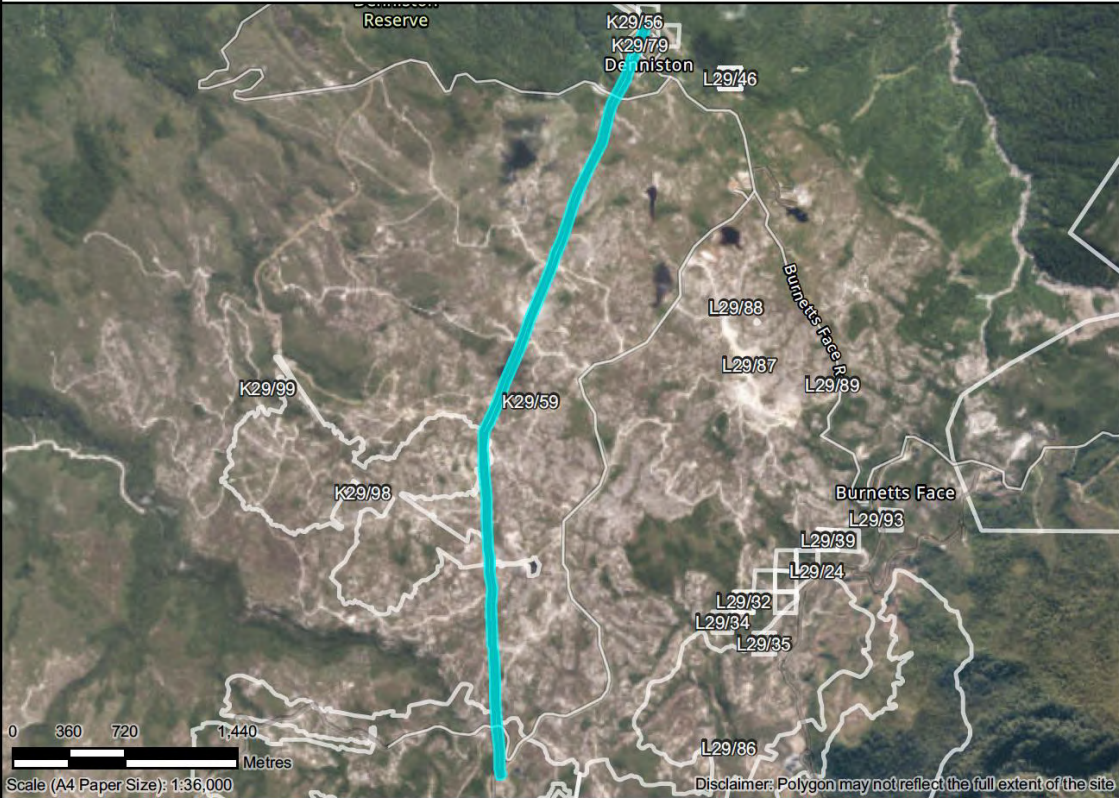
- Sullivan Mine in production.
- 1956 Millerton Mine started hydro mining.
‘Closing down’ of Burnett’s Face.
- 1960 Wellington Mine reopened .in 1960s.
Mine Creek section abandoned at Millerton.
- 1962 Escarpment Mine officially opened.
- 1963 Millerton incline ceased working.
- 1967 Denniston Incline ceased working – coal trucked down from Brakehead bins.
- 1968 Inangahua earthquake wrecked the top section of Denniston Incline.
Monocable aerial ropeway ceases operations on Denniston.
- 1969 Millerton Mine closed.
- 1971 Wareatea Mine closed 26 November.
Webb Mine closed.
Post Office on Denniston closed.
- 1973 Private Mine at Cedar (Horseshoe Bend) closed.
- 1979 Escarpment Mine became Denniston's first State Hydro mine.
- 1980 New western entrance to Sullivan established at Rapid Creek.
- 1982 Escarpment Mine closed.
Wareatea Mine reopened as a hydro mine.
Cascade Mine reopened as a private opencast mine.
- 1986 Sullivan West hydro mine in full production; Management changed from State Coal Mines to Coal Corp.
- 1988 Whareatea closed, 9 December.
- 1995 Sullivan West closed, November.
- 1998 Decommissioning work at Whareatea and Sullivan started July, suspended August.

APPENDIX 2: SITE RECORD FORMS

The NZAA site record forms have been updated and new site records created for all sites that are discussed in the Parts 1–5 of the BPCP Archaeological and Historic Heritage Assessment reports. Due to the large extent of site information updated in ArchSite and provided in the assessments this is not duplicated in the following copies of the site record forms.

Refer to the site records attached in this appendix for newly recorded sites, updated site extents and previously recorded information on the sites in conjunction with discussions of each site in the assessment reports.

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: K29/59 Imperial Site Number: Site Type: Mining - coal Site Name(s): Denniston Aerial	Site Coordinates (NZTM) Easting: Northing: Source: Shapefile	
		
Finding Aids to the Location of the Site: Main elements can be found at Denniston township and Brakehead and near the Sullivan and Whareatea mine sites.		
Brief Description: Monocable aerial. Remains are scattered along the 3.68km aerial route between the Denniston Brakehead and the Steps entrance to Whareatea Mine.		
Condition of Site when last visited: No Recent Info		

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Modern 1900-

Ethnicity:

Non Maori

Site Features:

Aerial cableway

Associated Sites:

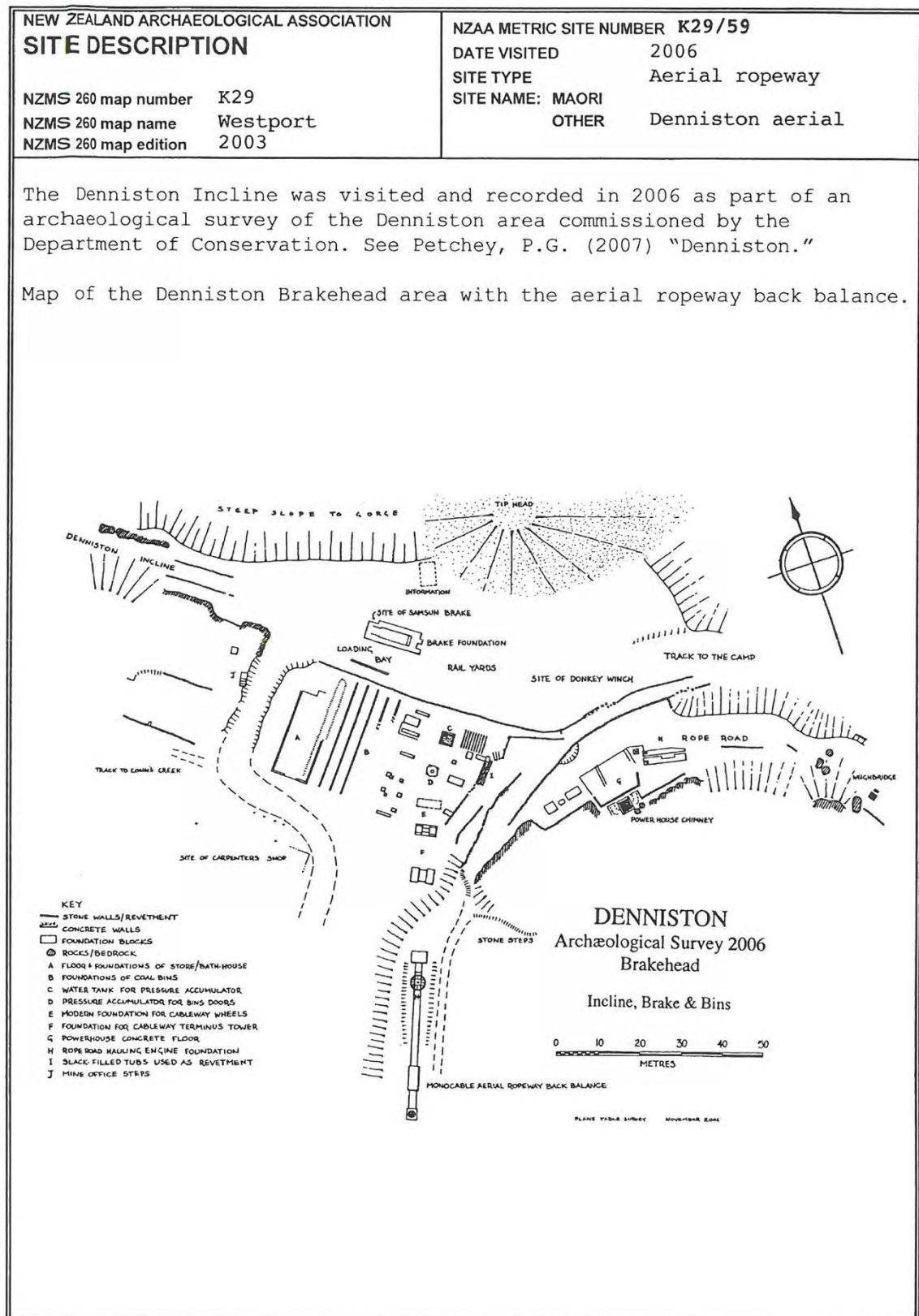
Description:

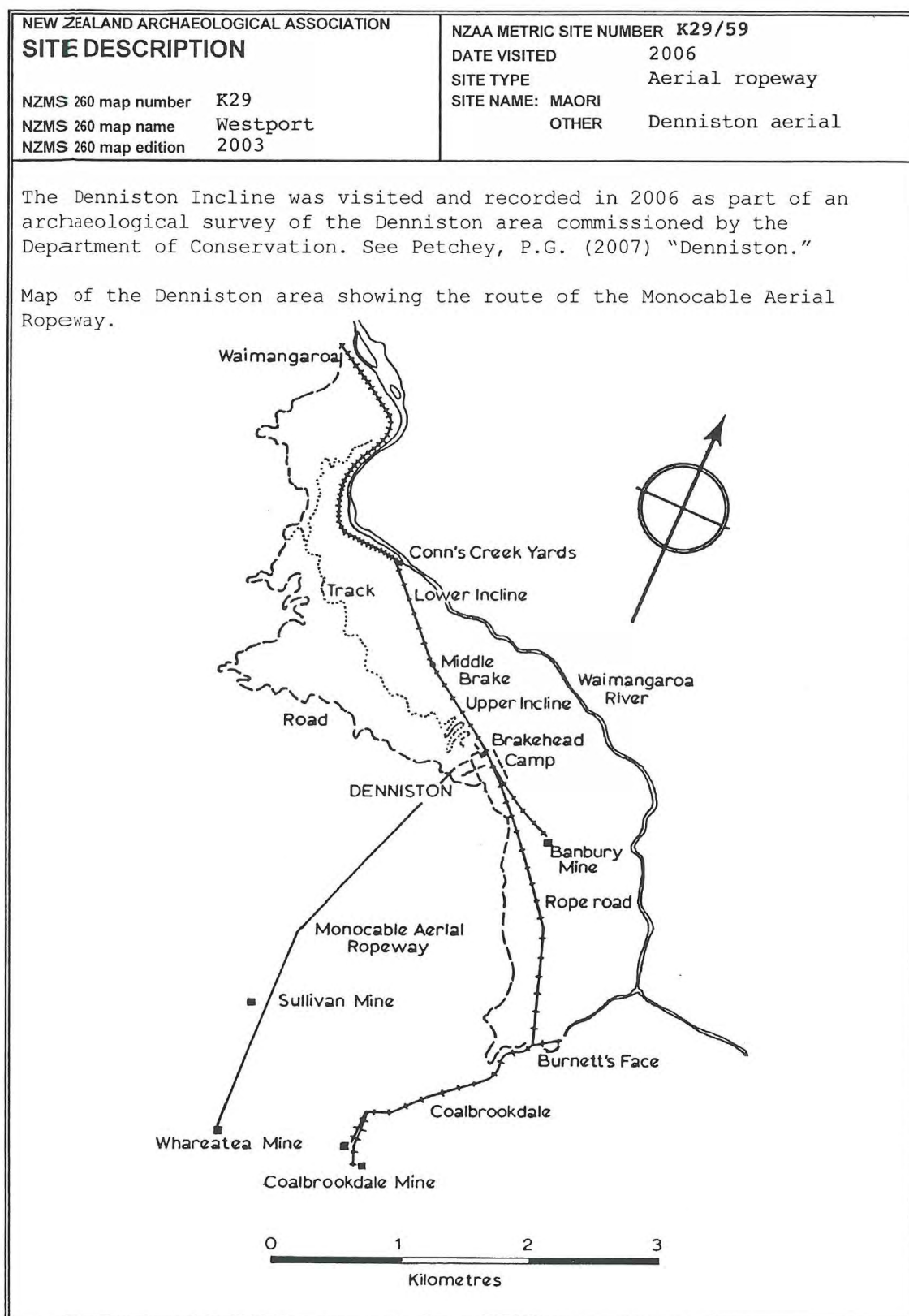
Condition Notes:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE DESCRIPTION		NZAA METRIC SITE NUMBER K29/59 DATE VISITED 2006 SITE TYPE Aerial ropeway SITE NAME: MAORI OTHER Denniston aerial
NZMS 260 map number K29 NZMS 260 map name Westport NZMS 260 map edition 2003		

The Denniston Incline was visited and recorded in 2006 as part of an archaeological survey of the Denniston area commissioned by the Department of Conservation. See Petchey, P.G. (2007) "Denniston."

Illustration of the operation of the Monocable Aerial Ropeway at the Brakehead.





NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION METRIC SITE RECORD

Site: K29/59

Type: Monocable Aerial

Site Name: Denniston Aerial

Map number: NZMS 260 K29 Westport

Grid References: Easting ~~405~~, Northing ~~108~~ 2409800 5940500

1. Aids to relocation of site:

Main elements can be found at Denniston Township and Brakehead and near the Sullivan and Whareatea mine sites.

2. State of site and possible future damage:

Integrity poor but what remains is in good condition.

3. Description of site:

Remains are scattered along the 3.68km aerial route between the Denniston Brakehead and the Steps entrance to Whareatea Mine. They include the top loading and drive station foundations at the Whareatea (Steps) mine site, the angle station near the Sullivan Mine, six support towers, numerous buckets and the bottom return wheels and cable tensioner at the brakehead. The Department of Conservation is maintaining a tower at each end of the system.

History:

An electric-powered monocable aerial system was built in 1950-53 to replace the old roperoads from Coalbrookdale to the Denniston incline brakehead bins. Commissioned in 1954, it carried coal from the Whareatea, Escarpment and Sullivan mines. The system closed in 1968. Motors and the more accessible aerial components were removed, and the rest scrapped or abandoned.

4. Owner:

Department of Conservation, Private Bag 701, Hokitika

5. Nature of information

Historic photographs, colour prints and slides in DoC Photograph Library, Hokitika

6. Reported by:

Dept of Conservation, Hokitika

Filekeeper:

Les Wright, Box 5, Punakaiki 7850

Date: 25.6.01

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED



Site Record Form

NZAA Site Number: K29/72

Imperial Site Number:

Site Type: Mining - coal

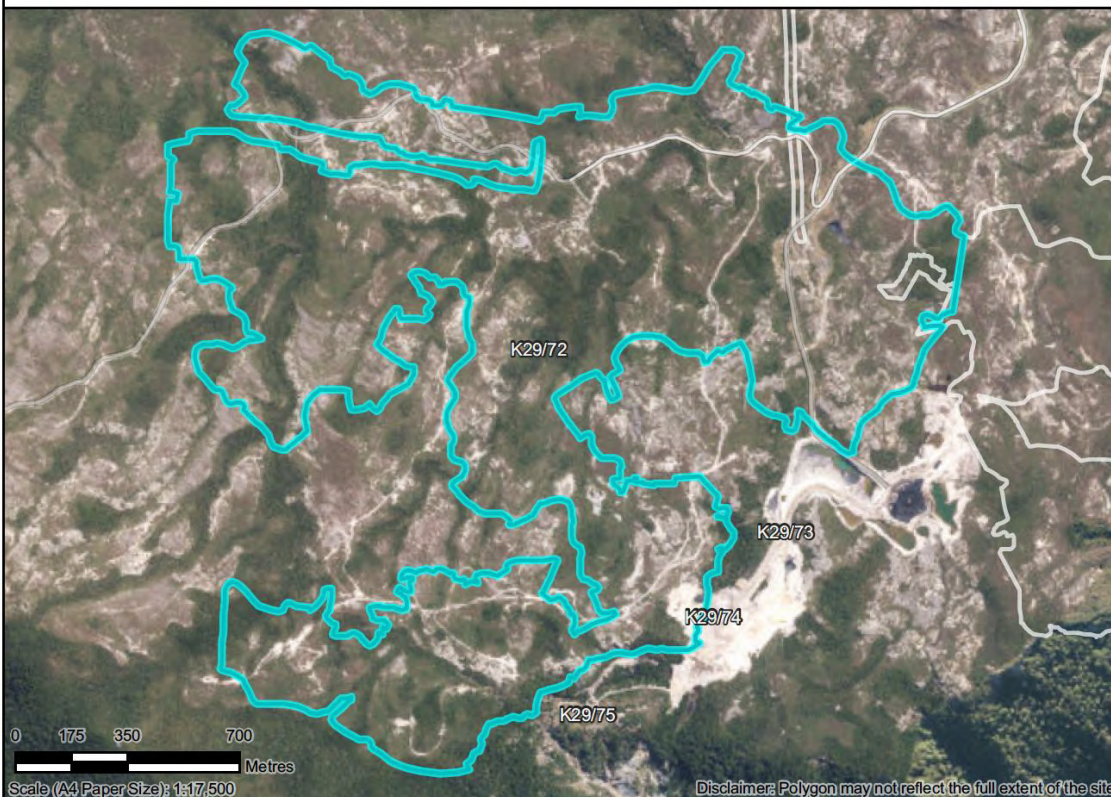
Site Name(s): Whareatea Extended

Site Coordinates (NZTM)

Easting:

Northing:

Source: Shapefile



Finding Aids to the Location of the Site:

Located on the Denniston Plateau. Follow Mt Rochfort Road.

Brief Description:

Coal mine.

Condition of Site when last visited:

No Recent Info

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS260) NZMS 260 map number K29 NZMS 260 map name Westport NZMS 260 map edition 2003		NZAA METRIC SITE NUMBER K29/72 DATE VISITED 24 March 2009 SITE TYPE coal mine SITE NAME: MAORI OTHER Whareatea Extended	
Grid Reference Easting .2.4 0 9 0 7.7.		Northing .5.9 3 6 9 3.5.	
1. Aids to relocation of site (attach a sketch map) The site is located on the Denniston plateau, to the south of Denniston itself. It is reached by following the Mt Rochfort Road.			
2. State of site and possible future damage The site is in reasonable condition.			
3. Description of site (Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here) The Whareatea mine went through three stages: the first as The Steps entrance to the Whareatea section of Coalbrookdale (1926-1953); the second as a standard coal mine (1953-1971); and the third as a hydro mine (1982-88). Each stage involved a different set of above-ground infrastructure. The first stage required the least infrastructure and at this time the area appears to have consisted of little more than The Steps entrance and the road to the entrance. This road was put in prior to The Steps being opened and was used to transport the miners to and from work. Following the state takeover of the Westport Coal Company there was a considerable amount of investment in the Whareatea, and this area became the main mine portal rather than just The Steps entrance (which became a fan drift rather than an entrance). To this end, a new entrance was driven and a coal transport system built. This consisted of a conveyor to carry coal from the mine to a hopper, from which a second conveyor then carried the coal to the bins. From the bins, the coal was loaded onto the aerial cableway and carried across the plateau to the incline brakehead. These first bins were also used by the Escarpment mine from 1963 and by private parties working in the area. There was a change to the coal transport system in 1968, with the closure of the aerial. At this point, new bins were built and received coal directly from the first conveyor. Coal was loaded into trucks from the new bins and carted across the plateau. Following closure of the mine in 1971, the original bins were demolished and the second bins removed. Horses were also used in the mine during this period.			
4. Owner Crown Address		Tenant/Manager Department of Conservation Address	
5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers and where they are held) Aerial photographs (reference numbers and clarity of site)		Archaeological survey	
6. Reported by Katharine Watson Address 28 Pratt Street, New Brighton, Christchurch		Filekeeper Les Wright Date	
7. Key words			
8. New Zealand Register of Archaeological Sites (for office use) NZHPT Site Field Code			
Latitude S		Longitude E	
Type of site		Present condition & future danger of destruction	
Local environment today		Security code	
Land classification		Local body	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE DESCRIPTION NZMS 260 map number K29 NZMS 260 map name Westport NZMS 260 map edition 2003	NZAA METRIC SITE NUMBER K29/ DATE VISITED 24 March 2009 SITE TYPE coal mine SITE NAME: MAORI OTHER Whareatea Extended
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The re-opening of the mine in 1982 with a new technology saw a revamping of the facilities at the Whareatea and few of the structures associated with the 1954-71 period remained in use. The same entrance continued to be used and The Steps continued to function as a fan drift, as well as being used for three pipes associated with the hydro system. Two of these pipes were used for carrying out coal and waste material while the third was used for returning water to the sump. The conveyor that had been used to carry coal from 1954-71 was replaced with a stone conveyor. Coal was now transported from the mine (via The Steps) to a boil box and then along a distributor to the dewatering pads. The water was flumed away from here. When dewatered, the coal was loaded into trucks with a front-end loader. Water for the hydro mining was initially brought in from the Escarpment and later from Brazil's dam (after the water supply from the Escarpment proved inadequate), which had been built for hydro mining at the Escarpment. Before entering the mine, the water passed through a fines filtration tank. There was also a fines settling pond during the hydro period, used for recovering fine coal.

Much of the surface infrastructure associated with the Whareatea remains in situ - see below.

Site. no	Site
1	The Steps entrance to the Whareatea
1a	Fanhouse foundations
1b	Concrete rubble
1c	Doors from The Steps entrance to Whareatea
2	Whareatea entrance to the Coalbrookdale
3	Winch foundations
4	Conveyor foundations
4a	Conveyor remains
5	Mine conveyor terminal foundations
6	Conveyor tail roller foundations & dump hopper foundations
7	Bin & aerial drive station foundations

8	Workshop foundations	k29/72
9	Dam	
10	Water tank	
11	Office & workshop foundations	
12	Stable foundations/storage shed	
13	Electrical substation foundations	
14	Home coal bin foundations	
15	Timber retaining wall	
16	Dewatering pads	
16a	Timber platform	
16b	Drain outlet	
16c	Timber flume	
16d	Metal road	
17	Fines filtration tank	
18	Water recirculation pump shed foundations	
19	Collapsed workings/rubbish hole	
20	Fines settling pond	
21	Road	

For more detailed information, see:
Watson, Katharine and Les Wright. 2004. Whareatea, Sullivan and Sullivan West Mines, Denniston Coalfield. Archaeological assessment for Solid Energy Ltd.

Watson, Katharine. 2009. Escarpment Mine Project: An Archaeological Assessment. Unpublished report for L&M Coal Ltd.

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: K29/98 Imperial Site Number: Site Type: Mining - coal Site Name(s): Sullivan mine	Site Coordinates (NZTM) Easting: Northing: Source: Shapefile	
		
Finding Aids to the Location of the Site: The site is reached via a 4WD track that branches off to the west from the Whareatea Mine Road.		
Brief Description: Mine portal, foundations of structures and buildings		
Condition of Site when last visited: Fair		

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Site Periods:

Modern 1900-

Ethnicity:

Combination

Site Features:

Foundations, Portal, Reservoir, Tank

Associated Sites:

K29/55, K29/59, K29/72

Description:

Updated 01/04/2022 (Field visit), submitted by katharinewatson , visited 21/11/2003 by Watson, Katharine
Grid reference (E1499086 / N5376338)

This is the site of the Sullivan mine, opened in 1953 by the State Coal Mines Department. It was an underground mine and the first fully mechanised coal mine in New Zealand. It fed coal to the aerial ropeway that connected the Whareatea mine with the Denniston incline. The incline closed in 1967 and the aerial ropeway the following year, after which coal was trucked away from the site. Sullivan mine was decommissioned in 1998.

The detailed description below is from: Watson, K. and Wright, L., 2004. Whareatea, Sullivan and Sullivan West Mines. Unpublished report for Solid Energy (a copy of this report is held by the Department of Conservation). The figures and plates referred to are attached to this site record form and the numbers in the text indicate the location of the features on the site plans (those numbers prefixed with an A relate to the aerial cableway). This report also contains all the references referred to below.

23) Men & Materials entrance: Low concrete foundation walls run along the north-east and north-west sides. Most of the south-west wall has been removed. Inside, the sloping entrance and portal have been filled to approximately the surrounding ground surface level (Plate 27). At the eastern end of the north-east wall is a rectangular concrete slab with a smaller foundation against it, sloping up in a south-easterly direction.

History: Described as a dip stone drive, the entrance was driven in the hard strata of a granite upthrust, work beginning in November 1950 (AJHR 1951). It subsequently served as the working entrance of the Sullivan mine until operations became centred at Rapid Creek in the 1980s. A large gable-roofed corrugated iron building covered the entrance (Plates 29 and 30). Materials were hauled in and out on rails along the south-western side, using an electric winch (site 29, Plate 37). Coal and stone went out along the north-east side on a belt conveyor covered by a gantry connected to the bins (Plates 30, 33 and 34). The small slabs at the eastern end were the entranceway and the start of a steel stairway that went up inside the gantry (Frank Robertson, pers. comm.). In 1998 the mine entrance was filled with unwanted mine equipment, building debris and other material, apparently including the south-eastern foundation wall. Household rubbish and other items including old cars were later added. (Plate 28) During the summer of 2003-04 the entrance was cleared to a depth of 3m at the portal end, then backfilled and compacted using locally sourced hard fill (Plate 27). Mining equipment was piled nearby (Plate 41) or taken to the Friends of the Hill museum while other rubbish was taken to a scrapper or dumped. (Michael Kingsbury, pers. comm.)

24) Fan drift: The concrete shell of a fanhouse with a heap of spoil blocking the incline tunnel inside. Adjacent is a foundation for the fan and its power unit. (Plates 31 and 32).

History: The fan drift or return airway was driven at the same time as the men and materials tunnel (AJHR 1951) and drew foul air from the mine throughout its working life. On top of the concrete structure at the mouth was a roof of timber slabs supported with steel bars (Comeskey 1996). Equipment was removed after the mine closed, and the tunnel entrance was blocked in 1998.

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25) Conveyor gantry foundations: Three pairs of concrete plinths, (25a, b and c), 0.45 x 0.68m (Plate 35). There is also a concrete foundation (25d), 1.7 x 0.7m, in line with the space between the plinths, immediately south-east of foundation 30.

History: The plinths were the bases for the gantry that supported the mine-to-bins conveyor, built c.1953. The single foundation was for the conveyor belt tensioner (Plates 30, 33 and 34). Besides bringing coal up from the mine, the conveyor could handle coal from stockpiles in the vicinity via a loading chute behind the building over the mine entrance (Brian Kerr, pers. comm.). The conveyor was demolished in 1989 (Gary Bainbridge, pers. comm.).

26) Coal bin foundations: Concrete slabs, a concrete floor, stumps of steel I-beams and other structural elements lie amidst coal, stones and rubbish (Plate 36).

History: Construction of the bins began in 1952 and they were ready for the commencement of mining the following year (AJHR 1952-53). The full (western) side of the aerial ran through the bins while the empty buckets returning to Whareatea passed over the top (Fig. 10, Plate 34). Aerial buckets sent through from the Whareatea drive station automatically detached from the moving cable and ran on their own wheels along the shunt rail for loading before being pushed to the end where they dropped onto the moving cable again (Frank Robertson, pers. comm.). Originally coal was not screened until it reached the brakehead bins, but when the aerial was abandoned the bins were partitioned and a crusher was installed to provide different-sized coal (Brian Kerr, pers. comm.). No longer needed when hydro mining began via Sullivan West in 1985, the bins were demolished free of charge in return for the material scrap value (Gary Bainbridge, pers. comm.) during the bitter winter of 1991 (Denniston Mines report, 4.6.91).

27) Aerial/conveyor foundations: There are four parallel concrete foundations, 3.05 x 0.35m, transverse to the line of both the aerial and the later conveyor to the truck loading bin.

History: These foundations supported the conveyor to the truck loading bin (28) in use from 1968 until the close (Plates 30 and 33). The northernmost foundations could also have been bases for a tower on the aerial system that preceded the bin.

28) Truck bin foundations: A concrete pad, 12.9 x 6.6m.

History: These foundations were built to load coal into road trucks after the aerial was retired in 1968. Coal reached the bin via a conveyor (27) from the main bins (26; Plates 30 and 33).

29) Winch house foundation: A concrete slab, 6 x 4.43m, with remnants of steel bolts embedded in it (Plate 35).

History: A twin-drum electric-powered winch, used for lowering and hauling equipment, timber and materials into and out of the mine, was installed here at the start of mining (Plate

37). It had been used previously to haul tubs from the Cascade dip at Coalbrookdale. The winch was given to the Department of Conservation several years ago to restore on the Coalbrookdale site (Plates 33 and 34).

30) Landing platform: A concrete slab 4 x 3.3m with four threaded rods sticking out of the middle (Plate 35).

History: This was not one of the original structures at the mine (and is neither marked on Fig. 10 nor visible in Plate 34) but was added early on and is visible in Plate 33. It served as a landing for mine boxes and timber trolleys hauled from the mine by the winch. From there they could be loaded onto a truck to be taken elsewhere (such as the brakehead workshop) or rolled down into the Sullivan workshop (32; Frank Robertson pers. comm.).

31) Electrical substation foundations: Three concrete foundations, 100mm wide, are just discernible in a pile of coal fines, stone and other rubbish. There are two parallel foundations 3.370m apart and another connecting them on the side nearest the bins. The pair can be traced about 2.5m before disappearing into a pile of debris. Jutting out from that heap is a block of concrete that appears to have been moved from elsewhere.

History: A shed containing transformer, switching gear and other electrical equipment stood here (Brian Kerr, pers. comm.). It was shown on the early mine layout (Fig. 10) and is visible in Plate 33.

32) Workshop/store foundation: A concrete foundation 19.1m long and approximately 5.1m wide with iron rails 0.62m apart running down its length.

History: A long Nissen or Quanset half-round structure, built at the start of mining as a store and workshop for fitters and electricians stood on the northern part of this foundation. Quite soon after, a rectangular building was added to the south side where a change is evident in the foundation. It had double doors in the south wall and a travelling hoist in the roof so a road truck could be backed up and equipment unloaded. The extension was used by the fitters and the

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rest of the building was for electricians and storage. The rails enabled electrical equipment or machinery requiring attention from fitters to be brought in on a mine trolley. It would be winched up to the platform (30), points would be changed, and it would be run back into the workshop. The bend outside the workshop was very tight, so anything being brought out again had to be pushed as far as possible around the bend or the winch would pull it off the rails. Adjacent on the east side was a block of flush toilets put in much later (Frank Robertson, pers. comm.). The workshop was demolished following the mine closure.

33) Compressor shed foundation: A concrete floor slab, 6.27 x 5.06m, with heavy metal rods, bent over and loose. History: This originally housed compressors that powered pneumatic drills when the main and fan drift tunnels were being driven during the early 1950s. As large quantities of compressed air were not required for the subsequent mining they were later removed (Frank Robertson, pers. comm.). The shed was used in latter years as a garage for mining equipment (Brian Kerr, pers. comm.). It is visible in plates 30 and 33.

34) Water tank: A rectangular concrete structure with walls 2.3m high, reinforcing rods sticking out the top and iron bars around the sides. A PVC pipe protrudes from its base (Plate 27). History: This was used mainly as a reservoir for spraying systems to lay dust in the mine workings. Water pumped from 'Lake Connew' (37) was fed into the mine as required (Brian Kerr, pers. comm.). The tank always leaked – a legacy of heavy rain that fell when the concrete was poured (Frank Robertson, pers. comm.).

35) Explosives magazine foundation: A concrete foundation, 3.14 x 5.32m, with six piles in the middle and steps in front (Plate 38). History: The powder magazine, a timber framed building with corrugated iron roof and wall cladding and timber match lining, stood on this foundation (Frank Robertson, pers. comm.). Miners picked up their powder tins (Plate 39) containing 'plugs' of explosives near the mine entrance, where the required quantity was delivered from the magazine for the start of each shift (Brian Kerr, pers. comm.).

36) Detonator magazine shell: A roofed concrete box, 2m long, 1.3m wide and 1.5m high. There is a doorway in the south wall (Plate 38).

History: This was built following a ruling that detonators and powder must be stored separately. Detonators were most dangerous on their own, hence the concrete magazine (Frank Robertson, pers. comm.).

37) Reservoir: A pond approximately 70 x 30m formed by damming a natural depression collecting water run-off from the surrounding ground. A 200mm iron pipe underneath the Sullivan mine access road limits the level. Large quantities of coal have been dumped on the west side (Plate 40).

History: This supplied water for anti-dust measures in the Sullivan mine (via concrete tank 34) and was also there if required for firefighting (Brian Kerr, pers. comm.). It was known as 'Lake Connew' after a mine manager (Frank Robertson, pers. comm.). The coal is a remnant of numerous stockpiles around the Sullivan mine, either delivered there from other mines or the result of production exceeding bin capacity, mentioned frequently in mines reports.

38) Pump shed foundation: A 2.4 x 2.7m concrete foundation for a pump adjacent to the reservoir (37).

History: The pump that delivered water to the holding tank (34) was housed here.

Condition Notes:

Updated 01/04/2022 (Field visit), submitted by katharinewatson , visited 21/11/2003 by Watson, Katharine

At the time of the site inspection, no buildings remained standing, but most foundations were in situ and in good condition. The mine portal is sealed.

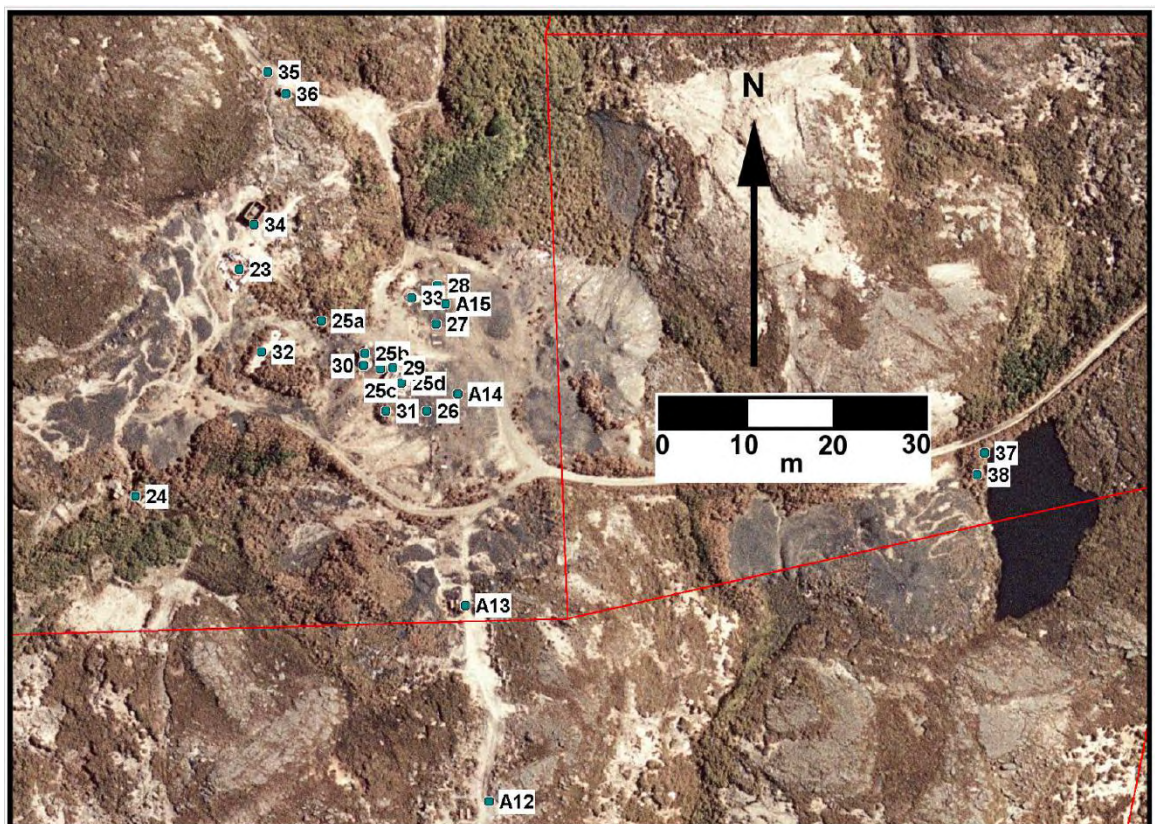
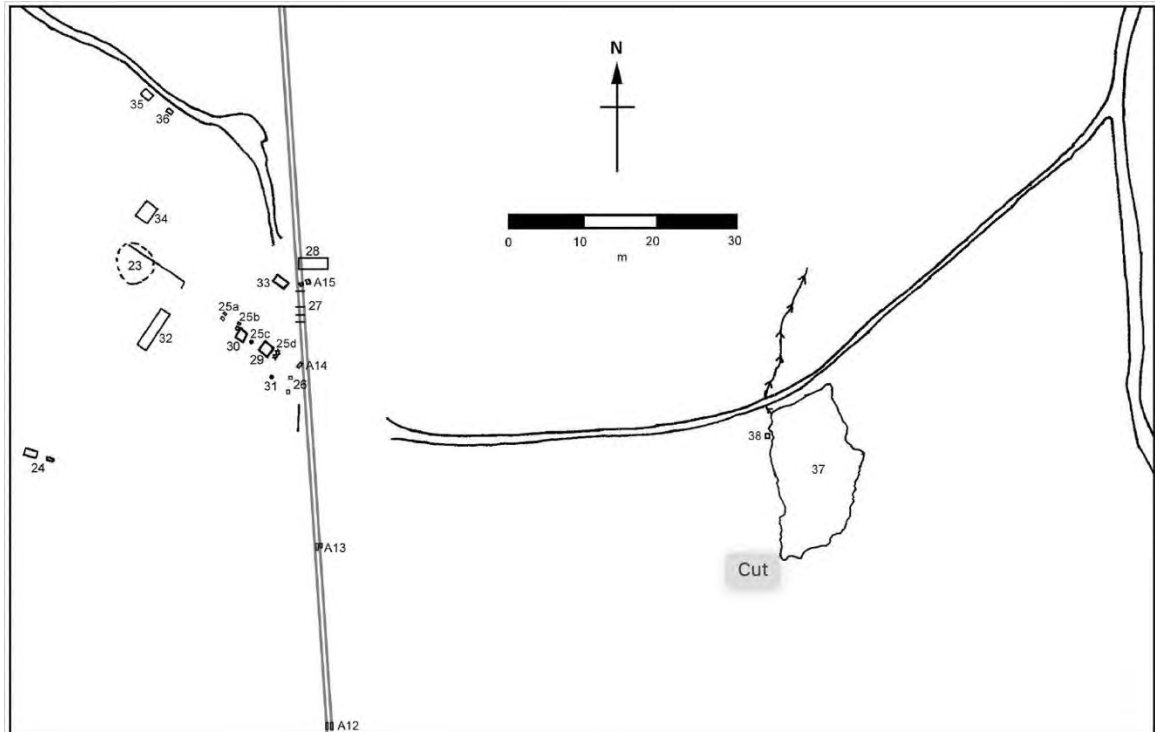




Plate 27: Intact end and side kerbing at Sullivan mine entrance (23), showing recent backfill. The place where the other side kerb was broken off is in the right foreground. In the background, behind the bodies of some old mine boxes or tubs is the concrete water tank (34).



Plate 28: The Sullivan mine entrance area (23) before a recent cleanup. The water tank (34) is in the background.



Plate 29: A view down the Sullivan entrance (23) late in the mine's life, with the rails at centre and conveyor at right. Materials and equipment were stored in the large entrance shed. (Solid Energy, Westport, photo B2020.)



Plate 30: Sullivan bins (26) from the east in 1984 with conveyor gantries (25 and 27) to the mine behind and the truck bin (28) at right. To the right of a gantry support, about the centre the mine conveyor tensioner is visible although mostly obscured by the truck bin gantry. Aerial towers (see Fig. 10) still stand on top of the bins. ('New Zealand Coal' Vol. 28: No. 1, Autumn 1984.)



Plate 33: The Sullivan mine from the south in 1977 with the mine conveyor gantry (25) going up to the bins (26) at right and the smaller gantry (27) connecting with the truck loading bin (28) beyond. At centre is the conveyor belt tensioner (25c) with gantry supports (25b and 25c) on either side. The winch shed (29) is right of the tensioner with the electrical substation (31) nearer the camera and the compressor shed/garage (33) farther right again, mostly obscuring the truck bin. At left are the mine offices which have disappeared entirely. (Peter Robertson photo from 'New Zealand Coal' Vol. 21: No. 4: Spring 1977.



Plate 34 (left): Sullivan conveyor gantry (25) and bins (26) during the pre-1968 period. At left a loaded bucket leaves the bins for the brakehead while an 'empty' passes over the roof of the bins, bound for the Whareatea. The space between the gantry foundations (25b) and tensioner (25c) has yet to be filled by the landing platform (30). The winch house (29) is partly visible.

Plate 35 (below): View from the same place today with features 25b, 29 and 30 most obvious.





Plate 36: Looking south along the bucket loading shunt foundations at the Sullivan bins site (26). The western perimeter of the foundation is at the far right where the angled concrete foundation ends.



Plate 37: The Sullivan mine winch shortly before removal from its site (29) to which it may be returned. The winch shed has been destroyed.



Plate 38: The concrete shell of the Sullivan detonator magazine (36) and the foundation of the original explosives magazine (35). The concrete water tank (34) is on the sky line.



Plate 39: Former Denniston miner John Green examining a rusty but intact powder tin. Each miner would carry his tin of explosive plugs into the mine, but detonators were held by the deputy who was shot-firer.

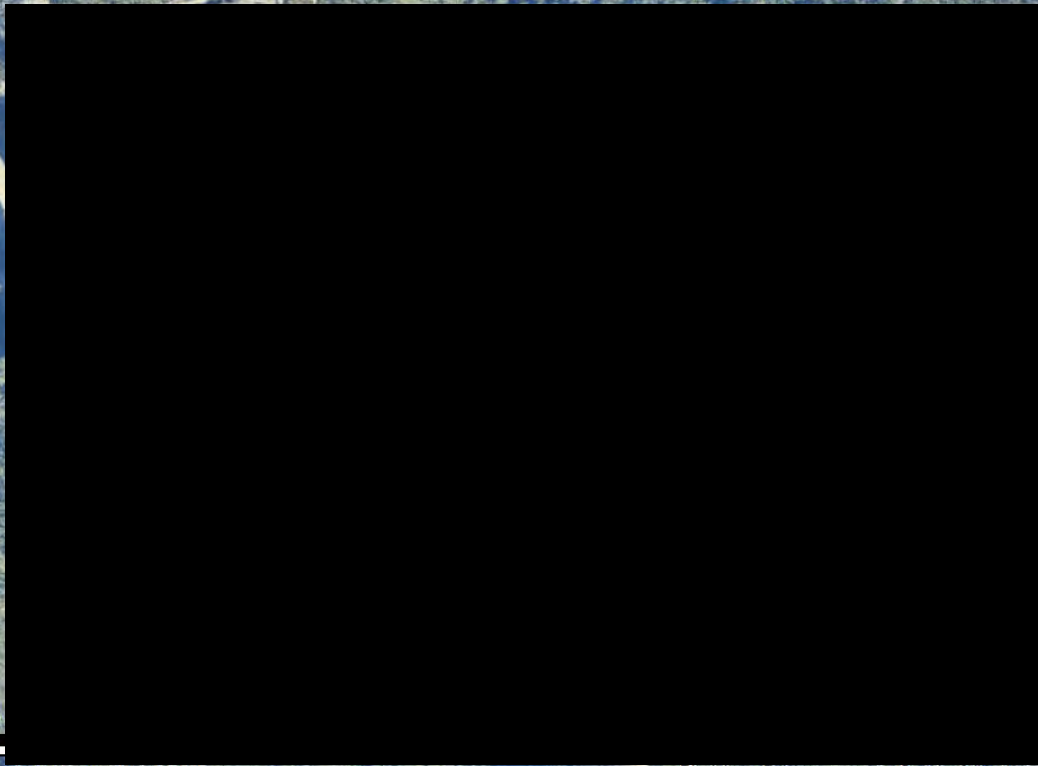


Plate 40: Fines from one of many Sullivan coal dumps spread almost to the shore of the reservoir referred to as Lake Connew (37). A pump shed foundation (38) lies amidst the growth at left.



Plate 41: Mining relics retrieved from the Sullivan entrance (23) lie nearby, awaiting identification and possible conservation.

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: L28/16 Imperial Site Number: S23/25 Site Type: Transport/ Site Name(s): Jorgen's Drive	Site Coordinates (NZTM) Easting: Northing: Source: Shapefile	
 0 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: On the Millerton plateau, to the west side of Granity Creek, 2km southwest of Millerton.		
Brief Description: Tramway bench, with cuttings, stone faced benching, three embankments crossing gullies		
Condition of Site when last visited: No Recent Info		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Modern 1900-

Ethnicity:

Non Maori

Site Features:

Tramway, Cutting, Track - benched

Associated Sites:

Description:

Updated 15/04/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 13/11/2024 by Kim Tatton, Doug Gaylard

See 13 Nov 2024 site visit.

Updated 03/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 13/11/2024 by Kim Tatton, Doug Gaylard

A section of Jorgen's Drive was relocated in November 2024. The drive has been intercepted and modified by modern mining where roads have been cut through the drive in at least two places along its length. Otherwise, the drive appears to remain intact and undamaged but covered in thick tussock, manuka and other native scrub.

Updated 11/12/2025 by ArchSite.

Grid reference changed from (E1504946 / N5388726) to centroid of site polygon (E1504996 / N5388776).

Condition Notes:

Updated 03/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 13/11/2024 by Kim Tatton, Doug Gaylard

The drive has been intercepted and modified by modern mining where roads have been cut through the drive in at least two places along its length. Otherwise, the drive appears to remain intact and undamaged but covered in thick tussock, manuka and other native scrub.

Jorgen's Drive (L28/16)

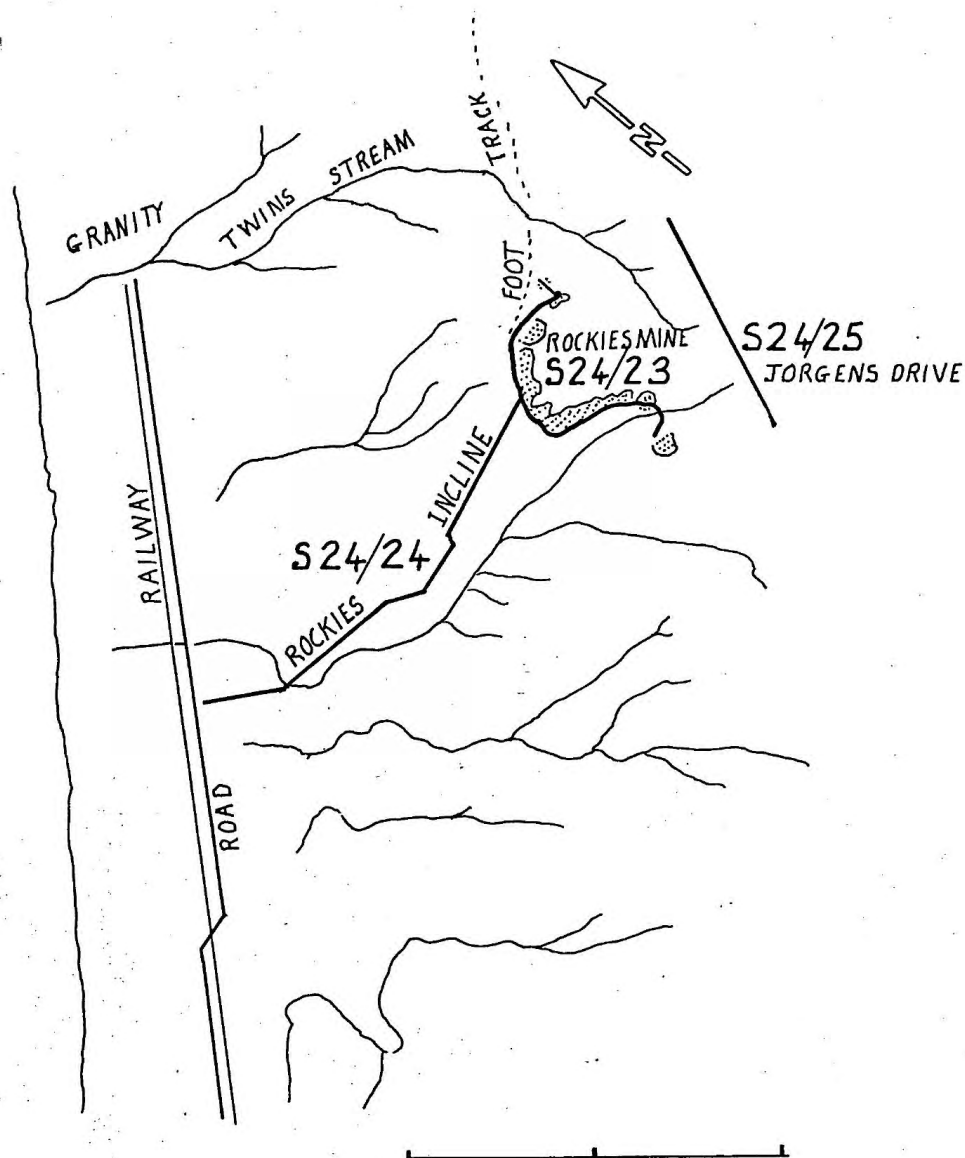
Site Visit – Kim Tatton and Doug Gaylard 13/11/2024



1943 aerial photograph showing the cutting of Jorgen's Drive (arrowed) (Retrolens SN264 Run No. 778 Photo. 4)

S24/25

HISTORIC SITES ROCKIES MINE



NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1)		NZAA NZMS 1 SITE NUMBER S24/25 DATE VISITED August 1989 SITE TYPE Tramway SITE NAME: MAORI Jorgens Drive OTHER													
NZMS 1 map number S24 NZMS 1 map name Westport NZMS 1 map edition 3rd															
Grid Reference		Easting													
1. Aids to relocation of site (<i>attach a sketch map</i>) On Millerton plateau, west side of Granity Creek, 2 km south west of Millerton, runs from above G R to 323 848.															
2. State of site and possible future damage Undamaged covered in tussock, manuka.															
3. Description of site (<i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i>) A straight tramway formation some 700m long running NE-SW, climbing gradually to south west. Formation is 3-4m wide with cuttings, stone faced benching and three embankments crossing gullies (up to 8m high). The southern embankment has been breached by stream. According to Brian Watson this tramway was supposed to link up the west section of Mine Creek mine with further coal seams to the south. The surface section was completed but fire in the west section forced abandonment of the proposal. The west section was sealed and abandoned in 1926, suggesting c.1925 as a date of construction for this tramway. Jorgenson was an engineer or manager who initiated this plan.															
4. Owner Coal Corp Address		Tenant/Manager Address													
5. Nature of information (<i>hearsay, brief or extended visit, etc.</i>) Filed trip AJHR records B Watson pers' comm. Photographs (<i>reference numbers, and where they are held</i>) DOC Hokitika Aerial photographs (<i>reference numbers, and clarity of site</i>) SN 8119 A/13															
6. Reported by R H Hooker Address Dept of Conservation HOKITIKA		Filekeeper Date <i>MM 29/1/89</i>													
7. Key words Tramway															
8. New Zealand Register of Archaeological Sites (<i>for office use</i>) NZHPT Site Field Code															
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>B</td><td>B</td></tr> <tr><td>-</td><td>-</td></tr> <tr><td>B</td><td>B</td></tr> </table> Type of site Local environment today Land classification		B	B	-	-	B	B	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>A</td><td>B</td></tr> <tr><td>-</td><td>-</td></tr> <tr><td>A</td><td>Q</td></tr> </table> Present condition and future danger of destruction Security code Local body		A	B	-	-	A	Q
B	B														
-	-														
B	B														
A	B														
-	-														
A	Q														

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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number:	L28/17	Site Coordinates (NZTM)
Imperial Site Number:	S23/26	Easting:
Site Type:	Mining - coal	Northing:
Site Name(s):	Mine Creek	Source: Shapefile
Scale (A4 Paper Size): 1:3,000 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: The site is within the Stockton mine, operated by Bathurst Mining Ltd. Access is only possible with permission from Bathurst (and accompanied by a Bathurst representative).		
Brief Description: Site of mining settlement: boiler chamber, compressor shed sites, house sites, scattered artefacts, boarding house site, magazine, bath house site		
Condition of Site when last visited: Fair		

SITE RECORD HISTORY	NZAA SITE NUMBER: L28/17
Site description Updated 15/05/2023 (other), submitted by katharinewatson Grid reference (E1506874 / N5388786) The excavation of the Mine Creek infrastructure and settlement took place under authority 2009/237, issued by the New Zealand Historic Places Trust on 9 July 2009. Excavation of the site began in September 2009 and was completed on 10 March 2010. The final report has not yet been completed. The following areas were excavated: • one chamber of the boiler shed; • most of the compressor shed; • five house sites • an industrial building • the terrace adjacent to the portal on the true left of Mine Creek. Boiler chamber One boiler chamber was excavated. The chamber excavated was from the last of two additions made to the original building. Excavation revealed a brick floor, the remains of the fire grate and the position of the vents and the brick supports for the boiler tubes. The northern extent of the building was exposed, as were the steps that led into the pedestrian accessways between the chambers. Compressor shed Most of the compressor shed was excavated. It had a concrete floor throughout, with a number of drains and a large oil sump set into this. Some of the drains had been covered with timbers or large metal plates, presumably to stop people hurting themselves on them. There were also some metal pipes, presumably for carrying air. Other features exposed within the shed include concrete blocks and metal anchors for machinery and a brick chimney. The foundations of two air compressors were found. An early 20th century photograph of the compressor shed at Mine Creek shows four compressors in the shed, indicating that two had been removed subsequently. Most of the artefacts recovered during the excavation were from this area. These were predominantly metal, although there were some ceramic insulators and bottles. Many of the artefacts were heavily rusted but those that were recognisable included machine parts, tools such as spanners, and bolts and pins and the like. Notable amongst the artefacts were a stoker from the boilers and two in situ boxes of bolts. House sites Five house sites were excavated. Only two of the house sites were complete. Excavation of the remaining sites focused on the area around the fireplace and locating the house piles to establish the size of each building. Few artefacts were found in association with any of the sites. Area B This house site was on a deliberately formed terrace near a later mine portal on the true left of Mine Creek. The site could be seen in a number of historic photographs of the settlement. Excavation revealed that this house had had stone steps leading up to it. These overlaid a drain and connected with a bridge over a small natural stream and a track on the other side of that stream. The drain would have carried water away from the house while the steps would have made access to the house easier and avoided turning the ground to mud. These features would have been particularly important at this house site, as it got less sun than any other house site in the settlement and there was often frost on the site in September. The fireplace was particularly messily put together compared with some of the other fireplaces. Only two rows of piles were found in association with the house but it is likely to have had more, as the two rows were no more than 2 m apart, which would have been a very small house. Area D This house was probably the largest of the houses excavated, although the terrace that the house sat on had had a large hole dug into it at some stage after the house was abandoned. The house site had been created by excavating a terrace into the natural clay. The rear of the terrace was around 500 mm high and the top of this bank had been edged with a single line of stones. There was a shallow drain cut into the clay between this bank and the house platform. This continued around the house to at least the fireplace, and appeared to continue beyond this. The fireplace associated with this house was on the exterior of the house and encased in a concrete shell. The interior of the concrete shell was lined with bricks, although there was a gap between the bricks and the concrete. This contained fill,	

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

which may have formed after the house was abandoned. There was a row of bricks, however, that sat over the gap between the brick lining and the concrete shell. This row of bricks would have been only partly supported by the brick lining. As such, there is likely to have been material of some description in this gap when the house was occupied, which may have been a form of insulation. The fireplace at Area N was similar. The firebox associated with this chimney was particularly small compared to the other houses.

Area E

Unlike most of the other house sites, this house did not appear to sit on a deliberately cut terrace, although the area where it was built may have been levelled. The remains exposed here consisted of a brick fireplace, piles, post holes and a brick patio. The fireplace had a relatively small firebox and the exterior had been coated in a thin layer of plaster, rather than the concrete shell seen in Areas D and N. Little of this plaster remained in situ. Unlike any of the other domestic fireplaces (all of which were built on the exterior of the associated house), two postholes were found on the exterior corners of this fireplace, suggesting that the fireplace had an external covering (probably corrugated iron). This may have been necessary to protect the thin plaster covering from the elements.

The brick patio ran the length of the north elevation of the house. Curiously, the patio was in two parts. It is not clear why there was a gap between the two sections of brick and unfortunately there was not time to investigate this area (the patio was found on the penultimate day of the excavation).

Area F

This house was immediately below Area B and was also on a deliberately built terrace. Historic photographs indicated that the house had been extended during its occupation, almost doubling in size. The only evidence of this extension was a small drain cut into the clay along the rear of the terrace. This only ran half the length of the house site and thus appears to have been associated with the first house.

The fireplace from this house was similar to those found at Areas D and N, although it did not have the gap between the concrete and bricks. Nor did it have the brick edging found around the hearth of the Area N fireplace (see below).

Area N

This house sat on a terrace that had probably been deliberately cut and that had had a track built around the front of it. The track ran to the natural stream described in association with Area B. Where the track met the stream, it was faced with stone. A small drain had been dug between the track and the terrace edge. There was also a drain running from the terrace down to the track. Much of the house terrace had unfortunately been dug out during later mining in the area.

The fireplace at Area N was the same design as that at Area D, although it had brick edging around the fireplace and a larger fire box than the Area D fireplace. Few piles were found in association with this house, although there was a joist, one bearer and the possible remnant of a floorboard. One of the piles had been burnt and a lot of charcoal was found in parts of the site, although not sufficient to indicate that the house had burnt down.

Industrial building

This industrial building lay the north of the boarding house. Historic photographs of the settlement show that this building was larger than the houses and that it had what appeared to be double doors at the north end. This suggested that the building was not domestic in character. The site was excavated to establish its function and because it had two fireplaces, one behind the other (separated by about 1 m), both facing the same way, at the south end of the building.

The excavation failed to reveal either the function of the building or why there were two fireplaces, but it is likely that one superseded the other. One of the fireplaces was inside the building and the other, which appeared to more neatly and substantially built, was outside the building. The excavation did reveal a short section of brick-lined drain that had been under the building at its north end, which may have captured material from within the building, and that a small lean-to addition had been made to the east elevation of the building.

The building stood on a terrace above the settlement and neither the terrace nor the building can be seen in the earliest photographs of the settlement. This terrace had a benched track running around the side of it, leading down to the heart of the settlement. This would have been necessary as the other approaches to the building were steep and relatively difficult.

Terrace

This terrace was above Areas B and F and was adjacent to a mine portal on the true left of Mine Creek. The terrace cannot be seen in any of the historic photographs of the settlement and was investigated to determine why it was built. Vegetation clearance revealed that it had been faced with stone and that a hole had been dug at one end and there was a post next to this. Excavation (in the form of a test trench dug the length of the terrace), however, revealed nothing of what might have stood on the terrace.

The attached images show the site in April 2023.

See site record form

Condition of the site

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

Updated 15/05/2023 (other), submitted by katharinewatson

Since the excavation, a dam has been built across Mine Creek, below the boiler shed, but the rest of the site remains largely undisturbed and the boiler shed remains standing (as at April 2023). The following areas of the site were not excavated:

- one house site;
- the bath house area;
- the boarding house;
- the magazine; and
- a small part of the compressor shed.

The site is in reasonable condition. Some of the elements of it are run down. There is little left of the house sites.

Statement of condition

Current land use:

Threats:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD INVENTORY	NZAA SITE NUMBER: L28/17
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Supporting documentation held in ArchSite

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1)		NZAA NZMS1 SITE NUMBERS 24/26 524/26 DATE VISITED August 1989 SITE TYPE Mining Settlement SITE NAME: MAORI OTHER Mine Creek													
NZMS 1 map number S24 NZMS 1 map name Westport NZMS 1 map edition 3rd															
Grid Reference Easting															
1. Aids to relocation of site (<i>attach a sketch map</i>) On both sides of Mine Creek about 400m southwest of trig A1. Take track on west of main road 200m north of Mangatini Bridge, follow some 1.2km take track to north, follow to Mine Creek valley.															
2. State of site and possible future damage Valley floor covered in thick gorse, upper slopes bare or stunted pakihi vegetation. Bulldozed track crosses part of site.															
3. Description of site (<i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i>) Derelict settlement. Notes attached.															
4. Owner Coal Corp Address		Tenant/Manager Address													
5. Nature of information (<i>hearsay, brief or extended visit, etc.</i>) Field trip, B Watson pers comm Photographs (<i>reference numbers, and where they are held</i>) DOC Hokitika Aerial photographs (<i>reference numbers, and clarity of site</i>) S.N. 8119 B/15 difficult															
6. Reported by R Hooker Address Dept of Conservation HOKITIKA		Filekeeper Date													
7. Key words Coal mining township															
8. New Zealand Register of Archaeological Sites (<i>for office use</i>) NZHPT Site Field Code															
<table border="1"> <tr><td>E</td><td>R</td></tr> <tr><td>-</td><td>-</td></tr> <tr><td>B</td><td>B</td></tr> </table> Type of site Local environment today Land classification		E	R	-	-	B	B	<table border="1"> <tr><td>B</td><td>B</td></tr> <tr><td>-</td><td>-</td></tr> <tr><td>A</td><td>Q</td></tr> </table> Present condition and future danger of destruction Security code Local body		B	B	-	-	A	Q
E	R														
-	-														
B	B														
B	B														
-	-														
A	Q														

Site Description S24/26 Mine Creek Settlement

The main underground haulage road between the Mine Creek section (to the south of Mine Creek) and Millerton passed beneath this settlement. In 1899 a boiler house to provide electric power and return airway were built. Surface access adits provided easy access for miners to the Mine Creek workings. Miners huts, a boarding house, hall and bathhouse followed. Access to Millerton was via the main haulage road, a direct track over the tops or a more even graded track down Mine Ck. The township appears to have been abandoned in the 1930s and the powerhouse somewhat later.

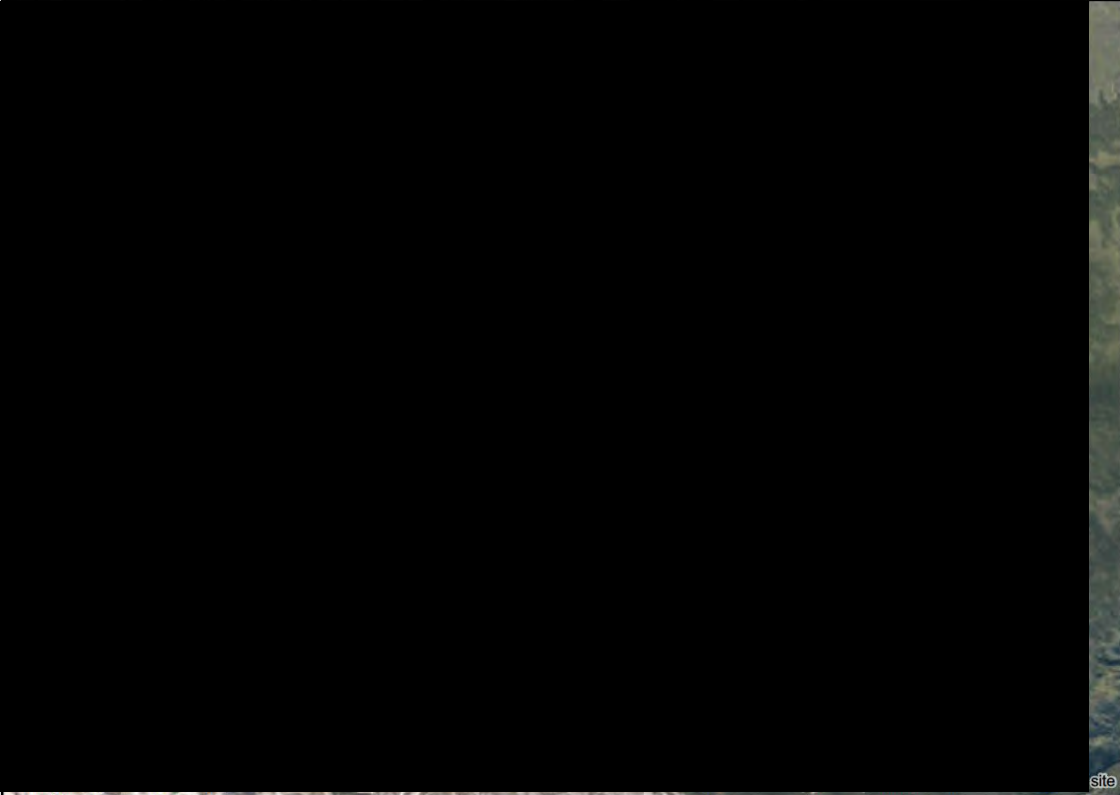
Through this site Mine Creek runs almost east-west. The south side comprises mainly mining related ruins. At the eastern end where the creek turns south are the concrete remains of the bathhouse and some wooden debris which is possibly the hall. A bulldozed line cuts across west of this feature. East of this cut is the concrete and brick boiler house remnants and adjacent is the concrete slab and back wall (against the bank) of the compressor/generator shed. East again is the ventilation flue some 3m x 3m by 4m tall. Thick gorse covers most of this southern side. The original benched track to Mangatini runs above the bulldozed access track. Behind the bathhouse are 2 adits (open) descending in a southerly direction.

The northern side of the creek has little flat ground. Scattered about the slopes opposite the boiler house - ventilator area there are abundant domestic sherds, bottle glass, crockery etc. No definite habitation sites could be determined though several small terraces occur. The surface is a bare quartzose sandstone which is fretting away making surface feature identification difficult.

A substantial building remains are located on the eastern side opposite the bathhouse and adjacent to the bulldozed track. It comprises timber piles and brick chimney bases and was either a substantial house or the boarding house. The foot track down Mine Creek is easily distinguished on this northern side.

From coal delivery records held by Mr B Watson; during 1930-31 T Laffy, McInnes, Neighbours, Qualter, Shaw, Taylor, O'Connor, Willan & Wilson were living at Mine Creek. Coal was also delivered to the boarding house and library.

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
 ARCHSITE archaeological site recording scheme	NZAA Site Number:	L28/20
	Imperial Site Number:	S23/29
	Site Type:	Transport/
	Site Name(s):	Stockton Electric
Site Coordinates (NZTM)		
Easting:		
Northing:		
Source:		Shapefile
		
Finding Aids to the Location of the Site: Stockton		
Brief Description: Electric tramway, built 1906-1907. Used to bring coal from the Mangatini area to the incline.		
Condition of Site when last visited: No Recent Info		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Modern 1900-

Ethnicity:

Non Maori

Site Features:

Tramway

Associated Sites:

Description:

Updated 11/12/2025 by ArchSite.

Grid reference changed from (E1507645 / N5391025) to centroid of site polygon (E1507695 / N5391075).

Condition Notes:

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1)		NZAA NZMS 1 SITE NUMBER S24/29 DATE VISITED AUGUST 1989 SITE TYPE COAL TRAMWAY SITE NAME: MAORI STOCKTON ELECTRIC OTHER TRAMWAY													
NZMS 1 map number S24 NZMS 1 map name WESTPORT NZMS 1 map edition 3rd															
Grid Reference	Easting														
1. Aids to relocation of site (<i>attach a sketch map</i>) Ran from top of Stockton incline to 355 856 where it went underground, briefly emerging to cross the Mangatini Stream. Most of route marked on S24, 3rd edition, plan attached.															
2. State of site and possible future damage Overgrown, destroyed in places by present mine road.															
3. Description of site (<i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i>) Built in 1906-1907 as an electric tramway to bring coal from the Mangatini area to the incline. One of the first electric tramways in NZ. Powered from power house at Ngakawau. Workshops for servicing rolling stock and locos on southside of road at GR 361 875 remnant timbers, steel and servicing pits remain.															
4. Owner Coal Corp Address		Tenant/Manager Address													
5. Nature of information (<i>hearsay, brief or extended visit, etc.</i>) Field trip, AJHR reports. DOC Archives Photographs (<i>reference numbers, and where they are held</i>) DOC Hokitika, Margon 1915 Aerial photographs (<i>reference numbers, and clarity of site</i>) SN 8119 B16 shows well															
6. Reported by R H Hooker Address Dept of Conservation HOKITIKA		Filekeeper Date													
7. Key words Coal tramway															
8. New Zealand Register of Archaeological Sites (<i>for office use</i>) NZHPT Site Field Code															
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>B</td><td>B</td></tr> <tr><td>-</td><td>-</td></tr> <tr><td>B</td><td>B</td></tr> </table> Type of site Local environment today Land classification		B	B	-	-	B	B	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td>C</td><td>B</td></tr> <tr><td>-</td><td>-</td></tr> <tr><td>N</td><td>Q</td></tr> </table> Present condition and future danger of destruction Security code Local body		C	B	-	-	N	Q
B	B														
-	-														
B	B														
C	B														
-	-														
N	Q														

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS260) NZMS 260 map number L28 NZMS 260 map name NZMS 260 map edition 2006		NZAA METRIC SITE NUMBER L28/20 DATE VISITED July 2008 SITE TYPE railway line SITE NAME: MAORI OTHER electric loco line	
Grid Reference Easting			
1. Aids to relocation of site (attach a sketch map) The site is within Solid Energy New Zealand's Stockton mine. Permission to enter Stockton must be obtained from Solid Energy. The grid reference above is for the bottom end of the line. Other waypoints recorded for the site are listed below.			
2. State of site and possible future damage Some sections of the loco line have been destroyed, particularly by the construction and widening of the haul road. Those sections that have not been destroyed are in good condition. None of the substations or workshops remain standing, and one of the workshop sites has been bulldozed.			
3. Description of site (Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here) Work must have started on the loco line late in 1906 or early in 1907 and, by the end of 1907, 1 mile of the line had been constructed, with the eventual length between the top of the incline and the mine mouth being 2¼ miles (AJHR 1907 C3A:4, 9). There were three sidings at the top of the incline and the average grade of the line was 1:21.2, with the maximum grade being 1:12. The railway formation was built to be wide enough to carry two lines, as it was hoped that the mine would eventually be producing 2000 tons a day. ¹ The railway tracks were supplied by an English firm, Cammell, Laird and Company ² , and weighed 65lb. The rails were apparently rolled to order to meet the needs of the loco line. Most of the sleepers were locally sawn yellow pine, with the exception of those used for crossings, curves and joints, for which imported hardwood was used. The locomotives on the line weighed 20 tons and had been purchased from the General Electric Company (Crawshaw 1998:22; <i>Westport Times and Star</i> 7 October 1908). The locomotives came from so far afield because the gauge being used at Stockton was 3 foot, which was 6 inches less than the standard New Zealand gauge (Sumner 1983:297). The tubs that the locos pulled (they were capable of pulling twenty of these) had a capacity of 30cwt, and were manufactured locally, probably at Birchfield Foundry. The locos had wheel brakes and Fell brakes, which used a centre rail laid on the sections of the line with steeper gradients (Crawshaw 1998:22; <i>Westport Times and Star</i> 3 October 1908).			
4. Owner Solid Energy New Zealand Address		Tenant/Manager Address	
5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers and where they are held) Aerial photographs (reference numbers and clarity of site)		Extended survey.	
6. Reported by Katharine Watson Address 28 Pratt Street, New Brighton, Christchurch		Filekeeper Les Wright Date	
7. Key words			
8. New Zealand Register of Archaeological Sites (for office use) NZHPT Site Field Code			
Latitude S		Longitude E	
☐ Type of site		☐ Present condition & future danger of destruction	
☐ Local environment today		☐ Security code	
☐ Land classification		☐ Local body	

¹ No information has been found to suggest that the line ever carried two tracks.

² A company better known for their shipbuilding (http://en.wikipedia.org/wiki/Cammell_Laird), but who produced railway tracks from their Cumberland factory (<http://www.banklands.com/Workington%20as%20an%20Iron%20and%20Steel%20producing%20centre.htm>).

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE DESCRIPTION	NZAA METRIC SITE NUMBER L28/20 DATE VISITED July 2008 SITE TYPE railway line SITE NAME: MAORI OTHER electric loco line
NZMS 260 map number L28 NZMS 260 map name NZMS 260 map edition 2006	Power for the line was supplied by a powerhouse at Ngakawau (still standing), through an overhead wire. The powerhouse also supplied power to the other electrical equipment used by the mine, including coal cutters and fans (AJHR 1909 C3A:11). There were initially three substations on the line, one between the top of the incline and A tunnel (No. 1 Substation), one at the mouth of A tunnel (No. 2 Substation) and one at the far end of B tunnel (No. 3 Substation; <i>Wesport Times and Star</i> 3 October 1908). This was the first electric railway line built in New Zealand (Churchman 1995:8). The scheme had its doubters, particularly Frank Reed, the Mines Inspector of the day, who believed that, at 30cwt, the tubs were too heavy for the terrain. A written argument between George Broome, the English mine manager, and Reed developed around this matter (and a number of other issues). Reed was initially proven correct - within days of the opening, the mine was forced to close due to alterations required to the line - although the electric loco line would be used (almost without pause) until 1953 and the inception of the aerial ropeway (Crawshaw 1998:19-22; Henley 2005). The electric loco line was extended twice during the 1910s. The first occasion was a major extension to New Mine, which opened in 1913. This extension necessitated the construction of a bridge across Mangatini Stream, which was completed in May 1910 (AJHR 1911 C3A:9). The second extension was from New Mine through to Fly Creek mine, which appears to have opened in the early 1920s (DOC: AJHR 1922, 1923). Only a small section of this line is above ground. The electric loco line continued to operate until 1953, when the aerial cableway opened. The report in the 1927 AJHR records the construction of a "new" loco line, while the following year's report notes that "[T]he extension of the electric loco haulage road has improved the daily output" (DOC: AJHR 1928). It is likely that the comments refer to the same piece of track, and that this extension was into the Fly Creek area. 1929 saw the beginning of what was to be an ongoing programme of repairs and maintenance on the loco line and its associated infrastructure, when new rails were laid on a mile of the track and reconditioning work was undertaken on Mumm's bridge (over the Mangatini Stream). Matters were not helped by the Inangahua earthquake, when "[A] considerable amount of damage was done to the tunnels, loco-track, and mine generally" (DOC: AJHR 1929). Almost every AJHR entry for the 1930s includes a reference to repair work on the loco line, and Mumm's bridge was reconditioned again in 1938 (DOC: AJHR 1939). It is not clear how much of the work that took place in the 1930s was a result of damage caused by the earthquake, but some of it is likely to have been. There also seems to have been a programme of upgrading the lines, with 60 lb rails gradually replacing the earlier, heavier rails (DOC: AJHR 1930, 1939, 1940). The rolling stock was also added to in 1935, when seventy new mine trucks were purchased. Further "extensive repairs and renewals" were carried out in the 1940s (DOC: AJHR 1944, 1947, 1948). Still more work was required after March 1950, when No. 4 Substation was destroyed by fire. The report notes that "[E]fforts to locate suitable equipment to replace that lost are being made" (DOC: AJHR 1950:21). This must have been particularly frustrating for the now State-owned colliery, with work on the aerial cableway already underway. The ongoing references to the need for repairs to the loco line no doubt reflect the heavy wear and tear to which it was subjected, and must have been one of the reasons it was replaced. The Archaeological Survey While much of the electric loco line remains intact, it has suffered damage with the passage of time and the expansion of the mine. Further, much of this damage has occurred since the early 1980s when the Summers recorded the line and is related to the widening of the haul road. The electric loco line begins at the top of the Stockton Incline, where it is difficult to make out any definite evidence of the sidings that were in this area. There are scattered concrete foundations here (as well as building remains) that may have been associated with the sidings. Beyond here, it is possible to follow the line briefly before it is cut by the haul road (this area had been damaged in the 1980s). There are scattered sleepers and rails along the north side of the haul road here that were no doubt pushed up when the original mine road (known as the Burma Road) was put it.

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The line is initially difficult to make out on the south side of the haul road but is obvious by the time it reaches the loco workshop and No. 1 Substation, which lie above the haul road (Plate 1). The workshop site consists of concrete foundations with two 'wells' in between them and the remains of a substation to the south. These remains consist of wooden foundations in a small earth-floored depression adjacent to the workshop. Compared to the substation located further along the line, few artefacts were found here. The haul road has encroached on the eastern end of this site, cutting through the loco line embankment and leaving sleepers, rails and a pit exposed in the sections (Plate 2).

Beyond this point, the loco line has been cut four more times by the haul road before there is a relatively complete section of the line leading up to A tunnel. Prior to this, the loco line runs along above the haul road until shortly beyond the Tintown corner, after which point the haul road climbs more steeply than the loco line. Within the section up to the Tintown corner, the line is on an embankment for most of its length, with some cutting also evident in places. There are also the remains of power, telephone and/or telegraph poles in this section, as well as a bridge that it is still safe to walk across at the Tintown corner (Plate 3).³ Also of note is the remains of a siding just west of the bridge. This is difficult to make out clearly now due to the bush regrowth but a widening of the line is evident here. The Summers also recorded this feature, also noting a points mechanism and that men who lived at Tintown used to catch the train here to travel to work (Sumner 1983:290-291). The sections of the line either side of the aforementioned bridge are embankment.

After the Tintown corner, the loco line is on a small embankment for much of its length. There are few features associated with the line until the section leading to the A tunnel. The loco line runs through impressive rock cuttings prior to entering the A tunnel (Plate 4). As with much of the line up to this point, regenerating bush is growing in the cuttings, this obscuring details associated with the line. Nonetheless, poles are visible along the outside edge of the cutting (Plate 5) and there are various metal items attached to the inside wall of the cutting (Plate 6). One drain through the outside edge of the cutting was observed and it is likely that there were more of these features but that they were obscured by the bush. It is also likely that there were drains running down the inside of the cutting - there was certainly water running down it in places but the density of the vegetation made it difficult to tell whether or not this was in a channel.

The cutting ends shortly before the loco line enters the A tunnel and the line has been benched around a rock face. An old coal tub lies at the end of the cutting (Plate 7) and there are various metal and electrical artefacts scattered along the embankment between this point and the tunnel entrance. The tunnel entrance is in good condition and timbers can be seen inside the tunnel (Plate 8). The line emerges briefly from A tunnel to cross a small stream before entering B tunnel. The line emerges again to cross the Mangatini Stream before being cut by the haul road again.

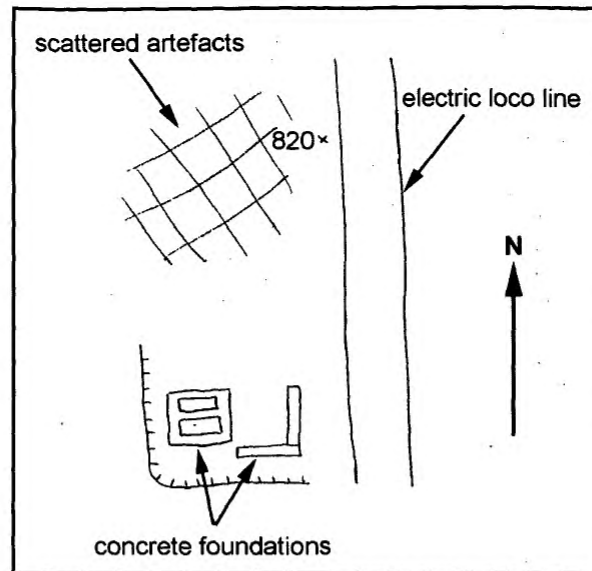
The bridge across the Mangatini does not remain but there are impressive stone abutments on either side of the stream (Plate 9). The embankment on the true left of the Mangatini is one of the few sections of line on which sleepers remain in situ (Plate 10).

After crossing the Mangatini, the loco line has again been cut by the haul road (as noted above). The Sumner report (1983:294) notes that the loco line had been disturbed considerably by bulldozing and other activity in this area and there was little evidence of the line between this point and the old loco workshop on the section of line to New Mine. Bearing in mind that twenty-five years have passed since this comment and there has been increased mining activity in this time and thus even fewer remains of the loco line are likely to survive, no attempt was made to locate the line in this area. Instead, the survey was resumed at the old loco workshop.

Here there are the scattered remains of electrical equipment, as well as bulldozed concrete foundations, which are likely to have been from the workshop (Plates 11 and 12). Most of this area is covered in dense gorse. As such, no attempt was made to relocate the exact site of the workshop. From here the line runs along an embankment to a bridge across a small stream. There are still timbers in place here and a stone abutment on at least one side of the stream (Plate 13; the dense vegetation made it difficult to see the other abutment).

From here the line continues until it reaches Mumm's tunnel. This section of the line is in good condition and has not been disturbed as much as the section between the Stockton Incline and A tunnel. The line runs through a number of lengthy cuttings (which are often clear of vegetation; Plate 14) but there are other sections of line on embankments. A number of piles of sleepers were seen leaning against the side of the cuttings. Another notable feature of this section of line was a substation, described by the Summers (1983:295) as No. 4 Substation, which fits with the information in the 1908 *Westport Times and Star* article outlined above. The remains of this substation consisted of the wooden foundations of the building and densely scattered artefacts, including numerous broken insulators (Plates 15 and 16). There were also concrete foundations associated with another structure nearby (Plate 17).

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Sketch plan of No. 4 Substation, which was where the scattered artefacts are. Not to scale.

As at the time of the Sumners' visit, the lower end of Mumm's tunnel is still in good condition. The upper end has collapsed but the cutting leading to this entrance is still in good condition, although very boggy. From here the loco line ran around the hillside to the entrance to New Mine. This entrance was not found during the survey (although the general area was) and Stu Henley indicated that he did not know where this entrance was.

There is another section of loco line at Fly Creek. One piece of this was briefly inspected during the survey but time constraints prevented the full survey of this part of the line. This section, however, was surveyed by Ray Hooker in 1998 and at that time the bridge across Fly Creek (consisting of concrete abutments and stringers) remained in situ (Hooker 1998:25). Hooker's updated version of the Sumners' sketch of this area (see below), however, indicated that some bulldozing of the embankment had taken place. This has been little activity in this area since Hooker's survey and it is likely that the site remains as it was then.

wypt	easting	northing	altitude	error	description
7			320 m	6m	This is apparently the bottom end of the loco line, where locos were turned around. The area is now covered in gorse and blackberry and there is a large metal artefact here, buried in grass.
7			318 m	7m	Part of the end of the loco line? There is a concrete pad here with scattered metal artefacts and wooden posts nearby. There is also a fireplace (which probably had a coal range) with a collapsed chimney and more concrete pads nearby. Site may be part of Stockton township.
7			339 m	6m	Embankment? Difficult to tell due to the thick vegetation.
7			336 m	7m	Embankment. Very thick vegetation.
7			320 m	5m	Rails and timbers protruding from a cut for the haul road.
7			336 m	5m	Standing on the timbers recorded at 780. These do not look like sleepers but are laid out as sleepers would be. Their alignment suggests the electric loco line headed out across the road from this point.
7			337 m	6m	Three railway irons lie on top of a cutting above the haul road - not in situ. The embankment may have been bulldozed and the material piled up here.
7			338 m	6m	Embankment lost here, where it meets a stream near the loco workshop.
7			339 m	6m	The cutting becomes very thick with vegetation.
7			344 m	5m	Electric loco line in cutting.
7			349 m	5m	Embankment to the west of the workshop site. It has a cutting on its south side and haul road on the north side.
7			352 m	6m	Electric loco workshop site.
7			367 m	5m	The west end of the workshop site, where the haul road has destroyed the loco line formation. The drainage channel alongside the embankment has scoured out the west end of the embankment.

787		3	376 m	5m	The east end of the next section of loco line embankment to the east of the workshop. It has been bulldozed away during haul road and drainage channel formation.	L28/ 20
789		9	383 m	7m	A power/telegraph pole where the embankment resumes. The embankment has had spoil dumped on it here. There are lots of scattered pins, etc, on the embankment between the spoil and the drainage channel. The embankment runs through a cutting east of this point.	
790		7	382 m	4m	A power/telegraph pole on the embankment.	
758		5	387 m	4m	Embankment. There is a power/telegraph pole to the north.	
757		8	387 m	5m	The cutting on the south side has all but gone.	
756		0	387 m	4m	The end of the cutting on the north side of the embankment.	
759		2	389 m	4m	Electric loco line.	
755		9	386 m	5m	Electric loco line in cutting.	
754		9	386 m	4m	A power/telegraph pole on the north side of the embankment (the DOC walking track leaves the embankment here).	
753		7	386 m	5m	A cutting on the south side of the embankment, less than 1.5m high.	
752		6	384 m	6m	A stream flows under the embankment. This appears to have been culverted under. There is a conifer on the north side of the embankment here.	
751		2	385 m	6m	End of cutting. Apx 20m long.	
750		2	385 m	6m	The start of a cutting on the south side of the embankment. Max 2m high.	
749		1	386 m	6m	Embankment. Metal pins are visible through the moss and there is a drainage channel along the north side.	
748		4	386 m	6m	Metal fittings on the embankment, with coal scattered between these. There are some sleeper ruts east of this point. Four of the fittings are clearly exposed and another two are covered in moss.	
747		9	386 m	6m	A possible siding on the south side of the embankment, apx 4-5m wide. No sign of building remains.	
746		1	385 m	6m	The central point on a bridge on the embankment.	
745		7	386 m	6m	The DOC walking track meets the electric loco line embankment on the south side of the haul road.	
834		1	387 m	5m	Loco line.	
835		1	388 m	5m	Loco line.	
836		8	389 m	4m	The loco line meets the haul road.	
833		8	400 m	5m	The loco line meets the haul road.	
832		0	409 m	5m	The loco line has a cut on one side and a bund/cut on the other side.	
831		6	410 m	4m	Loco line.	
830		5	411 m	5m	The loco line resumes after having been cut by the haul road - the batter from the haul road spills out onto the loco line.	
812		6	427 m	4m	The loco line has been cut by the haul road here. It was difficult to follow the line from 811 to this point.	
811		7	427 m	4m	Loco line.	
810		7	430 m	4m	Loco line.	
809		6	433 m	4m	The loco line runs cross the flat with a small cut on one side and a bund (apx 50cm high) on the outside edge of the line.	
808		5	435 m	5m	The loco line comes out into a broad flat slightly swampy area.	
807		6	436 m	4m	Loco line.	
806		7	439 m	6m	The loco line emerges from under the haul road. It has a bund on the outside edge. The inside edge has been destroyed by the haul road batter.	
805		9	450 m	5m	The loco line has been cut by the haul road here.	
804		1	450 m	7m	The loco line is benched here. There is a power pole apx 7m northeast of this point.	
803			453 m	5m	The loco line is back in a cutting here.	
802			452 m	7m	The embankment has been built from fill here, where it crosses a gully mouth.	
801			453 m	6m	A bolt on the rock wall on the inside of the cutting.	
800			456 m	4m	The end of the power poles described in 799 (below). The loco line is still in the cutting.	
799			461 m	5m	Power poles alongside the loco line cutting (on the outside edge). A cut track with wooden steps lead down into the loco line cutting here. There is a bolt sticking out of the rock on the inside edge of the cutting.	
798			463 m	5m	In the drain adjacent to the loco line. The loco line enters a half cutting apx 10m north of this point.	
797			465 m	5m	The electric loco line is now on an embankment with a drain running along the east side. The embankment may have been built on fill from the cutting.	
796			468 m	5m	The outside edge of the cutting is now a low bank (probably fill from the cutting).	

795		41	474 m	5m	The remains of a power/telegraph pole on top of the outside edge of the cutting, and a cable on a rock wall on the inside edge of the cutting.	L28/20
794		24	473 m	5m	On the outside edge of the cutting in 793 (which has been built up with spoil) there is a stone lined drainage channel. The drain is 60cm wide and 50cm deep.	
793		18	473 m	5m	The embankment has a cutting on one side, and possibly on the other side as well (thick vegetation made this difficult to establish).	
765		94	489 m	5m	North end of a 5m wide cutting.	
764		61	505 m	8m	Cutting.	
766		40	492 m	5m	The middle of three power poles in the cutting. There is a pile of rotting sleepers and bolts next to this. There are intermittent drainage channels down both sides of the cutting. The channel on the uphill/east side of the cutting is more definite.	
767		84	493 m	5m	The other end of the cutting. There are various bolts and attachments and a wooden post in the cutting, as well as the remnant of another power pole on top of the cutting. There are the remains of a wagon to the east of this point.	
768		61	493 m	6m	Embankment.	
763		87	502 m	8m	The embankment diverges from the current 4WD track.	
762		66	502 m	7m	Electric cable on the embankment. This may be from the aerial above. There are pieces of metal and nails scattered along the embankment here.	
761		86	503 m	7m	Tunnel portal. The tunnel has very square sides and looks to be in good condition.	
2		69			Tunnel portal.	
1		29			South end of the abutment above Mangatini Stream.	
3		09			Abutment on true right of the Mangatini.	
814		20	593 m	4m	Probably the remains of the bulldozed workshop. There is a jumble of concrete and brick foundations in gorse here, as well as various metal and electricity-related artefacts.	
813		02	594 m	4m	A bridge. There is a stone abutment on the true left of the stream - the true right is covered in thick vegetation.	
815		63	593 m	4m	Loco line. There is a standing railway iron for power to the northeast of the line and there are some in situ sleepers.	
818		29	591 m	5m	Impenetrable gorse between here and 815.	
817		19	592 m	5m	Cutting. Sleepers have been lifted out and are leaning at intervals against the south side of the cutting between 816 and 817. There is also lots of coal scattered along the top of the south side of the cutting.	
816		11	592 m	5m	This waypoint was taken at what appears to be the end of the cutting (there is thick gorse to the southeast). There is a standing railway iron on the north side of the cutting.	
819		09	591 m	6m	Loco line. There is a cut on the west side and a bund on the east side.	
820		60	591 m	4m	No. 4 Substation. The substation remains consist of wooden piles, one of which still has part of the base/floor plate attached; broken insulators; and metal artefacts. There are Neighbours bricks scattered around the site.	
821		00	592 m	5m	The loco line reaches a stream. The line has a cutting on one side but drops down into a gully on the north side between 820 and 821.	
822		71	592 m	5m	The other side of the stream. There is a small cutting on the south side and a bund on the north side.	
823	2418497	5948643	592 m	6m	A metal artefact on the south side of the line.	
824			593 m	4m	The entrance to Mumm's tunnel. It looks like it is in a good condition.	
825			584 m	6m	The mouth of the cutting for the other end of the tunnel. The cutting is apx 15m long and then meets the road.	
826			584 m	9m	The loco line, adjacent to the road.	
828			585 m	9m	Possibly the loco line, with a vertical railway iron on the hillside above and a long drill bit nearby.	
829			584 m	7m	A creek has been dammed in the area where the loco line is believed to have gone. There is coal scattered around here and a sleeper.	
921			586 m	8m	Culvert, underneath what may be the electric loco line.	

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NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
 ARCHSITE archaeological site recording scheme	NZAA Site Number:	L29/14
	Imperial Site Number:	S23/11
	Site Type:	Mining - coal
	Site Name(s):	Koranui Incline and
	Site Coordinates (NZTM)	
	Easting:	
	Northing:	
	Source:	Shapefile
Finding Aids to the Location of the Site: Just east of Waimangaroa. Access from Conns Creek across the Waimangaroa River		
Brief Description: Coalmine: mine adits, incline and tramway, track		
Condition of Site when last visited: Good		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900

Ethnicity:

Non Maori

Site Features:

Mine, Tramway

Associated Sites:

Description:

Updated 15/04/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 12/11/2024 by Kim Tatton and Doug Gaylard

File added from K, Watson Dec 2009. The Koranui Incline: An Archaeological Survey. Report for Solid Energy.

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 12/11/2024 by Kim Tatton and Doug Gaylard

The Koranui Mining area on Koranui Hill of Mt Frederick was inspected. The area is covered in thick regenerating native bush, ground plants and moss, making ground visibility almost impossible. The extent of collapsed underground workings and the terrain made the identification of early mining features extremely difficult. However, several mining features were identified. Table 3 of the attached describes the heritage features (143–153) identified.

Early mining plans of the Koranui Mine show Plans do show several different areas of underground workings scattered across the Koranui Hill, including both lower 'bord' (cut tunnels) and coal columns 'pillar' workings and upper primarily 'pillared' workings where the pillars have been removed to maximise extraction.

The Koranui Incline and tramway was not inspected at this time.

Updated 11/12/2025 by ArchSite.

Grid reference changed from (E1501645 / N5380730) to centroid of site polygon (E1501695 / N5380780).

Condition Notes:

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 12/11/2024 by Kim Tatton and Doug Gaylard

Many mine tunnels and portals collapsed.

APPENDIX 1

wypt	grid ref	altitude	error	description
864		854 m	7m	Ventilation shaft.
865		807 m	13m	Main portal, now collapsed. A cutting leads to the portal. Mining props along it in the cutting. Cutting 3.4m wide at base (but has collapsed) & apx 15m long.
866		806 m	13m	Mouth of cutting.
867		801 m	13m	Coal tub remains below the incline. Also a large beam with bolts in it and various other pieces of metal. Wire rope nearby - 17mm and 32-33mm diameter.
868		807 m	24m	Incline - near mouth of cutting.
869		809 m	12m	Incline in cutting.
870		809 m	12m	Other end of cutting.
871		810 m	14m	The incline is on a benched formation, which widens out. There are in situ sleepers with dogs near the edges.
872		806 m	9m	The remains of an embankment on either side of a natural stream. There is a timber frame, metal artefacts and a pulley on the true left of the stream.
873		810 m	12m	The centre of a short cutting (7-8m long). The embankment has slumped between 872 and 873 - can see dislodged sleepers.
874		804 m	10m	The centre point of another cutting (5-6m long). The outside edge is less than 1m high.
875		804 m	10m	A portal above the incline. This is collapsing inside.
876		800 m	10m	Mouth of cutting leading to another portal above the incline.
877		803 m	13m	Collapsed portal.
878		797 m	14m	Incline.
879		796 m	17m	Corrugated iron sheets on the incline.
880		796 m	14m	Brake. The incline broadens out into a terrace.
881		795 m	14m	Mouth of portal on terrace 880.
882		790 m	11m	Brick chimney on terrace 880. There is corrugated iron scattered around here.
883		788 m	9m	Incline is 2.5m wide.
884		781 m	9m	Incline.
885		774 m	8m	Incline crosses a stream.
886		776 m	12m	A possible ditch across the incline formation.
887		777 m	7m	Incline.
888		780 m	8m	Collapsed portal above the incline. Connected to the incline via a cutting. There is a short section of stone revetting near the mouth of the portal.
889		778 m	7m	Mouth of cutting. Corrugated iron nearby.
890		777 m	8m	Metal artefact on side of incline, probably from mine portal.
891		778 m	10m	Mouth of another portal, right next to the incline. There is a square shovel in it.
892		777 m	7m	Incline.
893		776 m	7m	Incline.
894		774 m	6m	Top of cutting. 3.5m wide at base. Warner's Safe bottle here.
895		770 m	6m	Bottom of cutting. Ditch on left-hand side. Embankment built on fill.
896		768 m	7m	Ditch on left-hand side finished, borrow pit on right-hand side.
897		755 m	6m	Borrow pit ends, now just a small ditch. Incline on much less of an embankment.
898		750 m	5m	Incline.
899		750 m	7m	The incline has broadened out (may have broadened out to go around the corner). There is building wall adjacent to the incline. The incline goes around a corner here and probably had to be blasted out of rock, judging by what remains of the hillside in this area.
900		748 m	7m	An incline wheel for rope (on incline, partly covered by a large rock). 1450mm diam.
901		747 m	8m	Wheel from something on incline. Groove for rope in it. 400mm diam.
902		746 m	7m	Start of borrow pit on left-hand side. Incline on embankment.
903		741 m	9m	Return wheel in borrow pit adjacent to track. 1450 diam.
904	241124Z 394235T	743 m	8m	End of borrow pit and embankment. Incline now runs through cutting.

905		740 m	11m	Bottom of cutting.
906		736 m	8m	Incline runs through cutting apx 5m long.
910		735 m	12m	Borrow pit on left-hand side of embankment. Starts here, at the end of the cutting.
911		729 m	9m	A possible collapsed portal adjacent to the borrow pit and below the level of the embankment. The embankment has stone facing on it here. The portal is to the north of the embankment.
912		728 m	10m	A chimney base to the north of the embankment (apx 1m from the embankment). There was corrugated iron, coal fines and pale blue and green glass nearby.
913		728 m	12m	Chimney base at edge of terrace. There is a metal drum on the terrace, and a piece of an old shovel.
914		732 m	9m	Hut site on terrace above portal. Scanty remains of chimney base and railway irons.
915		730 m	12m	Chimney/wall.
916		730 m	10m	Possibly another chimney base, but could be part of 915.
917		732 m	9m	A pile of bricks, some of which have been moved here in relatively recent times. One white Brunner brick.
918		736 m	9m	A double row of posts/trunks of saplings, with nails in the top. The row is over 10m long. The posts range from 300mm-1m high. Rosehead nails. This crosses over the top of what looks like a chimney base (919). There is also a possible cut out terrace for a building near this. It is possible that a foot track leads uphill from 918 but does not go very far (apx 20m) before it peters out.
919		734 m	13m	Possible chimney base that 918 passes over.
920		733 m	12m	A hut terrace to the south of the incline. This is the only hut in the area. 3.5 x 4m. No sign of chimney or artefacts.
921		734 m	9m	The incline is no longer on an embankment but in a cutting, with a large slip and some possible revetting. Cutting over 5m deep.
922		733 m	8m	The remains of a timber structure in a cutting. Metal rod in rock wall of cutting.
923		731 m	8m	A hut site with wooden posts with nails in the top. In rectangular pattern. To north of incline, on top of cutting wall.
924		726 m	10m	Downhill end of cutting. There are intermittent drains and borrow pits running down from this point.
925		700 m	7m	A wheel in a borrow pit on the left-hand side of the incline.
926		690 m	8m	Incline.
927		680 m	10m	The incline has slipped away between 926 and 927.
928		668 m	11m	The incline is no longer on an embankment.
929		663 m	12m	The incline is on an embankment, with a borrow pit on the right-hand side.
930		653 m	9m	The borrow pit and embankment end. The incline is now benched.
931		648 m	10m	Borrow pit resumes on right-hand side.
932		645 m	8m	There is a ditch across the incline with stone edging on the right-hand side. The borrow pit ends here but a drain starts below this point on the right-hand side.
933		637 m	9m	The incline runs across a terrace that is likely to have been the site of an brake. Two wheels - 150mm wide and 1650mm diam.
934		638 m	8m	A possible chimney base on terrace 933.
935		640 m	9m	Top of a cutting, just off the terrace 933.
936		638 m	9m	Bottom of the cutting - 2.5m wide. The incline formation is now benched on the right-hand side, with a borrow pit on the left-hand side. Nice stone edging and revetting on the left-hand side.
937		633 m	7m	Downhill end of edging.
938		628 m	7m	Downhill end of benching. Still borrow pit on left-hand side - ends a little beyond this.
939		615 m	6m	Another wheel, on the incline.
940		598 m	8m	Telegraph pole 2m south of incline. Wypt taken on incline.
941		587 m	6m	Drain or borrow pit, right-hand side of incline (slight embankment).
942		584 m	6m	Drain or borrow pit no longer visible. Incline benched on right-hand side.
943		580 m	6m	Drain or borrow pit has resumed (slight embankment).
944		570 m	6m	No drain.
945		564 m	5m	The incline is now running down exposed rock - difficult to assess the nature of the formation.
946		555 m	5m	The incline is in a cutting that started above this point but was difficult to see in the manuka. Rope roller in the cutting.
947	2410536 5942323	548 m	5m	Incline still in cutting. Some stone edging visible in the cutting.

948		537 m	5m	Incline now on embankment.
949		530 m	5m	Incline on embankment with borrow pit on both sides.
950		528 m	4m	Incline on embankment with stone facing on both sides. Left incline here
				due to the difficulty of walking along it.
951		520 m	4m	Incline now in cutting.
952		515 m	3m	Incline in cutting.
953		509 m	4m	Incline in cutting.
954		499 m	3m	Incline.
955		492 m	3m	Incline.
956		474 m	4m	Incline (on embankment).
957		462 m	4m	Telegraph pole apx 2m from incline.
958		452 m	4m	Incline.
959		427 m	4m	Incline.
960		419 m	6m	Incline in cutting.
961		407 m	7m	Incline in cutting.
962		404 m	6m	Incline on embankment.
963		402 m	5m	Incline on embankment.
964		400 m	4m	Incline in very wide cutting (9m). Lasts apx 15-20m, then just benched on left-hand side.
965		398 m	5m	1450mm wheel. Second one on edge of benching and other metal artefacts.
966		398 m	4m	Brunner brick, railway iron and sheet iron. Still on relatively wide terrace.
967		395 m	6m	Idler in trench on left-hand side of incline.
968		391 m	7m	Telegraph pole.
969		388 m	5m	Incline.
970		384 m	6m	Incline. Enters a cutting immediately beyond this.
971		371 m	5m	Cutting is 5.5m wide.
972		354 m	5m	Incline. Possibly in cutting, difficult to tell.
973		346 m	5m	Incline on embankment.
974		341 m	5m	Incline on embankment with borrow pit on both sides.
975		336 m	6m	Incline on embankment, which is at least 2m above the surrounding ground.
976		334 m	6m	Prospect pit.
977		333 m	6m	North end of water race that drains an area of water that pools next to the embankment. Water race ends in natural gully. The embankment above the pool has been faced with stones and logs.
978		337 m	5m	Top of cutting. 8m wide.
979		335 m	4m	Gap in cutting.
980		334 m	4m	Cutting.
981		334 m	4m	Telegraph pole above the cutting.
982		330 m	6m	Still in cutting? Difficult to tell because of the bracken.
983		326 m	5m	Rope roller on right-hand side of cutting.
984		316 m	5m	Incline in cutting.
985		307 m	6m	Incline. Not in cutting.
986		299 m	7m	Benched on right-hand side.
987		296 m	6m	Incline.
988		295 m	5m	Incline on embankment.
989		292 m	5m	Top of cutting.
990		293 m	5m	Bottom of cutting. The incline is benched on the left-hand side from here.
991		291 m	5m	Incline in cutting.
992		275 m	5m	Incline in cutting.
993		267 m	6m	Downhill end of cutting, immediately above the last finish point.
860		257 m	9m	Incline?
859		242 m	7m	Incline?
858		237 m	7m	Wire rope continues intermittently to this point.
857		232 m	8m	Wire rope.
856		228 m	8m	Idler/curve wheel.
855		227 m	6m	Top of cutting.
854		220 m	7m	Bottom of cutting. 3.2m wide. Water has flowed down this. Some wire rope.
853	2408686 5941963	218 m	7m	The benching changes to the south side here.

852		215 m	7m	Top of cutting, and incline then runs on benched formation (north side).
851		203 m	8m	Bottom of cutting. 3.4m wide.
850		195 m	6m	Incline now on benched formation. The wall of the bench is on the left-hand side.
849		183 m	7m	Bottom of cutting, which is more pronounced on the south side. Water has run down the incline and washed it out.
848		179 m	7m	The cutting has all but disappeared.
847		176 m	7m	Top of cutting. Now just benched on left-hand side. The cutting has been washed out for most of its length.
846		171 m	7m	Cutting is 9.5m wide.
845		170 m	6m	Bottom of cutting.
844		162 m	8m	Return wheel below the incline formation. The wheel lies in a water course that may be the result of later gold mining activity. There is some evidence of stacked stones on the true left of the water course. This may be evidence of filling the ridgeline.
843		168 m	5m	Brake remains on the incline.
842		166 m	6m	Top of cutting 841. The incline runs along a ridge above this point - may have been filled. Antoine and Nils coarse earthenware bottle.
841		164 m	7m	Bottom of another cutting. 5.2m wide.
840		162 m	5m	Top of cutting.
839		159 m	6m	The cutting is less washed out above this point than below it.
838		136 m	7m	Downhill end of cutting, which has been washed out. Cutting is 4m wide.
837		131 m	6m	Incline. Stone edging for apx 5m uphill of this point, on the left-hand side of incline.
862		113 m		Return wheel.
836		112 m	6m	Incline. Lost uphill of this point in thick bush. There appears to have been some slumping through here.
833		111 m	6m	Back on incline. Incline benched here.
834		111 m	6m	Incline below 833.
832		111 m	5m	Water race uphill of 831. Can not clearly see the line of the incline between 831 and 832.
835		110 m	8m	Possibly the incline. Difficult to follow between 834 and 835 due to thick flax and cutty grass. Essentially lost by 835, which is on walking track. Roughly on right alignment.
831		110 m	6m	The line of the incline becomes unclear uphill of this point. No longer within small cutting that 830 is base of. The incline is not washed out within this small cutting.
830		109 m	6m	Effectively the top of the cutting that 827 is the base of. Incline still within cutting, but it is small - sides less than 1m high.
829		103 m	9m	1.5m from top of cutting to ledge which appears to have been the original base of the cutting. Wire rope continues intermittently until just short of this point.
828		90 m	8m	Piece of wire rope in cutting. 35mm diameter.
827		88 m	7m	Incline goes back into cutting. The surface of the incline has been washed away, down to rocks. Base of cutting 3.5m wide. The depth here is 2m.
826		83 m	7m	Prospect pit on the incline. Short tunnel dug into incline and small pit below this.
825		76 m	10m	Water race at head of gully. Gully is at right angles to the water race.
824		74 m	10m	Broken wheels apx 3m from head of gully, which has been sluiced out. The wheels have may have fallen down from above.
822		53 m	9m	This was the last place where the incline was obvious when heading downhill. Uphill of this point, the incline runs through a cutting - 3.4m wide at the base. The cutting may have been widened and deepened by later alluvial sluicing. The cutting may have had a water race running down it. The surface that the locos ran down has been washed away. There is wire rope in this area.
821		55 m	8m	Centre of gold claim. Have sluiced into the bank and then tunnelled. Area sluiced in apx 15m long and 5m wide.
823		45 m	9m	To the west is a sluice gully, to the east is a possible collapsed shaft. No sign of the incline below 822.



PLATES

Plate 1: This photograph is believed to be of the Koranui incline as the Koranui incline was the only Buller incline with an overhead rope. PAColl-9487, Alexander Turnbull Library.



Plate 2: The incline running through a cutting (waypoint 922).



Plate 3: The incline on a benched formation (waypoint 936).

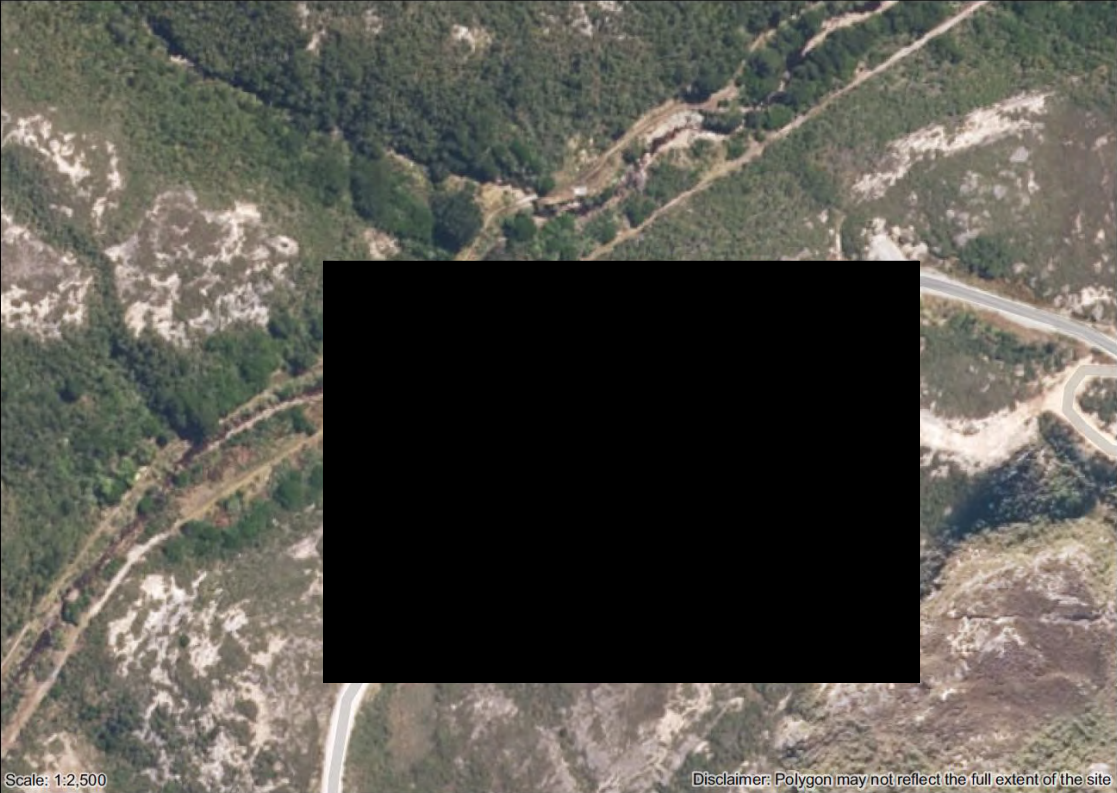
NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD INVENTORY	NZAA SITE NUMBER: L29/14
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Supporting documentation held in ArchSite

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1)		NZAA NZMS 1 SITE NUMBER S24/11												
NZMS 1 map number S24		DATE VISITED Not visited												
NZMS 1 map name WESTPORT		SITE TYPE Incline and coalmine												
NZMS 1 map edition 3rd Ed 1973		SITE NAME: MAORI Koranui Incline and OTHER coalmine												
Grid Reference	Bottom Easting													
1. Aids to relocation of site (attach a sketch map) Just east of Waimangaroa <i>L29/14</i>														
2. State of site and possible future damage Incline overgrown, little else known.														
3. Description of site (Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here) Constructed incline and opened-up coalmine 1883 Bought out by the Union Steamship Co. Stopped producing late 1886. Sold to the Westport Coal Co, but never worked.														
4. Owner first 500m on private land Address NZFS Hokitika	Tenant/Manager Address													
5. Nature of information (hearsay, brief or extended visit, etc.) Morgan and Bartrum 1915 'The Geology and mineral resource of the Buller-Mokihinui Sub-division'. Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site)														
6. Reported by Address NZFS Hokitika	Filekeeper Date <i>RAA 23/5/88</i>													
7. Key words														
8. New Zealand Register of Archaeological Sites (for office use) NZHPT Site Field Code														
<table border="1"><tr><td>A</td><td>Y</td></tr><tr><td>-</td><td>-</td></tr><tr><td>A</td><td>3</td></tr></table>	A	Y	-	-	A	3	Type of site Local environment today Land classification	<table border="1"><tr><td>B</td><td>D</td></tr><tr><td>-</td><td>-</td></tr><tr><td>A</td><td>Q</td></tr></table> Present condition and future danger of destruction Security code Local body	B	D	-	-	A	Q
A	Y													
-	-													
A	3													
B	D													
-	-													
A	Q													

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: L29/24 Imperial Site Number: S23/34 Site Type: Transport/ Site Name(s): Coalbrookdale Rope	Site Coordinates (NZTM): Easting:  Northing:  Source: Site Record Form	
 Scale: 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Tramway runs alongside on the true right bank of Coalbrookdale Creek from Burnett Creek confluence upstream for approximately 1km.		
Brief Description: Comprises a 1km length of Coal Mine tramway and associated features.		
Condition of Site when last visited: Good		

Printed by: CLOU_KimTatton_ArchSite

Date Report Created: 04/03/2025

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900

Ethnicity:

Non Maori

Site Features:

Tramway

Associated Sites:

Description:

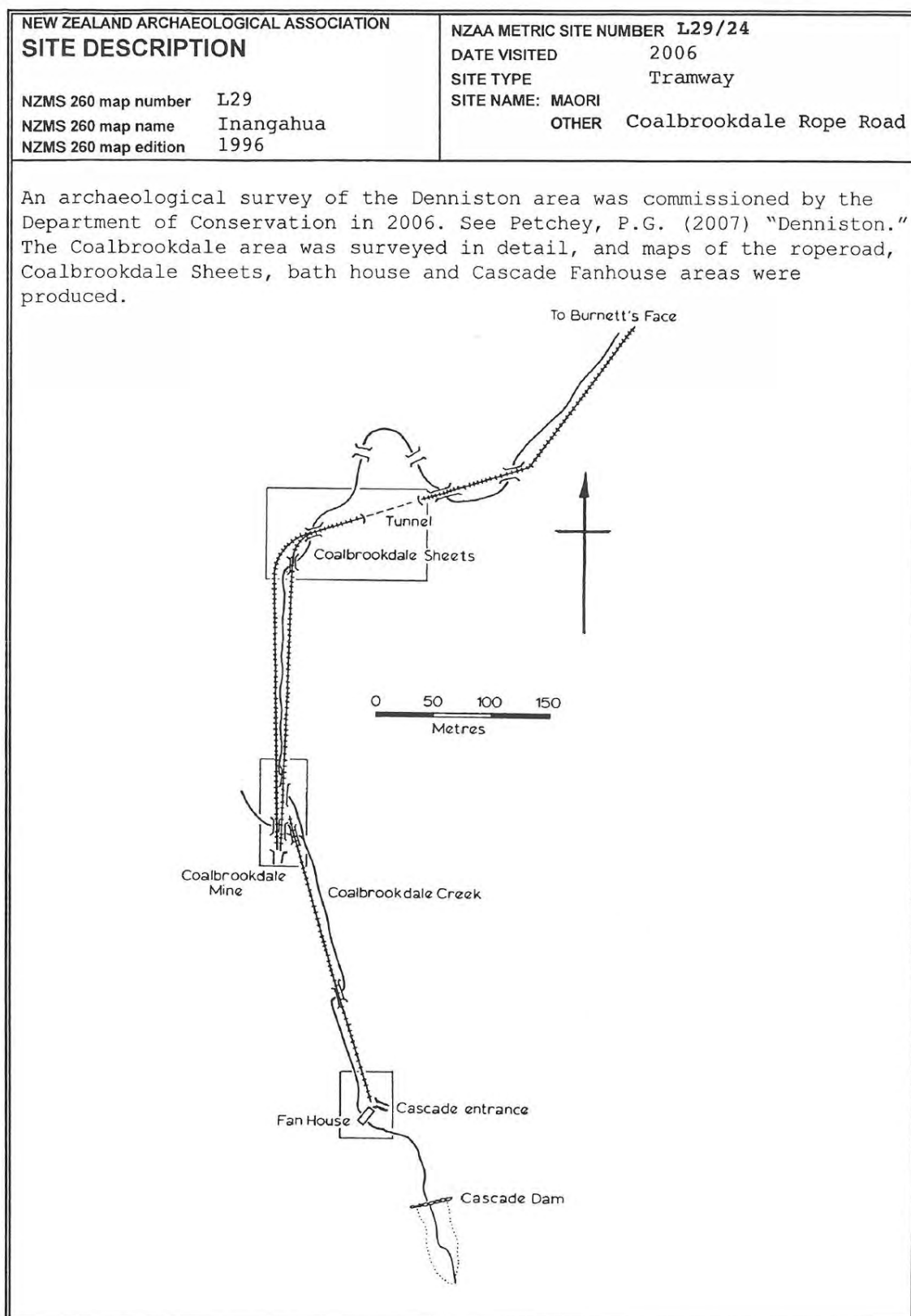
Updated 04/08/2017 (Field visit), submitted by neville Ritchie , visited 26/10/2016 by Ritchie, Neville
Grid reference (E1500745 / N5376332)

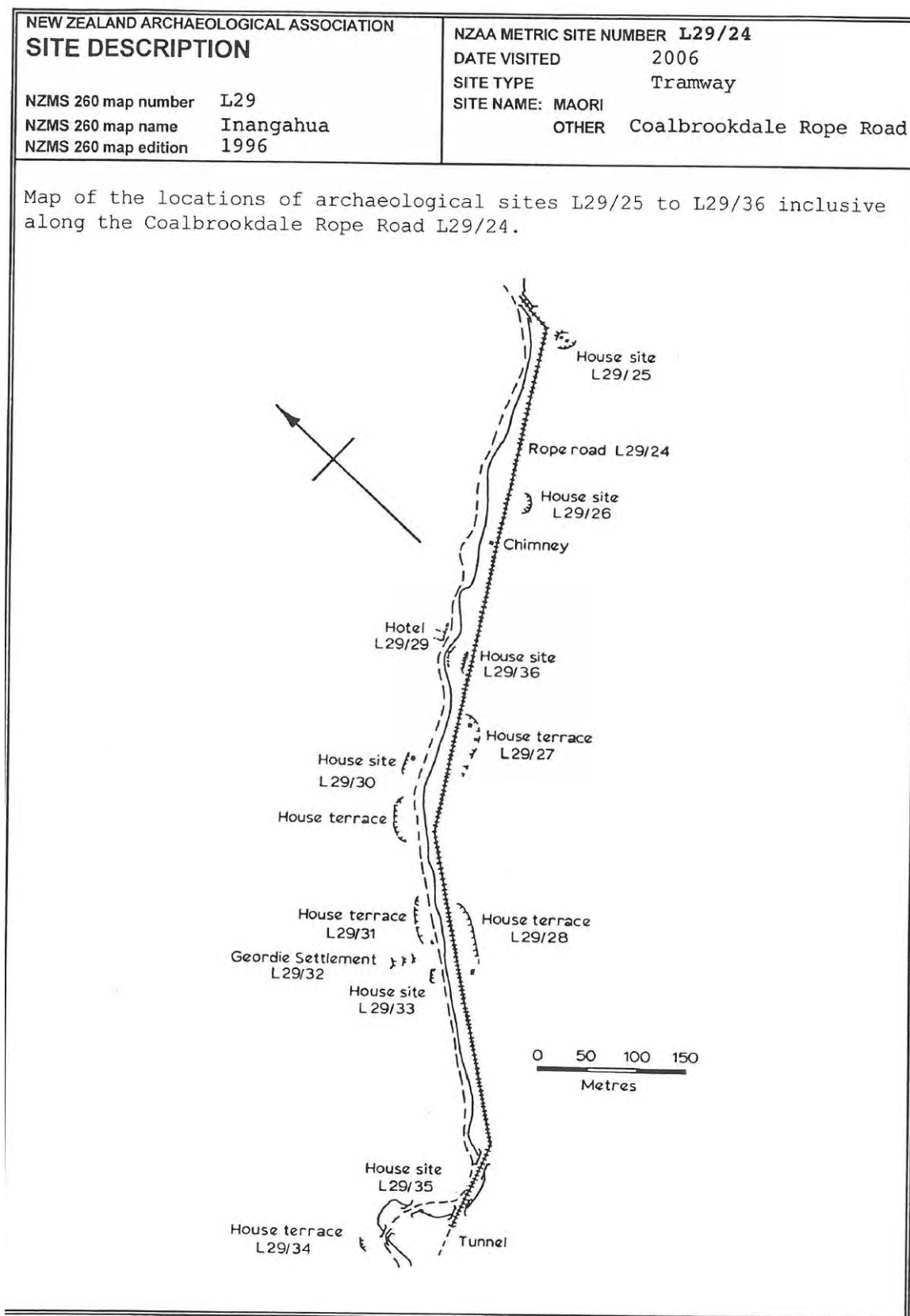
Visit was initiated after engineer's report indicated there were 2 areas of unsafe rock in the Poverty Hill tunnel, a feature on the Burnett's Face-Coalbrookdale rope-road, which now serves as a walking track. DOC was advised that rockbolting was necessary and sought authority from HNZ to undertake the work so the tunnel and track could be re-opened. The authority number was 2017/452 and the work was undertaken by Geotech on 9th February 2017. An area above upstream portal was rockbolted as well as a section in the middle of the tunnel.

Condition Notes:

Date Report Created: 04/03/2025









BURNETTS FACE


$$\begin{array}{r} 523 \overline{) 34} \end{array}$$

1624f

COALBROOKDALE ROPE ROAD S23/34

This section of rope road was part of the haulage system from the Coalbrookdale mine to the Denniston Incline. This surface haulage comprised three sections - from inside the mine to Coalbrookdale sheets (GR 273 716) S23/24 ran from here to Burnetts Face at GR 284 727, where another rope road ran to the Brakehead at Denniston.

From Coalbrookdale sheets to Burnetts Creek (approximately 1 km) the tramway formation excluding bridges, rails and sleepers is unmodified. From Burnetts Creek confluence to GR 284 727 the formation is largely destroyed or heavily modified by the present road.

The tramway formation is approx 2 m wide and supported two 2 foot gauge tramways, with a c.80 cm space between. odd remnants of rail (bends etc), rope, idlers and guides decayed wire rope and timber rail bearers remain. At a number of places along the tramway the stream bank has stone walls, up to 6 m high. A number of different stone walling techniques and patterns are evident, square dressed, rough hewn and unmodified stone has been utilised, usually exclusively in discreet sections.

Some 200 metres west of the Burnett Creek confluence immediately north of the tramway is a brick chimney. This was part of the roadman/oilers hut. A second chimney though of two stories one opening above the other; is located just east of the creek at Coalbrookdale sheets. This was part of a shelter and elevated tramway section where empty tubs were run over a hump to unclip and marshall them for the next rope road and out going full tubs were similarly handled. The shelter was for the 'clip on boys' relief from the elements.

Forty metres to the east is a 50 metre tunnel. At the top of the tramway (peg 5529) are the concrete foundations of the winding engine.

Following the holing through of the Bunbury mine to Burnetts Face in 1882 the new tramway to Coalbrookdale was constructed. The Coalbrookdale Mine was in production by mid 1884. Two haulage roads, from the Cascade and Whareatea sections, brought tubs (trucks) of coal to Coalbrookdale sheets.

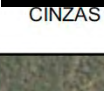
The Coalbrookdale rope road ceased operations in 1950, mining operations had switched to the western side of the Whareatea section. Motor trucks replaced mine trucks from mine to bins.

Aerial photographs survey 264 B (1946) provides good coverage of tramway system. Most of system still operative at that time.

L29/24

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1)		NZAA NZMS 1 SITE NUMBER S23/34 DATE VISITED June 91 SITE TYPE Tramway SITE NAME: MAORI OTHER Coalbrookdale Rope Road											
NZMS 1 map number S23-24 NZMS 1 map name Westport NZMS 1 map edition 1973													
Grid Reference Easting	[REDACTED]												
1. Aids to relocation of site (<i>attach a sketch map</i>) Runs alongside on true right bank Coalbrookdale Creek from Burnett Creek confluence upstream for some 1 km. See plan attached.													
2. State of site and possible future damage Unmodified, recently cleared of scrub and forms part of Coalbrookdale walkway.													
3. Description of site (<i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i>) Comprises a 1 km length of Coal Mine tramway and associated features. Site Description, plan and photos attached. Early C. 1890s photos shows section of tramway below Coalbrookdale Creek, now largely destroyed. Coalbrookdale valley to right of upper centre (ATL 1899½)													
4. Owner Address Dept of Conservation Private Bag Hokitika	Tenant/Manager Address												
5. Nature of information (<i>hearsay, brief or extended visit, etc.</i>) Field Trip - various references Photographs (<i>reference numbers, and where they are held</i>) ATL 1899½ - various colour DOC, Hokitika Aerial photographs (<i>reference numbers, and clarity of site</i>) - SN 264B/1276, 12, 13/1277, 11, 12													
6. Reported by Address RH HOOKER DOC, HOKITIKA	Filekeeper Date 10/5/93												
Key words: Tramway - Stone walls - Coal Transport													
7. New Zealand Historic Places Trust (<i>for office use</i>)													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">O</td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">Q</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> </table>	A	O	A	Q			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">S</td> <td style="text-align: center;">K</td> </tr> </table>					S	K
A	O												
A	Q												
S	K												
Type of site Local environment today Land classification	Present condition and future danger of destruction Local body Butler												

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: L29/32 Imperial Site Number: S23/42 Site Type: Historic - domestic Site Name(s): Geordie Settlement	Site Coordinates (NZTM): Easting:  Northing:  Source: CINZAS	
Scale: 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Mount Rochfort. Site is on the ridge to the north of stream, approximately 700 m west of Cascade Road along Coalbrookdale Road.		
Brief Description: Site comprises 3 stepped terraces all which show evidence of buildings. Upper terrace has a chimney, remnant piles and a stone wall.		
Condition of Site when last visited: No Recent Info		

Printed by: CLOU_KimTatton_ArchSite

Date Report Created: 02/11/2025

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900

Ethnicity:

Non Maori

Site Features:

Chimney, House floor/ site, Terrace, Track

Associated Sites:

Description:

Condition Notes:

Date Report Created: 02/11/2025

L29/32

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION

SITE RECORD FORM (NZMS1)

NZMS 1 map number S23
NZMS 1 map name Westport
NZMS 1 map edition 1973

NZAA NZMS 1 SITE NUMBER S23/42
DATE VISITED June 1991
SITE TYPE House site
SITE NAME: MAORI OTHER Geordie Settlement

Grid Reference Easting [REDACTED]

1. Aids to relocation of site (*attach a sketch map*) some 700 m west of Cascade Road along Coalbrookdale Road is a small stream - site is on ridge to north of stream, some 30 m from road. See Coalbrookdale Plan.

2. State of site and possible future damage covered in scrub and beech 2 - 4 m tall.
Little prospect of damage.

3. Description of site (*Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here*)
Site comprises 3 stepped terraces all of which show evidence of buildings.
Covers an area of 35 x 10 metres. The upper terrace has a chimney, some remnant piles and a stone wall on the north side. The chimney is built of local sandstone and brick. A vague track leads from the road toward the terraces. Some vague rectangular patterns visible in 1946 aerial photograph. Several expatriate Geordie miners built their cottages on this spur.

4. Owner DOC, HOKITIKA
Address
Tenant/Manager
Address
Key words: House sites, Coal Mine Settlement

5. Nature of information (*hearsay, brief or extended visit, etc.*) Field Trip, Garry James pers. comm.
Photographs (*reference numbers, and where they are held*) DOC, HOKITIKA
Aerial photographs (*reference numbers, and clarity of site*) SN 264 B 1276/12

6. Reported by RH HOOKER
Address DOC, HOKITIKA
Filekeeper
Date *ILHA 10/5/91*

7. New Zealand Historic Places Trust (for office use)

Type of site

Local environment today

Land classification

Present condition and future danger of destruction

Local body

611

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: L29/34 Imperial Site Number: S23/44 Site Type: Historic - domestic Site Name(s):	Site Coordinates (NZTM) Easting: [REDACTED] Northing: [REDACTED] Source: CINZAS	
 Scale: 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Mount Rochfort. Approximately 1 km along Coalbrookdale Road from Cascade Road junction, some 10-20 m north west of second bridge over Coalbrookdale Creek.		
Brief Description: Three small house terraces.		
Condition of Site when last visited: No Recent Info		

Printed by: CLOU_KimTatton_ArchSite

Date Report Created: 02/11/2025

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900

Ethnicity:

Non Maori

Site Features:

Terrace

Associated Sites:

Description:

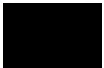
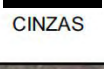
Condition Notes:

Date Report Created: 02/11/2025

L29/34

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1)		NZAA NZMS 1 SITE NUMBER 523/44 DATE VISITED June 1991 SITE TYPE House Terraces SITE NAME: MAORI OTHER											
NZMS 1 map number 523 NZMS 1 map name Westport NZMS 1 map edition 1973													
Grid Reference Easting [REDACTED]													
1. Aids to relocation of site (<i>attach a sketch map</i>) Approximately 1 km along Coalbrookdale Road from Cascade Road junction, some 10-20 m north west of second bridge over Coalbrookdale Creek - see Coalbrookdale plan.													
2. State of site and possible future damage Covered in low scrub, little prospect of damage.													
3. Description of site (<i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i>) Three small artificial terraces at foot of gentle spur, no surface evidence of buildings although reported as hut sites. No buildings visible in 1946 aerial photos. There were other houses/huts on south side of creek but these have been destroyed by road works. These houses/huts were the upper limit of Coalbrookdale Village.													
4. Owner DOC, Hokitika Address		Tenant/Manager Address											
Key Words Hut sites Coalmine Settlement													
5. Nature of information (<i>hearsay, brief or extended visit, etc.</i>) Photographs (<i>reference numbers, and where they are held</i>) Aerial photographs (<i>reference numbers, and clarity of site</i>)		Field trip SN 264B 1276/12											
6. Reported by RH Hooker Address DOC, Hokitika		Filekeeper Date <i>RHA 19/5/93</i>											
7. New Zealand Historic Places Trust (<i>for office use</i>)													
<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table> Type of site Local environment today Land classification								<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table> Present condition and future danger of destruction Local body					

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: L29/35 Imperial Site Number: S23/45 Site Type: Historic - domestic Site Name(s):	Site Coordinates (NZTM) Easting:  Northing:  Source: CINZAS	
Scale: 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Mount Rochfort. Approximately 1 km along Coalbrookdale Road from Cascade junction, 10 m south of first bridge over Coalbrookdale Creek, above and adjacent to road.		
Brief Description: Small terrace, reportedly the location of the last standing cottage at Coalbrookdale.		
Condition of Site when last visited: No Recent Info		

Printed by: CLOU_KimTatton_ArchSite

Date Report Created: 02/11/2025

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900

Ethnicity:

Non Maori

Site Features:

House floor/ site, Terrace

Associated Sites:

Description:

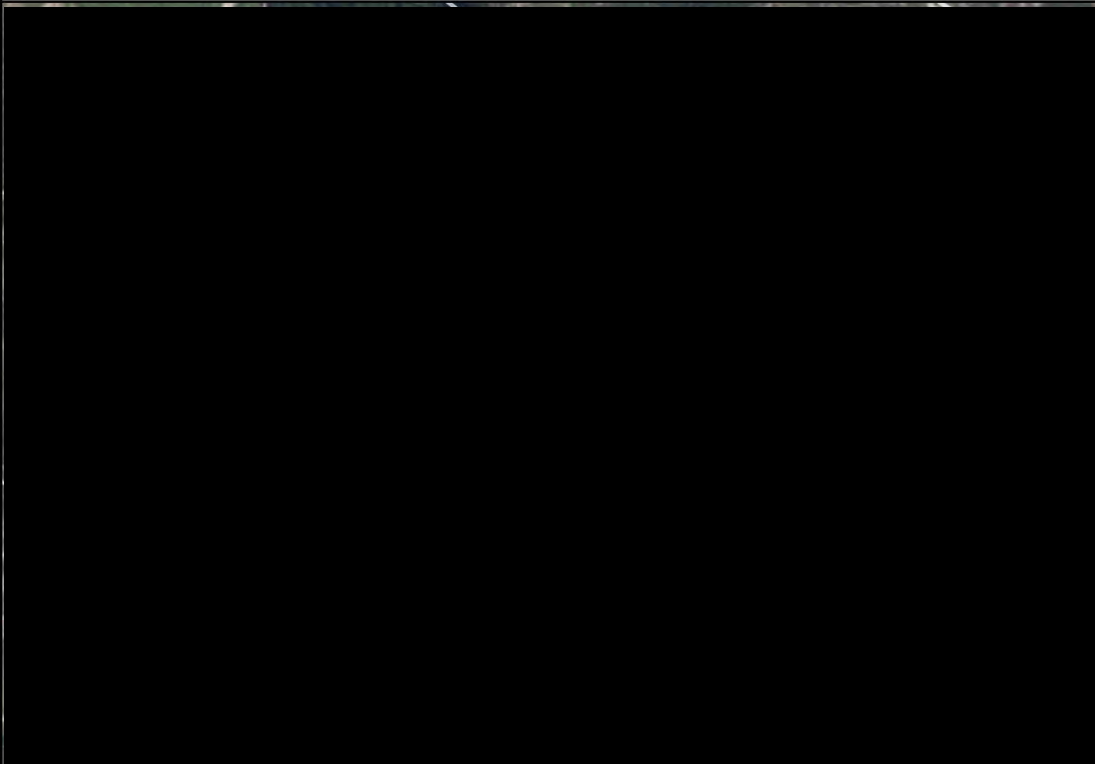
Condition Notes:

Date Report Created: 02/11/2025

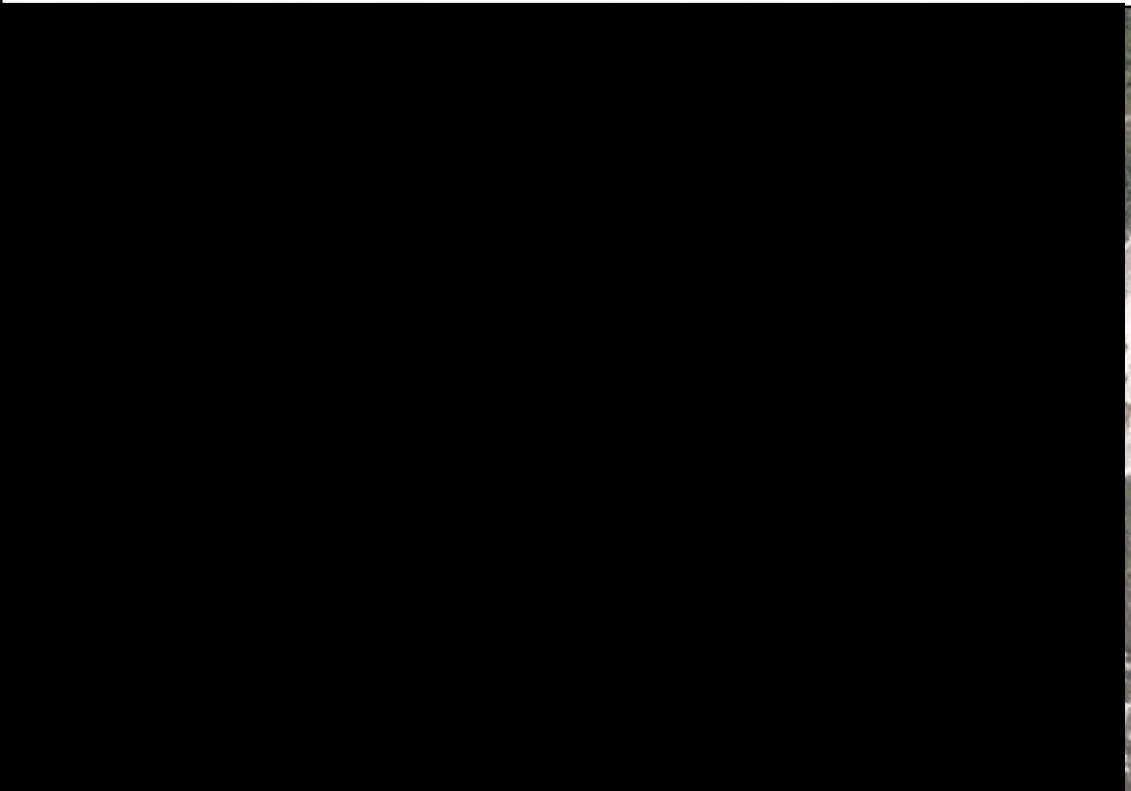
L29/35

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS1) NZMS 1 map number S23 NZMS 1 map name Westport NZMS 1 map edition 1973		NZAA NZMS 1 SITE NUMBER S23/45 DATE VISITED June 1991 SITE TYPE House site SITE NAME: MAORI OTHER													
Grid Reference Easting [REDACTED]															
1. Aids to relocation of site (<i>attach a sketch map</i>) Approx 1 km along Coalbrookdale Road from Cascade junction, 10m south of first bridge over Coalbrookdale Creek above and adjacent to road. See Coalbrookdale plan.															
2. State of site and possible future damage Covered in low scrub, any road widening would threaten this site.															
3. Description of site (<i>Supply full details, history, local environment, references, sketches, etc. If extra sheets are attached, include a summary here</i>) Small terrace on toe of hill immediately above road. This site is reportedly the location of the last standing cottage of Coalbrookdale. Used as a batch into the 1950's Terrace is clearly defined on 1946 aerial photo, though any building is not distinct.															
4. Owner DOC Hokitika Address		Tenant/Manager Address													
Key Words - Hut Site															
5. Nature of information (<i>hearsay, brief or extended visit, etc.</i>) Field inspection G. James Photographs (<i>reference numbers, and where they are held</i>) - Aerial photographs (<i>reference numbers, and clarity of site</i>) SN264B 1277/12															
6. Reported by R.H. Hooker Address DOC Hokitika		Filekeeper Date <i>RHA</i> <i>19/5/93</i>													
7. New Zealand Historic Places Trust (<i>for office use</i>)															
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<table border="1" style="display: inline-table; vertical-align: top;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table> Land classification															

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
	NZAA Site Number:	L29/98
	Imperial Site Number:	
	Site Type:	Mining - coal
	Site Name(s):	Iron Bridge Mine
	Site Coordinates (NZTM)	
	Easting:	
	Northing:	
	Source:	Shapefile
		
Scale (A4 Paper Size): 1:14,000 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Located on the eastern side of Burnett's Stream (southern extension of the Waimangaroa River) and north of Cedar Creek Road, east of Burnett's Face on the Denniston Plateau. Access is gained by bush crashing down off Cedar Creek Road		
Brief Description: Coal mining workings, including Iron Bridge Mine stone drive, bathhouse foundations, chimney, water tank, house / bach foundations		
Condition of Site when last visited: Fair		

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
	NZAA Site Number:	L29/98
	Imperial Site Number:	
	Site Type:	Mining - coal
	Site Name(s):	Iron Bridge Mine
	Site Coordinates (NZTM)	
	Easting:	
	Northing:	
	Source:	On Screen
		
Scale: 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Located on the eastern side of Burnett's Stream (southern extension of the Waimangaroa River) and north of Cedar Creek Road, east of Burnett's Face on the Denniston Plateau. Access is gained by bush crashing down off Cedar Creek Road		
Brief Description: Coal mining workings, including Iron Bridge Mine stone drive, bathhouse foundations, chimney, water tank, house / bach foundations		
Condition of Site when last visited: Fair		

NEW ZEALAND ARCHEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900, Modern 1900-

Ethnicity:

Non Maori

Site Features:

Mine, Drive, Chimney, Building foundations (unspecified)

Associated Sites:

Burnetts Face, Coalbrookdale

Description:

Updated 17/07/2025 (Other), submitted by: CLOU_KimTatton_ArchSite

The Ironbridge Mine is the beginning of the workings which extend to the burning mine, Kiwi, over the Waimangaroa River and up the flanks of Mt. Frederick. The workings of Iron Bridge Mine around the Burning Mine south of the Waimangaroa River to Cedar Creek Road date from 1887 - 1945.

In 1882 the Banbury mine was driven right through to Burnetts Face from where more developments began, including the Iron Bridge and Coalbrookdale mines. The Iron Bridge, which was to give the mine its name, was under construction across Burnett's Creek (also called the south branch of the Waimangaroa River) in 1887.

In 1902 a 'New Track' (Cedar Creek Road) connecting Denniston to the Waimangaroa was opened and there was extensive tunnel and bridge works to deviate the Iron Bridge main haulage line from the mine to a central loading station on the Coalbrookdale main line at Burnett's Face, where it was transferred to the main overland ropeway to the Denniston Brakehead. Two steel-girder bridges which spanned the Burnett Stream – one to a new Iron Bridge Mine entrance, the second over Cedar Creek Road.

The main Iron Bridge Mine surface remains comprise of the Iron Bridge Mine stone drive, which was the second entrance to this mine, the bathhouse foundations, a chimney and a water tank with the remains of several dwellings / baches associated with Cedar Settlement in the bow of Burnett Stream (between the mine remains and Cedar Creek Road). Bridge remains in the creek. The Iron Bridge main haulage line cutting is visible on the opposite side of Burnetts Creek through to Wooden Bridge at Burnetts Face. An extensive area of underground mine workings are associated with the Iron Bridge Mine.

Condition Notes:

Updated 17/07/2025 (Other), submitted by: CLOU_KimTatton_ArchSite

Building foundations remain and a standing chimney is visible from above. The Iron Bridge main haulage line cutting is visible on the opposite side of Burnetts Creek through to Wooden Bridge at Burnetts Face.

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
	NZAA Site Number:	L29/99
	Imperial Site Number:	
	Site Type:	Mining - coal
	Site Name(s):	Beggs Outcrop or
	Site Coordinates (NZTM)	
	Easting:	1504788
	Northing:	5378094
	Source:	Shapefile
		
Scale (Arch Paper Size) 1:125000 Disclaimer: Origin may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Accessed along Cedar Creek Road (4WD) from Burnett's Face at Denniston. Located south of the Waimangaroa River and approximately 1 km north-east of Cedar Creek. The site is located immediately adjacent to the road		
Brief Description: Coal mine adits, concrete building foundations, railway line sleepers, chimney base		
Condition of Site when last visited: Fair		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Modern 1900-

Ethnicity:

Non Maori

Site Features:

Building foundations (unspecified), Chimney, Adit

Associated Sites:

Description:

Updated 13/04/2026 (Other), submitted by: ArchSite_CentralFilekeeper

Removing unwanted attachment.

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 11/11/2024 by Kim Tatton and Doug Gaylard

The State Mines Department prepared Beggs Outcrop or Cedar(dale) Creek Mine in the late 1950s and early 1960s. The coal was intended for the proposed New Plymouth coal-fired power station, but when the government discarded coal in favour of oil and natural gas, development at Beggs Outcrop came to a standstill. There was then no market for high sulphur coal. In the 1980s the State Department was talking about open-casting and mixing this coal with cleaner coal from elsewhere. State Mines bulldozed the face of the seam clear. The bins were built and then taken down (in 1981) to be rebuilt at the recently reopened Whareatea Mine (Sumner and Sumner 1983:156).

Beggs Outcrop consists of three old mine entrances. The most northerly is 2m wide x 3m high with some remaining timbers still visible inside and a stream now runs out of the mine. Approximately 50m to the south is the second mine entrance which is half-boarded over and inside are old props. Part of an old pump lies below the entrance. Approximately 60m south of the second entrance is the third mine shaft which is closed by fallen rock. Below the entrance are a couple of pieces of iron fluming.

Other remaining structures include the foundation of the concrete transmission (power) house (5.5m x 4m), which is located immediately adjacent to the road where the power line ends (Feature 233). Railway iron tracks stand around the foundation edge that were used as building beams. The former site of the administration block, which is no longer standing, comprises the base of a brick chimney, with scattered corrugated iron, other building materials and bricks (Feature 231); and the concrete foundations of two adjoining coal bins 12m long x 9m wide (Feature 235).

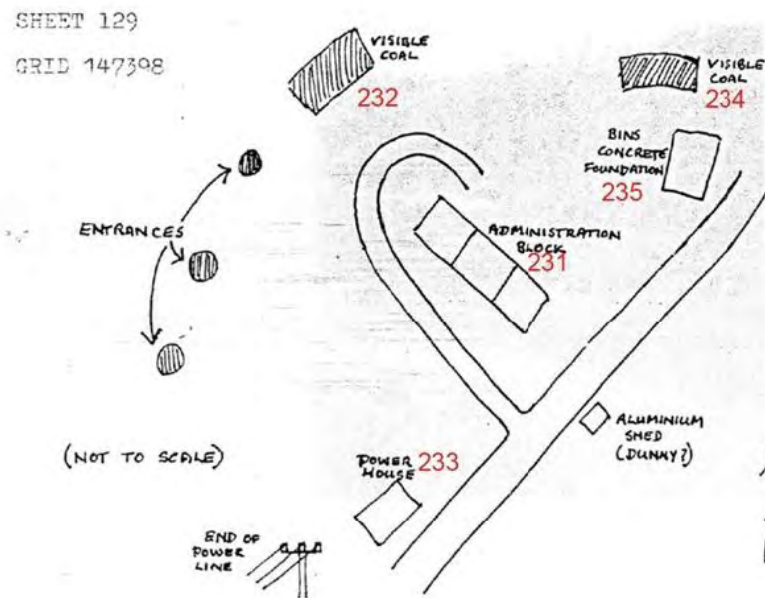
Two exposed coal seams are located north of the site's structural remains that were bulldozed clear in the bank behind the buildings site. The largest seam located behind the administration block is 4.5m high (Feature 232). The smaller seam is behind the coal bin foundations.

The aluminium shed (dunny?) shown in the Sumner sketch on the southern side of the road is no longer present.

Condition Notes:

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 11/11/2024 by Kim Tatton and Doug Gaylard

As this site is easily accessible and beside the road there is evidence of vandalism, litter, coal extraction from the exposed coal seam.

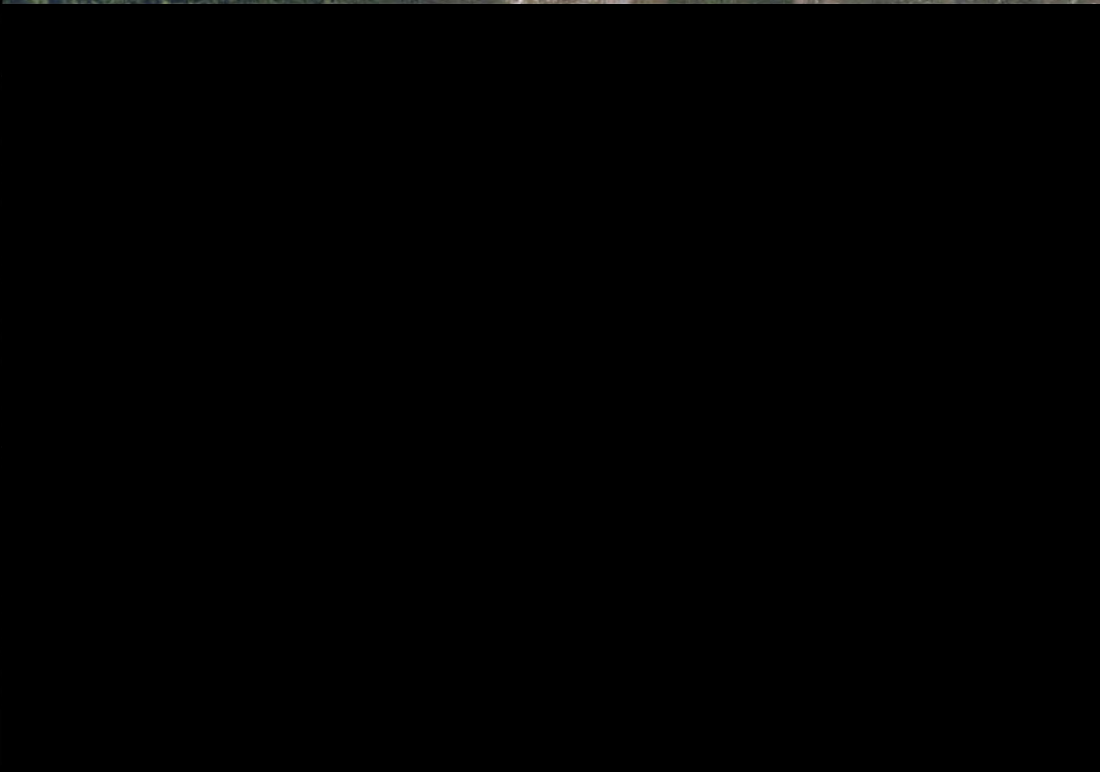


Sumner and Sumner 1983 plan: Beggs Outcrop with recorded features marked (source: Sumner and Sumner 1983 sketch:156). The feature numbers recorded during survey are shown in red



Northerly mine entrance at Beggs Outcrop

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
	NZAA Site Number:	L29/100
	Imperial Site Number:	
	Site Type:	Mining - coal
	Site Name(s):	Taipo Mine (Deep)
Site Coordinates (NZTM)		
Easting:		1502644
Northing:		5379596
Source:		Shapefile
		
Scale (A4 Paper Size): 1:11,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: Located on the south-western flank of Mt Frederick. Difficult access only by crossing the Waimangaroa River at Deep Creek and following the route of the rope road to the top workings across dissected coal country, and the forested gorge of Deep Creek.		
Brief Description: Coal mine - mine workings, braking and cable tensioning station, tramway, historic artefacts		
Condition of Site when last visited: Good		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Modern 1900-

Ethnicity:

Non Maori

Site Features:

Mine, Drive, Adit, Artefact - historic, Chimney, Tunnel - pedestrian, Bridge, Building foundations (unspecified)

Associated Sites:

L29/98

Description:

Updated 15/04/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 12/11/2024 by Kim Tatton and Doug Gaylard

Taipo 2 and Taipo2_1 added.

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 12/11/2024 by Kim Tatton and Doug Gaylard

Taipo Mine was worked and accessed from the 1920s to the 1940s as an extension of mining and a rope-haulage system associated with the Deep Creek and Kiwi workings of the Iron Bridge Mine (see Taipa1 document attached for historic background)

(refer Taipa2 document attached for Figures described below) The northern extent of the Taipo historic mining area is an excellent example of a large area of collapsed underground shafts, surface subsidence damage (pot holes, cracks, collapsed overburden), mine portals and exposed coal seams. There is little overburden with the coal at a shallow and surface depth, which make it possible to follow on the ground the collapsed lineal pattern of the historic drives with intervening walls still standing between (Features 142–137).

South and immediately adjacent is the Top Break Station, which supported the braking and cable tensioning systems for the Taipo endless haulage rope road, are other scattered mining remains (a collapsed hut site with fallen timbers, corrugated iron, bricks ('Neighbour'), nails, remains of a chimney, various metal debris (Features 136–134).

Between the Top Brake Station and Kiel's Flat to the southwest is the remains of the surface rope road/tramway formation built up with coal fines (Figure 24), stacked stone bridge buttresses (Features 132 and 133), embankments, cleared stone pathways and scattered sleepers and metal debris.

East of Kiel's Flat is the Taipo stone drive consisting of a 35m long x 4m wide open cutting into the rock to the entrance to the portal entrance (Feature 131). The mine entrance is open and visible inside for approximately 30m.

Standing timber struts survive down the centre of the mine, with side bracing timbers on the walls at its entrance.

Kiel's Flat is the area with the most prominent and greatest concentration of remnants associated with the Taipo workings. Remains include a Strap Brake Mount frame, collapsed buildings of corrugated iron, shed framing, wooden and concrete foundations, the remains of two brick chimneys, bogey wheels, rails, iron fluming, coal tubs, metal rope, and other debris scattered about. Kiel's Flat also marks the end of the power line which followed the rope road from Waimangaroa to the Taipo workings up the southern flank of Mt Frederick and supplied the Taipo, Deep Creek and Kiwi workings of the Iron Bridge Mine. Some power poles of rough timber logs are still standing at random across the landscape (Figure 33).

The tunnel entrance of the rope road at the Brake Station on Kiel's Flat (Feature 120) is approximately 457m long and re-emerges to the south (Feature 118) where it is possible to follow the line of the rope road tramway (southwards) because its tunnels have collapsed. Whole blocks of rock have dropped into the ground in places, revealing the rope road beneath (Feature 117).

East of this area remains of a surface rope road divert and extend (Features 100–102, 105– 107) towards a secondary area

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

of underground workings and mine portals (Features 103, 108 and 110).

Condition Notes:

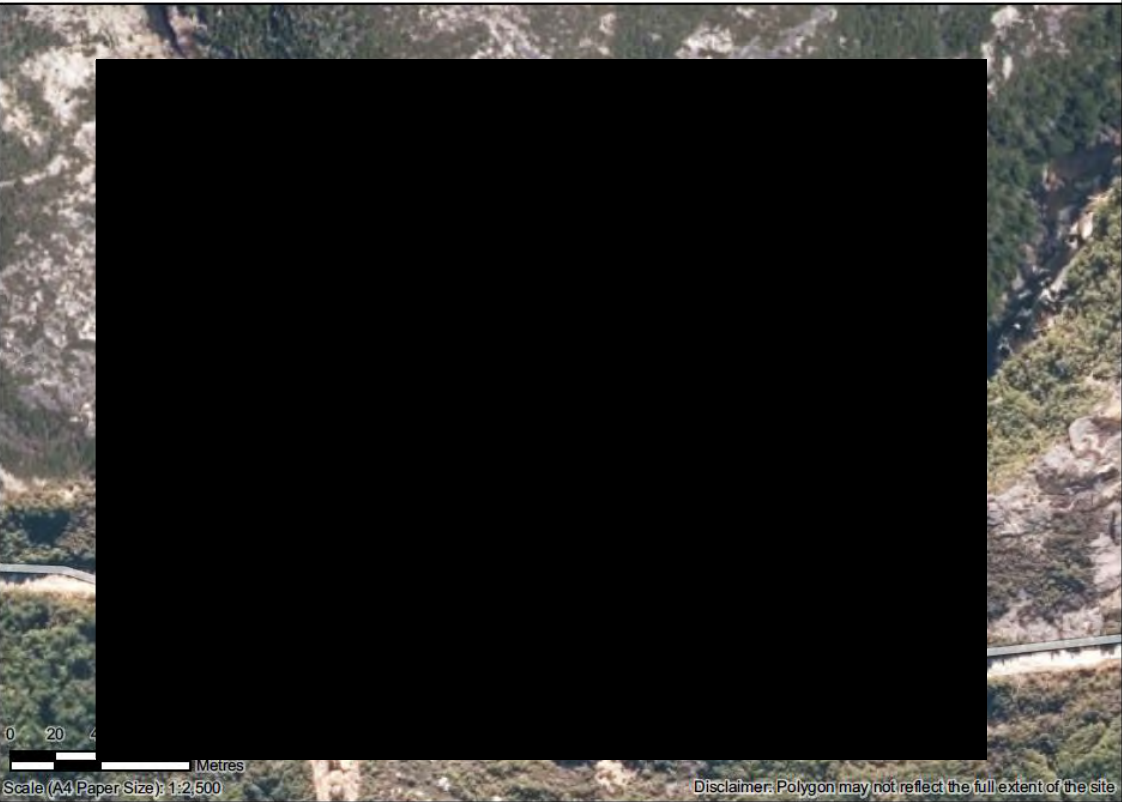
Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 12/11/2024 by Kim Tatton and Doug Gaylard

The 20th century remains of this mine are extensive and varied, and are relatively intact and undisturbed because of its isolated location and the absence of later modern-era large scale mechanical mining. This includes artefactual material that is often missing from other more accessible sites.

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Record Form		
	NZAA Site Number:	L29/101
	Imperial Site Number:	
	Site Type:	Mining - coal
	Site Name(s):	Kiwi Mine, Fan House
	Site Coordinates (NZTM)	
	Easting:	1502948
	Northing:	5377377
	Source:	Shapefile
		
Finding Aids to the Location of the Site: Accessed from Cedar Creek Road east Burnetts Face. Located at the confluence of Waimangaroa River and Gomorrah Creek. Walk north of the Cedar Creek Road opposite the pylon road to the rivers edge		
Brief Description: Kiwi Mine Fan House and Compressor: power house foundations, machine concrete foundations, brick reclining airway/ chimney		
Condition of Site when last visited: Fair		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form			
NZAA Site Number: Imperial Site Number: Site Type: Site Name(s):	Site Coordinates (NZTM) Easting: Northing: Source:	 	
 0 20 40 Metres Scale (A4 Paper Size): 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site			
Finding Aids to the Location of the Site: Accessed from Cedar Creek Road east Burnetts Face. Located at the confluence of Waimangaroa River and Gomorrhah Creek. Walk north of the Cedar Creek Road opposite the pylon road to the rivers edge			
Brief Description: Kiwi Mine Fan House and Compressor: power house foundations, machine concrete foundations, brick reclining airway/ chimney			
Condition of Site when last visited: Fair			

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Colonial 1840-1900, Modern 1900-

Ethnicity:

Non Maori

Site Features:

Building foundations (unspecified), Chimney, Artefact - historic

Associated Sites:

L29/98

Description:

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 11/11/2024 by Kim Tatton and Doug Gaylard

The Kiwi Mine was worked and accessed as an extension of mining and a rope-haulage system associated with the Deep and Kiwi workings of the Iron Bridge Mine that date to 1901-1921.

The Kiwi Mine Compressor and fan supplied air and power to sections the Ironbridge Mine. The Compressor was under construction in 1899 and built in a central position midway between the Cedar Creek Dip and North Waimangaroa coalfield to supply power to the workings. The Chief Inspector of Mines noted in his report the spacious housing and ample capacity to drive all the underground haulage machinery, pick machines, and pumps. The steam was supplied by Roots tubular boilers. In 1901 more steam and machine power was installed. In 1902 a 7' Schiele fan was dismantled and being re-erected in the Ironbridge Mine. In 1929 the old fans at Kiwi were dismantled and a 40' Sirrocco fitted (Sumner and Sumner 1983).

The remains of the Kiwi Mine Fan House and Compressor (Features 212 and 213) comprise of the power house and machine concrete foundations and a brick reclining airway/chimney that was built up the hillside. This air shaft chimney is half built of double brick and half carved out of the rock. The shaft is roughly oval being c.2m high and c.1m wide with a double brick roof. The chimney is only partially intact and the rest has caved in. Next to the chimney shaft on top of the hill is the broken remains of the vertical metal chimney. In the river banks of the Waimangaroa River north branch are cuttings into the rock and concrete foundations with metal pins that either supported the main girder bridge across the river or the smaller second bridge that accessed a mine to supply coal for the compressor furnace.

The brick reclining air shaft chimney of the Kiwi Compressor is partially collapsed and structurally vulnerable to further collapse.

Condition Notes:

Updated 22/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 11/11/2024 by Kim Tatton and Doug Gaylard

The brick reclining air shaft chimney of the Kiwi Compressor is partially collapsed and structurally vulnerable to further collapse; the metal vertical chimney is broken and in pieces; only the concrete foundations of the Fan House and Compressor building survive.

Date Recd: 22/03/2026

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

 Site Record Form		
NZAA Site Number: L29/102 Imperial Site Number: Site Type: Mining - coal Site Name(s): Cooks Lease Area	Site Coordinates (NZTM) Easting: 1505224 Northing: 5378653 Source: On Screen	
 0 20 40 80 Metres Scale (A4 Paper Size): 1:2,500 Disclaimer: Polygon may not reflect the full extent of the site		
Finding Aids to the Location of the Site: From Burnetts Face at Denniston follow Cedar Creek Road. Three quarters of a mile beyond and across the Waimangaroa River from Begg's Outcrop.		
Brief Description: Area of open cast mining: cables of swing bridge, spoil heaps, metal artefacts		
Condition of Site when last visited: Poor		

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION INCORPORATED

Site Periods:

Modern 1900-

Ethnicity:

Non Maori

Site Features:

Mullock heap, Artefact - historic

Associated Sites:

Description:

Updated 30/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 13/11/2025 by Kim Tatton and Doug Gaylard

Down stream of the ford across the Waimangarao River is the remains of a swing bridge. Four metal cables are strung across the river upstream from the ford but are slack and unconnected. All that is now left of the mine is an area of 400 yards x 150 yards (366m x 137m) of rubble and spoil heaps and outcrops of flakey coal. There has been regrowth of lichen, manuka, tussock, sedge grass and gaultheria and amongst it there are occasional rusted-out pipes, pieces of rusty ¼ inch (c.6mm) plate, and wire cables. This area of what was known as Cook's Lease was leased to Marshall and Co. in 1952. It was estimated to contain 20,000 tons of coal. It was operated by open cast methods - 10' of overburden was removed to reach 20' of coal. The coal was transported by truck to the 'Wooden Bridge' at Denniston where it was transferred to coal tubs which then carried the coal to the Brakehead and down the incline. In 1953 bad weather severely hampered production.

Condition Notes:

Updated 30/03/2026 (Field Visit), submitted by: CLOU_KimTatton_ArchSite, visited 13/11/2025 by Kim Tatton and Doug Gaylard

All that is now left of the mine is an area of rubble and spoil heaps and outcrops of flakey coal.