5.2 ARCHAEOLOGICAL EVIDENCE OF MACETOWN

The township straggled nearly a mile along the one main road, being constrained by its site on the long narrow river terrace (Map 1, pp. 10–11). It appears to have had two main sections: the northwestern end with the main community buildings such as the hotels, school, bakehouse and stores; and the southeastern end, which includes Joseph Needham's house but is otherwise not well documented. The whole area was surveyed in 1878, but the survey plan shows structures only at the northwestern end (Fig. 9).

The site of Macetown is archaeologically very rich. As the area is actively managed and receives large numbers of visitors in four-wheel-drive vehicles, it is generally quite 'tidy', without much small artefactual material scattered about. Most building sites are marked by terraces, levelled areas, chimney remains and cultural plantings. There are still three standing buildings, namely the timber building at the southeastern end of the town area (Fig. 7), Needham's cottage (Fig. 8), and Smith's bakehouse, the last two of which have

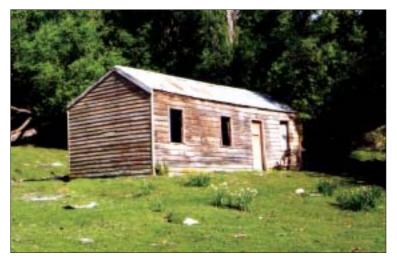


Figure 7. The last remaining timber building at Macetown. Note the clumps of flowering daffodils.

Photo: P. Petchey.

been restored. Substantial ruins of a small stone building near the timber building and the Alpine Hotel stables near the bakehouse also stand. It is very likely that the township area has been heavily fossicked for bottles.

Of particular interest around the town site are the remains of cultural plantings. The large deciduous trees make a spectacular sight in autumn, while many daffodils can be seen in spring, still largely confined to their original flower beds. One interesting spring sight is two extended rows of daffodils defining a

long-disappeared front path to a house site at the base of the hillside on the south side of the township. Throughout the town site there are still a number of fruit trees, but many others have died, and none seem to be naturally reproducing. A number of old hawthorn hedges are easily identified, the hawthorn still growing in the original hedge lines. In general, it appears that



plants that are not palatable to stock survive and may multiply, while palatable plants will not be naturally replaced, as any seedlings that appear are eaten.

Figure 8. Joseph Needham's cottage. This building was restored by the former Department of Lands and Survey. Photo: P. Petchey.

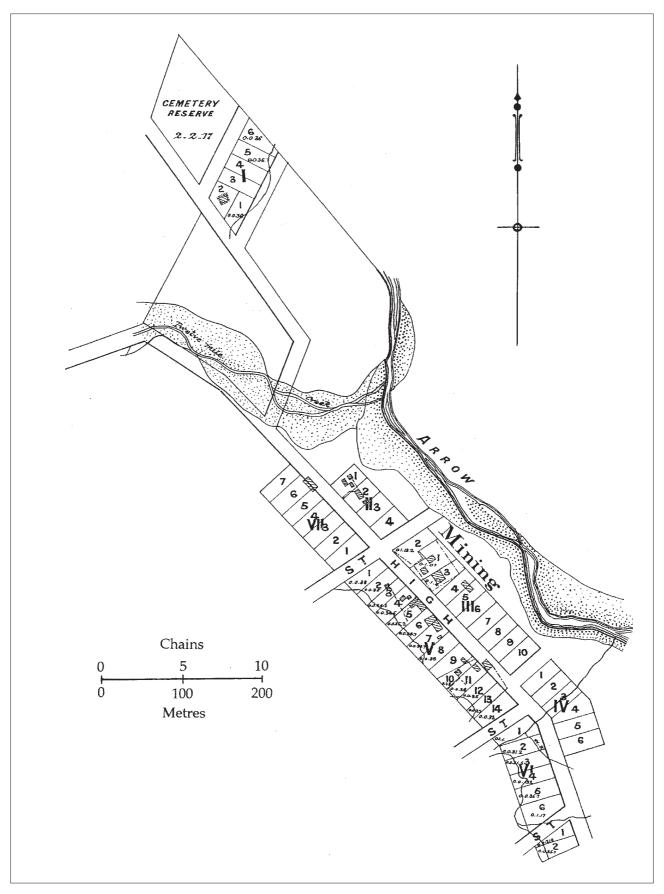


Figure 9. Part of the 1878 plan of Macetown, showing the northern end of the surveyed township with a number of building locations marked. The surveyed township down to the river approximates the area of the Historic Reserve. *Map: Hocken Library, Uare Taoka o Hakena, University of Otago, Dunedin.*

5.3 SOME SPECIFIC MACETOWN SITES

Over the years there were a large number of buildings erected at Macetown, including numerous residences, several hotels, stores, a bakehouse, a school, a post office and a hall. The archaeological remains of a number of these can be positively identified on the ground. Some of these sites are described below, starting from the southeastern end of the township, where the road climbs up from the river bed to the location of the first modern interpretation sign.

On the left (southwest of the road) is the only remaining timber building in the township (Fig. 7, and 'H' on Map 1, pp. 10-11). Its history is unknown. Beside this building, past some old gnarled willows, are several house and hut sites, the largest of which has the daffodil pathway mentioned above. There are several other hut sites, the remains of an orchard, and a stone wall fronting the road. On the other side of the road (northeast) from the wooden building is a large area of ground sluicing. Fifty metres past the stone wall just mentioned there is a small square stone structure set immediately above and southwest of the road. It is in good condition, although the roof is missing.

Two hundred and fifty metres further on, on a terrace below and to the northeast of the road, is Needham's cottage (Fig. 8, and 'G' on Map 1). Joseph Needham was the schoolmaster at Macetown from 1879 until 1889, after which he stayed in Macetown goldmining (Beaton 1971: 54). The cottage was substantially rebuilt by the Department of Lands and Survey c. 1979.

A further two hundred metres on, the road drops down a steep cutting from the top of a bluff. To the northeast is an area of ground sluicing tailings with shallow dams. There are several hut sites on this terrace, known to have been inhabited by Chinese miners (see Fig. 6). An interpretation panel shows one hut when it was inhabited, together with its occupants and G.H. McNeur.

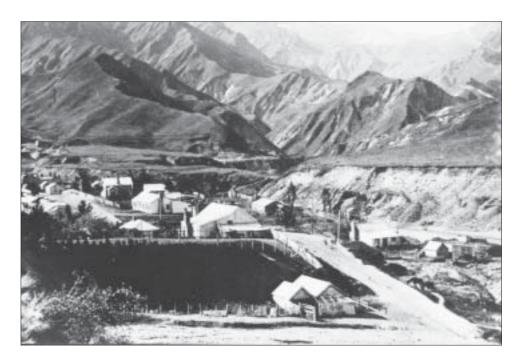
The road then climbs again to the site of the Macetown memorial and a series of interpretation panels. These stand on the site of Smith's store. Just behind them (to the southwest) is the site of Smith's bakehouse ('F' on Map 1). This was also rebuilt by the Department of Lands and Survey. Figure 10 shows this area in 1897, with the store standing prominently beside the road at the top of the rise.

Just beyond the store site was the Macetown Hotel (see Figs 3 and 4). This was initially owned by Joseph la Franchi, then sold in 1873 to the Italian Resta brothers, and later passed through the hands of Edmund Elliott, George Spooner, a Mrs Elliott and Robert Gilmore. It was finally bought in 1905 by John McLeay before being destroyed by fire in 1906.

Almost directly opposite the Macetown Hotel (on the northeast side of the road) was the Alpine Hotel (Fig. 10). Its site can be identified by the substantial ruins of the stables which stood behind the hotel ('E' on Map 1). It was opened in 1883 by a Mr Dyson, was later operated, for a short time, by William Jenkins, and then by Mary Illingworth. By 1905 James Anderson had the licence, and the Alpine was the only operating hotel left in Macetown. It was then run for a time as an accommodation house, before finally closing in 1918 (Veitch 1972).

Past the Alpine Hotel (still on the northeastern side of the road) were the Public Hall, the school, the Post Office and the school residence. The school was opened on 7 February 1870. The building, constructed the previous year, measured 22 ft by 14 ft. In 1895 a new school building was erected, the old

Figure 10. Macetown in 1897. The store and bakehouse are on the left of the road at the top of the rise. The long white building on the opposite side of the road (to the left of the store in the photograph) is the Alpine Hotel. To the rear of this are the stone stables, the ruins of which can still be found. Photo: Hocken Library, Uare Taoka o Hakena. University of Otago, Dunedin.



building being retained as a playhouse. The school finally closed in 1916. The Public Hall was opened in March 1899, with a large ball held to celebrate the opening (Veitch 1972).

A number of other house, hut, and business sites and access lanes are scattered on either side of the road as one continues along. Revetted banks and remains of gardens mark several of these just past the small stream (Fig. 11). The road then drops down a cutting towards the Rich Burn, where the track branches.

From this junction, the northeastern track crosses the Rich Burn, and another stream to lead round to a track cut up onto Cemetery Terrace ('C' on Map 1). This was the location of the Catholic Church and the Cemetery Reserve. The Catholic Church was established during the first year of the settlement. However, by 1865 the building had fallen into disrepair. The 1878 plan of Macetown (Fig. 9) still shows a building on this spot, although it is not certain how long it survived. The graveyard was located near the Church, and two graves are reputed to be still occupied, although most of the bodies have been removed to the Arrowtown Cemetery. The ridge track to Advance Peak climbs up the hillside close to the church and cemetery site. The edges of the terrace have been extensively worked by ground sluicing.

The track continues to the north, to the site of Granny Barker's house, on a terrace above the Arrow River ('D' on Map 1). The house site is marked by the remains of a stone chimney and numerous trees. A line of dead fruit trees is present below the existing vegetation.

Returning to the main road at the end of the township, if one carries on along the road to the west, rather than turning northeast to go to Cemetery Flat, it continues onto a ford in the stream. To the southwest, above the ford, were the huts of the 'Twelve Apostles' ('B' on Map 1). These were twelve old miners who were renowned for their drinking binges. More information about them is available in Beaton (1971: 48-49).

Over the ford, the road continues up the Rich Burn, which is discussed in more detail in Chapter 7.



Figure 11. Part of the western end of Macetown in autumn. Numerous low stone walls and lines of revetment mark out long-disappeared gardens and house sites amongst the trees. *Photo: P. Petchey.*

6. Macetown terraces and alluvial mining (Maps 1 and 2)

6.1 HISTORY OF MINING AT MACETOWN

The first gold workings in the Arrow River were in the river bed and on the beaches. Some of this work paid well, and in the winter of 1863 some 1500 miners in the Arrow forwarded a monthly average of 6000 oz of gold (Veitch 1972). Miners soon turned their attention to the higher terraces on the western side of the valley. Work began in 1865, but lack of water for ground sluicing was a problem. To a certain extent this was overcome by tunnelling to extract the gold-bearing gravels for subsequent washing (A.J.H.R. 1865 C4A: 16), but many areas were not mined until long (and expensive) races were constructed to bring water to the claims from the creeks further upstream. Later, hydraulic sluicing increased the amount of material that could be worked. In places, clear archaeological evidence of this method cutting through evidence of earlier ground sluicing can be seen (see below).

When quartz (hard-rock) mining became the dominant activity at Macetown, sluicing activities declined but did not cease completely (Veitch 1972). Large areas of the terraces on the west side of the river which could not be worked in the early years due to the difficulty and expense of bringing in water (Veitch 1972) were later extensively worked, particularly after the closure of the Premier hard-rock mine in 1906 spurred a renewal of interest in alluvial mining (Veitch 1972). One of the most extensive operations was that of the Macetown Sluicing Company, which worked the terraces behind the township (Veitch 1972).

6.2 ARCHAEOLOGICAL EVIDENCE

Extensive evidence of alluvial mining can be found on the hillside above Macetown on the western side of the valley (see Fig. 5, centre-right of photograph), as well as on the terraces on both sides of the river at the confluence of the Arrow and the Rich Burn. This archaeological survey has mapped the workings from the confluence of the Arrow River and the Eight-Mile Creek (Fig. 2; Map 2, p. 18) to the confluence of Scanlan's Gully and the Rich Burn (Fig. 2; Map 1, pp. 10–11).

To a remarkable degree, the location of the present archaeological sites was foretold in an 1865 sketch of the 'ancient river bed' between the Eight Mile Creek and the Twelve Mile Creek (Rich Burn) (Fig. 12) published in the District Mining Surveyor's report (A.J.H.R. 1865 C4A; following p. 14). This report stated:

'At the Twelve-mile Creek, and between it and the Eight-mile, Arrow, a lead of gold has been struck on the terraces on the west of the river, upon which several extended areas have been surveyed. This lead has all the appearance of having been at one time the bed of the Arrow, although now several hundred feet above the present level of the river. The run is not continuous, but is broken by the intersection of numerous small gullies that have

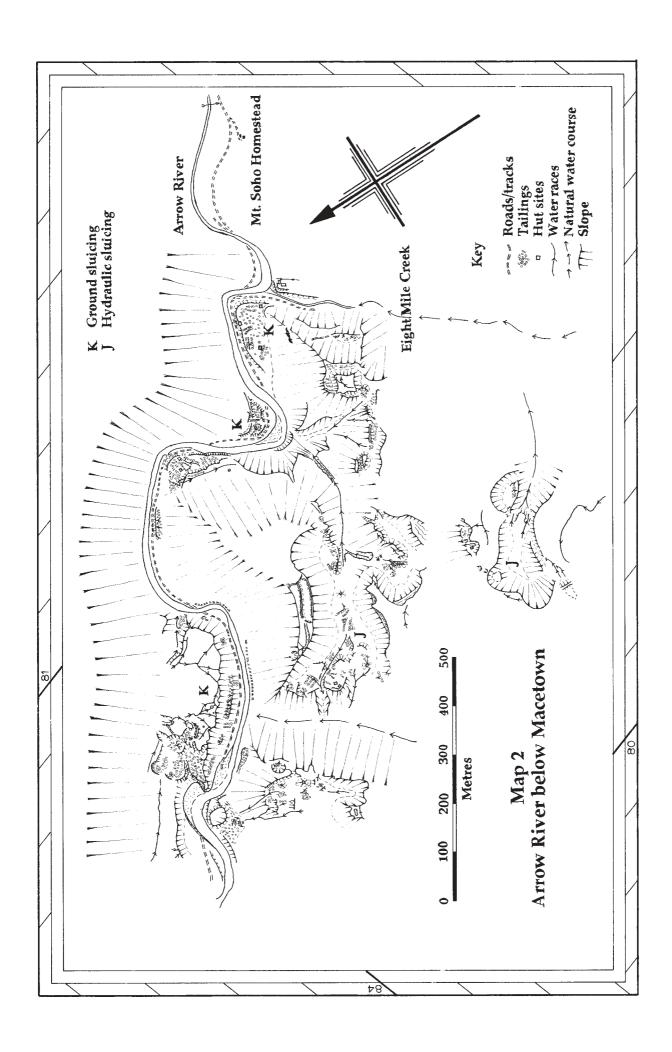
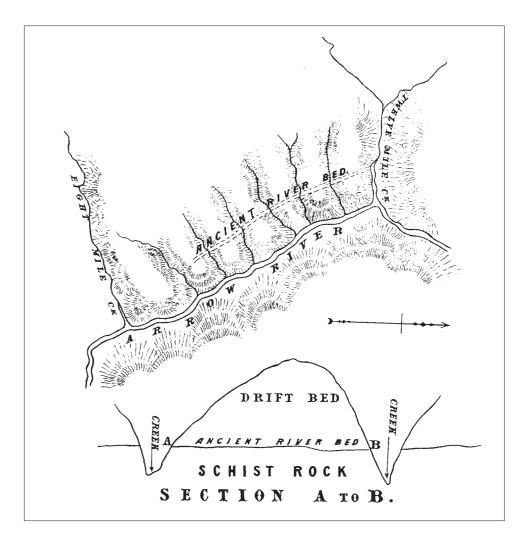


Figure 12. 1865 plan of 'ancient river bed'. A.J.H.R. 1865 C4A.



apparently cut their ways across it. The accompanying sketch [Fig. 12] shows approximately the lay of the ground, by which it will be seen that the bed of the tributary creeks which cross it are worn away deeper than the ancient river bed which constitutes the lead.' [A.J.H.R. 1865 C4A: 16].

The workings are concentrated in a band running parallel to the Arrow River, extending some 600 m up the hillside. Typically, there are the remains of a number of high water races running around the hillsides, which brought water to the claims. Below the races are the upper sluice faces of the claims, below which run the tail races and piles of tailings.

The alluvial mining landscape around Macetown is dominated by the effects of two basic mining technologies: ground sluicing (using water run over a scarp to wash the gold-bearing gravels away); and hydraulic sluicing (using a jet of water under pressure to wash away the gold-bearing gravels). Ground sluicing sites typically have water races at low levels and numerous stacks of tailings below shallow sluice faces, while hydraulic sluicing sites have high-level water races and high sluice faces. Both systems often used reservoirs for water storage.

There is some pattern to site location, with ground sluicing areas dominating the low- to mid-altitude sites, and hydraulic sluicing sites often found higher up the hillsides. In several places at Macetown there is clear evidence of the progression of mining, with hydraulic sluicing cutting through earlier ground sluicing sites lower down the hillsides (Fig. 14).

Although some very large gullies have been sluiced out of the hillsides, many of them are not visible from the road. In some places large tailings fans spreading out from narrow gullies indicate a large set of workings higher up the hillside. Figure 13 shows one of these sluicing scars, cut from a high terrace.

The alluvial workings that are visible from the road are typically low-level ground sluicings on the insides of bends in the river. These are generally no more than 10 m above the river level, and are fed by short water races running out of side gullies and creeks. Shallow sluice faces sit above heaps of tailings with numerous tail races running out to the river. Hut sites are often found within the tailings, although in some cases very small structures may have been tool sheds rather than habitations. Figure 14 shows a large area of such tailings inside the town area.



Figure 13. A 'hidden valley' hydraulic sluicing scar. Not visible from the road (to the left and below), this valley was sluiced from the hillside. The cut is between 110 and 200 m wide (see Map 2, p. 18, the northernmost of the two areas marked 'J'). *Photo: P. Petchey*.



Figure 14. An oblique aerial view (looking southwest) of the southern end of Macetown. High on the hillside is a hydraulic sluicing scar (J on Map 1, pp. 10–11), with the tailrace leading off to the left cut through earlier ground sluicing tailings (K on Map 1). The 'tracks' that appear to follow hillside contours are the remains of supply and head races. Below, several building sites and Macetown's surviving timber building (H on Map 1) are located in the trees, with the regular patterns of hand-stacked ground sluicing tailings on the flat in the foreground (K on Map 1). *Photo: K. Jones, Department of Conservation, Wellington.*

7. Rich Burn sites (Maps 1, 3 and 4)

The valley of the Rich Burn (or Twelve Mile Creek or Gold Burn) contained a number of mining sites in its own right, and also provided a link between the numerous mines in the adjoining gullies and hills. The main track between Macetown and the mines, ultimately leading to Advance Peak, ran along the valley. In addition, six stamping batteries: the Public, Anderson's, Homeward Bound (which consisted of three different batteries serving the same mine at different times) and the Sunrise, were all located by the Rich Burn, close to this track. These served the hard-rock mines in the surrounding hills. Thus both alluvial and quartz reef (hard-rock) gold was mined in this area.

The alluvial mining sites in the Rich Burn are typical of the area, where ground sluicing technology was used to work small areas of ground above the valley floor. The archaeological remains of this activity include piles of tailings, tail races and scattered hut sites.

The main archaeological sites in the Rich Burn are discussed below, heading upstream (west) from the confluence with the Arrow River.

7.1 THE 'TWELVE APOSTLES'

The site of the huts of the 'Twelve Apostles' is discussed above in Chapter 5 (Macetown). The huts were located on the true right bank of the Rich Burn, beside the first ford of the main track up the stream ('B' on Map 1, pp. 10-11).

7.2 ALLUVIAL MINING

Along the valley sides of the Rich Burn are sluice faces and heaps of tailings from ground sluicing operations. On the true left bank are the sluice faces cut back into the Cemetery Flat terrace ('C' on Map 1), while on the true right bank are scattered areas of overgrown tailings.

7.3 PUBLIC BATTERY

The Public Battery was constructed by the Macetown Crushing Company in order to fulfil a need for a general battery. The company consisted mainly of local shareholders, and the battery was erected in 1877 on a terrace about a quarter of a mile upstream from the township (Veitch 1972). It consisted of ten 6-cwt stampers powered by a Greenlaw's turbine (A.J.H.R. 1879 H11: 23). However, there were complaints that it was located too far from the mines, and there were calls to relocate it near the Lady Fayre ground (Veitch 1972). Nothing came of this, and in December 1882 tenders were called for the removal of the plant (Veitch 1972).

Nothing remains on the site to identify it today. It was probably located on the true left of the stream, between 100 and 200 m upstream from the first main ford on the track.

7.4 CONCRETE FOUNDATIONS

Located on a terrace above the true right bank of the stream are several concrete foundations. One appears to be an engine bed, while the others are of uncertain use. It appears that they were housed in a small building, and may have been built during the last main period of activity at Macetown in the 1930s Depression.

7.5 ANDERSON'S BATTERY

Anderson's Battery is located beside the Rich Burn, at the mouth of Scanlan's Gully ('A' on Map 1, pp. 10-11; and Map 3, p. 24). As it served a mine in Scanlan's Gully, it is discussed in Section 8.4 below.

The vehicle track up the Rich Burn finishes at the battery, where there is plenty of space for parking. The old road (now only passable on foot) continues up the Rich Burn. A vehicle barrier is located about 100 m further on to prevent the use of four-wheel-drives and motorcycles.

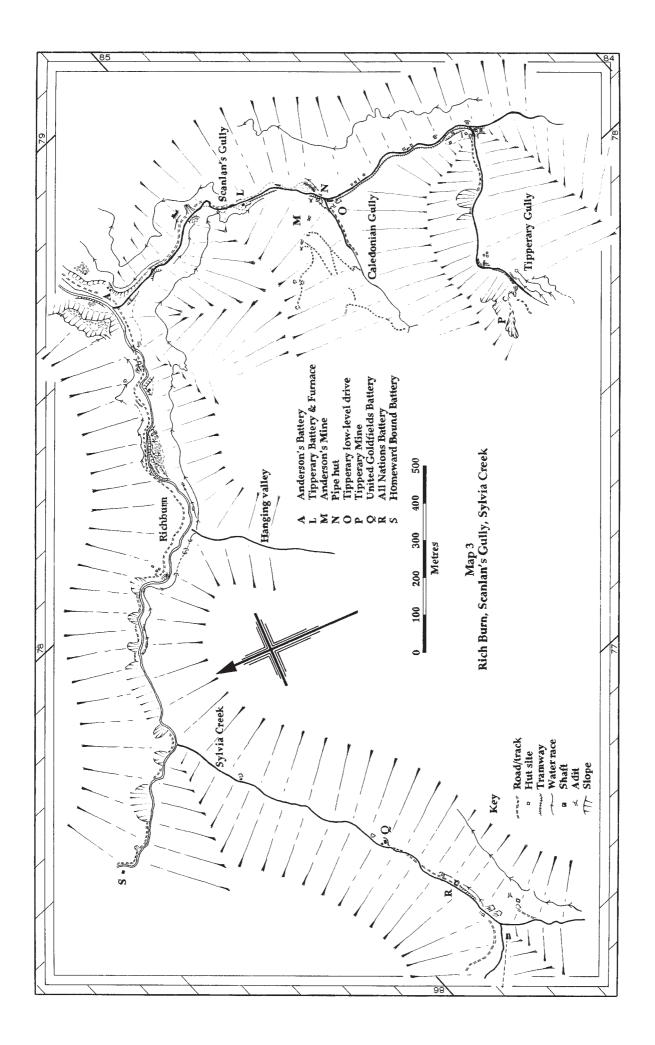
7.6 ALLUVIAL WORKINGS AND HUT SITE

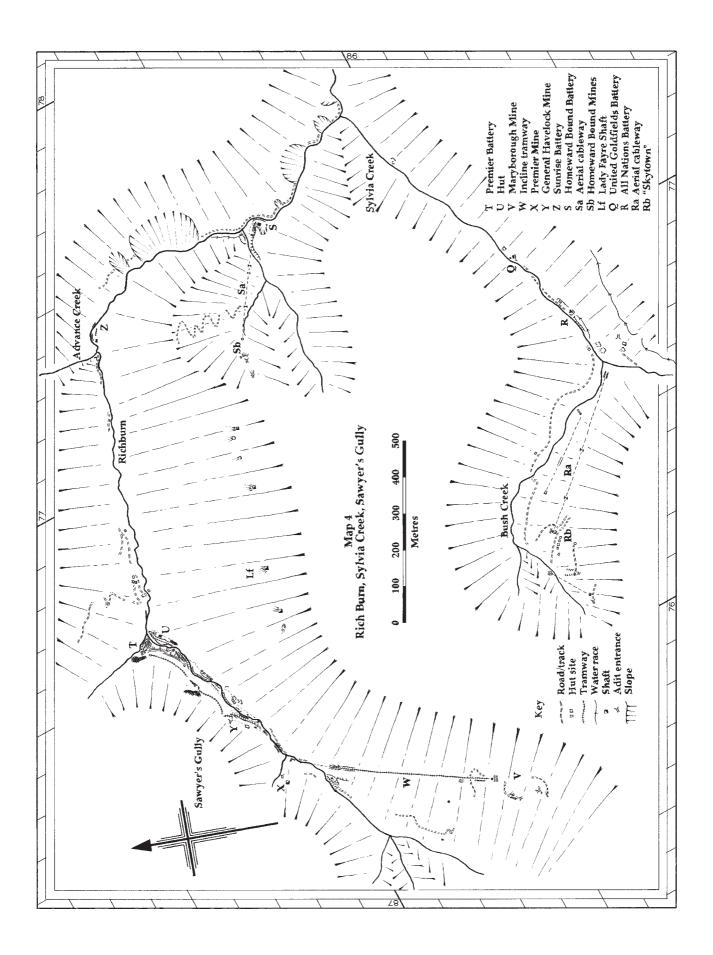
Shortly beyond the first ford after the vehicle barrier, two areas of alluvial workings are located on the true right bank, across the creek from the track. These are located on terraces well above the level of both the stream and the track. The first area is only about 20 m by 20 m, and sits atop a bluff projecting out into the valley. It contains a small hut site.

The second area is much larger, 100 m long by 25 m wide. It also contains a hut site, although most of the area is taken up by piles of tailings and several tail races. Both areas are shown on Map 3.

7.7 HUT SITES

About 150 m past the hanging valley (Map 3), three hut sites are located on a level area above the track. One hut site is marked by a stone chimney, which has half fallen away. The huts are not visible from the track.





7.8 SYLVIA CREEK

At the confluence of the Rich Burn and Sylvia Creek the track branches. The sites located up Sylvia Creek (including the United Goldfields and All Nations batteries) are described later in the report. The main Rich Burn track continues up the valley to the Homeward Bound Battery.

7.9 HOMEWARD BOUND MINE AND BATTERY

The Homeward Bound Company was the first quartz-reef mining company to register at Macetown, with a claim on the Premier lode (although the Tipperary reef, see below, was found first). While opening up the mine in 1876, Messrs Raven and Barclay won 551 oz. of gold from 542 tons of stone (Beaton 1971: 14). They erected the first battery in the Macetown area—the 'Little Wonder'—in March 1876 (A.J.H.R. 1900 C: 27; Powell 1976: 27). This was a small mill of four stamps, erected to test the value of the reef. Its first crushing produced 10 oz 16 dwts of gold from 2 tons of quartz (A.J.H.R. 1876 H3: 3). The floods of 1878 swept away the mine office and stables and silted up the battery (Veitch 1972). This led to its replacement by a more powerful five-stamp battery located comfortably above the stream flood level. A self-acting tramway was also constructed to take ore to the mill from the mine, a distance of 22 chains (A.J.H.R. 1879 H11: 25). The following year, a further ten stamp heads were added to the battery (A.J.H.R. 1880 H26: 26). Figure 15 shows the second Homeward Bound Battery.

The mine was operated on three levels. The top two levels were payable, but the third (lowest) level was not. Disaster struck in November 1883 when a slip caused by heavy rain completely destroyed the tramway to the battery (Veitch 1972). The company was wound up in 1884, the mine passing into the hands of Messrs Gage and Co. of Dunedin. They carried out some prospecting, but found nothing worthwhile (Powell 1976: 29).

The mine was later acquired by Farrell's New Zealand Consolidated Gold-mines (Limited), and in 1909 it was announced that payable quartz had again been located, and work began on the construction of a new aerial cableway from the mines down to the Twelve Mile Creek (Rich Burn). The following year the large OPQ (Otago Pioneer Quartz) stamping battery at Waipori was dismantled and transported to the site where it (the third Homeward Bound Battery) still stands (A.J.H.R. 1910 C3: 33). Between 1908 and 1911 stone from the Homeward Bound, All Nations and Garibaldi mines was crushed either in this battery or in a small composite battery in Bush Creek (possibly the United Goldfields Battery) (Veitch 1972). The outbreak of war in 1914 brought a complete cessation of funds from London, and all work was stopped in the claims (Veitch 1972). Figure 16 shows the third Homeward Bound Battery (date unknown) and Fig. 17 shows it in a state of disrepair in about 1930.

Some prospecting work was carried out in 1935, with one of the old levels being reopened (A.J.H.R. 1935 C2: 41), but this appears to have been the last activity at the mine.