WARANGA TRAMWAY AND QUARRY

Location

1180 RUSHWORTH-TATURA ROAD WARANGA SHORES, CAMPASPE SHIRE

Municipality

CAMPASPE SHIRE

Level of significance

Heritage Inventory Site

Heritage Inventory (HI) Number

H7924-0099

Heritage Listing

Victorian Heritage Inventory

Statement of Significance

Last updated on - May 15, 2023

What is significant?
The Waranga tramway and quarry extant features consist of the foundations of a tramway extending from a stone quarry to the edge of the Waranga Basin in the north-east. The fabric of the tramway mainly comprises a raised earth platform or foundation on which the track was laid. As the track foundation emerges from the quarry, it has been incised into the hilly landform before emerging onto flat ground. The tramway extends approximately 514 meters north towards the Waranga Basin embankment.
How is it significant?
The Waranga tramway and quarry site is of historical and scientific (technological) significance to Victoria.
Why is it significant?
The Waranga tramway and quarry site is of historical significance because it is directly connected to an important local, regional and state level historical event, the construction of the Waranga Reservoir and the development of the Goulburn Irrigation System. The site relates to the first phase of construction of what was to become the Waranga Basin. The Basin water storage reservoir was an integral part of the Goulburn Irrigation System, described by architectural historian Graeme Butler as the 'most important irrigation system in Victoria' until the completion of the Snowy River Scheme in 1974 (G Butler, Waranga Conservation Study: Shire of Waranga Conservation Study 1988). The importance of the reservoir was also acknowledged at the time of its construction with one reporter claiming that after the second phase of development the Waranga Reservoir would be the ‘second or third largest artificial lake in the world’ (Nagambie Times, 7 July 1916:3).

The tramway and quarry are of scientific significance because they provide archaeological evidence of the construction process of the reservoir and are a rare example of a horse drawn tramway used in an industrial context for mining stone. The site is representative of a specific period of technological development relating to transportation in the mining and construction industry. The tramway and quarry demonstrate the use of horsepower aided by rail to shift heavy raw materials between places in the early twentieth century.

Interpretation of Site	The tramway and quarry comprise an industrial site used to source and transport stone for construction of the Waranga Reservoir during the period c. 1903 – 1907. When the tram tracks were laid, they crossed areas of land that are now submerged beneath the waters of the Waranga Basin as can be seen by the sudden end of the tramway foundations at the water's edge. A section of the tramway is incised into the hill as it extends from the quarry, while other sections of the tramway foundations on flat land were laid on a raised earth bed. There are no remains of the iron and wood track as it was removed by the contractor after use. The tramway foundations are clearly visible and although there is evidence of weathering, there has been no major damage from subsequent uses of the site. The quarry site is intact, but in recent years there has been some illegal dumping of rubbish. The Waranga tramway and quarry site is partially on public land and partially on land owned by Goulburn-Murray Water. The site is currently managed by Goulburn-Murray Water. Since the construction of the Waranga Basin, the site has mainly been used for recreational activities. The Kyabram Pony Club leased the site from 1996-2017. The pony club created a cross-country jumps course across part of the tramway foundations; however, this has not caused significant damage to the site.
Hermes Number	209591
Property Number	

History

This site crosses three different allotments in the Parish Waranga: Allotments 25C, 19A & 19B. Allotment 25C was part of a water supply reserve initially gazetted in 1874 (Parish of Waranga, County of Rodney, Put Away Plan W37 2, Central Plan Office). In 1902 the government reduced the size of the water reserve to ~247ac and in 1982 to ~151ac. At this time the reserve comprised the whole of Allotment 25C, Parish of Waranga (Government Gazette 23 June 1982:2054). A gazetted road running through Allotment 25C later became incorporated into the reserve. Allotments 19A and 19B were licensed to individuals under Section 19 and 20 of the Land Act 1869, before being compulsorily acquired for the development of the Waranga Reservoir. The Board of Land and Works acquired Allotment 19A in 1889. This land was previously purchased by Annabella Oakden who died in 1887. The allotment was inherited by her daughter Jessie Cowain, wife of William Cowain, farmer, who had purchased Allotment 19B in 1868. Cowain sold Allotment 19B in 1889 and it was later acquired by the Board of Land and Works (The Elmore Standard, 26 April 1889:2). The quarry and tramway relate to the period 1903-1907 when an initial embankment was constructed at the Waranga Lagoon to create a larger water storage reservoir. Works had begun on the embankment by January 1902 with an expected date of completion of 1905. The contract for the construction cost £93,988 0/8 (The Berrigan Advocate, 12 December 1902:3). A newspaper report of 23 January 1904 records that the embankment ran for about two miles (~3.2km) with a rammed puddle wall at its centre and sloped sides to prevent slippage (Riverine Herald, 23 January 1904:2). Stone was required for the construction of the embankment and this was sourced from quarries west of the lagoon. The stone was used to reinforce the bank and to give it a more 'substantial and finished appearance' (The Argus, 31 March 1904:6). A tramway was built to carry the stone from several quarries west of the lagoon near the Rushworth to Tatura Road to the embankment site: 'A tramway has been laid from the quarries, situated upon the road from Rushworth, right across the bed of the basin to to [sic] embankment, a distance of two and a half miles. The stone is conveyed in the rough state as broken out, in trucks drawn by horses, two horses drawing about 35 yards of metal per trip. It is run along the top of the embankment and tipped and broken to the guage required. The tramway is said to save the uset [sic] of 60 horses and drays' (Riverine Herald, 23 January 1904:2). There were several quarries gazetted as stone reserves or quarry reserves in the 1870s and 1880s in the vicinity of the road

south-west of the embankment site. The extant tramway foundations at Waranga extend from a quarry at the intersection of Crown Allotments 25C, 19A and 19B. The location of the embankment north of the tramway can be seen on the parish map of 1959 (above). The tramway enabled the stone to be loaded onto ‘trucks’ or tramway cars drawn by horses to the embankment site. Construction of the tramway was noted in an article from 15 July 1903. According to this newspaper report construction contractor Thomas N. Flight had recently bought five miles (~8km) of rail to be laid from the quarries to the embankment (The Age, 15 July 1903:6). The tramway was removed following construction, however, there was public criticism of the government for not purchasing the tramway track to assist in the completion of future works on the reservoir. In November 1906 the construction of another tramway was suggested to cart stone from the quarries to further reinforce the northern part of the embankment after water damage (The Age, 20 November 1906:8): 'The department did not purchase the contractor’s tramway as most it is was in the bed of the lake and would have had to be relaid….had it been purchased a probable saving of £400 might have been effected, as the cost of a new tram will be £1200 (Geelong Advertiser, 17 January 1907:4). When the contractor for the Waranga embankment proposed to sell the tramway he had used for the haulage of stone, Mr. Bent asked the auctioneers to withhold it from sale, as it might be purchased by the Government. The request was complied with, but the Premier was overruled by the Cabinet or the Water Supply department' (The Age, 15 January 1907:5). Newspaper reports are unclear about whether this second tramway was built, although there is photographic evidence of sections of tramway being used near the embankment site. After two successive dry years 1912-1916 the Waranga Reservoir was extended and the height of the embankment was raised from ~4.8m to ~12m. This expanded the size of the reservoir to 14,720ac and its water capacity to 0.4km³. The earth embankment was upgraded with the installation of a reinforced concrete wall in 1926 after water leakage from the earth wall following heavy rain in 1922 (Butler 1988:29). In 1957 a new ~23km channel named after William Cattanach, a foundation commissioner of the State Rivers and Water Supply Commission, was completed duplicating the older channel that brought water into the reservoir and increasing the water flow capacity (Bossence 1969:1098; Butler 1988:30). In 1976 the Waranga Reservoir was officially renamed the Waranga Basin. The Goulburn Irrigation System with the Waranga Basin at its centre was the 'most important irrigation system in Victoria' until the completion of the Snowy River Scheme in 1974 (Butler 1988:30). Other evidence of the tramway includes a photo from the initial period of construction of the Waranga Reservoir dated 1910. This image shows the north-west corner of the Waranga Reservoir with the completed embankment reinforced by stonework and a tramway extending south (‘Waranga Basin’, 1910, State Rivers and Water Supply Commission photographer, Rural Water Corporation Collection: Waranga, State Library of Victoria). An aerial image from 1946 shows that the tramway was still partially evident at this time extending northwards from the quarry site (Aerial photograph, 1946, 'Murchison_799A1', Aerial Survey of Victoria, Historical Photomaps, Department of Environment, Land, Water and Planning).