KYNETON RAILWAY STATION HOUSE SITES

Location

MOLLISON STREET KYNETON - PROPERTY NUMBER 1, MACEDON RANGES SHIRE

Municipality

MACEDON RANGES SHIRE

Level of significance

Heritage Inventory Site

Heritage Inventory (HI) Number

H7723-1256

Heritage Listing

Victorian Heritage Inventory

Statement of Significance

Last updated on - August 25, 2022

What is significant?
An 1884 map shows two weatherboard houses and a block of brick offices to the north and west of the Kyneton Railway Station Complex. Based on the stratigraphic profile presented in the site card it is likely that the site to the north and west will be preserved. The construction date of the houses is currently unknown, however, the site has the potential to contain historical archaeological deposits and artefacts associated with the construction and occupation of the former residences and offices. The yards, gardens, outhouses, and other parts of the sites also have the potential to contain archaeological remains associated with the occupation of the place, and the operation of the Kyneton Railway Station. The concentration of houses is unique in a Railway Station context and the houses were demolished prior to 1973 so it is likely that deposits remain intact. The Kyneton Railways Station Complex is on the VHR H1602 as one of the earliest railway buildings built in Victoria (c.1857-c.1869). It was constructed in the 'Carlsruhe' style was a direct derivation of the 'English style'; a type of railway station design common in England in the 1840s and 1850s, based on classically derived planning principles and details.
How is it significant?
The Kyneton Railway Station House sites are of local historical significance and archaeological significance.
Why is it significant?
The Kyneton Railway Station House Sites are historically significance for their relationship with the Kyneton Railway Station and as a representation of the community in early Kyneton. The archaeological remains from the site have the potential to provide information about the occupation of the Railway Complex and the lifestyle of the station employees who lived in proximity to the station. The concentration of houses and buildings in proximity to

a railway station is considered rare, and stratigraphy indicates they are likely to be intact.

Interpretation of Site	From the excavation works carried out at Kyneton, it has been found that the earlier Ganger House, and many of the associated facilities of these earlier rail housings have been destroyed. Many of these buildings were removed in previous car park works, however, it does appear that the Ganger House was removed sometime prior to 1930, where a black ash like fill was placed over the site once the house had been totally removed. The only remnants of this are a partial brick pathway that is connected to the house. Due to the lack of remains on site, it is believed that the building was most probably built on stumps, and not that of a solid stone foundation. Where no bluestone was found, the absence of any post hole remains also leaves this open to interpretation. The septic system was installed sometime between 1916 and 1917. This followed the designs by Robert Boan. The septic system was built into natural earth away from the levelled area of the previous Ganger House and subsequent leveling of this part of the site. There is no evidence of the area of the former Ganger house ever being re-occupied with buildings, and possibly became a storage area and later, overflow car park for station operations. The site of the septic system reflects this, as it was away from any populated or operationally active areas. The septic system was one of only a handful of purposely designed and built railway specific systems by Robert Boan. Research has found that there were some other designs made by Boan, however, further examination of these other sites would be warranted to identify, preserve, and understand these other systems. Significant portions of the Kyneton septic system were able to be retained and reburied on site, including part of the tanks and one complete settling bed. From these excavations, a detailed occupational history has been unearthed and understood. This has contributed to the archaeological knowledge of the station, its operations, and how early sanitation was brought to the region. From the works on site, it has been determined that the Ganger House has been removed at some time in history. As such, the site is no longer available for any further archaeological examination. It was however found that the Septic Tank was historically significant and was able to be partially retained and reburied as a part of these works. From the investigations it was also found that historically, the waste from the railway refreshment service was being deposited down a bank to the west of the site. This created a very interesting archaeological site which has had little disturbance in comparison to the Ganger House and has the potential to divulge information about discard at a rural railway station. As already stated, the Robert Boan Septic Tank is of significance in its ability to tell us more about waste disposal methods of the Victorian Railway, as well as new innovations in waste management in early 20th century Victoria. The northern wall and northern settling tanks were able to be retained as a part of this excavation. As such, there are still remnants of the site under this new car park and has been updated on the Heritage Victoria Site Card for the site. Refreshment service rubbish dump Further west of where the Ganger house was once situated is a bank that descends into the creek. Here it was found that there was a large amount of stratified as well as signs of deflated stratigraphic profiles of artefacts that are eroding out into this creek. These items were all generally associated with the Kyneton Railway. It is believed that this represents the regular dumping of broken railways service goods as a part of the railway operations. It appears that larger amounts of rubbish were collected periodically and dumped over the side of the bank throughout the service industries period, and has thus cause a lot of this area to show stratified remains of these dumping events. Due to erosion, many of these stratified middens are deflating into the creek and being washed away. .
Hermes Number	209227
Property Number	

History

SiteCard data copied on 02/04/2025:Artefacts excavated onsite included a variety of food service, drinking and structural materials. Many artefacts from all aspects of excavation were all found within a mixed context and were generally associated with the dumping and levelling of the site after the earlier car park works abutting the study area. The predominant artefact type was kitchen based, more specifically, that related to The Refreshment Service Branch of Victorian Railways. Several near complete and fragmentary remains of Victorian Railway ceramics were found from a range of different periods since the station's formation. The range of Victorian Railway ceramics are datable, as there is a known start and finish time for this form of service within Victorian Rail (from 1920, with full closure in 1981 with the Seymour Station). The Refreshment Service Branch was created in 1920 by the Chief Commissioner Harold Clapp. By 1926 there were 61 refreshment rooms across the state with 770 employees, 460 being women (The Victorian Railways Magazine 1926: 8). This also meant that the establishment required a steady supply of goods and services, and subsequently bought about the requirements of poultry farms, and other food processing, such and meat processing (The Victorian Railways Magazine 1926: 14). In 1923 the Refreshments Service Branch sold over three million meals on separate services in Victoria, and with purchases of goods that Victoria Railway could not self-service, bolstered local economy by £200,000 per year (The Victorian Railways Magazine 1926: 8). Every month, 33 tons of meat, 1.5 tons of ham and one ton of bacon were consumed in the railways across Victoria, with the annual bill for this being £30,000. During this year, it is noted that 40,000 dozen eggs were used across the state, including 21 tons of bread and four tons of butter, and 29 tons of potatoes used every month. Regarding hot beverages, 14 tons of tea is brewed every year. Eight tons of coffee is also consumed across the state. Seven tons of sugar is used monthly, with milk accounting for 7,000 gallons per month (The Victorian Railways Magazine 1926). In understanding the quantities of food and drink served per month across the state, it is interesting to analyse further the railway assemblages that may occur at these sites. From the analysis, it has been found that, especially at Kyneton, the ceramics were a mix of either generically branded 'VIC.RLYS' or having their own 'Victorian Rail Kyneton' branded goods. Of the datable items excavated, these were generally associated with the turn of the century and were predominantly associated with the Refreshment Service Branch. As stated above, this can be associated with the time the Refreshment Service Branch was in operation (1920-1981), however, it is believed that the items found during this excavation is related to the 1920s to 1940s. There were a range of designs and patterns in these branded ceramics, ranging for considerably basic 'VICT. RYLS.' Blue branding on a cup, to ornate 'Refreshment Service Branch' branded items, with crown and decorative scrolling, more generically 'Victoria Railway' branded ceramics with crown and scrolling, to individually branded 'Kyneton Railway Station' pieces. As stated below, one area of potential research would be a study and analysis of railway ceramics in Victoria and establish a dating range for these artefacts. Septic Tank The main structure of the septic tank became the focus of the second session of archaeological monitoring and excavation. The completeness of this tank, and its size meant that further research was required to understand the site, and gauge how the structure was constructed and how it worked. In Australia, early facilities for the disposal of sewage were primitive in the extreme, but public health considerations in Sydney and Melbourne soon led to the development of collection and removal works for those and other large cities. Australia's sewerage authorities, coming late into the field, had the advantage of being able to select the most appropriate technologies from those in use elsewhere, after frequent visits to Europe and North America by Australian engineers. From as early as 1914, there was a desire to fix the sewage problem from the Kyneton Railway Station: If the municipal drains leading into the river are properly trapped and periodically [unreadable], and if all noxious sewage – notably that from the railway station and hospital – is duly disinfected before it reaches the river by means of septic tanks, or diverted (Kyneton Guardian Tuesday 15 September 1914, page 4). Records from the Kyneton Guardian (Tuesday 15 September, 1914, p. 4) talk about the desire '… to take steps for the prevention of the drainage from the railway station flowing into the Campaspe below the gardens …'. The drainage of the Kyneton Railway Station ran into the Campaspe River and its banks which was used by the public for both hygiene as well as recreational purposes. The Kyneton Observer (1882, p. 2) noted that 'youths and young men' were using the creek for bathing and socialising on the banks of the Campaspe near the Mollison Street Bridge. Discussions continued into 1915 where a letter was received by the Secretary for Railways in further regards to providing a solution to the sewage problem Kyneton Guardian (Tuesday 4 May, 1915, p. 4). By 1916 it appears that movement had been made to create the septic system for the station, however was delayed due to funds but would be completed by the summer of 1917 (Kyneton Guardian, Tuesday 6 June 1916, p. 3, Figure 29). No further references to the septic system are made in the Kyneton Guardian or any other publication at the time, so it could be assumed that the site was constructed c. 1917. This also corresponds with the brick type at the site. The septic tank at Kyneton was designed by Robert Boan. Robert Boan worked for the Victorian Railways Department from 1878 – 1925. He is credited as having a chemical laboratory created within the Department and became the chemist-in-charge for testing and researching. The beginnings of Boan's septic system were first published in the Journal of Proceedings for The Royal Victorian Institute of Architects in 1914. The Boan Septic system works on the concept of the waste material being liquified by hydrolysis (Boan 1914, p. 206, Figure 31). This liquification occurs once entering the first tank, where fatty matter forms to scum on top, which through hydrolysis caused the

solids to break down and trap much of the gas under this fatty layer (Boan 1914, p. 206). Boan (1914, p. 208) in his early experiments found that the sewage took between eight to 24 hours to pass through the septic tank but can also take as long and three to four days depending on the concentration of the sewage. The tanks were made to accommodate half a day's supply, which allowed sufficient time for solid matter to settle, and the sewage that enters and exits the system with as little disturbance as possible, making the in-flow and out-flow the same level throughout (Boan 1914, p. 208). Boan (1914, p. 208) states that the velocity of sewage is limited to three feet per minute, to ensure solids settle on the floor and can be broken down by microorganisms. This resulting sludge is then forced by water into pipes at the bottom of the tank where it is distributed elsewhere as a peaty mass '…with a lightly tarry odour' (Boan 1914, p. 216). Boan (1914, p. 216) believes that this process took between three to six weeks in warmer weather, but two to three months before best results are obtainable. The water is displaced in the tank by incoming sewage and flows to the outlet. This must be done over a 24-hour period, which Boan (1914, p. 209) states is done by the baffles in the tank, which were present during the excavations on site. At this end point in the tank, Boan (1914, p. 209) states that the water is only half purified. The water is then collected on an aerobic filter bed (Boan 1914, p. 210). Boan (1914, p. 210) described different methods in his paper, however at Kyneton, and detailed in his original 1914 plans, the liquid is dropped onto V-shaped channels laid level and gently drained onto the oxidising filter beds, which are then filtered through bluestone onto a bed that is then channelled out though pipes to a cistern and then out to a water source as filtered water. It has been found that Boan had been researching, perfecting, and building septic systems for the railway since 1909. His designs were all similar, with many of the changes made to the layout of the systems, as opposed to the actual technology and science of the process. Thus far, it has been found that he designed similar septic systems for Leongatha, Seymour and Warragul The systematic excavations and monitoring of the septic tank at Kyneton have shown that the designs devised by Boan were followed almost completely. Upon inspection of the site, and the analysis of the technical drawing undertaken during the excavation, the only deviation of the original plan was the sloped base of the settling beds, which were found to be flat when excavated. From this excavation, it has been found that the work of Boan can possibly be traced to other sites Victoria, which follow a refinement of design of his septic system. More broadly, the study of septic tanks specifically is a knowledge gap in the archaeological record. The management of waste and the movement of this away from cities has been underestimated in the development of sanitation at sites, and the improvements this made to health and wellbeing in communities. These sites can be seen not only as a way of processing waste but changing the health aspects of a community dramatically. Such developments not only improved health, but prolonged life, and had massive influence over the general environment. The works conducted here have shown the need to further understand sanitation developments in this area of scholarship, and future archaeological works that may involve septic systems.