
ROCKY POINT HERITAGE AREA

Location

49-53 RIVERSDALE ROAD NEWTOWN, GREATER GEELONG CITY

Municipality

GREATER GEELONG CITY

Level of significance

Heritage Inventory Site

Heritage Inventory (HI) Number

H7721-0552

Heritage Listing

Victorian Heritage Inventory

Statement of Significance

Last updated on - March 14, 2024

What is significant?

The site is recognized for its industrial heritage significance, association with James Harrison and early ice making activities in Geelong. The Rocky Point Cave site is believed to be the site of experiments with icemaking in 1854-55, cited as the earliest attempts to create commercially viable ice in the world. These attempts were ultimately successful, and the world's first vapour-compression refrigeration system was invented. Harrison refrigeration machines were used internationally by 1861 (Churchward, 2006). The cave was likely capped in the 20th century and has potential to contain historical archaeological deposits associated with the experimentation events.

How is it significant?

The site is of historical and archaeological significance.

Why is it significant?

The site is of historical significance for its association with James Harrison, a journalist and citizen scientist associated with the development of refrigeration, having developed the "first successful large-scale commercial ice-making machines..." (Lang, 2003). The site is of archaeological significance due to its potential to contain

artefacts, deposits and features that relate to construction and use of the cave as a laboratory including metal fragments and other artefacts associated with the vapour compression machine.

Interpretation of Site	Include phases in the development of the site, functions and activities represented, as well as current place use: 1854-55 – site leased by Harrison and some construction of rubble walls and possibly a hut or shed took place. A second shed up to 50 metres away was built which for the drawing of water from the Barwon River. This water converted to ice using the condenser (ABC 2022) The site was the location of Harrison’s chemical experiments and development of an ice-making system. Activities include drawing water from the river, using a compressor to force gas through a condenser, and experiments with chemicals such as ammonia and ether. Harrison was injured in accidents during these experiments, so at some point the cave was deemed unsafe and “filled in” (ABC 2022), potentially in the C20th and possibly with concrete. It is unclear how deep the infill extends into the cave
Hermes Number	209517
Property Number	

History

Dates of events vary between sources, but it seems the most significant activity related to the use of a cave on the site occurred in the mid 1850s. There seems to be little historical activity on site prior to or post these events. The area is within an area of cultural heritage sensitivity as it is approximately 50m north of the Barwon River. According to Lang (2003, p57) the title deed for the site originally belonged to Reverend Andrew Love in 1854. It was then taken over by Ebenezer Davies who leased the site to James Harrison. It is unclear if the cave was pre-existing or if it was purpose built. There are claims that a hut was partially built into the cave (Geelong Advertiser ca1970), and an advertisement for excavating and building rubble stone walls at Rocky Point was placed by Harrison in 1855 (Geelong Advertiser Saturday, November 3, 1855), so it is likely that some construction was undertaken around this time. A second shed some distance away may have been associated with extracting water from the river (ABC 2022; Lang, 2003, 57).

The cave is believed to be the site of James Harrison’s early experiments with icemaking, where he constructed a “closed cycle of operations in the Perkins model, but possibly without knowledge of that” (Roy Lang, p57, 2003). This involved attaching a pump to a coil from a heating device, pouring ether into the coil, closing the other end and operating the pump. This would apparently create ice on a wet surface (Lang, 57, 2003). Water was sourced from the Barwon River.

Harrison submitted a patent in 1855 for a refrigerating machine, using ammonia and other gaseous substances. This was ultimately successful and Harrison commercially developed the invention, selling them internationally until at least 1878 (Churchward, M. (2006)

This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>