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# MERNDA 3, PLENTY RIVER FLUME

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## Location

YAN YEAN PIPE TRACK MERNDA, WHITTLESEA CITY

## Municipality

WHITTLESEA CITY

## Level of significance

Heritage Inventory Site

## Heritage Inventory (HI) Number

H7922-0038

## Heritage Overlay Numbers

HO13

## Heritage Listing

Victorian Heritage Inventory

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## Statement of Significance

Last updated on - July 19, 2005

The Plenty River Flume is part of the Yan Yean Water Supply System and originally supplied water to Melbourne. The flume was constructed in 1879 to replace an old damaged bridge which formed part of the Morang Aqueduct and carried water from the Yan Yean Reservoir to a small storage basin known as the pipe-head reservoir. The flume was designed by engineer William Davidson and is supported by three basalt piers which were locally quarried and hewn. Each pier has a clean, dressed cutwater to cope with the Plenty River floods and has coursed face basalt blockwork abutments with dressed basalt cappings. The flume itself is of bolted wrought iron plate construction, approximately 1.5 by 1.2 metres and 70 metres long. There is a set of rollers above each basalt column to accommodate expansion and contraction of the metal flume. The flume is no longer used and whilst now uncovered, was covered with timber when in use.

The Plenty River Flume is of historical and architectural importance to the State of Victoria.

The Plenty River Flume is of historical importance for its association with the supply of reticulated water to Melbourne from the Yan Yean Reservoir. The Yan Yean reservoir and its associated structures are of exceptional

importance as the earliest metropolitan water supply system in Victoria and its construction represented a major engineering feat in the late 1850s. The flume is important for the role it played in restoring a reliable water supply to Melbourne after floods in 1878 washed away the original Plenty River aqueduct. The flume has strong associations with notable engineer, William Davidson, who designed the flume after the massive floods of 1878. Davidson, who was the Yan Yean engineer at the time, emerged as something of a hero after successfully and efficiently restoring Melbourne's water supply. He went on to play a leading role in the development of Melbourne's water catchment policy and in 1890 was appointed as Inspector-General of Public Works.

The Plenty River Flume is of architectural importance for the high quality of craftsmanship used in its construction, in particular the basalt blockwork abutments and piers with clean, dressed cutwater. The flume demonstrates the use of local materials and is important for its design detail which illustrates engineering practices of the time. It is a rare structural type, being a combination of masonry bridge carrying an open wrought iron aqueduct and is an excellent, intact example of a water structure relating to a major water supply.

[Source: Victorian Heritage Register]

Hermes Number 10276

Property Number

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## History

Heritage Inventory History of Site: Erected 1879.

*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/>*