

WAIMAKARIRI DISTRICT COUNCIL
HISTORIC HERITAGE ITEM RECORD FORM

2021 District Plan Item No. HH049

HERITAGE ITEM NAME Browns Rock water intake & tunnel
ADDRESS Browns Rock, Waimakariri River, Burnt Hill

PHOTOGRAPH



(WDC)

DISTRICT PLAN ITEM NO. H043 **HNZ LIST No. & CATEGORY** 7297 / 2
(at time of assessment)

LEGAL DESCRIPTION RES 3046 (in part)

VALUATION NUMBER 2154005100

DATE OF CONSTRUCTION 1895-96

**ARCHITECT/DESIGNER/
BUILDER** George Johnston Webster, engineer; various
contractors

STYLE Industrial

PHYSICAL DESCRIPTION

River intake structure forms northern entry to 73-metre arched concrete tunnel. Memorial plaque mounted above portal at south end, which is flanked by retaining walls.

MATERIALS/STRUCTURE

Concrete, metal.

ADDITIONS/ALTERATIONS

Screw gates replaced with radial arms (1962). Mercury float switches installed (1985).

SETTING

The water intake and tunnel are located on the east bank of the Waimakariri River, south-west of the intersection of Thongcaster and Browns Rock Roads. The township of Oxford is to the north-east and Sheffield, within the Selwyn District Council, is across the river to the west. A modern intake and silt pond are to the south of the historic intake and tunnel. The extent of setting is limited to the immediate setting of the intake and tunnel, as mapped by

Heritage NZPT and notwithstanding the potential archaeological values of the water race system as a whole.

HISTORY

The Waimakariri-Ashley Water Supply Board was established by act of parliament in 1892. Tenders were called for an intake tunnel at Rock Ford in late 1893 following a legal challenge from Marmaduke Dixon who favoured a cheaper Brown's Rock option. Although Dixon lost his case in the Supreme Court the Rock Ford scheme was abandoned by a new board in 1894. The headworks at Brown's Rock were well advanced by November 1895; a number of contractors being engaged to construct the different elements of the intake. JW Thomas built the timber groyne to protect the bank on the opposite side of Brown's Rock beyond the tunnel. JW Thomas and EJ Craighead built the tunnel and some of the water races beyond it along with D Long, D McGrath and D Gundry for the rest. McGrath gave up his contract for earthworks and it was taken over by J Scanlan in early 1896. Likewise Craighead did not finish the tunnel and this fell to Thomas at the same time (March). A dispute with Long in December 1895 over disobeying board instructions led to his contract being abandoned and relet in February 1896, which also appears to have gone to Scanlan. The formal opening of the water supply works was finally held on 16 November 1896. Premier Richard Seddon attended the gala opening on that day. Intakes were also built at Rockford and Woodstock (neither now extant), as part of a water race system that served six districts between the Waimakariri and Ashley Rivers. The water supply board was dissolved in 1989, after which the water races were taken over by the district council. On 30 October 1999 the Waimakariri Irrigation Scheme opened and in the same year the historic intake at Browns Rock was superseded by new headworks to the south.

HISTORIC AND SOCIAL SIGNIFICANCE

The Browns Rock water intake & tunnel has historic significance for its association with the development of the Waimakariri-Ashley water race scheme and, more generally, the development of North Canterbury farming.

CULTURAL AND SPIRITUAL SIGNIFICANCE

The Browns Rock water intake & tunnel has cultural value as a place of community identity and historic continuity.

ARCHITECTURAL AND AESTHETIC SIGNIFICANCE

The Browns Rock water intake & tunnel has aesthetic value as a late-Victorian water supply structure that was designed by George Johnston Webster (c.1866-1923), engineer to the Waimakariri-Ashley Water Supply Board. Webster later worked as a surveyor in the Manawatu.

TECHNOLOGICAL AND CRAFTSMANSHIP SIGNIFICANCE

The Browns Rock water intake & tunnel has technological significance as a late 19th century concrete structure that involved tunnelling under a river terrace to create an opening large enough to carry the desired water flow and was able to be accessed for shingle clearance.

CONTEXTUAL SIGNIFICANCE

The Browns Rock water intake & tunnel has contextual significance as a local historic feature that can be seen in relation to the modern Browns Rock water supply intake. The race is also associated with the Cust Museum, which was previously the Waimakariri-Ashley Water Supply Board offices, and a water ranger's house built near the intake, the fate of which is currently unknown.

ARCHAEOLOGICAL AND SCIENTIFIC SIGNIFICANCE

As the water intake and tunnel pre-date 1900, their site has potential archaeological significance relating to the intake's construction and subsequent use.

SUMMARY OF HERITAGE SIGNIFICANCE

The Browns Rock water intake & tunnel has overall heritage significance to the Burnt Hill/Oxford area and to Waimakariri district as a whole. The structure has historical significance for its association with the Waimakariri-Ashley water supply scheme and cultural value as a place of community identity. The Browns Rock water intake & tunnel has aesthetic value for its functional design and technological significance for its concrete construction and demonstration of late 19th century engineering methods and materials. The Browns Rock water intake & tunnel has contextual significance as a local historic feature and for its relationship with the modern-day Browns Rock water supply intake.

HERITAGE CATEGORY

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REFERENCES

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- <https://www.wil.co.nz/about-us/history/>

REPORT COMPLETED

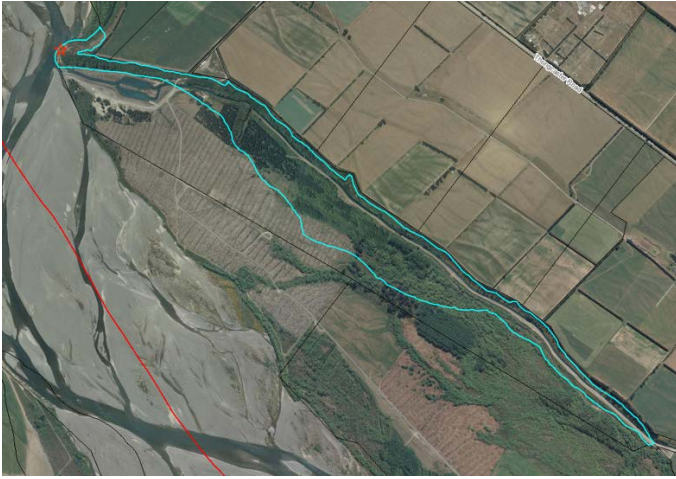
11 April 2019

AUTHOR

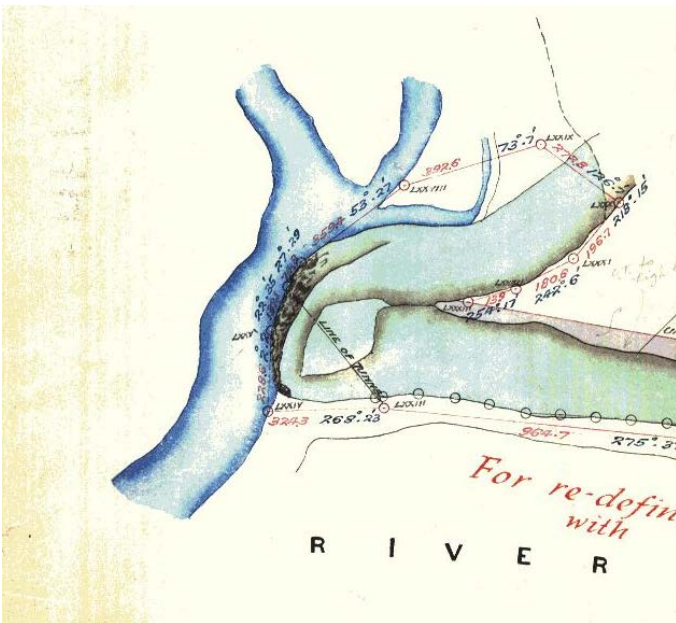
Dr Ann McEwan / Heritage Consultancy Services



Extent of scheduling, water intake & tunnel, Browns Rock, Waimakariri River, Burnt Hill.
Source: HNZPT.



Land parcel as a whole, with intake marked by star.



Detail from DP 1559 showing line of tunnel. Source: QuickMap.



The new intake and the old tunnel (note the commemorative plaque). This tunnel is now registered as an "Historic Place". August 1999