ACT Heritage Council

Entry to the ACT Heritage Register

Heritage Act 2004

20079. Cotter Pumping Station and associated housing

Block 470, 471 (part), and 390 (part)
and Cotter Bridge including East abutment Lat: 35° 19'S; Long: 148° 56'E, Cotter Road Reserve.

District of Stromlo

Cotter Bridge including East abutment Lat: 35° 19'S; Long: 148° 56'E, Cotter Road Reserve.

District of Coree

This document has been prepared by the ACT Heritage Council.

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Conservation Requirements (including Specific Requirements), as defined under the ***Heritage Act 2004,*** that are contained within this document are taken to be Heritage Guidelines applying to this place or object, as the case may be.

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ACT Heritage Council

AUSTRALIAN CAPITAL TERRITORY

INTERIM HERITAGE PLACE REGISTER

For the purposes of s. 54(1) of the *Land (Planning and Environment) Act* 1991, a citation for:

COTTER PUMPING STATION PRECINCT

INCLUDING THE COTTER PUMPING STATION, ASSOCIATED STAFF COTTAGES AND COTTER BRIDGE OVER THE MURRUMBIDGEE RIVER

has been prepared by the ACT Heritage Council, and included in an interim Heritage Places Register. This is pursuant to the ACT Heritage Council Resolution No. 61/4 made on 19 June 2000.

Date of Gazettal: 9 November 2000

Background material about this place and copies of the citation are available from:

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PROPOSED ENTRY TO AN INTERIM HERITAGE PLACES REGISTER

COTTER PUMPING STATION PRECINCT

LOCATION OF PLACE:

District of Stromlo:

- Block 470 (Pumping Station & mechanical plant) Lat: 35° 19´S Long: 148° 57´E
- Part of Block 471 (Staff Cottages)
- Part of Block 390 (Blockhouse ruin)
- Cotter Bridge including East abutment Lat: 35° 19'S; Long: 148° 56'E, Cotter Road reserve

District of Coree:

- Cotter Bridge including West abutment Lat: 35° 19'S; Long: 148° 51'E, Cotter Road reserve

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FEATURES INTRINSIC TO THE HERITAGE SIGNIFICANCE OF THE PLACE:

The features intrinsic to the heritage significance of the place are:

- The ***Pumping Station industrial buildings*** - consisting of the Pump House and Transformer House.
- ***Mechanical plant and equipment used in pumping operations*** - including pumps 1 to 8, plus associated electric motors, switchboards and controls.
- The salvaged ***Hydro Pump***, now stored within the Transformer House.
- The ruin of the ***Blockhouse,*** in which the Hydro Pump was originally located.
- The six ***Pumping Station Staff Cottages*** - built in 1927 (first), 1938 (second), 1957 (third & seventh), 1950 (fifth), and 1952 (sixth).
- The ***Cotter Bridge*** (Cotter Road crossing of the Murrumbidgee River) – including approach ramps and abutments.

STATEMENT OF SIGNIFICANCE:

The Pumping Station with its original equipment, associated cottages and the high-level bridge across the Murrumbidgee River are significant as an historical industrial landscape and a contemporary landmark as the ‘gateway’ to the Cotter Reserve and other areas of public recreation West of Canberra.

The primary significance of the Precinct lies in it’s association with Canberra's early engineering history and its ability to demonstrate the development of the initial civil infrastructure - specifically the provision of a permanent reticulated water supply for the proposed Federal Capital.

The Pumping Station and Cotter Bridge are two of the key engineering features of the Cotter water supply system, which include Cotter Dam, the pipeline and the primary storage reservoir at Mt Stromlo. The bridge carried gravity-fed water from the dam to the Pumping Station, where it was pumped to Mt Stromlo, and from there gravity-fed to Canberra.

The two buildings forming the Pumping Station, the Pump House and Transformer House, are among the earliest permanent buildings constructed during the development of Canberra. They were designed by the first Chief Architect for the Commonwealth, John Smith Murdoch, and

completed in 1915. The Pump House has undergone three major extensions in order to accommodate additional pumps, reflecting the increased demand for water as Canberra expanded. These additions have complemented the original architecture and industrial character of the building. The retention of the original pumps, electric motors and control equipment installed at each developmental stage results in the Pump House having a high potential to interpret the progressive development of engineering technology and the history of Canberra's water supply through the twentieth century.

The hydro pump is a heritage object of considerable engineering interest and interpretive potential, in conjunction with the Blockhouse ruin. They demonstrate an early experiment to utilise water from Cotter Dam to drive a turbine that pumped a small but continuous stream of water up to Mt Stromlo. This reduced the need to activate the main pumps, and minimise staffing levels. Damaged by a flood in 1927; the hydro pump was recovered and restored in 1986.

The Staff Cottages are closely linked to the development and operation of the Pumping Station. The progressive increase in the number of cottages is directly linked to the staged expansion of the Pumping Station operations. All of the cottages have been aligned to provide a formal address to the Cotter Road on the West side, where evidence remains of a contemporary urban streetscape including the presence of 'street trees' and a concrete footpath along the verge leading to the Pumping Station, reminders of the lifestyle of one of Canberra's early communities comprising the Pumping Station attendants and their families.

The first (1927) cottage is of key significance as the residence of the Chief Engineer at the Pumping Station, and a fine example of a standard FCC housing designs (T12B) - also common in the contemporary Corroboree Park Housing Precinct of Ainslie. The second (1938) cottage is significant as the residence of the Second Engineer. Cottages 1 & 2 are associated with several long-serving staff including Arthur Silver as Chief Engineer 1949-77 and Mr Murry as Second Engineer 1938-67. Cottages 3, 5, 6 & 7 are good examples of basic housing provided during the latter years of the Pumping Station's regular operation, and were generally used for short term accommodation during peak periods of operation. Cottages 4 & 8 are not related to the Pumping Station, being provided for the Cotter Road Patrolman and a Parks and Gardens Ranger.

The Cotter Bridge was constructed in 1915 to provide all-weather construction and public access to the Cotter Dam and the return water supply to the Pumping Station. The height of the bridge demonstrates the need to avoid the floodwaters of the Murrumbidgee, on a scale and frequency that no longer occurs following the construction of Tantangara Dam in the 1950s as part of the Snowy Mountains Scheme. The Cotter Bridge still provides the only high level access to the West bank of the Murrumbidgee in the region, and has minor aesthetic & social values associated with the manner in which vistas of the Murrumbidgee river are first disclosed at the crossing, the rustic character of its narrow uneven deck and skeletal timber handrails, and the broader perception of the bridge as the arrival point or gateway to the Cotter Reserve.

Since completion of the Bendora Gravity Main in 1968, whereby water from Corin and Bendora dams is supplied to the Mt Stromlo reservoir without the need for pumping, the Cotter system is managed as a reserve supply for drought relief.

SPECIFIC REQUIREMENTS:

In accordance with s.54(1) of the *Land (Planning and Environment) Act 1991,* the following requirements are identified as essential to the conservation of the heritage significance of the place. These requirements are prepared to implement the following conservation policy for the place:

The collective intrinsic features of the Cotter Pumping Station Precinct should be conserved in a manner appropriate to its significance as an historical industrial landscape and gateway to the Cotter Reserve.

Any action relating to these requirements is development for the purposes of the Act and will require approval prior to undertaking the activity. To undertake development without such approval may be an offence.

Note: For the purpose of these requirements the ***'front'*** of the buildings shall be construed as any elevation that faces north or west toward the Cotter Road.

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1. The Pump House and Transformer House, Incorporating the Existing Mechanical Plant and Equipment

Objective:

The Cotter Pumping Station industrial buildings and the plant contained therein should be appropriately conserved and interpreted for their role in providing the first permanent reticulated water supply to Canberra and ability to demonstrate the progressive development and operation of hydraulic engineering technology through the twentieth century..

Specific Requirements:

1.1 Demolition or removal of the buildings shall not be permitted, other than in exceptional circumstances where it can be demonstrated that there is no prudent and feasible alternative.

1.2 Partial demolition of the original building fabric or the fabric of the three subsequent extensions shall not be permitted other than in exceptional circumstances where it can be demonstrated that there is no prudent and feasible alternative.

1.3 External and internal alterations and additions to the existing buildings must be in keeping with their heritage significance and shall reflect and complement their original architectural style.

1.4 Pumps 1 to 6, together with their electric motors, shall be retained within the Pump House in their original positions and on their original footings.

1.5 All the associated electrical equipment and controls for pumps 1 to 6 shall be retained within the Pump House in their original placements.

1.6 Pumps 7 to 8 with their associated motors and controls shall be managed for operational purposes. Where replacement of the pumps or major components are required, consideration shall be given to retaining the original machinery for interpretive purposes elsewhere within the precinct.

1.7 The Hydro Pump shall be retained for interpretation purposes, within the Transformer House or other appropriate location within the Precinct.

2. Staff Cottages 1 (1927) & 2 (1938)

Objective:

Staff Cottages 1 & 2 shall be conserved as an exemplar sample of the staff accommodation required on-site to service and operate the pumping station, being permanently occupied by the families of the Chief and Second 'Engineers', and for their ability to demonstrate the adaptation of standard interwar public housing design.

Specific Requirements:

2.1 Demolition or removal of Cottages 1 & 2 shall not be permitted, other than in exceptional circumstances where it can be demonstrated that there is no prudent and feasible alternative. In the event of total demolition, removal or accidental damage resulting in loss of more than 50% of the building fabric, rebuilding shall not be permitted.

2.2 External and internal alterations and additions to the 1927 and 1938 cottages must reflect and complement the architectural character, detailing and visual appearance of the original building.

2.3 New buildings or structures shall be of a domestic scale and architectural character that complements the existing cottages. New buildings or structures shall not be erected between the 'front' of the existing cottages and the Cotter Road (being the section of road between the Casuarina Sands intersection and the Cotter Bridge).

2.4 The original building forms are to remain dominant. Major additions or multi-unit development shall not be permitted. Minor additions and alterations may be permitted only to the sides and rear of the cottages and only if the additions are set back from the existing front of the cottages.

2.5 Internal alterations and additions to the 1927 and 1938 cottages shall retain the original spatial layout, fireplaces and timber floors, except in exceptional circumstances where it can be demonstrated that these elements are beyond repair, have already been replaced, represent a latter period addition or adaptation, or fail to meet other regulations or safety requirements. Upgrading of kitchens, wet areas and fittings shall generally be permitted to suit future use

3. Staff Cottages 3 (1957), 5 (1950), 6 (1952), 7 (1957) and Government Cottages 4 (1941) and 8 (1961)

Conservation Policy:

Staff Cottages 3, 5, 6, 7 may be conserved as latter examples of staff accommodation, or may be adapted or removed subject to management constraints.

Government Cottages 4 & 8 have no direct association with the Pumping Station and may be conserved for association with historical road and reserve management, or may be adapted or removed subject to management constraints.

Specific Requirements:

3.1 External alterations and additions shall complement the scale and character of the original buildings.

3.2 New buildings or structures shall be of a domestic scale and architectural character that complements the existing cottages. New buildings or structures shall not be erected between the 'front' of the existing cottages and the Cotter Road (being the section of road between the Casuarina Sands intersection and the Cotter Bridge).

3.3 The original building forms are to remain dominant. Major additions or multi-unit development shall not be permitted. Minor additions and alterations may be permitted only to the sides and rear of the cottages and only if the additions are set back from the existing front of the cottages.

3.4 Internal layout and fabric may be adapted to suit usage.

3.5 Demolition or removal of Cottages 3, 4, 5, 6, 7, 8 may be permitted where retention is not compatible with land use policies and future management of the place within the context of the Murrumbidgee River Corridor. In the event of total demolition, removal or accidental damage resulting in loss of more than 50% of the building fabric, the rebuilding of Cottages 3 to 7 shall not be permitted.

3.6 Replacement of Cottage 8 may be permitted subject to the scale, size and general visual appearance of the building being consistent with the other cottages.

4. Landscape Setting

Conservation Policy:

The landscape setting of the Cottages shall be conserved appropriate to the significance of the cottage where this does not conflict with the management objectives for the Murrumbidgee River Corridor.

Specific Requirements:

4.1 Where Cottages are retained, any streetscape elements along the Cotter Road should be similarly conserved.

4.2 The 'front' garden setting to each Cottage (being such part that faces north and/or west to the Cotter Road) shall be conserved to retain the rural domestic setting of each cottage.

4.3 The landscape areas to the East side of the Cottages and Industrial buildings may be developed in a manner that does not detract from the landscape setting of the buildings as visible from the Cotter Road.

4.4 The materials and extent of any paving between the Cottages and Cotter Road shall complement the character of a mid-twentieth Century domestic garden setting at the Cottages, and complement the industrial character of the Pumping Station and Transformer House adjacent to these buildings.

4.5 Any fencing around the cottages shall be consistent with their rural setting, of low height and generally of timber, wire strand or wire mesh panels. Masonry or colourbond steel fencing shall be avoided.

4.6 Plant species retained or introduced to the Precinct should present minimal risk of invasion into the surrounding reserve, and any declared weeds or recognized invasive species should be removed.

4.7 In the event that any cottage is removed or demolished the previous area occupied by the building and garden shall be rehabilitated to a natural state consistent with the surrounding reserve.

4.8 Any new development at the Precinct shall not detract from the heritage significance of the place.

5. Cotter Bridge

Conservation Policy:

The Cotter Bridge should be conserved for its ability to demonstrate an historical vehicle and water supply crossing point across the Murrumbidgee River whilst accommodating as minimal intervention as feasible to meet contemporary regulatory and usage requirements.

Specific Requirements:

5.1 The original engineering configuration, form and key elements of the bridge - including the concrete pylons and primary steel girders– are to be retained other than where it can be demonstrated that there is no prudent and feasible alternative whereby the these elements can comply with contemporary regulations and traffic demands.

5.2 Adaptation of the deck and handrails shall retain the visual character of the bridge as perceived from the roadway, including bitumen or a similar non-reflective surface, and skeletal framed barriers/handrails that enable a view to the river. Width of the deck may be increased to facilitate additional traffic and/or pedestrian and cycle access.

5.3 Where prudent and feasible, a water pipeline across the bridge shall be retained in all or part for interpretative purposes – to reflect the path of water from the dam to pumping station and context to the prominent pipelines between the pumping station and Mt Stromlo.

ASSOCIATED PLACES:

Other places that have a direct association with the Cotter Pumping Station include:
As components of the Cotter Water Supply System:

- ***Cotter Dam and Reserve*** (separately nominated to an interim Heritage Place Register) – a large cultural landscape including the primary storage dam within the Cotter System, archaeological sites associated with construction works, supply pipe to the Pumping Station, mining sites, natural formations including caves and large public recreation areas.
- ***Mt Stromlo water reservoir*** –in daily operation through connection to the Bendora Gravity Main and to be managed for operational purposes.
- ***Water pipeline*** from the Pumping Station to the Mt Stromlo Reservoir.

As places of a similar class – early civil infrastructure (public utilities) within the ACT:

- ***Kingston Powerhouse Precinct*** (listed on the ACT Heritage Places Register) – first power station within the ACT, and with the critical relationship of providing power to the pumping station so as to operate the pumps and thus supply Canberra with water.
- ***Main outfall sewer*** - (elements of which are separately nominated to interim Heritage Place Registers).

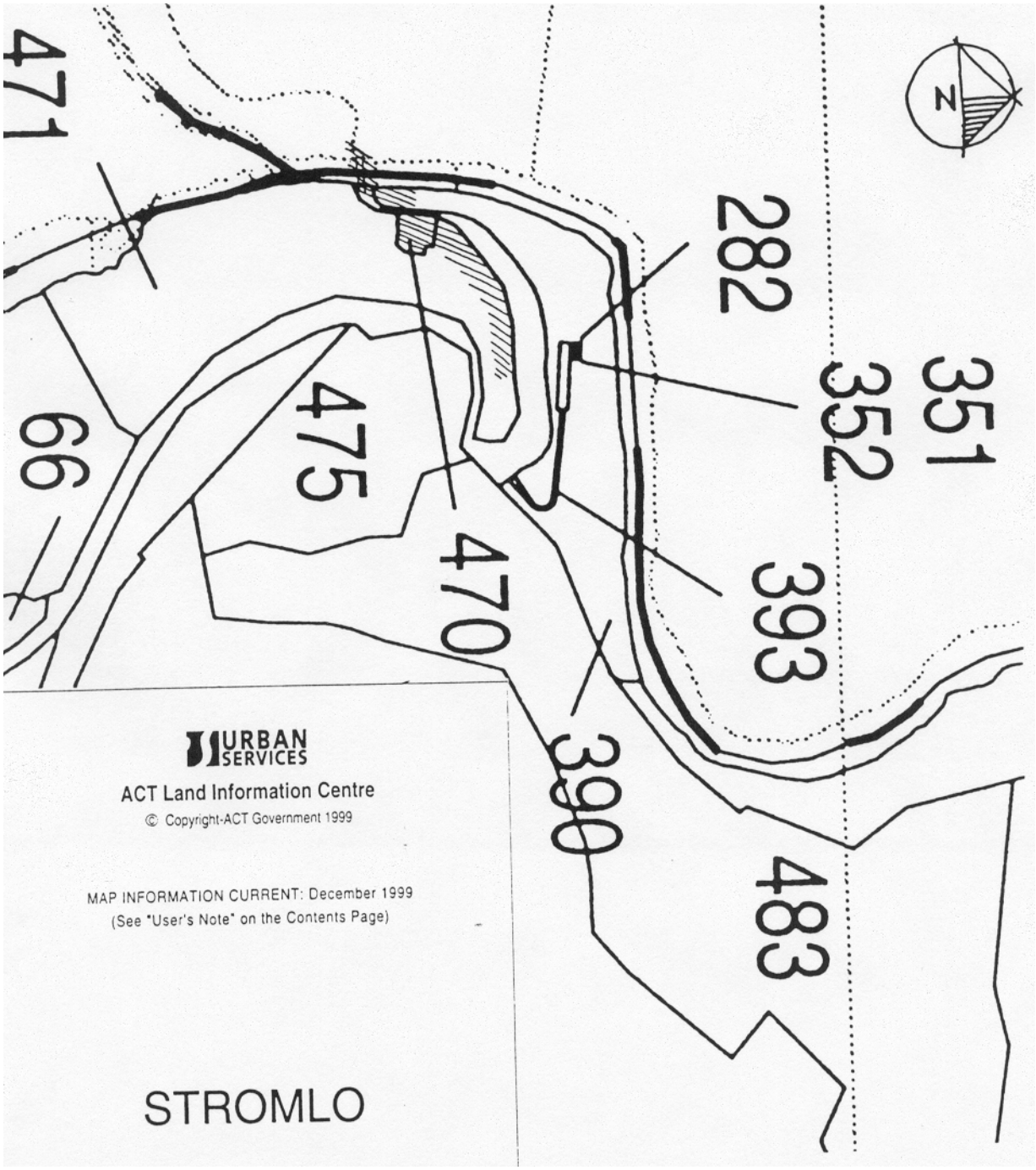

Fig 1. Cotter Pumping Station Precinct Cadastral Plan
Curtilage shaded; blocks 390, 470, 471 District of Stromlo;
Cotter bridge & adjacent abutments in Districts of Stromlo and Coree

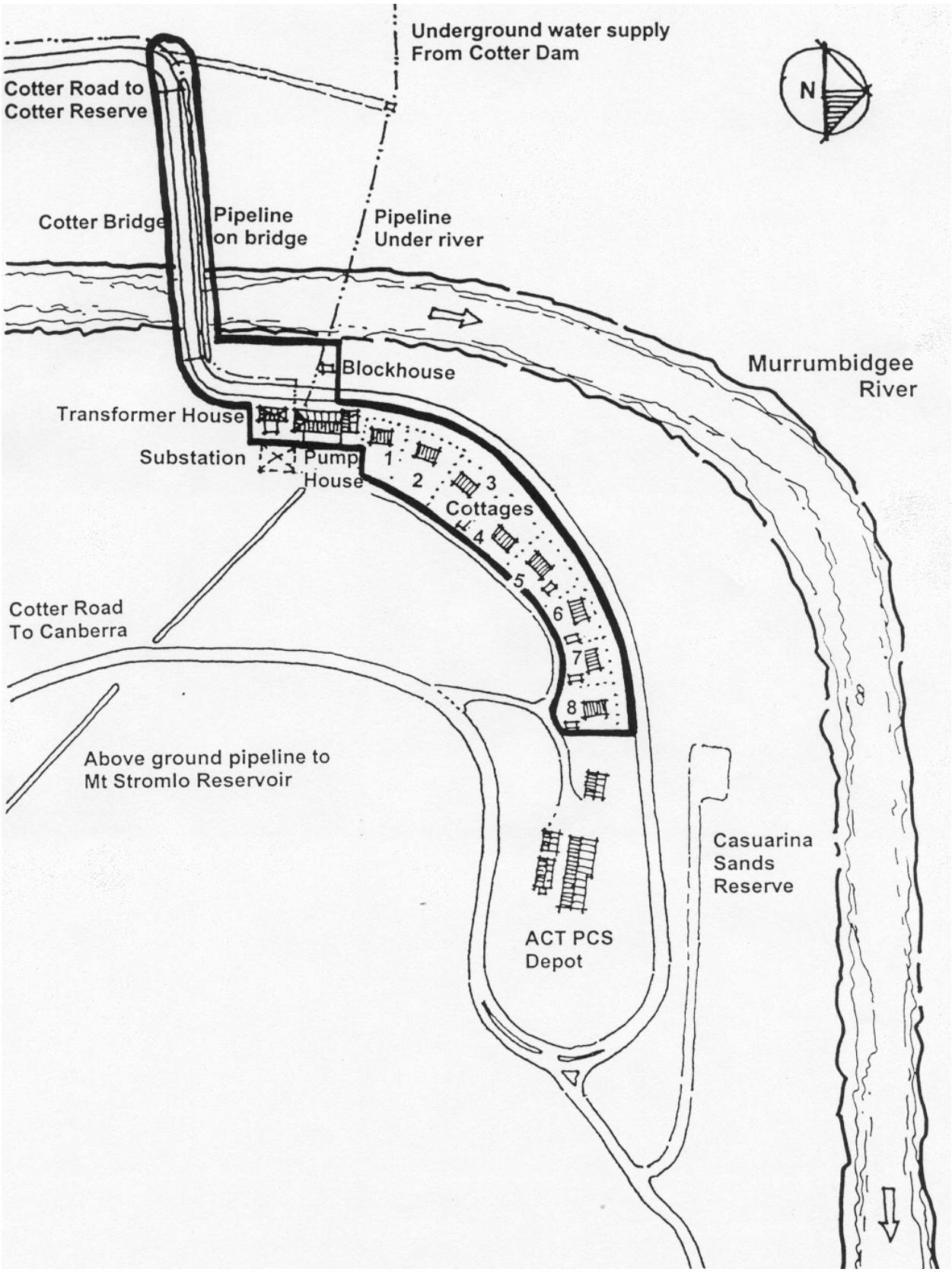

Fig 2. Cotter Pumping Station Precinct Sketch Site Plan
Curtilage indicated by heavy outline