

**HISTORIC
HERITAGE REPORT
FORESTRY
DEPARTMENT'S
DIVISIONAL
HEADQUARTERS**

MARCH 2015



TOWN PLANNING
URBAN DESIGN AND HERITAGE

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Executive Summary

The purpose of this Historic Heritage Report is to present the findings of recent preliminary historic research and archaeological investigation into the Forestry Department's Divisional Headquarters (subject place) to assist the Heritage Council of Western Australia's (HCWA) determination under the Government Heritage Property Disposal Process (GHPDP).

The subject place falls within the study area of NorthLink WA, a road project which involves two main components of a wider series of improvements to the Perth-Darwin National Highway. The intention is that this site be cleared to facilitate the construction of the Perth - Darwin National Highway. Whilst not included on any existing heritage list, the subject place has been identified in previous heritage reports as a place of potential heritage value and thus is required to undergo a formal referral to the HCWA as part of the GHPDP.

Historic research has been undertaken to assist in understanding the subject place's cultural heritage significance (if any) in terms of its aesthetic, historic, social value and to some extent scientific value. An archaeological survey was also undertaken by Snappy Gum Heritage Services Pty Ltd to provide a more complete understanding of the archaeological potential and scientific value of the subject place.

The report finds that given all of the former buildings at the subject place including stables, nursery, office and dwellings have been removed the place has little aesthetic value. It has also been found to have little archaeological potential *'owing to an assemblage that is quantifiably, spatially and chronologically limited'*.¹ The subject place was a relatively small settlement, where 'outsiders' were not encouraged to venture to, and as a result its social value would only be to people who once lived and worked there. Therefore it is considered its social value would be of a limited scale and not of statewide significance.

However, the report identifies that the subject place has some historic value. It is associated with the Forests Department, the former governmental body responsible for the administration of Western Australia's forests, and their role in establishing pine plantations and associated settlements during the twentieth century. The now dismantled place is part of a wider cultural landscape, which saw large tracts of land transformed from the 1920s through to the late part of the Twentieth Century from a largely scrubland to one that became dominated by tree plantations. Whilst the place does hold historic value its condition, integrity; and authenticity have been severely eroded to the point where its former use and operation as an office and residential settlement are no longer apparent.

The report concludes that given the results of recent historic and archaeological research and the fact that all the buildings have been removed the subject place is not likely to have sufficient value to be considered for inclusion on the State Register of Heritage Places. However this decision is one to be made by the Heritage Council of Western Australia and accordingly must go through due process under the GHPDP. Recognising the historic value of the place the report makes a number of recommendations including:

- In due course, this Historic Heritage Report be provided to both the City of Swan and Joondalup Local History Centres for inclusion in their Local History Collection to ensure information about this place is made available for those interested.
- Any public art contemplated along this portion of the Perth - Darwin National Highway area (such as sound walls or artwork under overpasses and at interchanges) should interpret the historic themes identified in this report to recognise the history of the site.

¹ Snappy Gum Heritage Services Pty Ltd (2015) A Report on the Archaeological Assessment of the Forestry Department's Divisional Headquarters



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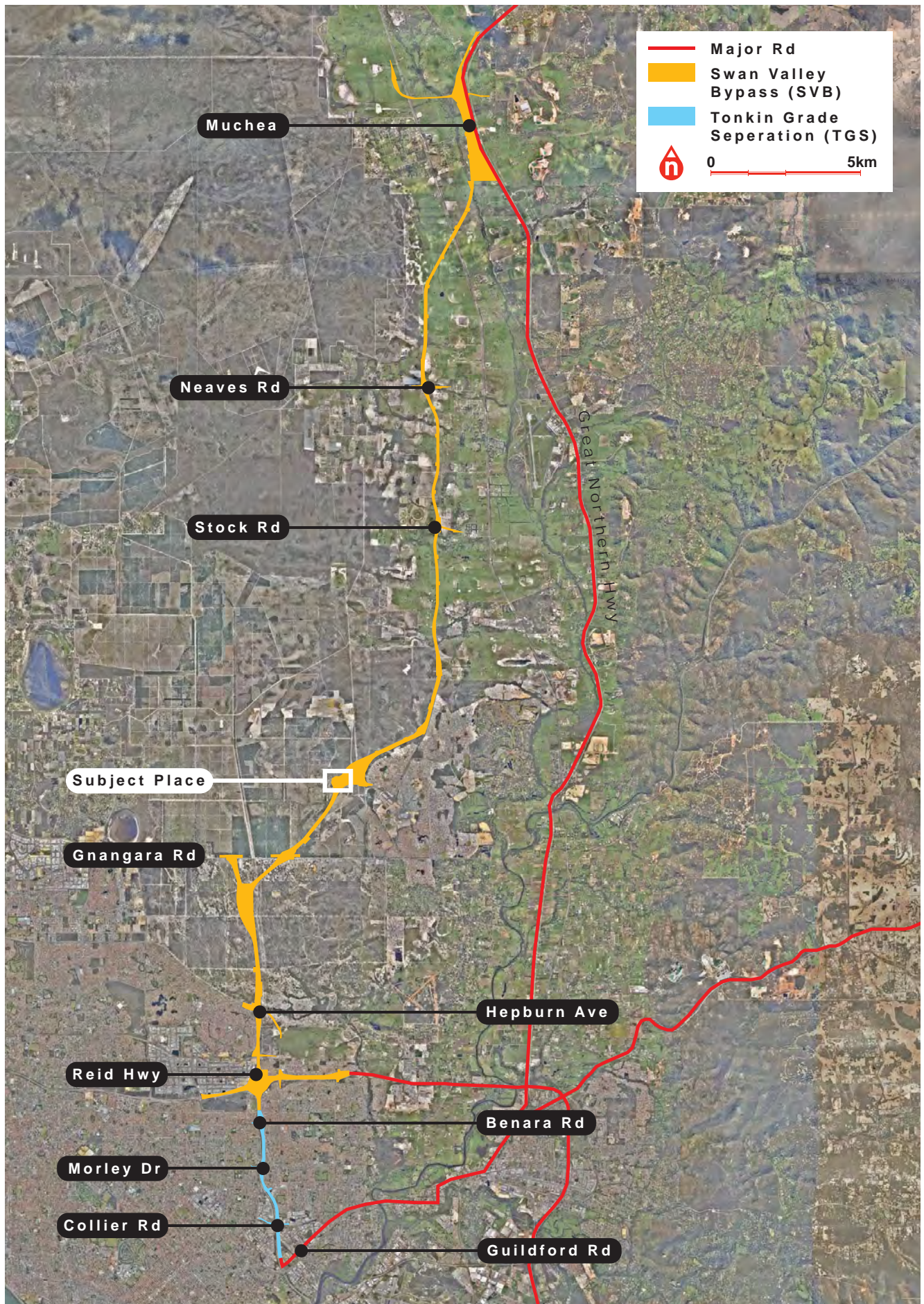


Fig 1. NorthLink Study Area and Subject Place

1. Introduction

This Historic Heritage Report has been prepared as part of the environmental impact assessment for the NorthLink WA Project. The Project is a program of road projects proposed to be undertaken by Main Roads Western Australia (MRWA), which form vital components of a wider series of improvements to the Perth-Darwin National Highway. In 2014 TPG Heritage were commissioned to assist with managing any 'European Heritage' sites located within the study area. Specifically the Brief (Main Roads 2013) set out:

The Consultant must investigate and make recommendations for managing identified European heritage issues that may be affected by this project in accordance with the requirements of the Heritage of Western Australia Act 1990 (WA) including preparing all submissions for obtaining appropriate approvals.

This report is the second prepared by TPG Heritage in relation to the NorthLink WA project the first being a desktop survey to identify the location and details of any existing or potential heritage places within and adjacent to the study area (refer to section 1.2 Background). As part of the initial investigations a site of potential heritage value was identified within the NorthLink Study area that being the Forestry Department's Divisional Headquarters (subject place), which required further investigations.

The purpose of this report is to present the findings of our preliminary historic research and recent archaeological investigation in relation to the subject place to assist the Heritage Council of Western Australia (HCWA) consider whether it needs to go through the Government Heritage Property Disposal Process (GHPDP).

1.1 Study Area and Subject Place

NorthLink WA comprises two main components:

- Perth - Darwin National Highway - A 37km highway link between the junction of Reid Highway/Tonkin Highway and Great Northern Highway / Brand Highway at Muchea; and
- Tonkin Grade Separations - the grade separation of the intersections of Tonkin Highway with Collier Road, Morley Drive and Benara Road, together with associated works.

The subject place is located in the Perth - Darwin National Highway section, just north of Gnangara Road and once formed an integral part of the Gnangara Pine Plantation.

The subject place once housed the District Site Office and residential settlement associated with the operation of the Gnangara Pine Plantation. From the research undertaken to date it is understood that the office and settlement were largely contained in the following lot, which traverses the study area:

- Lot 14910, near Gaskell Road, Lexia (north of Trainor Road, west of Ellenbrook)

A review of Landgate historic aerial imagery suggests that the structures at the subject place were demolished between 1985 and 1995.

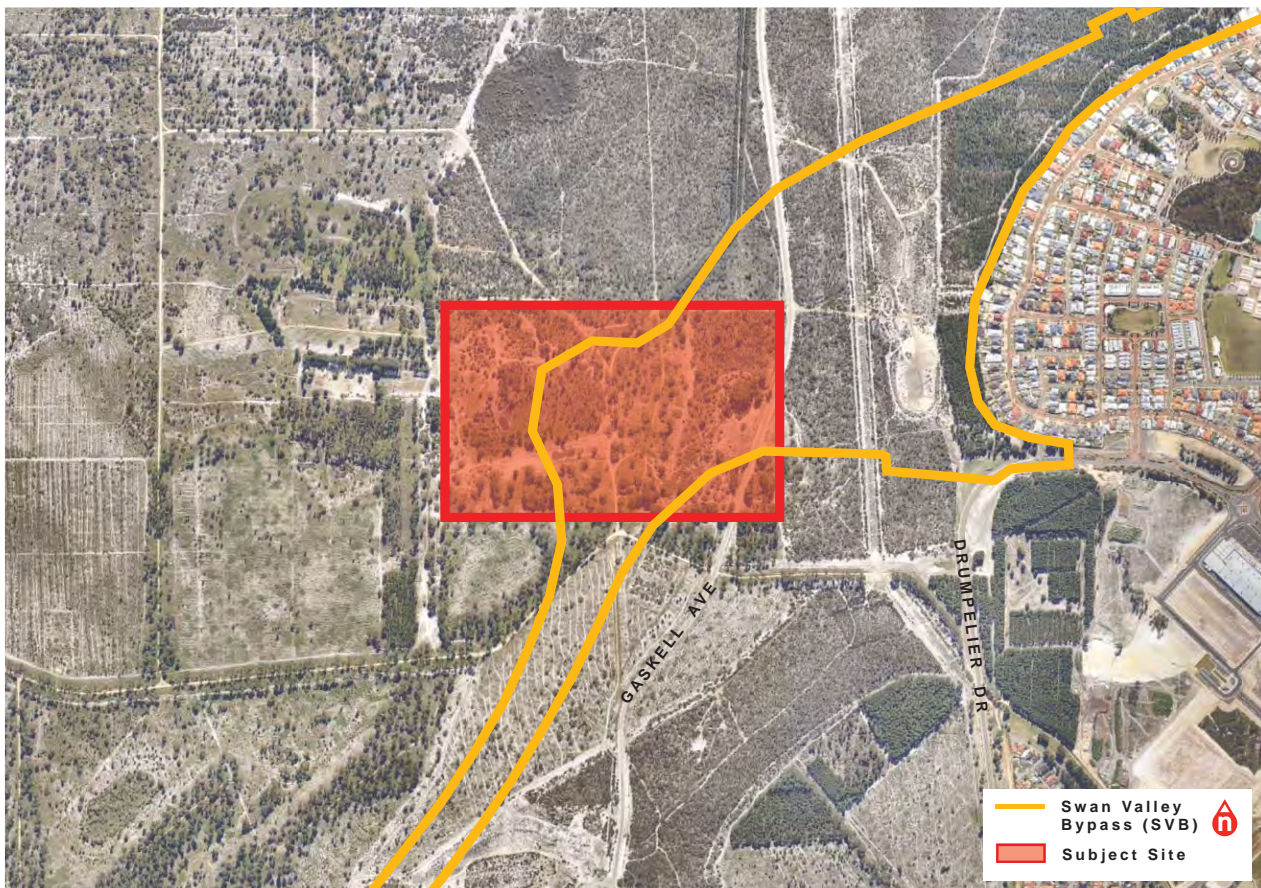


Fig 2. Subject site at Lot 14910, near Gaskell Road, Lexia

1.2 Background

In 2014, TPG Heritage was commissioned to prepare a European Heritage Desktop Report (EHDR) as part of the early due diligence work for the NorthLink WA Project. The EHDR reviewed existing statutory and non-statutory heritage lists/inventories to identify the location and details of any existing heritage listed places within and adjacent to the study area.

As the Project will involve some demolition works and a substantial amount of clearing to facilitate the construction of the road improvements the EHDR also identified properties that would be subject to the GHPDP. The purpose of the GHPDP policy is to identify and assess the heritage value of government property under consideration for disposal, and to provide relevant protection where appropriate.

Properties which are owned by the State Government and required to be demolished, will be subject to the GHPDP if they meet the following criteria:

- Are more than 60 years old;
- Are already listed on an existing heritage list such as a local government inventory (Municipal Inventory); or
- Display other evidence of potential significance in terms of aesthetic, historic, social or scientific value .

The EHDR set out that the Forestry Department's Divisional Headquarters would be subject to the provisions of the GHPDP as it has potential significance in terms of historic and scientific value notwithstanding it was largely demolished sometime between 1985-95. Early discussions with the State Heritage Office confirmed that the 'clearing' of a site, which has potential archaeological value has the same meaning/implications as demolition, which confirmed that the property would need to be formally referred to them under the GHPDP.

The Forestry Department's Divisional Headquarters had first been identified by Dr Gaye Nayton in her 2012 Desktop Survey, which related to a portion of the NorthLink WA project area. Nayton's Desktop Survey (2012) recommended that an archaeological and heritage survey be carried out on this place if planned construction works were likely to impact on or close to the site. Such a survey was to determine the extent and nature of surviving archaeological and built heritage features.

1.3 Methodology

The Burra Charter sets out that cultural heritage significance is embodied in a 'place itself, its fabric setting, use, associations, meaning, records, related places and related objects.' Cultural heritage significance is assessed by considering a variety of values, which include aesthetic, historic, scientific and social value. The degree of significance is informed by consideration of the place's rarity, representativeness, condition, integrity and authenticity.

However, before an assessment can be made as to the level of cultural heritage significance of a place the Burra Charter outlines that you must first understand the place by going through a sequence of 'collecting and analysing information'. A variety of primary and secondary resources were viewed in order to gain an understanding of the history and evolution of the Forestry Department's Divisional Headquarters. To guide the investigations the following research questions were posed:

- How did the headquarters come into being and when?
- What the settlement comprised of before its demolition?
- Who lived at the settlement and what activities were undertaken there?
- Was the settlement and operations undertaken there unique in the State? Are there any other comparative examples?

Historic research is useful to assist in defining the extent of its cultural heritage significance (if any) in terms of its aesthetic, historic, social value and to some extent scientific value. As Nayton's Desktop Survey (2012) suggested that the subject place had the potential to be of archaeological (scientific) significance, verification through on-ground investigation was required. To understand the site's scientific value Snappy Gum Heritage Services Pty Ltd (SGH) was engaged. Using aerial imagery and field investigations, the survey team sought to understand the nature and extent of archaeological potential. The findings of SGH's investigations are contained under separate cover in the report entitled 'A Report on the Archaeological Assessment of the Forestry Department's Divisional Headquarters,' February 2015.

2. Historic Background

The following narrative draws together all the information obtained in relation to the subject place.

Administration of Forests - General Context

Following the granting of Responsible Government in 1890, the administration of Western Australia's forests came under the control of the Lands and Surveys Department. The Department did not actively undertake forest management, and by 1894 there was increasing concern about the extent and future potential of the colony's forests. In 1896 the Forests Department (soon renamed the Woods and Forests Department) was created, with James Ednie Brown appointed Conservator of Forests. Despite limited staff and expertise, the Woods and Forests Department established experimental sandalwood farms at Pingelly and Meckering, a pine plantation at Bunbury and a wattle plantation at Gooseberry Hill in its first year of operation. The latter two were to provide locally grown softwoods as an alternative to imports and local hardwoods.²

In 1916 Sir David Hutchins (1850–1920), along with most of the forestry world, was greatly influenced by the afforestation work carried out with *Pinus pinaster* (*P. pinaster*) in sandy areas in Gascony, France, during the period 1787–1864. The climate and soils of the Western Australian jarrah forests were viewed as favourable to this type of pine, which supplied an industrial population with products.³ Sir Hutchins spent a considerable time in Western Australia examining its forests, and in the Eastern States he was equally diligent, and his labours in Australia resulted on the valuable monograph, *A Discussion of Australian Forestry, with Special Reference to the Forests of Western Australia*. It has been asserted with truth that

the Forests Department of Western Australia to-day, re-organised and under scientific direction, owes its inception to Sir David Hutchins.⁴

Gnangara - a Pine Proposition

The Gnangara area was first considered as a Maritime Pine (*Pinus pinaster*) proposition in 1917 by CE Lane-Poole. In 1914, the Woods and Forests Department transferred from the Lands and Surveys Department to the Mines Department. Charles Edward Lane-Poole replaced Richardson as Inspector General of Forests in 1916 and brought much needed professionalism to the Department. Lane-Poole had trained at L'Ecole Nationale des Eaux et Forets at Nancy in France where he obtained the degree of Civil Engineer in Forestry. He was a dedicated forester and man of vision and had one of the strongest voices against the indiscriminate logging of native forest.⁵

The soil at Gnangara was considered to be some of the poorest in the world, which measured with up to ninety-nine per cent pure silica. It has been described as 'the richest sand in the world'.⁶ A Forestry Department Annual Record of June 1918 records: 'Plantation north of Perth; the site for this plantation was gone over carefully and finally it was decided to carry out a preliminary survey with a view of discovering the best position for a tramline to connect the metropolis with the plantation'. The tramline was never acted upon.⁷

² State Heritage Office, Register of Heritage Places - Assessment Documentation Ludlow Forestry Mill and Settlement, 22 August 2008

³ Department of Water, 2009 Land and water uses of the Gnangara groundwater system - Gnangara Sustainability Strategy Situation Statement

⁴ Obituaries Australia. Hutchins, Sir David (1850–1920) Available online: <http://oa.anu.edu.au/obituary/hutchins-sir-david-18245>. Retrieved: 20 November 2014

⁵ State Heritage Office, op cit.

⁶ Pollard, J. 1948 'Gnangara Pines' in Walkabout, 1 January 1948

⁷ Sclater, J. 2001 Lost Your Block – the Origins of WA's Forest Block Names, Safety Bay, WA p. 37

Gnangara was the first of the plantation blocks to be established on the sand plains north of Perth, and is named after the nearby Lake Gnangara. A number of trial plots were cleared and planted with *P. pinaster* raised in nurseries or direct sown with seed. Sowing and plantings were carried out during 1918, 1921, 1922 and 1923 – all failed.

Hutchins suspected that the failure was due to the absence of *mycorrhiza fungi* in the soil. This led to the inoculation of all new pine nurseries with mycorrhizal material from healthy pine stands. This practical demonstration of the mycorrhizal requirements for exotic pines on new sites was of worldwide significance. It overcame the remaining survival problems on new planting areas, such as Gnangara, and consolidated world opinion on the importance of *mycorrhizal fungi* in forest ecosystems. By 1925 sufficient confidence had been developed to consider operational establishment of *P. pinaster* at Gnangara, and in 1925 the first working plan was prepared to assess the best method of establishment in this soil type.⁸

Planting of *P. pinaster* in Western Australia virtually ceased during the war years and resumed in 1950 as part of post-war reconstruction, when a 400 hectares per year program started. Refer to Figure 3 showing young pines in the plantation in 1947.

In 1948, a visitor to the plantation provides an interesting account of the place:

'I came to the Gnangara pines along a road laid down during wartime by the Forest Department in association with the Main Roads Board. Looking down past the edge of the bitumen, where the white sand was finely powdered, I marvelled that men had ever reached Gnangara on wheel in the time, not long ago, when only a sand track was here. "Sometimes I didn't," my forester friend replied to my question. "It was tough going with a horse and spring cart, but to get this outfit during the summer months was impossible."... "I used to leave it near the turn off from the main road and pack in a week's supplies to Gnangara, and return to my machine at the end of the week. That was when the plantation was being laid out, in the early days of planting here....

We reached, at the end of a show-lattice lane, a gateway and a nursery plot. We trudged through across bare white dust to a bed containing some twenty thousand seedlings... '9

8 Department of Water, op cit.

9 Pollard, op cit., p.32

Over time other plantations were established at Mundaring, South Perth, Mt Lawley, Applecross, Hamel, Myalup, Ludlow, Margaret River, East Kirup and Pemberton. In 1948, despite a 'planting holiday' necessitated by the war, there were neatly 14,000 acres of pines in these areas.¹⁰ Dedication of 'sparsely timbered Crown land' during the decade resulted in 60 000 hectares, extending north-west from Gnangara, being incorporated into State Forest 65 and available for *P. pinaster* planting. It was reported that as far as was known Gnangara was the only plantation in the world in which all the pine was grown solely through the aid of artificial fertilisers.¹¹

Pine was a valuable proposition and was used for a variety of purposes including as peeling for the manufacture of veneers and plywood, window frames, core stock for flush panel and ledge doors, manual training in technical schools, brush backs, furniture, flooring, truck building, and a variety of cases and crates, including those for crayfish tails, chickens, rabbits and eggs, for export.¹²



Fig 3. Among Gnangara's Pines, Source The West Australian Tuesday 27 May 1947, p. 15

10 Western Mail. 1948 Preserving Our Heritage of Forest Wealth for the Generations yet Unborn is a Tough Assignment. 1 April 1948, p.1

11 The West Australian, 1952. Big Variety of Uses For Pine Grown In Western Australia, Wednesday 6 August 1952, p. 2

12 The West Australian, Big Variety of Uses For Pine Grown In Western Australia, Wednesday 6 August 1952, P2

A Settlement at Gnangara

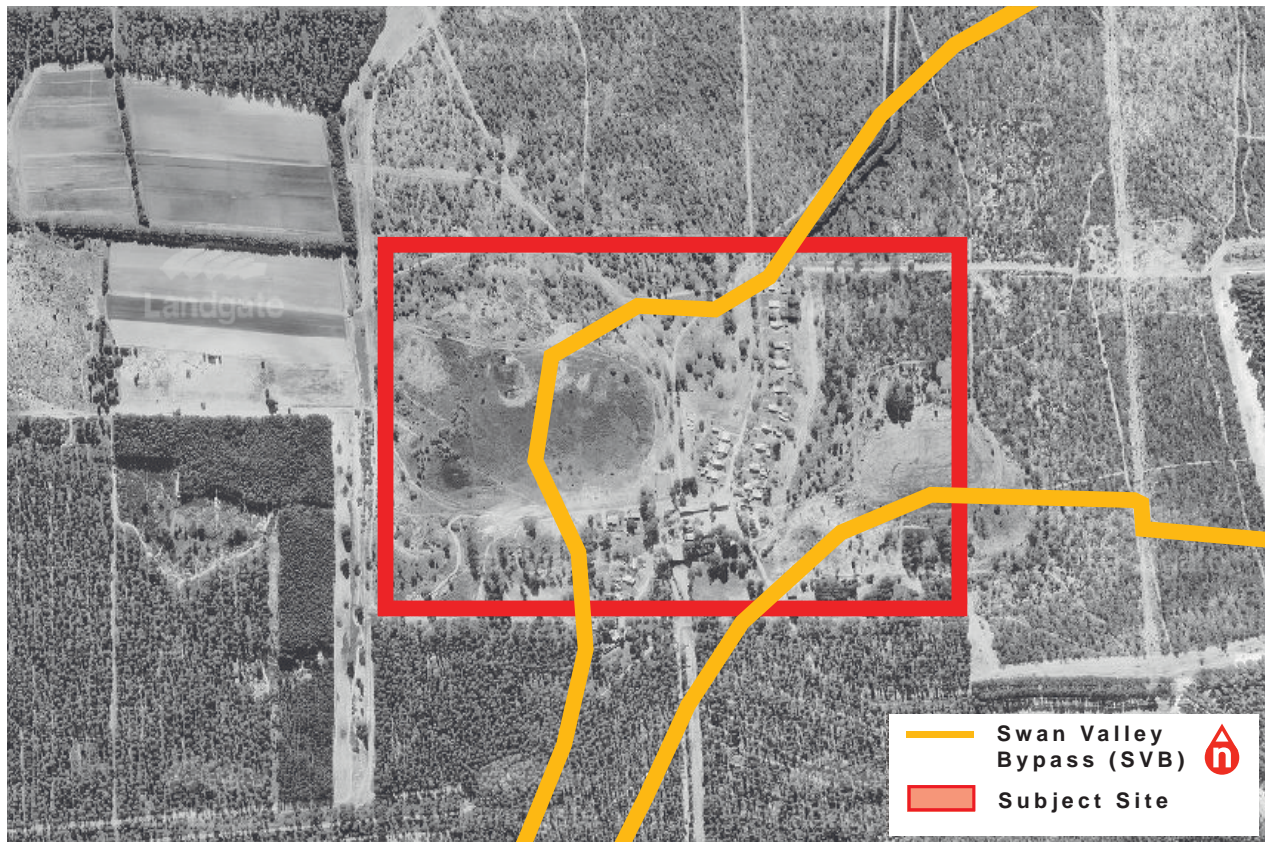


Fig 4. Historic Aerial from 1977 of settlement

In an oral history, recorded by the City of Joondalup Local History Studies Collection, Philip Clover provides an account of the settlement at Gnangara. Clover reminisces that up until just after World War II his family were the only ones living at the settlement permanently (Refer to Figures 5 to 7). Philip Clover was the son of Harold George Clover (born 1902) an employee of the Forestry Department. His main employment in the Department was the Officer in Charge of the Gnangara Pine Plantation. Clover sets out that there were workmen who used to live in tents and huts, as single people, going home at weekends, riding horses back through what is now the Morely shopping centre, which was then a small post office at the end of a bus route.¹³

The various sandy tracks that traversed the settlement were not generally named, places were identified by distance for example: 1 mile out. There were the odd names such as Nursery Road, which led to the nursery where pine seedlings would be planted. Tower Road went to the fire lookout. Wetherell Road was named after one of the first workers at the plantation from the 1930s.¹⁴

The settlement was largely operated by horse drawn vehicles and as a result there were substantial stables there. They were used for ploughing the grounds, and planting the pines, and for ploughing the fire breaks. Things started to change in 1944 when the first tractor arrived at the plantation.¹⁵

¹³ Philip Clover, interviewed by Linda Coleman, 1996, City of Joondalup Local History Studies Collection, E0223/224

¹⁴ *ibid.*

¹⁵ *ibid.*



Fig 5. Gnangara Pine Plantation house 1949.
Source City of Joondalup Library BRN301523

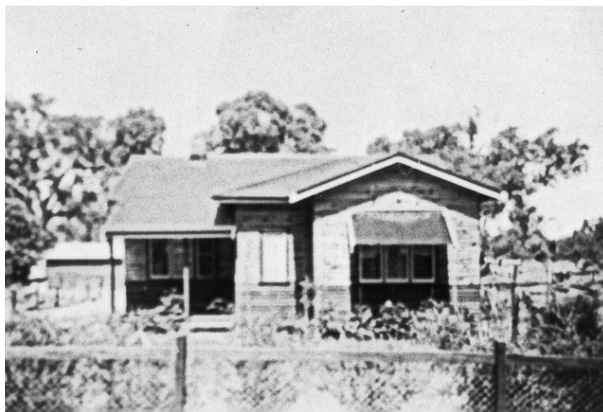


Fig 6. Gnangara Pine Plantation House 1950.
Source City of Joondalup Library BRN301555

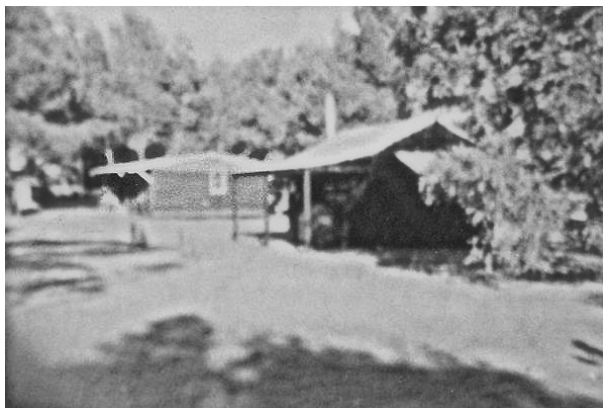


Fig 7. Gnangara Pine Plantation Office 1950.
Source City of Joondalup Library BRN 301554

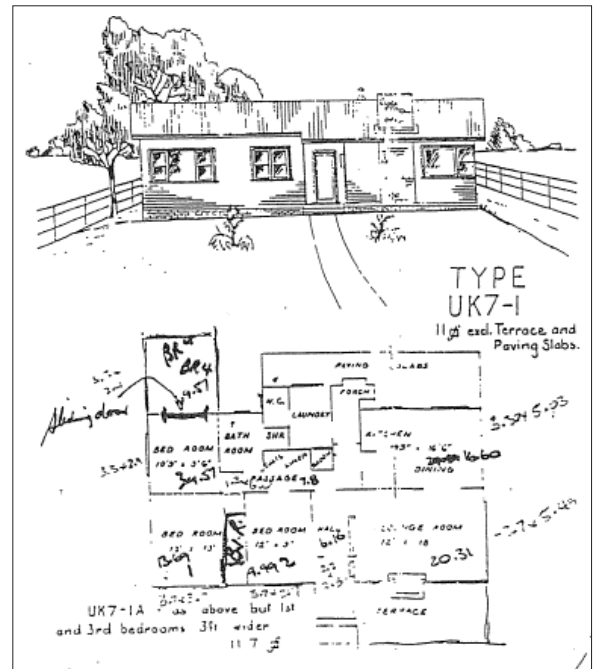


Fig 8. Housing Type UK 7-1. Source: State Heritage Office

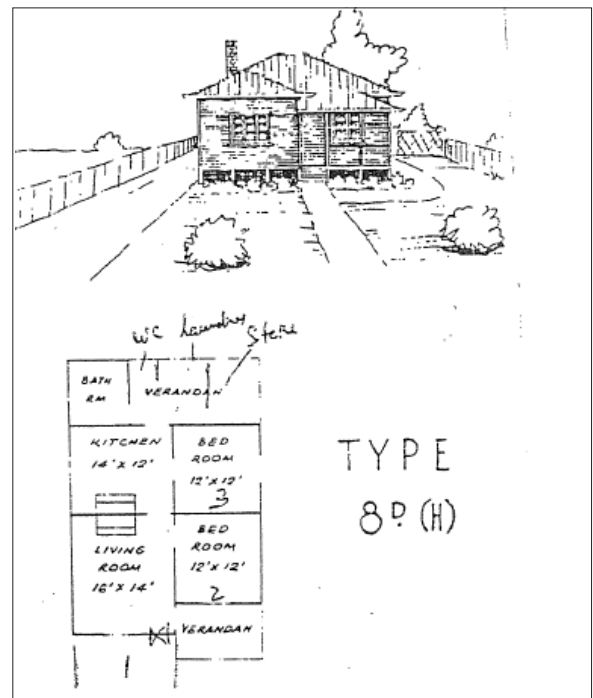


Fig 9. Housing type 8DH. Source: State Heritage Office

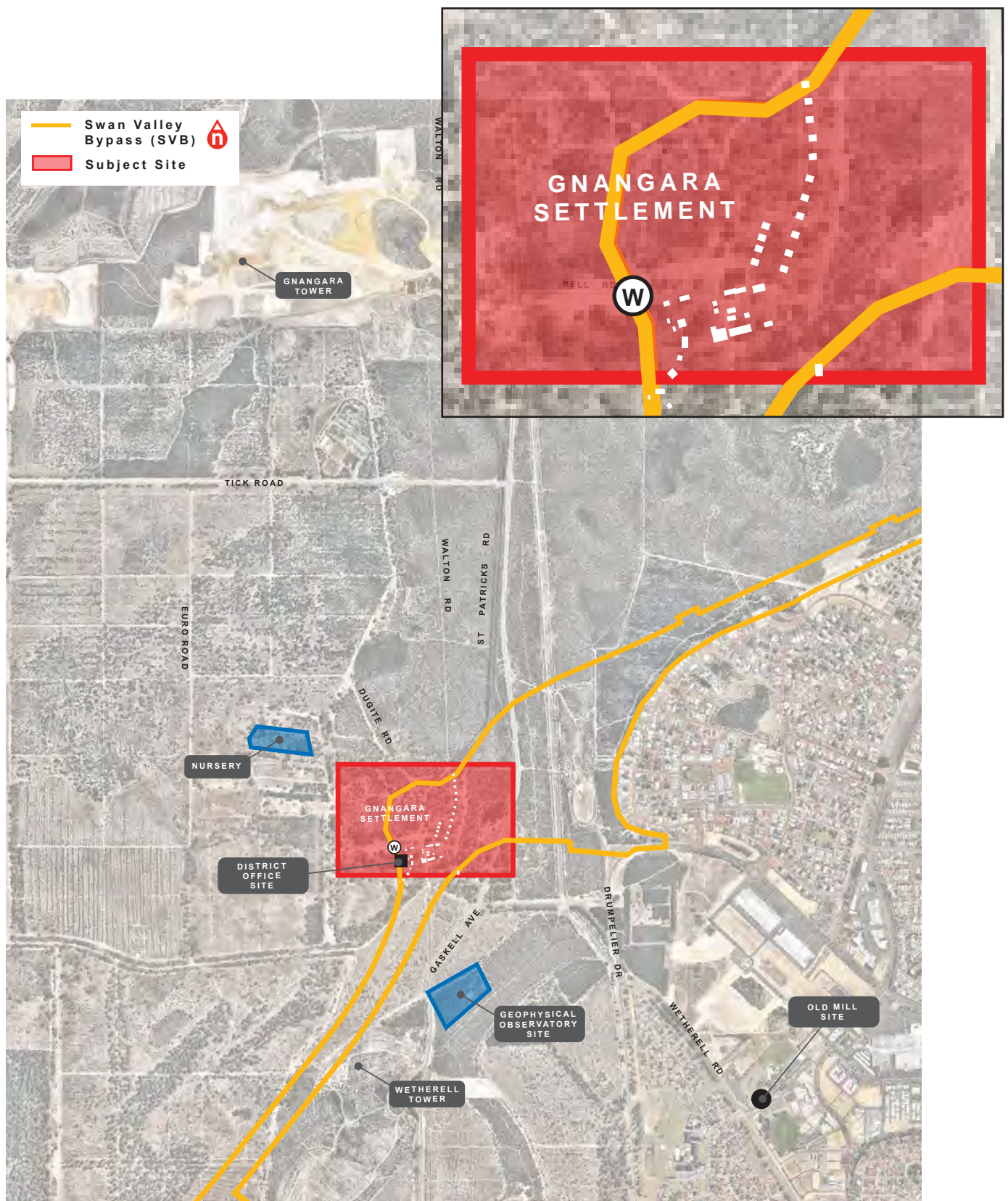


Fig 10. Historic Overlay of maps/plans sourced from the State Records Office showing footprints of buildings (refer to inset, white boxes) and other features of the settlement.

In the mid to late part of the 1940s, a mill was developed along the main road (Wetherell Road) of the settlement. The mill was built from various parts, some sourced from a sawmill at Swanbourne. The mill sawed small timber logs and then it went on to make cases – wooden crates that were then transported and sold. This enterprise sought to make the plantation a viable entity from growing seed to producing the product. A number of other small pine mills were established in the 1950s in the Ludlow, Mundaring, and Grimwade (East Kirup) plantations. By the 1950s the Gngangara mill had fallen into disuse and the logs were then carted into Town (presumably Midland).¹⁶

Post World War II Change

Following World War II, the demand for pine peeler logs for plywood production increased as Australia experienced a housing boom. Plywood production in Western Australia expanded accordingly, and in order to meet demand for the 'production of this high-priced product', 'New Australians' were put to work pruning, clearing and planting in the plantations.¹⁷ At least half a dozen migrants, largely from Lithuania, Estonia and Latvia, and their families came to live on at the plantation. Initially they were provided with two wooden huts per family, erected at the headquarters. Eventually they built houses.¹⁸

In 1965 reports indicate that there were 10 employees housed at Gngangara, which consisted of:

- Mechanics 3
- Piece Workers 3
- Labourers 3
- Towerman 1

Additional housing was requested for another mechanic, 1 handyman, 1 overseer and 2 labourers.¹⁹ A review of Landgate's Historic Aerial from 1965 show that the houses were largely located behind the District Office off a sandy track, which ran in a north-south direction. A tennis court is evident behind the District Office. A lesser number of houses were located along the south-western side of the District Office, presumably to accommodate those in charge, away from the general working population.

It was a common practice in the early twentieth century up to the 1970s for the Forestry Department to build houses for workers engaged in forest management, silviculture

and forest protection. A characteristic of these settlements, was the construction of housing to standard design 'Types' and the relocation of housing from one town to another on an as needs basis (Refer to Figures 8 and 9). These standard design 'Types' were utilised at Gngangara, with records from 1966 suggesting plans were made to:

- Shift 3 houses from Tallanalla to Gngangara
- Build a new house type 'UK 7-1' for the Forester overseer
- Build 1 older type '8DH' in the employees sections
- Build 2 or 3 better type huts in the single men's quarters.²⁰

A memorandum from a Rent Board Inspection dated 1966 paints a picture of the settlement *'it was noted that whilst some houses were well provided with gravel paths, or cement or slabs between the wash house and back steps, others had nothing but dark grey sand which was constantly carried into the house on the foot wear of tenants. It contrasted very unfavourably with houses in the jarrah belt where gravel is abundant.'*²¹

Fire Control

Forest fires were understandably the silviculturist's nightmare. In 1948 it was reported that Western Australia's fire prevention and control methods were amongst the finest in the world. Keen-eyed fire watchers would be put on duty throughout the danger season in fire-lookouts situated at strategic points. A well-equipped meteorologist station kept them fully informed of the current fire hazards and the weather likely to be experienced. A network of telephone lines then connected the towers to the forestry headquarters and two-way radio telephones gave prompt communications to fire gangs on the job. There were two towers at the Gngangara plantation: the Gngangara Tower to the north and the Wetherell Tower to the south.²²

Late Twentieth Century

Landgate historic aerial imagery shows the subject settlement extant in 1985 but not in 1995, so an assumption has been made that it is between this window that the headquarters and settlement was dismantled.

¹⁶ ibid.

¹⁷ Heritage Council of Western Australia Assessment Documentation, (2006) Ludlow Forestry Mill and Settlement

¹⁸ Clover, op cit

¹⁹ Memorandum - Housing Gngangara Settlement, 17 December 1965. State Records Office Ref: 006344F180221

²⁰ Memorandum - Housing Wanneroo and Gngangara 360/64, 19 January 1966. State Records Office Ref: 006344F180221

²¹ Memorandum House - Gngangara, Conservator of Forests, February 1966. State Records Office Ref: 006344F180221

²² Western Mail, 1948 op cit, p.1

3. Physical Evidence

The subject place was largely contained within what is now known as Lot 14910, near Gaskell Road, Lexia (north of Trainor Road, west of Ellenbrook) and formed part of the larger Gngangara Pines Forest. Access to the site is gained via a bitumen road (Gaskell Road), through the Rocla Quarry operation along the northern side of Gngangara Road. Approximately 1.3 kilometres along Gaskell Road, after the Rocla Quarry weigh bridge and office, access to the former settlement is gained via Wetherall Road, a sandy track. Old tyres dug into the ground with stencil lettering act as street signs.

Like Wetherall Road, all the roads in the former settlement area are sandy tracks. To the casual observer the area would appear to be nothing more than a section of pine forest strewn with litter and the occasional burnt car body. However, upon closer inspection remnants of the former headquarters in the landscape become apparent.

The Report on the Archaeological Assessment of the Forestry Department's Divisional Headquarters, prepared by SGH (2015) provides an account of the remaining fabric as summarised below:

- The aerial photography suggests that the Forestry Department's Divisional Headquarters encompassed a range of structures, which was surmised by: their proximity to other buildings; size; and shape. Residential houses, outdoor toilets, sheds, rainwater tanks and industrial facilities were all identified, including a tennis court in the settlement centre. Many places had formal fence boundaries and established consolidated limestone driveways.
- Few structures have been left intact – most physical signs had been removed with the exception of septic tanks, the occasional ant cap (a metal plate fixed to the top of a stump to prevent termite passage), concrete wet areas and broken ceramic toilet bowls.

- Numerous introduced plants were identified across the survey area, including pine trees, plane trees, Agave spp. bushes, bamboo and fruit trees such as pomegranate, fig and grape. Many of these plants run along old fence lines. Agave spp. was particularly present in large groups of in excess of 20 plants.

The following pages include images taken of the site in January 2015.



Fig 11. Brick structure. Source TPG 2015



Fig 12. Concrete wet area and base of toilet. Source TPG 2015



Fig 13. Concrete wet area. Source TPG 2015



Fig 14. Concrete path and footings. Source TPG 2015



Fig 15. Footings for former water tank and Agave spp. Source TPG 2015



Fig 16. Footings. Source TPG 2015



Fig 17. Local street signs. Source TPG 2015.



Fig 18. Mass planting of Agave spp. Source TPG 2015



Fig 19. Remains of septic tank. Source TPG 2015



Fig 20. Stand of Pine trees around former settlement. Source TPG 2015



Fig 21. Vine and trellis. Source TPG 2015



Fig 22. Water tank. Source TPG 2015

4. Comparative Analysis

Throughout the history of forestry in Western Australia, settlements have been established and disbanded in response to changes in the forestry industry. A characteristic of these settlements has been the relocation of cottages on an as needs basis.

A review of the inHerit database has identified a number of such settlements, which are listed on the State Register of Heritage Places.

Ludlow Forestry Mill and Settlement (Place Number 15834)

Ludlow Forestry Mill and Settlement, comprises an area of approximately 180 hectares and contains a former sawmill and associated workshop buildings and a residential settlement comprising eleven former forestry cottages with associated outbuildings, one former forestry hut, a former Education Department house, a former school, former District Office and various other buildings and structures. Although Ludlow was first settled in 1921, the majority of extant buildings were constructed between 1950 and 1956, when the sawmill was established, with additional development occurring in the 1960s.

This place is considered to have a high level of authenticity and is significant in the context of the history of the Forests Department and the forestry industry in Western Australia as the site of a pine plantation from the 1910s, of the State's first Forestry School from 1921 to 1927, and as a small forestry settlement from the 1920s until 1950 when the main forestry settlement and sawmill was established.²³

Lewana (Place Number 5006)

Lewana is located in the picturesque Blackwood Valley, on about 39 hectares. The place is significant in the context of the history of the Forests Department and the forestry industry in Western Australia as it demonstrates the manner in which the Forests Department functioned during the twentieth century in establishing pine

²³ Heritage Council of Western Australia Assessment Documentation, (2006) Ludlow Forestry Mill and Settlement

plantations and small arboreta to trial tree species to determine their suitability, and the type of housing that they provided for their employees.

The Assessment Documentation recognises that the place is an unusually intact former forestry settlement, and so far as is known the only such place with an arboretum and extensive plantings of more than 50 varieties of exotic and indigenous trees. It is one of only four former forestry settlements converted to a recreation camp in the 1970s before being sold into private ownership.²⁴

Dryandra Woodland Settlement (Place Number 3856)

Dryandra Woodland Settlement comprises a number of forestry buildings and structures, including a hall, forestry cottages, most of which are Types 8 and 6, a group of sheds and outbuildings, and a dam, erected from 1936 to the 1950s, on a 26 ha site. Dryandra also includes a 6ha arboretum, which was established in 1958 and contains a variety of Australian native species.

The Assessment Documentation recognises that the place has rarity value as a 'forestry settlement east of the Darling Scarp Divide and the only such settlement connected with the mallet bark industry.' The place is believed to contain the oldest extant forestry house in Western Australia, although it is not intact.²⁵

As noted above, evidence of the history of the Forestry Department is represented in many locations in the State particularly through the remains of both former mills and worker's cottages set within a forest setting.

²⁴ Heritage Council of Western Australia Assessment Documentation, (2006) Lewana

²⁵ Heritage Council of Western Australia Assessment Documentation, (2006) Dryandra Woodland Settlement



5. Discussion and Conclusion

The place is not currently included on any Heritage List (either statutory or non-statutory) however, in a previous Desktop report Dr Natyon (2012) suggested 'that the place may have heritage significance at state level.'²⁶

The question therefore must be answered as to whether the place has sufficient heritage value to meet the threshold for inclusion on the State Register of Heritage Places. The Assessment Criteria for Cultural Heritage Significance sets out the criteria for assessment for entry into the State Register (Refer to appendix A for a complete copy of the guide), which have been explored and tested against the subject place in the following discussion:

Aesthetic Value

Criterion 1 It is significant in exhibiting particular aesthetic characteristics.

Given that all the former buildings at the subject place including stables, nursery and dwellings have been removed the place has little Aesthetic Value. The pine trees within the settlement, which would have once contributed to the aesthetic values of the place's setting remain and continue to create a pleasing setting but are no different to the trees located within the remainder of the plantation as viewed from Gwangara Road.

Historic Value

Criterion 2 It is significant in the evolution or pattern of the history of Western Australia.

The subject place has some historic value. It is associated with the Forests Department, the former governmental body responsible for the administration of Western Australia's forests, and their role in establishing pine plantations and associated settlements during the twentieth century. The now dismantled place is part of a wider cultural landscape, which saw large tracts of land transformed from the 1920s through to the late part of the Twentieth Century from a largely scrubland to one that became dominated by tree plantations. In addition, the history of the place embraces a variety of themes, including:

Australian Historic Themes

- 2.4.2 Migrating to seek opportunity
- 3.4.4 Making Forests into a saleable resource
- 3.11.4 Clearing vegetation

Heritage Council of Western Australia Themes

- 101 Immigration, emigration and refugees
- 107 Settlements
- 112 Technology and Technological change
- 304 Timber industry

²⁶ Natyon, G (2012) Desktop Survey

Scientific Value

Criterion 3A It has demonstrable potential to yield information that will contribute to an understanding of the natural or cultural history of Western Australia.

The field survey undertaken in January 2015 by SGH identified 169 points of interest, which were weighted towards structural items, especially open septic tanks. As noted in the SGH report the results of the survey were summarised as follows:

- Little evidence of an archaeological assemblage spread over the entire area;
- The only extant evidence of building structures were generally fences, concrete wet-area floors, ant caps, septic tanks and toilet bowls;
- Many trees and shrubs in the area were introduced and planted, particularly along fencelines;
- Almost all artefacts were post-war, suggesting that little remains of pre-war settlement; and
- Little evidence (n=9; 5.33%) of an assemblage related to social/domestic activities.²⁷

The SGH report concludes that there is 'little archaeological research potential owing to an assemblage that is quantifiably, spatially and chronologically limited. The known assemblage is common to other parts of Perth and the integrity of the site is questionable given the presence of bull dozer spoils, the documented removal of buildings and the wide-spread occurrence of recreational vehicle tracks.'²⁸

Criterion 3B It is significant in demonstrating a high degree of technical innovation or achievement.

To those interested in afforestation, Gngangara was considered to hold three great advantages as a practical demonstration. It is in easy distance to the City; it is an example of what can be done with some of the poorest soils and it provided a study of nutritional and other experiments extending over a number of years. This innovation and achievement is not readily apparent given the buildings have been demolished and in any event it is unlikely that this particular value would have been readily apparent if the buildings remained extant. The remaining portion of the plantation, which falls outside the study area continues to demonstrate past agricultural and afforestation practices.

Social Value

Criterion 4 It is significant through association with a community or cultural group in Western Australia for social, cultural, educational or spiritual reasons.

Gngangara Road was not constructed until the late 1940s and prior to that it had been accessed by sandy tracks. The subject place was a relatively small settlement, where 'outsiders' were not encouraged to venture, largely because of the threat of potential fire. Therefore the significance of the place would be associated with those people who once lived and worked at the place.

The broader plantation area, outside the study area is frequented by a variety of recreational users and would hold some social value to these people.

As noted above, the place does hold historic value however, this value is not readily apparent in the remaining fabric. As noted in the Assessment Criteria for Cultural Heritage Significance it is important that the State Register be credible and accordingly it is desirable that places in that Register have at least reasonable levels of condition and integrity; and high degree of authenticity.

²⁷ Snappy Gum Heritage Services Pty Ltd (2015) A Report on the Archaeological Assessment of the Forestry Department's Divisional Headquarters, p. 3

²⁸ ibid.

The Criteria note that it is possible for a place of poor condition or integrity to be entered in the Register on the basis of a value where these things are relatively unimportant eg. an historic ruin. However, this is not the case in this scenario. We consider that the condition of the place is poor given the removal of almost all of its built fabric and the lack of management of the site since this occurred. It is also considered to have a low level of its integrity particularly as it is unable to convey its former use as an office and settlement associated with forestry development and management.

Given the above it is our view that the place is not likely to have sufficient value to be included on the State Register of Heritage Places, however this decision is one to be made by the Heritage Council of Western Australia and must go through due process under the GHPDP. To recognise the place's historic value the following recommendations are made:

- In due course, this Historic Heritage Report be provided to both the City of Swan and Joondalup Local History Centres for inclusion in their Local History Collection to ensure information about this place is made available for those interested.
- Any public art contemplated along this portion of the Perth - Darwin National Highway area (such as sound walls or artwork under overpasses and at interchanges) should interpret the historic themes identified in this report to recognise the history of the site.

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Appendix A

The Assessment Criteria for Cultural Heritage Significance

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The Cultural Heritage Significance of a place is assessed by considering various values. Each place is unique and has its own combination of values, which together show its cultural heritage significance.

This document outlines the criteria for assessment for entry into the State Register of Heritage Places.

NATURE OF SIGNIFICANCE

1. Aesthetic Value

Criterion 1 It is significant in exhibiting particular aesthetic characteristics.

- 1.1 Importance to a community for aesthetic characteristics.
- 1.2 Importance for its creative, design or artistic excellence, innovation or achievement.
- 1.3 Importance for its contribution to the aesthetic values of the setting demonstrated by a landmark quality or having impact on important vistas or otherwise contributing to the identified aesthetic qualities of the cultural environs or the natural landscape within which it is located.
- 1.4 In the case of an historic precinct, importance for the aesthetic character created by the individual components which collectively form a significant streetscape, townscape or cultural environment.

2. Historic Value

Criterion 2 It is significant in the evolution or pattern of the history of Western Australia.

- 2.1 Importance for the density or diversity of cultural features illustrating the human occupation and evolution of the locality, region or the State.
- 2.2 Importance in relation to an event, phase or activity of historic importance in the locality, the region or the State.
- 2.3 Importance for close association with an individual or individuals whose life, works or activities have been significant within the history of the nation, State or region.
- 2.4 Importance as an example of technical, creative, design or artistic excellence, innovation or achievement in a particular period.

3. Scientific Value

Criterion 3A It has demonstrable potential to yield information that will contribute to an understanding of the natural or cultural history of Western Australia.

- 3.1 Importance for information contributing to a wider understanding of natural or cultural history by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.
- 3.2 Importance for its potential to yield information contributing to a wider understanding of the history of human occupation of the locality, region or the State.

Criterion 3B It is significant in demonstrating a high degree of technical innovation or achievement.

- 3.3 Importance for its technical innovation or achievement.

4. Social Value

Criterion 4 It is significant through association with a community or cultural group in Western Australia for social, cultural, educational or spiritual reasons.

- 4.1 Importance as a place highly valued by a community or cultural group for reasons of social, cultural; religious, spiritual, aesthetic or educational associations.
- 4.2 Importance in contributing to a community's sense of place.

DEGREE OF SIGNIFICANCE

5. Rarity

Criterion 5 It demonstrates rare, uncommon or endangered aspects of the cultural heritage of Western Australia.

- 5.1 Importance for rare, endangered or uncommon structures, landscapes or phenomena.
- 5.2 Importance in demonstrating a distinctive way of life, custom, process, land-use, function or design no longer practiced in, or in danger of being lost from, or of exceptional interest to, the locality, region or the State.

6. Representativeness

Criterion 6 It is significant in demonstrating the characteristics of a class of cultural places or environments in the State.

- 6.1 Importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class.
- 6.2 Importance in demonstrating the principal characteristic of the range of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the locality, region or the State.

CONDITION, INTEGRITY AND AUTHENTICITY

Condition refers to the current state of the place in relation to each of the values for which that place has been assessed. Condition reflects the cumulative effects of management and environmental events.

Integrity is a measure of the likely long-term viability or sustainability of the values identified, or the ability of the place to restore itself or be restored, and the time frame for any restorative process.

Authenticity refers to the extent to which the fabric is in its original state.

Because it is important that the State Register be credible it is desirable that places in that Register have at least reasonable levels of condition and integrity. However it is possible for a place of poor condition or integrity to be entered in the Register on the basis of a value where these things are relatively unimportant eg. an historic ruin.

Places entered in the Register should also have a high degree of authenticity although it will be possible to include places which exhibit evolution of use and consequent change where this is harmonious with the original design and materials.

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