



AMERGIN CONSULTING (AUSTRALIA) PTY LTD

ABORIGINAL HERITAGE • PROJECT MANAGEMENT

**Report of an Aboriginal Heritage Desktop Assessment of the  
NorthLink WA Project (Perth–Darwin National Highway)  
Incorporating the Proposed Swan Valley Bypass and Tonkin  
Grade Separations**

**Prepared for Main Roads Western Australia on behalf of Coffey  
Environments Pty Ltd and BG&E Pty Ltd**

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## Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data has been collated, the authors can take no responsibility for omissions and/or inconsistencies that may result from **information becoming available subsequent to the report's completion.**

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## Acronyms and Definitions

Aboriginal Site	A place to which the <b><i>Aboriginal Heritage Act (1972)</i></b> applies
ACMC	Aboriginal Cultural Material Committee
<b>AHA (or "the Act")</b>	<b><i>Aboriginal Heritage Act (1972)</i></b> as amended
AHIS	Aboriginal Heritage Inquiry System
AIC	Australian Interaction Consultants
Amergin	Amergin Consulting (Australia) Pty Ltd
DAA	Department of Aboriginal Affairs (formerly Department of Indigenous Affairs or DIA)
DBNGP	Dampier–Bunbury Natural Gas Pipeline
MHA	McDonald, Hales & Associates Pty Ltd
MRWA	Main Roads Western Australia
PDNH	Perth–Darwin National Highway
S18	Section 18 of the Act which provides the mechanism for a proponent to seek consent to use land upon which an Aboriginal Site exists
SAAS	SAAS
SGH	Snappy Gum Heritage Services

Study Area	The land shown in Figure 1 incorporating the referral corridors for the SVB and TGS
SVB	Swan Valley Bypass
SWALSC	South West Aboriginal Land and Sea Council
TGS	Tonkin Grade Separations
TPG	The Planning Group WA Pty Ltd

## Executive Summary

Amergin Consulting (Australia) Pty Ltd has been engaged by Coffey Environments Pty Ltd on behalf of BG&E Pty Ltd and Main Roads Western Australia to undertake Aboriginal and European heritage investigations in relation to the NorthLink WA Project. This report, which presents the findings of the desktop Aboriginal heritage assessment, aims to identify the known and potential Aboriginal heritage constraints of the project.

The research found that twenty-eight (28) Aboriginal Sites and 'Other Heritage Places' as mapped by the DAA overlap the NorthLink Project (see Tables 1–3 and Figure 2).<sup>1</sup> These include nine (9) registered Aboriginal sites:

1. DAA Site ID **3179**: Clune Street (Artefacts/Scatter);
2. DAA Site ID **3180**: Marshall, Beechboro (Artefacts/Scatter);
3. DAA Site ID **3326**: Bayswater 1-3 (Artefacts/Scatter);
4. DAA Site ID **3692**: Bennett Brook In Toto (Mythological);
5. DAA Site ID **20008**: Gingin Brook Waggy Site (Mythological, Historical);
6. DAA Site ID **20058**: Temporary Camp (Camp);
7. DAA Site ID **20749**: Moore River Waugal (Mythological);
8. DAA Site ID **21393**: NNOR/02 - Lightning Swamp (Ceremonial, Mythological); and
9. DAA Site ID **21620**: Chandala Brook (Mythological).

There should be no ground disturbance activities within registered sites without Ministerial consent under Section 18 of the AHA.

In addition, the Project Area is overlapped by nine (9) lodged places, some of which could be found to constitute Aboriginal sites under Section 5 of the AHA:

1. DAA Site ID **3525**: Ellen Brook: Upper Swan (Mythological);
2. DAA Site ID **3618**: Whitemans Cutting (Artefacts/Scatter);
3. DAA Site ID **3619**: WHITEMANS QUARRY (Artefacts/Scatter);
4. DAA Site ID **20650**: Lennard Brook (Mythological);
5. DAA Site ID **21616**: Boonanarring Brook (Mythological);
6. DAA Site ID **21617**: Wallering Brook (Mythological);
7. DAA Site ID **21618**: Nullilla Brook (Mythological);
8. DAA Site ID **21619**: Breera Brook (Mythological); and
9. DAA Site ID **21994**: Neaves Road Creek Field Site 1 (Artefacts/Scatter).

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<sup>1</sup> The restricted site that does not appear on the DAA's results is DAA Site ID 3426 'South Ballajura Camp'. According to O'Connor (2012), this site lies outside and to the west of his study area for the PDNH–Tonkin Link (O'Connor 2012:14).

There should be no ground disturbance activities within lodged places unless Ministerial consent is obtained under Section 18 of the AHA and/or they are determined not be Aboriginal Sites within the meaning of Section 5.

Finally, there are ten places overlapping the Project that are listed in Stored Data (DAA Site IDs 3178, 3552, 3748, 3749, 4039, 4099, 18735, 19138, 19183 and 21392). Although these are not places to which the Act applies, some of these places/topographical features may still have significance for Aboriginal people and could therefore have implications for development should they potentially be impacted.

Archaeological and ethnographic surveys, as required under the Whadjuk Protocol, are currently under preparation.

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# 1. INTRODUCTION

## 1.1 Purpose of the Assessment

Amergin Consulting (Australia) Pty Ltd (Amergin) has been engaged by Coffey Environments Pty Ltd (Coffey) on behalf of BG&E Pty Ltd and Main Roads Western Australia (MRWA) to undertake Aboriginal and European heritage investigations in relation to the NorthLink WA Project.

NorthLink WA is a program of road projects proposed to be undertaken by MRWA that form vital components of a wider series of improvements to the Perth–Darwin National Highway (PDNH). The primary objective of these improvements is to enhance freight efficiency and productivity by reducing travel time and journey time reliability between the Perth metropolitan area and the Northwest of Australia.

The Project comprises two constituent parts:

1. Swan Valley Bypass (SVB) – a new 37km highway link between the junction of Reid Highway/Tonkin Highway and the Great Northern Highway/Brand Highway at Muchea; and
2. Tonkin Grade Separations (TGS) – the grade separation of the intersections of Tonkin Highway with Collier Road, Morley Drive and Benara Road, together with associated works.

The heritage investigations are being undertaken in five broad phases:

1. A desktop assessment investigating the known and potential heritage constraints of the Project;
2. An archaeological survey, as required by the Whadjuk protocol, which will be carried out by Snappy Gum Heritage Services (SGH) on behalf of Amergin Consulting;<sup>2</sup>
3. An ethnographic survey and consultations, as required by the Whadjuk protocol, which will be carried out by Amergin with the assistance of Ethnoscience;
4. European heritage investigations, which are being carried out by The Planning Group (TPG) on behalf of Amergin with the assistance of SGH; and
5. Preparation of heritage approval applications where required.

This report presents the findings of the desktop Aboriginal heritage assessment and aims to identify the known and potential Aboriginal heritage constraints of

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<sup>2</sup> The Whadjuk Aboriginal Cultural Heritage Protocol is an agreement between Main Roads Western Australia and the Department of Aboriginal Affairs (as the representatives of the State of Western Australia) and the South West Aboriginal Land and Sea Council on behalf of the Whadjuk community. The Protocol outlines how the parties intend to cooperate within the limits of the **Aboriginal Heritage Act 1972 (WA)** and the **Native Title Act 1993 (Cth)**. The protocol requires that SWALSC, acting on behalf of the Whadjuk Community, be consulted about Aboriginal heritage in the first instance and outlines a mechanism for assessing the impact of proposed activities on Aboriginal heritage. This includes the DAA and SWALSC agreeing on who should be consulted and on what terms.

the project. This desktop report, which relates to the first phase of the Aboriginal heritage investigations, discusses previously recorded Aboriginal Sites and Other Heritage Places intersecting with the Project, as well as previous Aboriginal heritage surveys. The desktop assessment of European heritage has been undertaken by TPG and is reported under a separate cover.

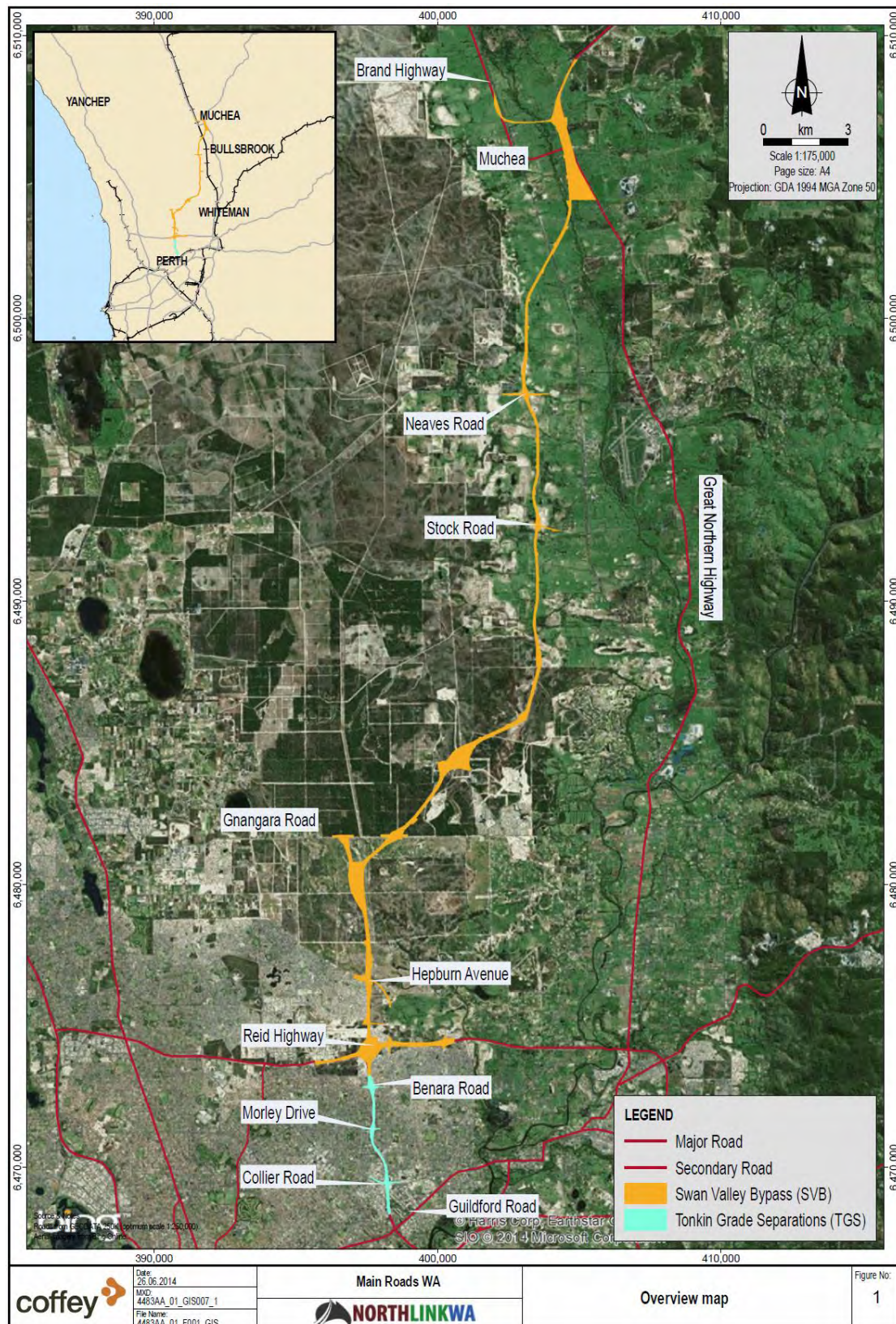


Figure 1: Overview map of the NorthLink WA project area (Source: Coffey)

## 1.2 Legislative Context

The *Aboriginal Heritage Act 1972* (AHA) is the primary piece of State legislation relating to Aboriginal heritage and defines and protects Aboriginal Sites and objects. Aboriginal Sites are currently protected by the AHA whether they are known to the Department of Aboriginal Affairs (DAA) or not. **Section 5** of the AHA defines an Aboriginal Site as follows:

- a. any place of importance and significance where persons of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of Aboriginal people, past or present;*
- b. any sacred, ritual or ceremonial site, which is of importance and special significance to persons of Aboriginal descent;*
- c. any place which, in the opinion of the Committee,<sup>3</sup> is or was associated with Aboriginal people and which is of historical, anthropological, archaeological or ethnographic interest and should be preserved because of its importance and significance to the cultural heritage of the State;*
- d. any place where objects to which the Act applies are traditionally stored, or to which, under the provisions of this Act, such objects have been taken or removed.*

Under **Section 15** of the AHA, persons are required to report the location of anything to which they might reasonably suspect the Act to apply.

Unauthorised disturbance of an Aboriginal Site or cultural material is an offence under **Section 17**:

- 17. A person who -*  
*excavates, destroys, damages, conceals or in any way alters any Aboriginal site; or,*  
*in any way alters, damages, removes, destroys, conceals, or who deals with in a manner not sanctioned by relevant custom, or assumes the possession, custody or control of, any object on or under an Aboriginal site,*  
*commits an offence unless he is acting with the authorisation of the Registrar under section 16 or the consent of the Minister under section 18.*

**Section 18** of the AHA provides a mechanism for landowners and proponents to seek consent to use land containing an Aboriginal Site(s) — and in effect to disturb those sites — from the Minister of Aboriginal Affairs and thereby protect themselves from potential prosecution under Section 17.

Other State legislation, such as the *Environmental Protection Act 1986* (EP Act), can in some instances complement the AHA (for example, in cases where physical

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<sup>3</sup> The Aboriginal Cultural Material Committee (ACMC).

protection of the natural environment is required to protect sites of heritage significance). Aboriginal heritage can also be afforded protection by Commonwealth legislation, in particular the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*. Aboriginal people who believe that a significant place or object is under threat and that State Government protection is inadequate can apply to the Federal Environment Minister to protect the place or object.

### 1.3 Defining an 'Aboriginal Site'

In this report, we use the term 'Aboriginal Site' to refer to a place that the Aboriginal Cultural Material Committee (ACMC) has determined to be an 'Aboriginal Site' within the meaning of Section 5 of the AHA and is therefore 'registered'. While other places and objects may be *listed* on the AHIS and in other sources, this does not necessarily mean they are Aboriginal Sites. Indeed, many places and objects listed on the AHIS are in fact not registered Aboriginal Sites for the purposes of the AHA.<sup>4</sup>

For example, there are places and objects within the system that are referred to as 'Other Heritage Places'.<sup>5</sup> Such places and objects may simply be 'Lodged' on the system (which generally occurs following initial reporting of the place or object to the DAA and prior to assessment by the ACMC) or for which it has been determined that there is insufficient information available to allow the ACMC to determine whether they are Aboriginal Sites or not. However, as there is a potential that such places might be found to be Aboriginal Sites in the future if further information becomes available, it is prudent to treat 'Lodged' places and places deemed to have 'Insufficient Information' as if they are Aboriginal Sites until a determination has been made by the ACMC and the legal status of the place has been clarified.

Another category of listing covered by the term 'Other Heritage Places' and which frequently is the source of confusion is that relating to places and objects archived in 'Stored Data' (also referred to as 'Archived Data'). Typically, these are places and objects for which a determination has been made by the ACMC and it has been concluded that they do not satisfy any of the criteria set out in Section 5 of the AHA and are therefore not 'Aboriginal Sites' for the purposes of the Act. Such places are therefore not subject to the Act's provisions. However, these

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<sup>4</sup> Decisions by the ACMC and the DAA, of course, may be overturned by the courts and indeed may be revisited by the ACMC itself.

<sup>5</sup> 'Other Heritage Places' were previously listed either on the 'Interim Register' or in 'Stored Data'.

places and objects are not deleted from the system (AHIS), but rather are **maintained as 'Stored' or 'Archived' data in order to account for the possibility** that new information may be presented in the future that might warrant a reassessment by the ACMC, and so that the DAA is aware if the same place is reported again.

It is also important to be cognisant of the possibility that places that do not have the full protection of State or Commonwealth heritage legislation may still have significance for Aboriginal people and could therefore have implications for development should they potentially be impacted.

## 2. DESKTOP ASSESSMENT METHODOLOGY

The desktop assessment involved in the first instance a search of the Register of **Aboriginal Sites using the Department of Aboriginal Affairs' (DAA's) online** Aboriginal Heritage Inquiry System (AHIS) and downloaded spatial data.

Relevant, unrestricted site files and heritage survey reports, where available, were subsequently reviewed **at the DAA's head offices in East Perth**. Additional background reports provided by Coffey, and those held in the archives of Amergin Consulting and Ethnoscience, were also reviewed along with other pertinent ethnohistorical and archaeological background material.

Additionally, DAA personnel provided assistance with respect to restricted sites overlapping the Project and have advised the consultants to obtain the consent of listed site informants (or their surviving next-of-kin) in order to access these restricted files. While it was not possible to obtain these consents prior to the preparation of this report, information concerning these sites was elicited from other, publicly available sources. It is intended to seek access to these files prior to fieldwork.

This desktop report was prepared jointly by Bryn Coldrick, Ryan Hovingh and Edward McDonald.



### 3. ETHNOGRAPHIC BACKGROUND

According to Tindale (1974) and Berndt (1979), at the time of European colonisation the South West of Western Australia was inhabited by some thirteen 'tribes' (Tindale 1974) or 'socio-dialectical groups' (Berndt 1979).<sup>6</sup> These groups formed a distinct socio-cultural block. Aboriginal people in this region referred to themselves as *Nyungar* (meaning "black man"), a term of identification which is still used today by south-west Aboriginal people.

According to Tindale (1974) and Berndt (1979), the area around Perth was traditionally part of the territory of the *Whadjuk* or *Whadjug* (Tindale 1974:260; Berndt 1979:82). Within the *Whadjug*, there were a number of identifiable band or horde territories at the time of Contact. Bands comprised a number of families and the ethnohistorical evidence suggests that they numbered about forty individuals. Colonial observers referred to these bands as 'tribes' and identified them with regard to both the territory normally occupied and the 'leadership' of the group.

The Upper Swan area was rich in resources and was a major focus for hunting and gathering. As a result, the area is rich in archaeological and ethnographic sites. The Upper Swan area seems to have been part of the territory of three bands. The land of the *Beeloo* was bounded in the south by the Canning River. The northern and western boundaries were marked by the Swan River and the eastern border was the Darling Scarp. This group was said to be led by Munday (Bourke 1987). The major camp in *Beeloo* was reported as being located at *Weererup* in the vicinity of Millendon.

The territory of the *Daren* or *Weeip*'s band was to the north of the *Beeloo*. The southern and western boundaries were the Swan River and Ellen Brook (*Gynning*) respectively. Their land was bounded on the east by the Scarp and the major focus of resource utilisation was Bull's Farm in the Upper Swan. *Mooro* country stretched from the Swan River at Perth Water to *Gynoorda* (Gingin Brook?) in the north. The eastern borders were marked by the Swan River and Ellen Brook.

In 1827, Captain James Stirling and botanist Charles Fraser navigated

*the Swan River as far as Ellen Brook to assess the area for its potential as a new colony. Stirling noted, "several deserted encampments .... and .... ground cleared by fire a few weeks before"* (Stirling 1827).

In 1829, the Swan River Colony was established, concentrating upon the alluvial flats of the Swan River as the best prospective farmland. The area was small with

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<sup>6</sup> Berndt's work is derivative of Tindale, among others, and Tindale uses the term 'tribe'.



gentlemen, such as Stirling himself, having first choice of the best locations (Hallam 1975). Such alluvial areas were relatively easy to clear due to Aboriginal modification of the land by the removal of the understorey to give ease of access and increase game numbers, giving the area a 'parklands' appearance. Stirling (1827) noted, "The whole country of the middle and upper Swan resembles a vast English park".

The Aborigines' yearly routines were disrupted by the occupation of this land, causing conflict between themselves and the white settlers. As Hallam (1975) states, Aborigines traditionally used the foothills of the Darling Scarp (such as the Bullsbrook area) as focal positions for the exploitation of resources of several zones (uplands, alluvial plains and the swamps beyond). With European usurpation of the alluvial zone, this was no longer possible and Aborigines eventually had to find alternative livings as labourers, etc. for white settlers.

## 4. ARCHAEOLOGICAL BACKGROUND

Heritage consultation has been the catalyst for almost all archaeological research in and around the Perth metropolitan area. Many of the sites listed within the NorthLink WA Project (such as DAA Site IDs 3618 and 3619) have played minor roles in the initial forays into studies about local Aboriginal occupation.

The NorthLink WA Project passes within 5–7km of some of the most integral archaeological sites in Western Australia which, upon their discovery, changed the nature and understanding of the timing of Aboriginal occupation on a national level. These sites are 'Upper Swan' which is dated to 38,000BP (Pearce and Barbetti 1981) and Walyunga, dated to 8,000BP (Pearce 1978).

The Perth Metropolitan Area lies on geological units collectively referred to as the 'Swan Coastal Plain', which has formed the basis of much of the local archaeological research. One seminal study was Hallam's Swan Area Archaeological Survey (SAAS) (Hallam 1972; Hallam 1977; Hallam 1987), which included surveying and data collection across much of the Swan Coastal Plain. **Hallam's methods are of particular relevance to the NorthLink WA Project** as they will guide the identification and management of any archaeological places identified in the upcoming field investigations.

Hallam's (1972; 1977; 1987) investigation of the Swan Coastal Plain was divided into distinct geomorphic zones: the Quindalup Dunes, the Cottesloe Limestone, Karrakatta Sands, Bassendean Sands, Alluvial Deposits such as the Pinjarra Plains, Foothills (such as the Ridge Hills Shelf) and the Darling Range (Hallam 1986:1). Her results regarding site distribution were:

*In all periods there are barely any sites in the coastal dunes (QD) or coastal limestone (CL), and few in the sandhills around the lakes on the eastern margin of the limestone belt (KS). **The bulk of sites lie around the lakes and swamps of the coastal sandplain (BS), the most extensive zone. The alluvial belt (PP), although limited in area, has many sites;** and the small sample of the foothills carries its full quota. There are no sites on the scarp itself, and barely any on the uplands (Hallam 1986:5) [our emphasis].*

Anderson's (1984) studies, as part of her investigation into Aboriginal movement between the Darling Scarp and the Swan Coastal Plain, produced similar results.

It is thought that the relatively high number of sites recorded in this area in comparison to other parts of the Swan Coastal Plain is most likely due to the presence of swamps and lakes that would have provided relatively stable and seasonally predictive food resources (Meagher 1974; Anderson 1984; Hallam 1987; Bowdler, Strawbridge et al. 1991). Archaeological investigations using site

frequency as a measure of site use suggest that the seaward margin (Quindalup Dune System) was not used significantly in terms of camping and resource procurement (Hallam 1987: 14).

The surface geology of the NorthLink WA Project is mostly comprised of clays and alluvial deposits associated with the Guildford formation, the overlying quartz sands linked to the Bassendean Sand geomorphic unit, and the swamp and lacustrine deposits within and in between (Wilde and Low 1978).

**Both Hallam and Anderson's investigations** around the Perth Airport (which is in a similar geomorphic zone to the NorthLink WA Project) suggests that most sites will be moderate to large in size and generally lie on sand ridges near water. Artefacts manufactured from quartz generally dominate the assemblages, although **56% of the 39 sites in Anderson's study contained small quantities of fossiliferous chert**. Other materials include mylonite, dolerite and silcrete with some European glass. Formal tools, such as tula and burren adzes, are also present.

These findings replicate that of the known existing sites within the survey corridor: of the ten archaeological places with accessible assemblage descriptions, half contained fossiliferous chert and few included artefacts manufactured from mylonite and silcrete. The presence of fossiliferous chert within the NorthLink WA **Project is a potential chronological marker. Hallam's (1986) research proposed** four phases based on assemblage characteristics to provide a means of dating the Swan Coastal Plain assemblages. Those with fossiliferous chert are thought to **represent an 'Early Phase'**.

Fossiliferous chert is thought to have been available to Indigenous occupations between 12,000 and 4,500 years BP (Ferguson 1980), although re-use and recycling behaviour may account for later dates. The only known sources of the fossiliferous chert have been submerged by rising sea levels, which attained their present position around 6,500 years BP and so the material acts as a temporal marker in archaeological contexts (Glover and Lee 1983). In addition, the presence of fossiliferous chert sources off the coast also suggests that there may have been some trade and exchange mechanisms taking place (Dortch 2002).

As the chert material began to decline in availability, it is thought that other local raw material sources (such as crystal quartz) became increasingly utilised (Schwede 1990; Worrell 2008). The knapping properties of available lithic materials, site type and the local geological context of a site appear to have

influenced responses to this changing raw material availability over time (Dortch 2002; Worrell 2008).

Unfortunately, dating Holocene sites within the Swan Coastal Plain is problematic as there are not many stratified archaeological sites in the region, particularly in the Bassendean Sands which are reported to have little stratigraphic integrity, having been disturbed by natural processes (constant dune deflation) as well as farming and urban development and low levels of deposit accumulation (Bowdler, Strawbridge et al. 1991). Those sites with the potential for stratified assemblages (such as DAA Site ID 21994 'Neaves Road Creek Field Site 01') are especially of importance owing to their potential to contribute to our understanding of Holocene Indigenous Australians.

Ethnohistorical sources describe the seasonal movements of large groups, particularly in summer linked to the exchange of male initiates, shared ceremonies and exogamous marriage arrangements as well as the consolidation of kinship and broader group alliances (Hallam 1989; Dortch 2002). Longer distance trade networks are also described with groups exchanging items such as ochre or specialised items such as spears from near modern day Albany through to the Murchison area (Le Souef 1993). Ochre, incidentally, was reportedly identified at DAA Site ID 3179 within the NorthLink WA Project corridor.

In 1987, Strawbridge undertook the collation and computer analysis of the data **generated by Hallam's SAAS project as part of the Perth Metropolitan Region's** planning strategy. The analysis identified a number of key environmental factors relating to the location and distribution of archaeological sites on the Swan Coastal Plain. In summary, sites are (after Edwards 2008: 10):

1. most likely to be situated on sandy, well drained dune ridges;
2. most likely to be located within 350m of a potential water source, including (in decreasing frequency) swamps, creeks, rivers, lakes, surface water, springs and soaks;
3. unlikely to be located in low-lying, poorly drained or seasonally inundated areas; and
4. unlikely to be located more than 350m away from potential water sources.

Strawbridge (1987:16–17) also formulated a number of research questions relating to the themes of site formation processes, site distribution and environmental change, and stone tool technological change.

In summary, the NorthLink WA Project is located on a combination of Alluvial Soils and Bassendean Sands, both of which have been identified as having higher numbers of archaeological sites than other areas of the Swan Coastal Plain. These

sites are often moderate to large in size and are often found on sandy crests near water sources. While quartz is commonplace in these assemblages, those with fossiliferous chert may be older than 6,000 years BP. Sites such as these have important implications for studies about the timing and mobilisation of Aboriginal people in the Perth area, particularly when coinciding with those having assemblages containing 'post-contact' materials such as glass.

## 5. DESKTOP ASSESSMENT RESULTS

### 5.1 Register of Aboriginal Sites (AHIS)

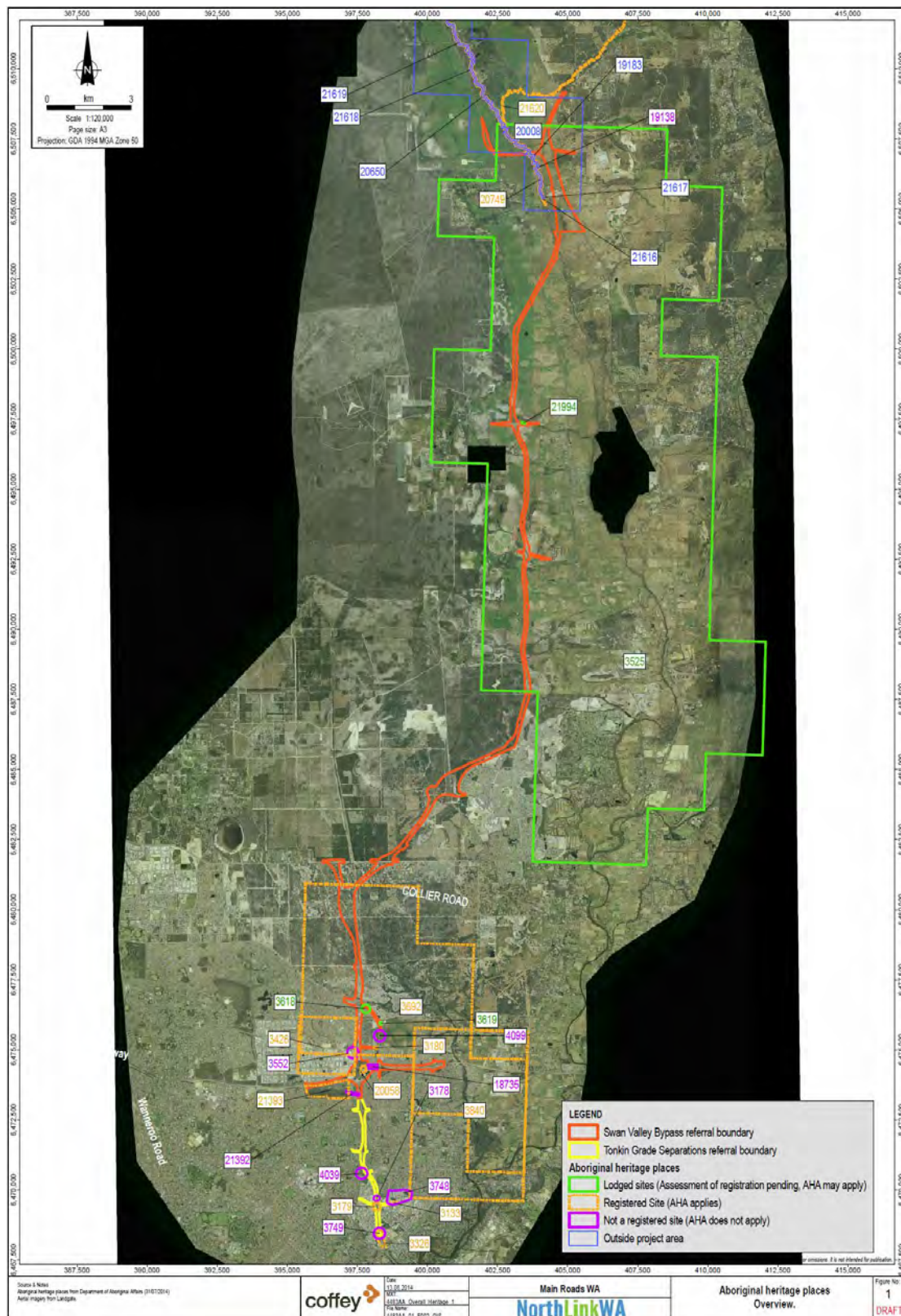
#### 5.1.1 Registered Aboriginal Sites

The sites listed below in Table 1 and described over the following pages are registered Aboriginal sites that have been recorded within or intersecting with the Project Area (see also Figure 2 and Appendix 1). They are therefore places to which the Act applies as defined by Section 5.

As stated in the Introduction, under Section 17 of the AHA it is an offence to excavate, disturb, damage or in any way alter a registered Aboriginal site, or to damage or remove any object from an Aboriginal site, without the consent of the Minister under Section 18 of the AHA or the Registrar under Section 16 as required.

**Table 1: Registered Aboriginal Sites overlapping the Project area**

Site ID	Restricted	Site Name	Site Type	Additional Info
<b>3179</b>	No	Clune Street	Artefacts/Scatter	
<b>3180</b>	No	Marshall, Beechboro	Artefacts/Scatter	
<b>3326</b>	No	Bayswater 1-3	Artefacts/Scatter	Camp
<b>3692</b>	Yes	Bennett Brook In Toto	Mythological	
<b>20008</b>	Yes	Gingin Brook Waggyt Site	Mythological, Historical	Plant Resource, Camp, Hunting Place, Water Source
<b>20058</b>	No	Temporary Camp		Camp
<b>20749</b>	No	Moore River Waugal	Mythological	
<b>21393</b>	No	NOR/02 - Lightning Swamp	Ceremonial, Mythological,	Archaeological Deposit, Meeting Place, Plant Resource, Camp, Hunting Place, Natural Feature, Water Source
<b>21620</b>	No	Chandala Brook	Mythological	



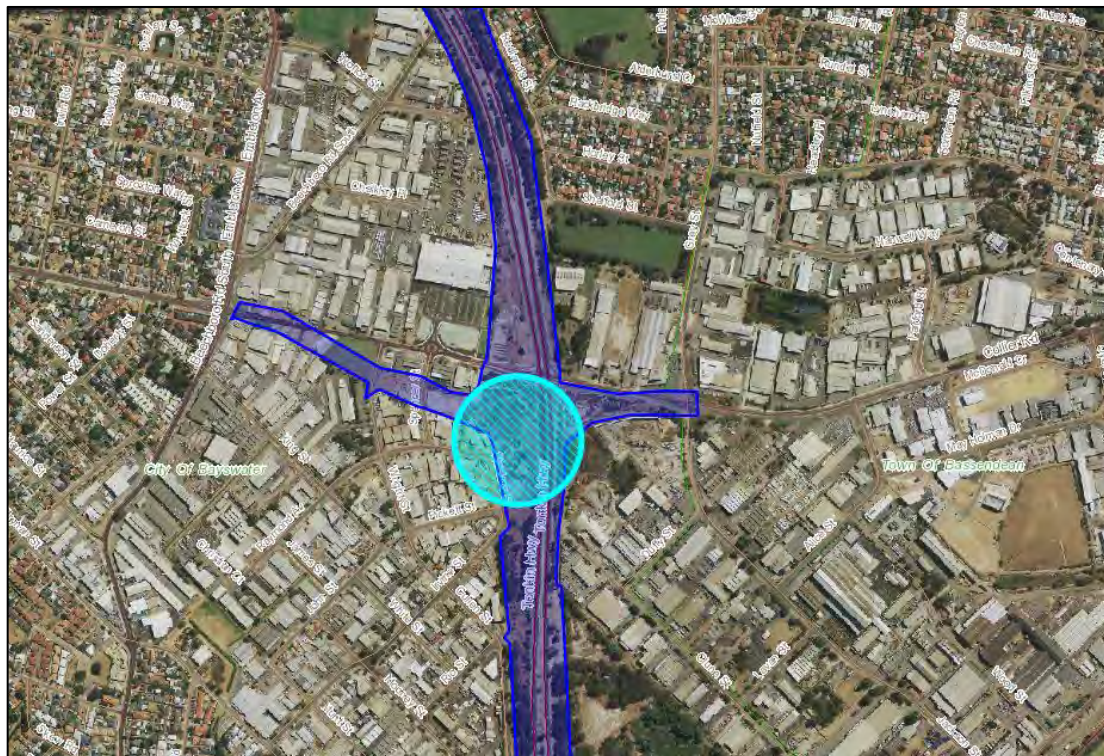
**Figure 2: Aboriginal Sites and 'Other Heritage Places' overlapping the NorthLink WA project area (Source: Coffey)**



**DAA Site ID 3179 'Clune Street' (Artefacts/Scatter) – Figure 3**

This archaeological site was first recorded by B. Dobson and 'T.H.' in 1976 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987) near the intersection of Clune and Irvine Street, Bayswater (Figure 3).

It was reported to be a sparse assemblage of three scatters consisting of quartz, fossiliferous chert pieces and one piece of red ochre. All visible artefacts were collected. It was suggested that the presence of bryozoan (fossiliferous) chert indicates an antiquity of at least 4,500 years.



**Figure 3: DAA Site ID 3179 'Clune Street' (registered Artefacts/Scatter) in relation to the NorthLink WA project area (Source: AHIS)**

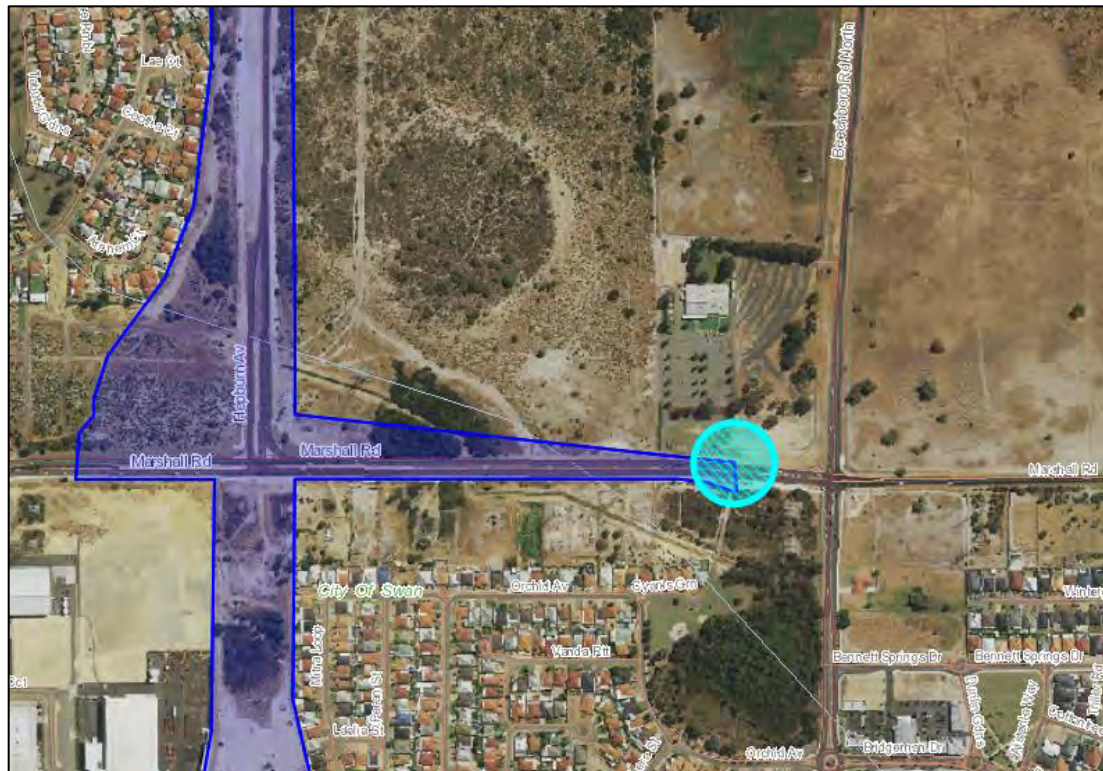
**DAA Site ID 3180 'Marshall, Beechboro' (Artefacts/Scatter) – Figure 4**

This archaeological site was recorded by R. Stranger in 1973 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987) and was found to be disturbed by the construction of Marshall Road (Figure 4). It was reported to be a sparse scatter of artefacts comprising mostly quartz, with one fossiliferous chert piece. One tool and all other visible artefacts were collected.

The location was investigated by O'Connor and Quartermaine (1987) and was found to be greatly disturbed, with little archaeological evidence remaining. Three artefacts were located on the north side of Marshall Road. Later investigations by



Harris (1994) and by Macintyre Dobson & Associates Pty Ltd (1998) found no artefacts within the area.



**Figure 4: DAA Site ID 3180 'Marshall, Beechboro' (registered Artefacts/Scatter) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 3326 'Bayswater 1-3' (Artefacts/Scatter; Camp) – Figure 5**

This archaeological site was originally recorded by S. J. Hallam and J. Glover in 1974 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). Further archaeological investigations by Brown (1982; 1983) were commissioned by MRWA prior to construction of the Tonkin Highway.

The investigation reported two concentrations of artefacts within an eolian sand dune deposit. Excavations revealed materials  $\leq 73$  cm below the dune surface. The materials consisted of quartz, bryozoans, chert, glass, shell, bone and other stone artefacts. All of the artefacts uncovered during the 1974 and 1982 investigations and excavations were collected (Brown 1983).

The location was recently investigated by AIC (2004) for the Cresco site. No artefacts were located. AIC (2004) noted that with the archaeological history of the area, there is the potential for subsurface artefact deposits; however, the prior disturbance of the area suggests that the finding of these deposits would be unlikely.



**Figure 5: DAA Site ID 3326 'Bayswater 1-3' (registered Artefacts/Scatter; Camp) in relation to the NorthLink WA project area (Source: AHIS)**

**DAA Site ID 3692 'Bennett Brook In Toto' (Mythological) – Figure 6**

This ethnographic site is a **restricted (or 'Closed')** site and the consent of the listed informants, or their surviving descendants, is required in order to access the file. The following is therefore based on publicly available information.

The “**Bennett Brook area**” was one of three areas of significance reported by Baines (1984:1) during her ethnographic research in relation to the Natural Gas Laterals in the Perth metropolitan area (the others being the Bayswater Camping Area [DAA Site ID 3749] and the Bardon Park/foreshore area [DAA Site ID 3170, outside the Project area]. O’Connor et al (1985) subsequently described the extent of **the “Bennett Brook”** site as follows:

*... this site extends approximately seven kilometres from the Bennett Brook/Swan River confluence to Mussel Pool in Whiteman Park, Whiteman. It comprises the brook and also its bank on either side.... Bennett Brook was formed by the creative actions of the Waugal, whose spiritual essence still exists there. For this reason the entire brook is an area of significance to Aborigines.... (cited in O'Connor 2012:16; our emphasis).*

Similarly, McDonald, Edwards & Murphy (1999) reported that:

*According to O'Connor et al. (1985:53–55) [the site] extends north from the Bennett Brook/Swan River confluence for about seven kilometres until the Brook reaches Mussel Pool in Whiteman Park. **The site is reported to include the Brook and extends up its banks on either side for a distance of approximately 30 metres.** O'Connor et al. (1985:53–55) note that, according to Nyungar tradition, Bennett Brook was formed by the Waugal, whose spiritual essence is believed to exist there.... [our emphasis].*

However, in his more recent assessment of the PDNH–Tonkin Link, O'Connor (2012) reports that "The tributary of Bennett Brook which, during heavy rains, drains under Beechboro Road in the brook's better defined headwaters in Whitemans [sic] Park, is part of the registered site and is within the survey area" (O'Connor 2012:14; see also O'Connor 2012:16–17). This would suggest that O'Connor is of the view that the significance of the site no longer ends at Mussel Pool in Whiteman Park as he originally reported, but now also includes tributaries that feed into Bennett Brook.

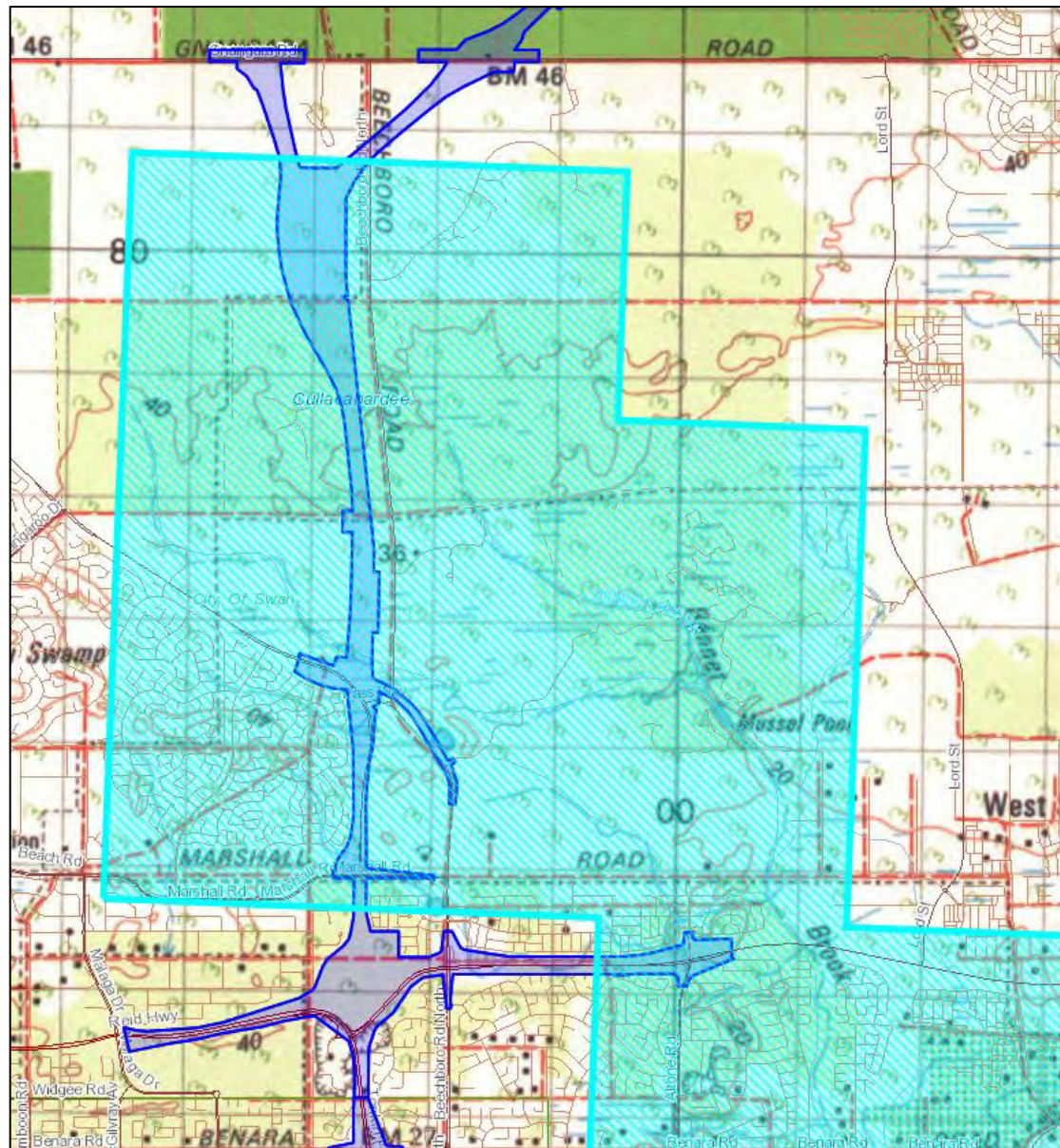
O'Connor also notes that:

*Aboriginal people camped along the western side of Bennett Brook in the pre-Contact era and in the era of Aboriginal fringe camps surrounding the growing city of Perth. [O'Connor (1985)] also recorded that the brook supplied fresh water from numerous wells and that hunting expeditions from these camps followed the headwaters of Bennett Brook, through the present Whiteman Park, across the [PDNH] study area and northwards to the fresh water lakes in and near Wanneroo (O'Connor 2012:16–17).*

Locke & Smith (1990:1) reported that "The Brook itself is a mythological site ... closely associated with Success Hill [DAA Site ID 3757].... A complex of camping and other habitation sites were also focussed on the Brook and in the [sic] number of surrounding areas such as Eden Hill, Lockridge and Beechboro (Locke & Smith 1990:11).

It will be necessary to gain access to the restricted site file in order to confirm the current boundary of **DAA Site ID 3692 'Bennett Brook In Toto'**. In the meantime, based on the above, no activities with the potential to impact Bennett Brook or any tributaries feeding into it, or ground within 30m of such features, should be carried out without Section 18 consent in order to avoid a potential breach of Section 17 of the AHA.





**Figure 6: DAA Site ID 3692 'Bennett Brook In Toto' (registered Mythological site) in relation to the NorthLink WA project area (public boundary) (Source: AHIS)**

**DAA Site ID 20008 'Gingin Brook Waggyt Site' (Mythological, Historical) – Figure 7**

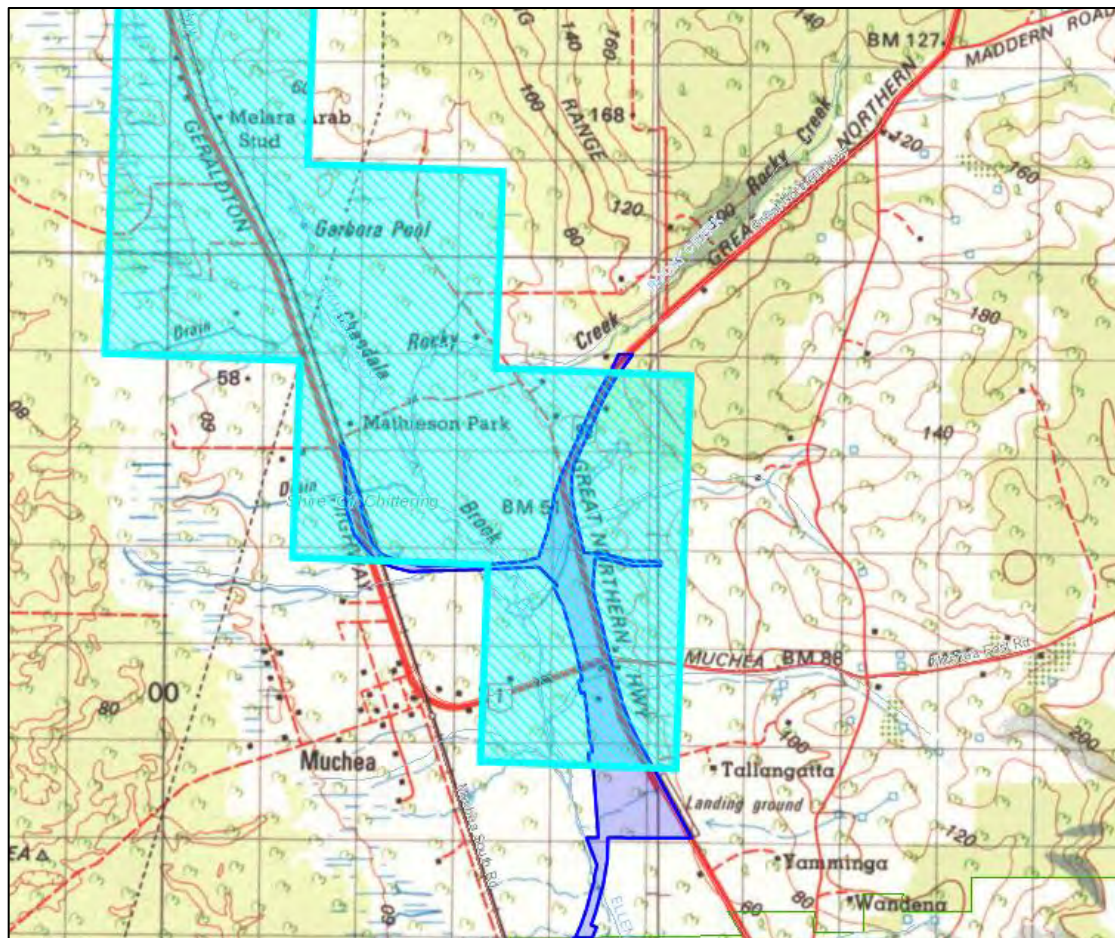
This is also a Closed ethnographic site and the consent of the listed site informants, or their surviving descendants, is required in order to access the file. The following is therefore based on publicly available information.

Gingin Brook is also associated with Waugal mythology as well as being a source of food and plant resources. People also used to camp along the brook.

However, Gingin Brook is actually located to the north of the Project area and is apparently listed as a result of its association with a DAA site complex (Complex



42) that comprises all the wetlands and watercourses between Bullsbrook and Moore River including DAA Site IDs 19183, 20749 and 21614–21620 (see Figure 22).



**Figure 7: DAA Site ID 20008 'Gingin Brook Waggy Site' (registered Mythological site) in relation to the NorthLink WA project area (public boundary) (Source: AHIS)**

### **DAA Site ID 20058 'Temporary Camp' ([Camp]) – Figure 8**

DAA Site ID 20058 'Temporary Camp' is a registered camp in the vicinity of the Tonkin Highway/Reid Highway Interchange and was recorded by Robert Reynolds (an officer of the Department of Indigenous Affairs) with Cedric Jacobs in 1994 following reports of disturbance by MRWA.

According to Rev. Jacobs, this was an important camping site that had been used by his family and other Aboriginal people for generations. The primary areas of the site were reported to be a raised sandy ridge with large Eucalypts which was the focus of his family's camping; a swamp; and a soak/water source. The following is an extract from Mr Reynolds' description in the site file:

*The Rev. Jacobs remembers visiting families still camping in this area up until the 1970's. He stated that it was a traditional camping area that had been used for generations. This was a principal camp used by the Cooper and Jacob families. Other families camped on the ridge further to the east, the exact location of which was not shown to me.*

To the north of the ridge was reported to be a swamp which provided a rich food resource, while the soak which provided water through the year was located to the southwest of the ridge. Three enlarged pits were identified during the inspection and it was noted that the area between these had been extensively disturbed.

A previous survey by O'Connor in 1987, which apparently had involved Rev. Jacobs, concluded that this camp was not an area of significance, however. O'Connor reported:

*An Aboriginal camp was located in the nineteen-forties and nineteen-fifties in the scrub some four-hundred metres (400 m) west of the present Beechboro Road) Victoria Road junction.... No trace of this camp remains today. The Aboriginal people consulted in the course of this survey, including the last surviving members of the family which actually camped there, were satisfied that it was merely an occasional camp and could not be seen as an area of significance on the grounds of sentimental or other associates [sic] (O'Connor & Quartermaine 1987: 3; original emphasis).*

It would also appear that there was some variation in the locations reported by O'Connor (1987) and subsequently defined by Jacobs and Reynolds (1994). The latter location is listed separately in Stored Data as DAA Site ID 18735 'Beechboro Camping Area', though it seems likely that the two listings relate to the same place (see below for further discussion).

Any further impact to this registered site will require Ministerial consent under Section 18 following consultation with Rev. Jacobs.<sup>7</sup>

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<sup>7</sup> Cedric Jacobs is not included on the list of Aboriginal consultants prepared for NorthLink WA under the Whadjuk Protocol. However, given that he is the primary informant on whose account the site was registered, he has a right to be consulted under the DAA's Due Diligence Guidelines before S18 consent is sought to disturb the site further.





**Figure 8: DAA Site ID 20058 'Temporary Camp' (registered site) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 20749: Moore River Waugal (Mythological)**

Discuss [outside PDA]

### **DAA Site ID 21393 'NOR/02 - Lightning Swamp' (Ceremonial, Mythological) – Figure 9**

This ethnographic site was reported by Ron Parker of Australian Interaction Consultants (AIC) in 2004 following a survey for the Noranda Regional Park complex. According to the Site Recording Form,

*All the informant groups consulted expressed concern that Lightning Swamp did not appear on the current DIA Register of Sites as it is widely known to be a place of high cultural significance. The site is considered to have a wider context than the swamp itself extending through the sand dunes and beyond the current reserve boundary to include previously utilised camps such as one situated to the north east of the project area.*

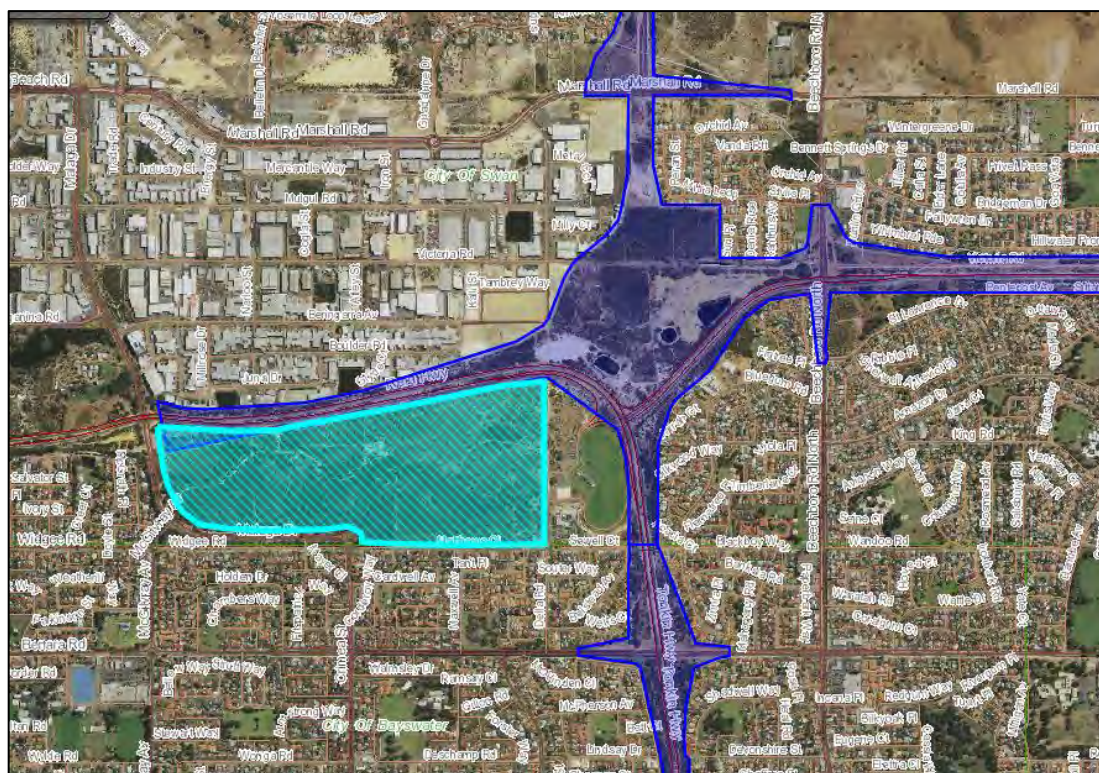
In their report on the proposed Lightning Swamp boardwalk installation, AIC (2009) state that according to the Ballaruk Peoples Elder [Corrie Bodney], "Lightning Swamp is called *Mulga Boro* in his language. As well as the bushland area, it incorporated land now on the other side of Reid Highway". They continue:



*The wetland is part of an underground stream to Bennett Brook, with freshwater boogine (springs) where he [Mr Bodney] had camped, hunted and gathered as a child. Lightning Swamp was part of movement during the six Nyoongah seasons around the landscape between Bennett Brook, Mussel Pool at Whiteman Park, Hamersley Paddock, Herdseman [sic] Lake, Gnangara Lake and Lightning Swamp.*

According to AIC, Mr Bodney's mother used to camp, hunt and gather here when it was 'natural' and as a child he used to gather branches to smoke for beekeeping etc. He reportedly requested that visitors throw sand into the water here to respect the Waugal and Aboriginal ancestors and ensure there is no "backlash from the Waugal". AIC (2009) further report that according to the McGuire family, Lightning Swamp is called **Mulga Boodjah** and "... was a big meeting place for cultural activities and for seasonal camping, hunting and gathering". They reported that native plants here are used in medicine, while water in general is significant in the Waugal dreaming.

However, there are no detailed descriptions in the file of the site's purported mythological or ceremonial associations. It also appears that Lightning Swamp was not reported during a previous survey of the Northern Perimeter Highway by O'Connor which also reportedly included Mr Bodney (O'Connor & Quartermaine 1987:3), or during other previous surveys (e.g., O'Connor, Bodney & Little 1985; Brown 1983).



**Figure 9: DAA Site ID 21393 'NOR/02 - Lightning Swamp' (registered Ceremonial and Mythological site) in relation to the NorthLink WA project area (Source: AHIS)**



**DAA Site ID 21620 'Chandala Brook' (Mythological) – Figure 10**

According to the site file, this ethnographic site was “registered” as a result of Aboriginal heritage investigations undertaken by McDonald, Hales & Associates in relation to the Dampier–Bunbury Natural Gas Pipeline (DBNGP) corridor widening project (MHA 2001a). A DAA memo states that **DAA Site ID 21620 'Chandala Brook'** forms part of DAA site Complex 42 which comprises all the wetlands and watercourses between Bullsbrook and Moore River including DAA Site IDs 3525, 19183, 20008, 20749 and 21614–21620, and that MHA had treated “all the latter sites” as one.

Although the file does not actually contain any extracts from the above-mentioned MHA reports, MHA in fact argued that Chandala Brook, and the other wetlands and watercourses between Bullsbrook and Moore River, **should not be considered Aboriginal Sites**. For example, in their summary report on the Aboriginal heritage investigations of the proposed DBNGP widening project, which was prepared to assist the ACMC in February 2001, MHA stated that:

*Aboriginal consultants from the Combined Metro Claim reported that all waterways in the Southwest are sacred sites because the mythical Waugal has created them. As a result, they reported concern about potential impacts of the proposed development upon all waterways and wetlands. These waterways included named creeks and rivers such as Moore River, Gingin Brook, Lennard Brook, Red Gully, Boonanarring Brook, Wallering Brook, Nullilla Brook, Breera Brook, and **Chandala Brook**, and tributaries of Ellen Brook (AAD Site ID 3525/S02516) as well as numerous unnamed creeks and wetlands between Moore River and Bullsbrook.... **Beyond a broad statement that the Waugal had created them, no specific mythological detail was provided** with regard to any of the particular waterways or wetlands along or adjacent to the DBNGP corridor. **As a result, there is probably insufficient information available to list these places on the Register of Aboriginal Sites.** Although the Nyungar representatives from the Combined Metro claim did not request deviations or changes to the DBNGP corridor, apart from Airfield Road, they did request that compensation be paid to them for disturbance of waterways and wetlands (MHA 2001a: 80; our emphases).*

In another report prepared in October 2001 (which does not appear to be included in the site file for DAA Site ID 21620 'Chandala Brook'), MHA stated:

*In the absence of “detailed ethnographic descriptions of the sacred, ritual or ceremonial aspects” of the reported ‘sites’ **we would recommend that none of the (permanent and ephemeral) wetlands and watercourses between Moore River and Bullsbrook be assessed as Aboriginal sites under Section 5 of the Act** (MHA 2001b: 35).*

The file for DAA Site ID 21620 'Chandala Brook' also contains the following extract from Baines' (1984) report on the Natural Gas Laterals in the Perth Metropolitan Area which refers to springs in the Dandaragan/Gingin area, though it is unclear what relationship these have to Chandala Brook:

*The diversity of opinion across informants as to whether the wakal is located only in one place (and resulting from this whether one can identify an area of special significance) is probably connected with the general understanding expressed by Nyungars in the South West about the relationship between people and the wakal of their birth spring or home area. The older generation say that the spirits (janak) of the old people when they die return to that place. Indeed Informant D who has an extensive knowledge about the 'kalleep' (= wakal) in the part of his run that he calls 'home' (he locates them in both the Moore River and in various springs in the Dandaragan – Gingin area) says he was given the names of the Kalleep where he was born by his grandmother. He, therefore, 'belongs' to that place and is a 'boss' for that 'concern' or 'business' i.e. the knowledge about that spring has been given to him" (Baines 1984: 16; highlight as per site file).*

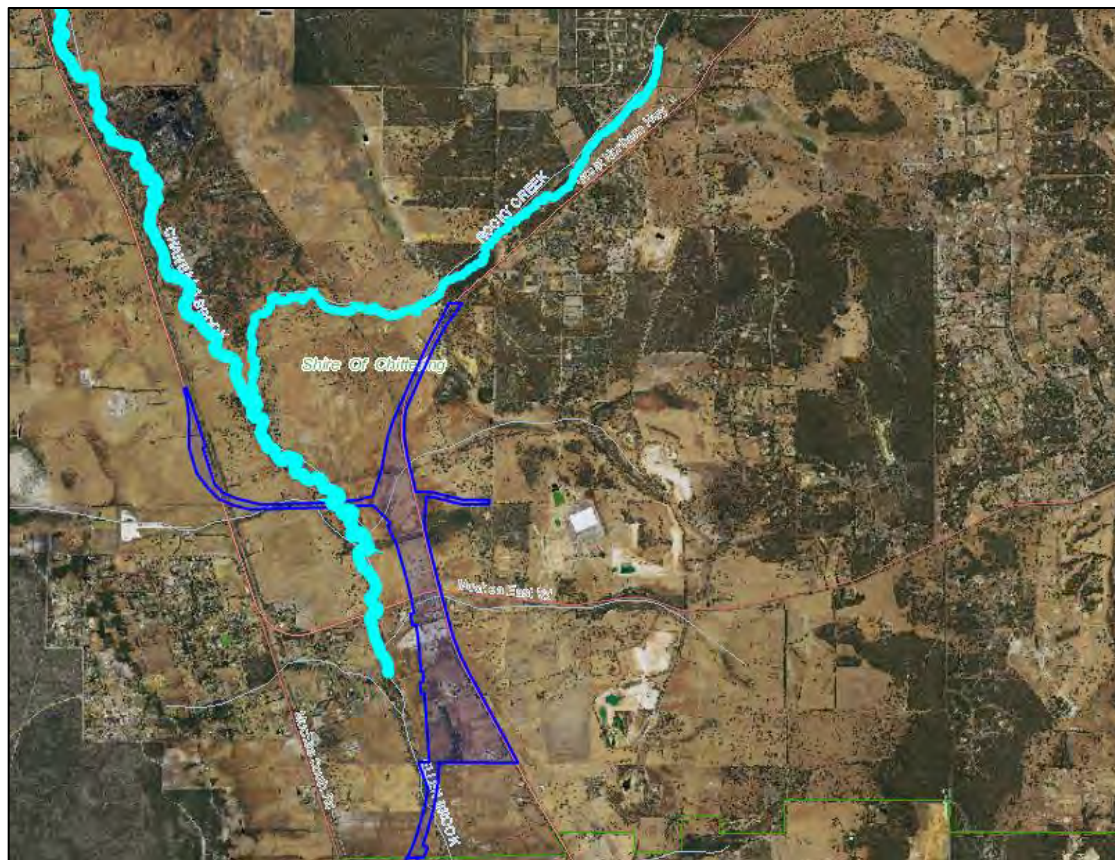
The third notable report extract in the site file is from a report on proposed road widening and passing lanes along the Great Northern Highway between Muchea and Walebing by O'Connor (2005). O'Connor noted that although Chandala Brook (DAA Site ID 21620) lay to the west of the project area, Rocky Creek (which he described as a major tributary of Chandala Brook) flows close to the project area. He therefore recommended that if work is occurring close to Rocky Creek, that the registration of Chandala Brook be considered to cover this creek also (O'Connor 2005a: 8–9).

*Chandala Brook joins with Rocky Creek in Muchea to form the waterway system known nowadays as Ellen Brook [DAA Site ID 3525]. From here, the waterway drains roughly southwards between Brand Highway and Great Northern Highway ... to ultimately join the Swan River to the east of the junction of Gnangara Road and West Swan Road. ... However, if, as appears to be the case ... the Aboriginal people consider that the significance of Ellen Brook extends also along its tributaries, then it is relevant that that alignment crosses four of those lesser waterways.... It then [sic] crosses Rocky Creek to the southwest of Old Gingin Road. In addition, all proposed alignments for the PDNH-Brand Highway link cross Chandala Brook (O'Connor 2005a: 8).*

However, there is no information in the extract in the file explaining why Rocky Creek should be considered part of the registered site other than it being a tributary of Chandala Brook.

A DAA memo referring to O'Connor's (2005) report notes that there is lack of information about the brook and that a preliminary assessment had concluded that it is "not a site". However, another DAA file note states that this site is a duplicate of Ellen Brook (DAA Site ID 3525) which has already been assessed by

the APMC. This example highlights some of the problems and inconsistencies in the DAA/APMC's assessment of information regarding the wetlands and watercourses in the greater Perth area.



**Figure 10: DAA Site ID 21620 'Chandala Brook' (registered Mythological site) in relation to the NorthLink WA project area (Source: AHIS)**

### 5.1.2 Lodged Aboriginal Heritage Places

The places listed in Table 2 and described over the following pages have been **lodged** with the DAA as potential Aboriginal sites as defined by Section 5 and are therefore places to which the Act **may** apply. There should therefore be no impact to the following places without the consent of the Minister under Section 18, or until the ACMC has determined that the Act does not apply to these places.

**Table 2: Lodged Aboriginal heritage places overlapping Project area (potential to be considered Aboriginal Sites)**

Site ID	Restricted	Site Name	Site Type	Additional Info
<b>3525</b>	Yes	Ellen Brook: Upper Swan	Mythological	Waterways and wetlands between Bullsbrook and Moore River.
<b>3618</b>	No	Whitemans Cutting	Artefacts/Scatter	
<b>3619</b>	No	WHITEMANS QUARRY	Artefacts/Scatter	
<b>20650</b>	No	Lennard Brook	Mythological	
<b>21616</b>	No	Boonanarring Brook	Mythological	
<b>21617</b>	No	Wallering Brook	Mythological	
<b>21618</b>	No	Nullilla Brook	Mythological	
<b>21619</b>		Breera Brook	Mythological	
<b>21994</b>	No	Neaves Road Creek Field Site 1	Artefacts/Scatter	

#### **DAA Site ID 3525 'Ellen Brook: Upper Swan' (lodged Mythological place) – Figure 11**

This ethnographic place is **restricted** (or 'Closed') and the consent of the listed informant (or in this case his surviving next-of-kin) is required in order to access the file. The following is therefore based on publicly available information, primarily research undertaken by MHA including a water pipeline over Ellen Brook (McDonald & Moore 1989; Veth 1989), a proposed bridge over Ellen Brook (McDonald 1989), proposed developments at the Mews, Sanwa Vines Resort (McDonald & Murphy 1991) and a WA Water Authority mains pipeline along Great Northern Highway (Smith & McDonald 1989) (see also McDonald 1976 and Robinson 1976) (McDonald, Smith & Murphy 1991:6–7).

McDonald (1989) reported that Ellen Brook (*Gynning*) is a mythological site associated with the spiritual 'turtle' and plays a mythological role as their Dreaming Track. He noted that Ellen Brook is also part of the greater system of waterways associated with the Rainbow Serpent or *Waugal*. For example, one of

the Brook's major tributaries – Ki-it Monger Brook which joins it at Bullsbrook – is also "sacred". However, not all of those interviewed considered Ellen Brook to be mythologically significant. McDonald noted, however, that Nyungars are generally concerned to minimise impact of the integrity of watercourses in the area including minimising disruption to the bed, banks and water flow of the watercourses (McDonald 1989:7). In addition to their mythological associations, the turtles were also described in a secular manner as living creatures that use Ellen Brook to swim down to the Swan River. The ecological importance of the turtles was therefore also noted.

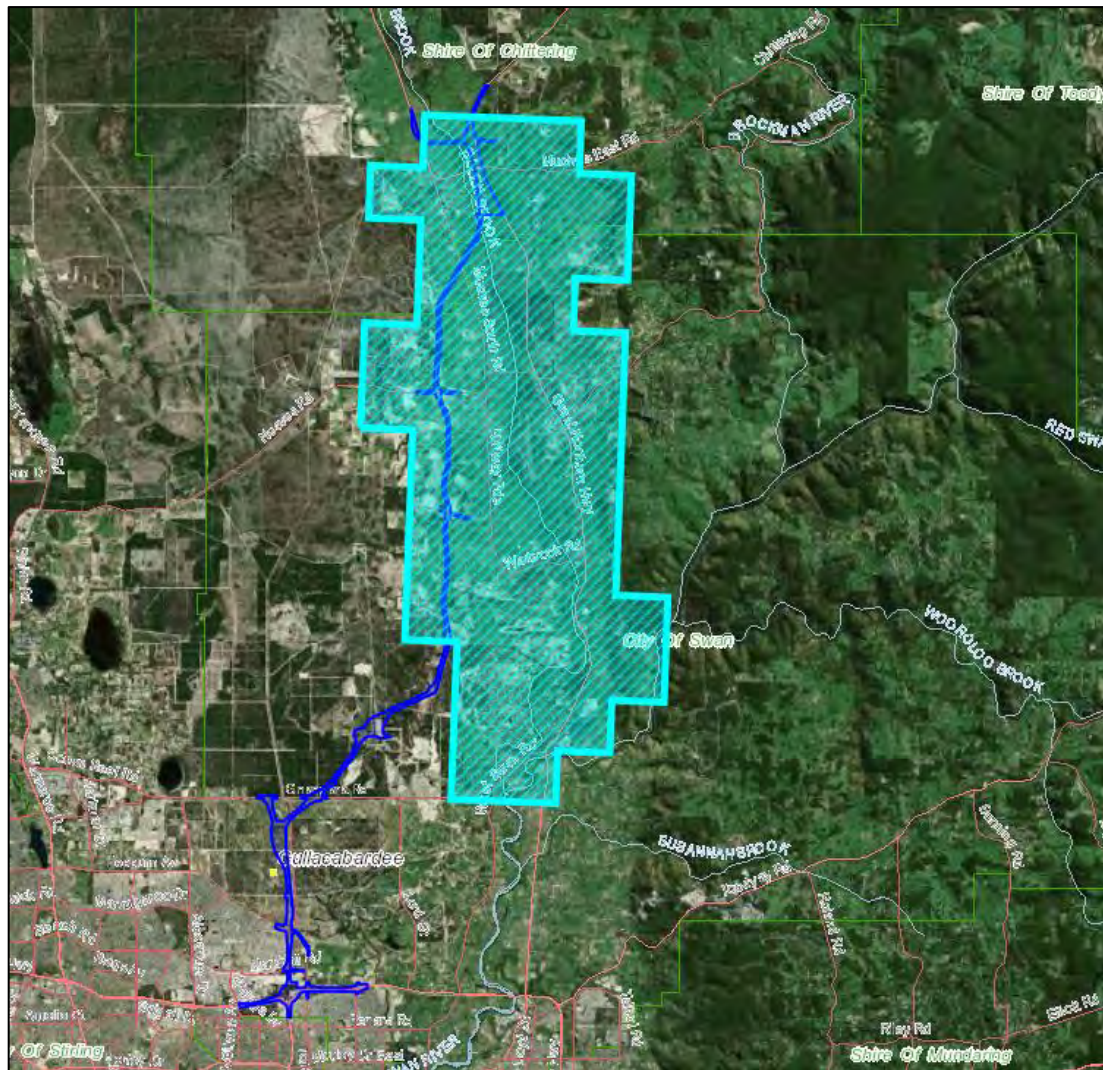
O'Connor has also undertaken a number of consultations in relation to Ellen Brook. For example, in 1987 he and Corrie Bodney conducted a survey for Aboriginal Sites at a proposed mineral sands plant site at Muchea. O'Connor reported that:

*The Aboriginal people consulted were satisfied that no sites of cultural significance were located within the area of proposed development. However ... **Ellen Brook is an area of current interest, due to its association with a Waugal myth.** Accordingly, the people interviewed requested that the Brook and its banks should remain undisturbed, and that a reasonable buffer zone should be maintained between it and the proposed development at all times (O'Connor & Quartermaine 1987:2; our emphasis).*

More recently, O'Connor has suggested that the significance includes all minor waterways due to the interconnectivity of the watercourses:

*Chandala Brook joins with Rocky Creek in Muchea to form the waterway system known nowadays as Ellen Brook [DAA Site ID 3525]. From here, the waterway drains roughly southwards between Brand Highway and Great Northern Highway ... to ultimately join the Swan River to the east of the junction of Gnangara Road and West Swan Road. ... However, if, as appears to be the case ... the Aboriginal people consider that the significance of Ellen Brook extends also along its tributaries, then it is relevant that that alignment crosses four of those lesser waterways.... (O'Connor 2005a:8).*





**Figure 11: DAA Site ID 3525 'Ellen Brook: Upper Swan' (lodged Mythological site) in relation to the NorthLink WA project area (public boundary) (Source: AHIS)**

**DAA Site ID 3618 'Whitemans Cutting' (Lodged Artefacts/Scatter) – Figure 12**

This archaeological site was recorded by Hallam in 1983 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). It was reported to be a moderate scatter of artefacts in Jarrah-Banksia woodland that were revealed by the construction of Beechboro Road. The scatter comprised mainly primary material in quartz and fossiliferous chert. One tool and all other visible artefacts were collected.

The location was recently investigated by Cecchi (2012) who noted that the coordinates for the site place it within the intersection between Beechboro Road and Hepburn Avenue. Cecchi found that the area has therefore been heavily

altered and no artefacts were observed in or around the coordinates given for the site (Cecchi 2012: 22).



**Figure 12: DAA Site ID 3618 'Whitemans Cutting' (lodged Artefacts/Scatter) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 3619 'Whitemans Quarry' (Lodged Artefacts/Scatter) – Figure 13**

This archaeological site was recorded by R. Stranger in 1983 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). It was reported to be an artefact scatter located on raised ground in a disused sand quarry. The assemblage comprised mainly quartz flakes, with some fossiliferous chert, mylonite and silcrete artefacts. Five utilised artefacts and three backed blades were collected at the site.

The location was recently investigated by Big Island Research (Wright & Harris 2012) who noted that the DAA listing contained "insufficient information". This appears to mean that the site has been assessed by the ACMC who have subsequently decided that the site recording conducted has been inadequate and has not provided enough detail regarding the site's location or characteristics.





**Figure 13: DAA Site ID 3619 'Whitemans Quarry' (lodged Artefacts/Scatter) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 20650 'Lennard Brook' (lodged Mythological place)**

Lennard Brook is located outside the Project area to the north of Muchea. It forms part of DAA site Complex 42 which comprises all the wetlands and watercourses between Bullsbrook and Moore River including DAA Site IDs 19183, 20749 and 21614–21620 (see Figure 22).

Lennard Brook was reported following a survey by AIC of proposed deviations to the extended DBNGP corridor in 2001. According to AIC, the Aboriginal consultants "asked that the water courses in the region be registered as *Waggyl* sites as that was the Dreamtime creature that made the creeks known as **Moonda Brook, Gingin Brook and Lennard Brook**" (Sauman et al 2001:25). They also noted that "... the major concerns are directed to the preservation of the wetlands that still accommodate many species of birds and **aquatic animals**" (Sauman et al 2001:30).

As stated above in our discussion of Chandala Brook (DAA Site ID 21620), MHA advised the ACMC that no specific mythological detail was provided with regard to any of the waterways or wetlands along or adjacent to the DBNGP corridor and



that in their view there is probably insufficient information to list these places on the Register of Aboriginal Sites (MHA 2001a: 80).

**DAA Site ID 21616 'Boonanarring Brook' (lodged Mythological place)**

Boonanarring Brook is located outside the Project area to the north of Gingin and also forms part of DAA site Complex 42 (see Figure 22).

**DAA Site ID 21617 'Wallerling Brook' (lodged Mythological place)**

Wallerling Brook is also located outside the Project area to the north of Gingin and also forms part of DAA site Complex 42 (see Figure 22).

**DAA Site ID 21618 'Nullilla Brook' (lodged Mythological place)**

Nullilla Brook is located outside the Project area to the north of Muchea and also forms part of DAA site Complex 42 (see Figure 22).

**DAA Site ID 21619 'Breera Brook' (lodged Mythological place)**

Breera Brook is also located outside the Project area to the north of Muchea and also forms part of DAA site Complex 42 (see Figure 22).

**DAA Site ID 21994 'Neaves Road Creek Field Site 1' (Lodged Artefacts/Scatter) – Figure 14**

This archaeological site was recorded by Archae-aus in 2000 during an Aboriginal heritage assessment of the Ellen Brook Constructed Wetland Project in Bullsbrook.

It was reported to be a sparse scatter of stone artefacts located on an exposed sandy ridge. The scatter consisted of eleven artefacts predominantly manufactured from quartz as well as silcrete, fossiliferous chert and dolerite. A piece of clear glass bottle was also noted in the recording.

Archae-aus noted the potential for subsurface archaeological material in the immediate vicinity (De Gand & Morse 2000).



**Figure 14: DAA Site ID 21994 'Neaves Road Creek Field Site 1' (Lodged Artefacts/Scatter) in relation to the NorthLink WA project area (Source: AHIS)**

### 5.1.3 Aboriginal Heritage Places in Stored/Archived Data

The places listed below in Table 3 and described over the following pages have been determined by the ACMC not to meet the definition of an Aboriginal site under Section 5 of the AHA and are therefore ***not places to which the Act applies***. However, as discussed above in the Introduction, some of these places/topographical features may still have significance for Aboriginal people and could therefore have implications for development should they potentially be impacted.

**Table 3: Stored Data places overlapping Project area (not Aboriginal Sites for the purposes of the AHA)**

Site ID	Restricted	Site Name	Site Type	Additional Info
<b>3178</b>	No	Collier Road	Artefacts/Scatter	
<b>3552</b>	No	Marshall/Della Roads	Artefacts/Scatter	
<b>3748</b>	No	Nyibra Swamp		
<b>3749</b>	No	Bayswater Camp		Camp
<b>4039</b>	No	Broun Avenue	Artefacts/Scatter	
<b>4099</b>	No	BEECHBORO ROAD	Artefacts/Scatter	
<b>18735</b>	No	Beechboro Camping Area		Plant Resource, Camp
<b>19138</b>		Wetlands & Watercourses Moore River To Bullsbrook	Mythological	
<b>19183</b>		Red Gully Creek	Mythological	
<b>21392</b>	No	NOR/03 - Creek	Mythological	Meeting Place, Camp, Natural Feature, Water Source

#### DAA Site ID 3178 'Collier Road' (Artefacts/Scatter) – Figure 15

This heritage place was recorded by A. McConnell and S. Brown in 1976 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). The place was within a sandy grassed area east of a swamp. It was reported to be a sparse assemblage of quartz and mylonite pieces, with one glass side scraper. All visible artefacts were collected.

The location was investigated by Schwede (1983) who noted a few isolated quartz pieces. The pieces were considered to not constitute a site due to heavy disturbance caused by road building machinery and soil redistribution.

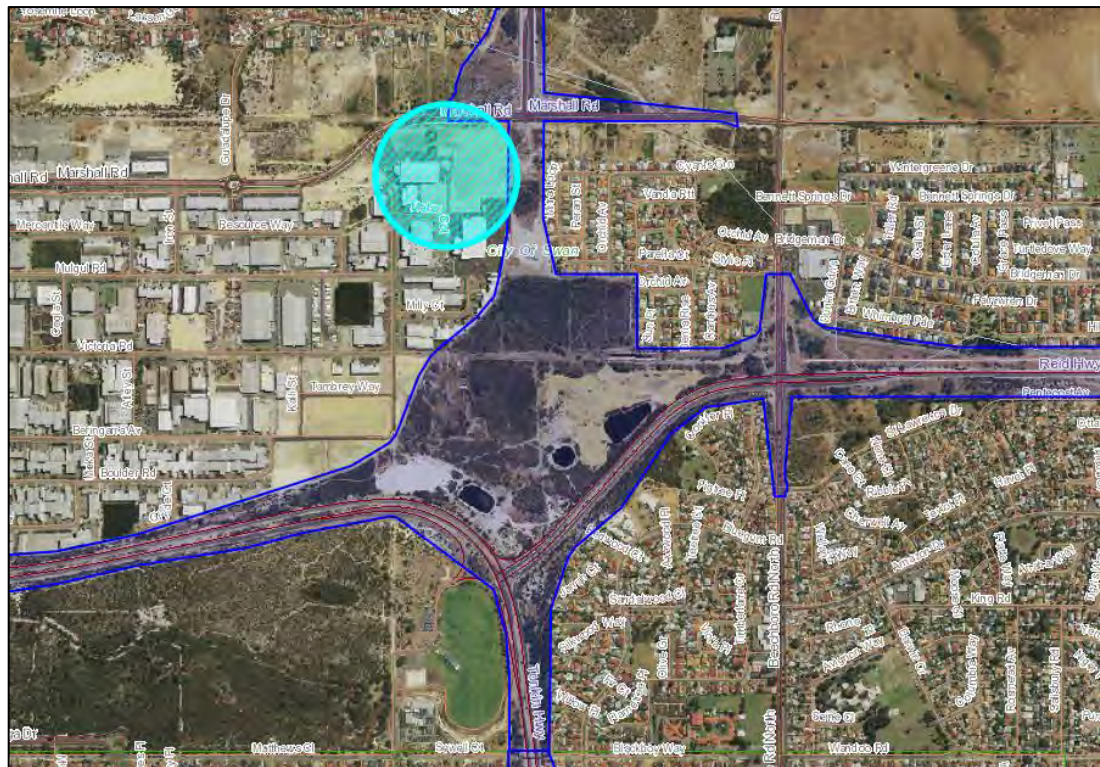


**Figure 15: DAA Site ID 3178 'Collier Road' (Artefacts/Scatter; Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

**DAA Site ID 3552 'Marshall/Della Roads' (Artefacts/Scatter) – Figure 16**

This archaeological site was recorded by Quartermaine in 1987. The site was noted as a small, low density scatter of quartz artefacts along the western margin of a swampy area. Previous disturbance was also noted in the recording.





**Figure 16: DAA Site ID 3552 'Marshall/Della Roads' (Artefacts/Scatter; Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 3748 'Nyibra Swamp' ([Hunting Place]) – Figure 17**

This ethnographic place was reported by O'Connor, Bodney & Little (1985) as a former hunting and fishing area:

*Nyibra Swamp was used as a turtle and gilgie fishing area by Aborigines from the Bassendean and Eden Hill areas from the 1920s until recent years. No evidence of mythological association was collected, although its position vis-à-vis Bennett Brook and some Aboriginal evidence suggests that ancient pre-contact usage occurred. Due to extensive earthmoving and drainage projects in the area, it is virtually impossible to establish the original dimensions of the swamp (O'Connor, Bodney & Little 1985: 70).*

They reported that the site is "bounded on the North by Broadway, on the South by Collier Road, on the East [crossed out, and replaced with "west"] by Grey Street and on the West [crossed out and replaced with "east"] by Troy Street. Its approximate dimensions are 800 metres by 400 metres. The swamp has been drained into a small lake system, but scattered Melaleuca and Leptospermum growth still evidences its former size" (O'Connor, Bodney & Little 1985: 70).

Due to previous disturbance and the level of destruction, the site was considered to be beyond management:

*Extensive drainage and earthmoving projects have been carried out recently in the area of this Aboriginal site. The time for protection or*



*management programmes has therefore passed; a matter of regret for two reasons: firstly, Nyibra Swamp is an area of significance to living Aborigines and secondly, it is likely that a rich source of archaeological material has been destroyed* (O'Connor, Bodney & Little 1985: 138-39).



**Figure 17: DAA Site ID 3748 'Nyibra Swamp' (Hunting Place; Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 3749 'Bayswater Camp' ([Camp]) – Figure 18**

This ethnographic place was also reported by O'Connor, Bodney & Little (1985). The informants were Corrie Bodney and Mrs Lawrence and the site was described as a "war time camp (i.e. 1939-45)":

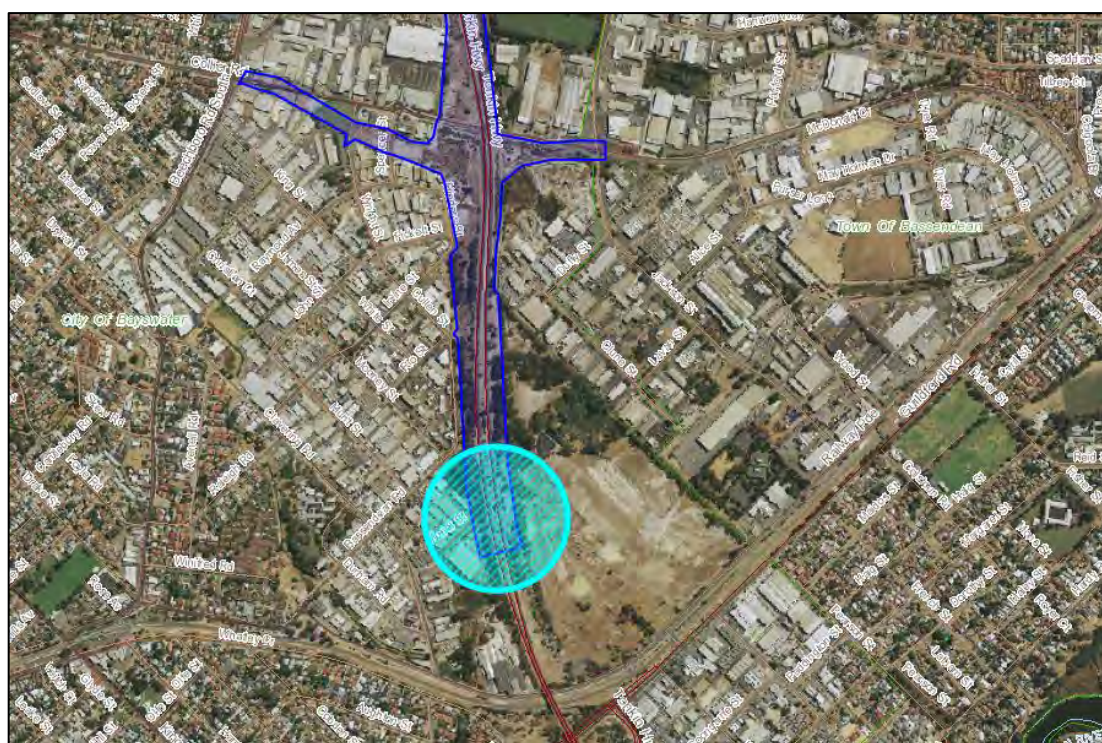
*Among others, Henry Williams and Johnny Williams, who worked for Wesfarmers Fertiliser Company during this period lived there. It was difficult to locate people with good knowledge of the area, but it does not appear to have been used as a camp since the 1940s* (O'Connor, Bodney & Little 1985: 71).

They reported that the site is now an industrial area and that it was not possible to gain access to the original location of the site. **However,** "It was located immediately to the North-West of the Cresco Fertiliser factory on Railway Parade and between Mooney Street and Clune Street. It appears that workshops and other industrial facilities **have been built on the site**" (O'Connor, Bodney & Little 1985: 71).



This camp was also reported by Baines (1984) during her ethnographic research in relation to the Natural Gas Laterals in the Perth metropolitan area. Baines reported "an area in Bayswater between Railway Parade and Mooney Street" as one of three areas of significance traversed by the pipeline (the others being "the Bennett Brook area" and "Bardon Park/foreshore area" (Baines 1984:1). She reports:

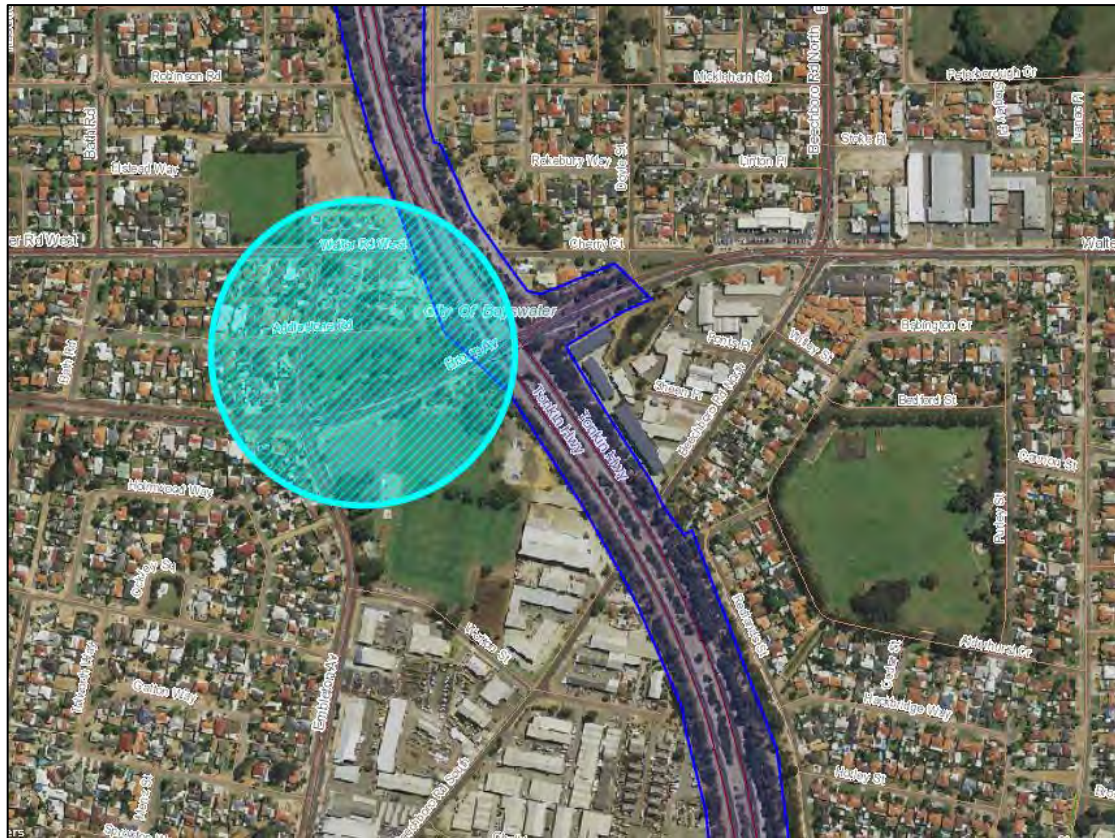
*The area between Railway Parade and in the vicinity of Mooney Street was identified as the "Bayswater camping ground" which was used by Aboriginal people certainly in the nineteen forties and most probably before this. **The major concern expressed about the route of the pipeline in this area was whether it would affect the flow of the streams** which Aboriginal people used to obtain their water from.... It should be noted that the wakal (giant snake) is not mentioned specifically with regard to this area, although it is implied from the way the water is talked about (Baines 1984:2; our emphasis).*



**Figure 18: DAA Site ID 3749 'Bayswater Camp' (Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 4039 'Broun Avenue' (Artefacts/Scatter) – Figure 19**

This archaeological site was recorded by A. McConnell and B. Dobson in 1976 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). The site was located east of the junction of Broun and Embleton Avenues in Embleton. The scatter was comprised entirely of quartz, with one piece of ochre. All visible artefacts were collected.



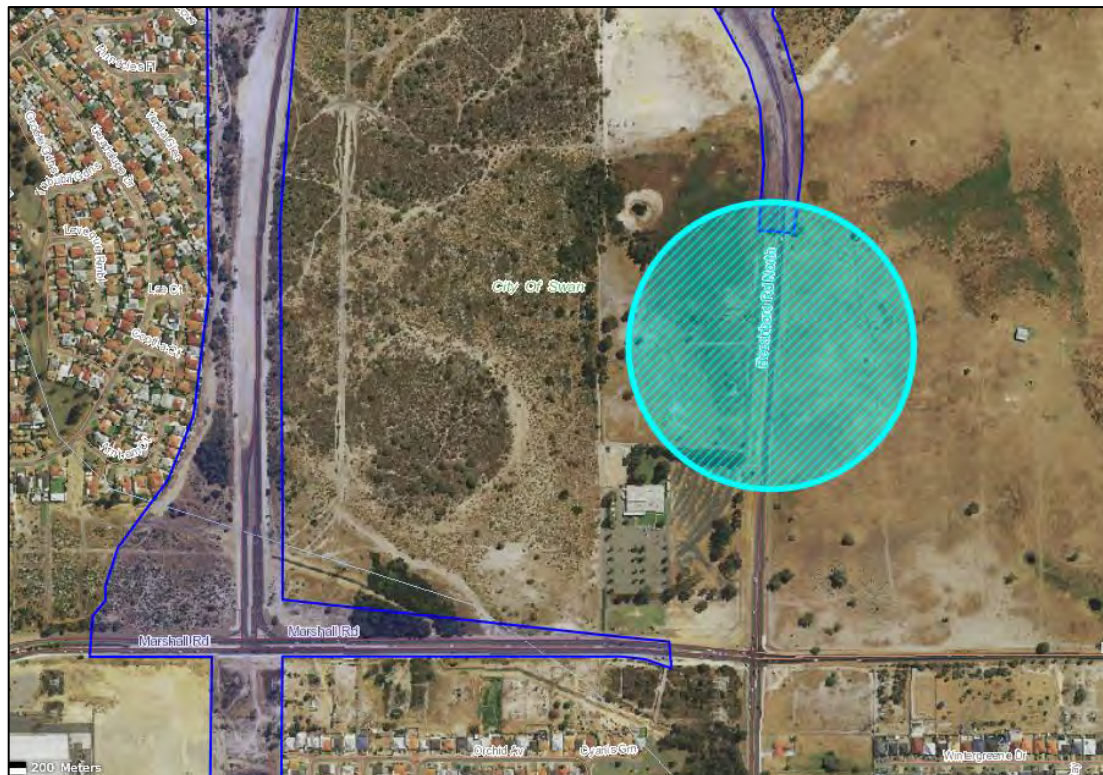
**Figure 19: DAA Site ID 4039 'Broun Avenue' (Artefacts/Scatter; Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 4099 'BEECHBORO ROAD' (Artefacts/Scatter) – Figure 20**

This archaeological site was recorded by R. Stranger in 1974 as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). It was reported to be a small and sparse artefact scatter within bare sand. The scatter largely comprised quartz and fossiliferous chert flakes. Two utilised flakes were also recorded.

The location was recently investigated by Big Island Research (Wright and Harris 2012) who noted that no archaeological material was identified, however, ground surface visibility was extremely low (<5%) and artefacts may have been covered by sands and dense vegetation.





**Figure 20: DAA Site ID 4099 'BEECHBORO ROAD' (Artefacts/Scatter; Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

### **DAA Site ID 18735 'Beechboro Camping Area' ([Plant Resource, Camp]) – Figure 21**

This ethnographic place was reported by O'Connor following consultations with members of the Bodney family in relation to proposed roadworks between Marshall Road and the Reid Highway/Tonkin Highway intersection in 2001. The Aboriginal consultants reportedly gave their "permission" for the project to proceed subject to the avoidance of artefact scatters, and in addition,

*They also wish to ensure that the swamp area at the junction of Marshall Road and Beechboro Road (South West corner) is not damaged, as there are medicinal plants used by the Nyungar people growing there. Also there were camps used by the ancestors of the Ballaruk Didjarruk people about 150 metres along the track that became known as an extension of Victoria Road. These were to the west of Beechboro Road" (O'Connor 2001:8).*

Previously, O'Connor reported that:

*An Aboriginal camp was located in the nineteen-forties and nineteen-fifties in the scrub some four-hundred metres (400 m) west of the present Beechboro Road) Victoria Road junction.... No trace of this camp remains today. The Aboriginal people consulted in the course of this survey, including the last surviving members of the family which actually camped there, were satisfied that it was merely an occasional camp and could not be seen as an area of significance on the grounds of sentimental or other associates [sic]." (O'Connor & Quartermaine 1987:3).*

Though not contained in the site file for DAA Site ID 18735, the above report extract from 1987 is included and highlighted in the site file for DAA Site ID 20058 **'Temporary Camp'** (a registered site) which is mapped 75m to the west. If the camps referred to by O'Connor in 1987 and 2001 are in fact the same place (though different distances are given to the west of Beechboro Road – 150m (2001), 400m (1987)), it also seems likely that DAA Site ID 18735 **'Beechboro Camping Area'** and DAA Site ID 20058 are one and the same place.

It is also worth noting that the swamp area/plant resource the Bodney family wanted protected (O'Connor 2001:8) to the southwest of the junction between Marshall Road and Beechboro Road (which lies 600m to the north of the mapped location for DAA Site ID 18735) does not appear to be indicated on the AHIS as a place, though an archaeological site (DAA Site ID 3180) is shown in the vicinity of this location (Figure 21).



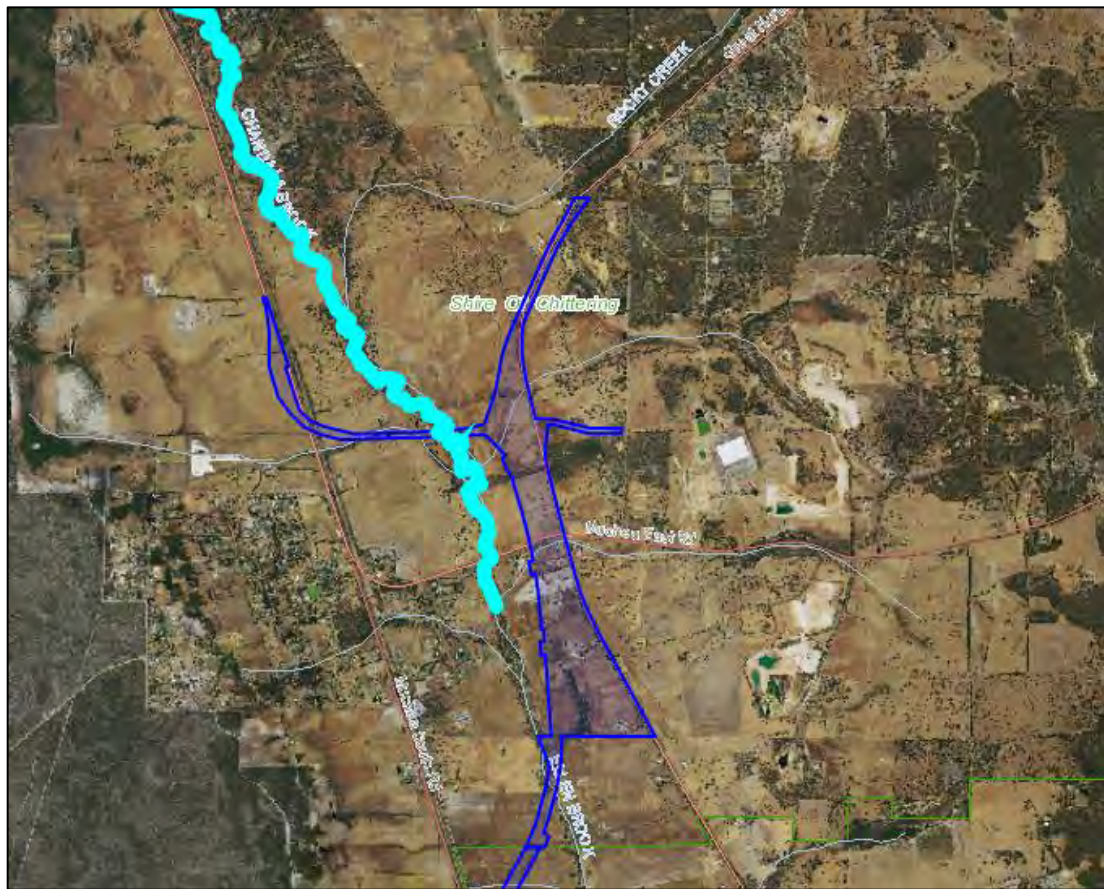
**Figure 21: DAA Site ID 18735 'Beechboro Camping Area' (Plant Resource, Camp; Not a Site) in relation to the NorthLink WA project area; note the swamp area to the north on the corner of Marshall Road and Beechboro Road (Source: AHIS)**



**DAA Site ID 19138 'Wetlands & Watercourses Moore River To Bullsbrook' (Mythological) – Figure 22**

DAA Site ID 19138 encompasses DAA Site IDs 3525, 19183, 20008, 20749 and 21614-21620 and would appear to correspond to DAA Complex 42.<sup>8</sup> As discussed above, MHA reported that:

*In the absence of "detailed ethnographic descriptions of the sacred, ritual or ceremonial aspects" of the reported 'sites' we would recommend that none of the (permanent and ephemeral) wetlands and watercourses between Moore River and Bullsbrook be assessed as Aboriginal sites under Section 5 of the Act (MHA 2001b: 35).*



**Figure 22: DAA Site ID 19138 'Wetlands & Watercourses Moore River To Bullsbrook' (Complex 42) in relation to the NorthLink WA project area (Source: AHIS)**

**DAA Site ID 19183 'Red Gully Creek' (Mythological)**

Red Gully Creek is located outside the Project area to the north of Gingin and also forms part of DAA site Complex 42 (see Figure 22).

<sup>8</sup> It is interesting to note that some of these watercourses are registered sites while others are not.

**DAA Site ID 21392 'NOR/03 - Creek' (Mythological) – Figure 23**

This Water Corporation drain was reported by AIC during the Noranda Regional Park heritage survey:

*At the time, the creek was a drain which the Elders indicated was originally a creek and did not object to it being converted into a living stream. The creek was identified by the Elders as being a site of significance but no further information was noted (AIC 2009: 23).*

No further details are given in the site file.



**Figure 23: DAA Site ID 21392 'NOR/03 - Creek' (Mythological; Not a Site) in relation to the NorthLink WA project area (Source: AHIS)**

## 5.2 Previous Aboriginal Heritage Assessments

The area traversed by the NorthLink WA Project has been subject to numerous archaeological and ethnographic surveys (see complete list in Appendix 2), many of which were small in scale and focused on discrete areas or sites for management. However, there are a number of large-scale investigations that have also taken place in or near the Project. This section summarises a selection of these previous Aboriginal heritage surveys.

### **Ethnographic Investigations Relating to Some Proposed Highway and Road Developments in the Perth Metropolitan Area (Brown 1983)**

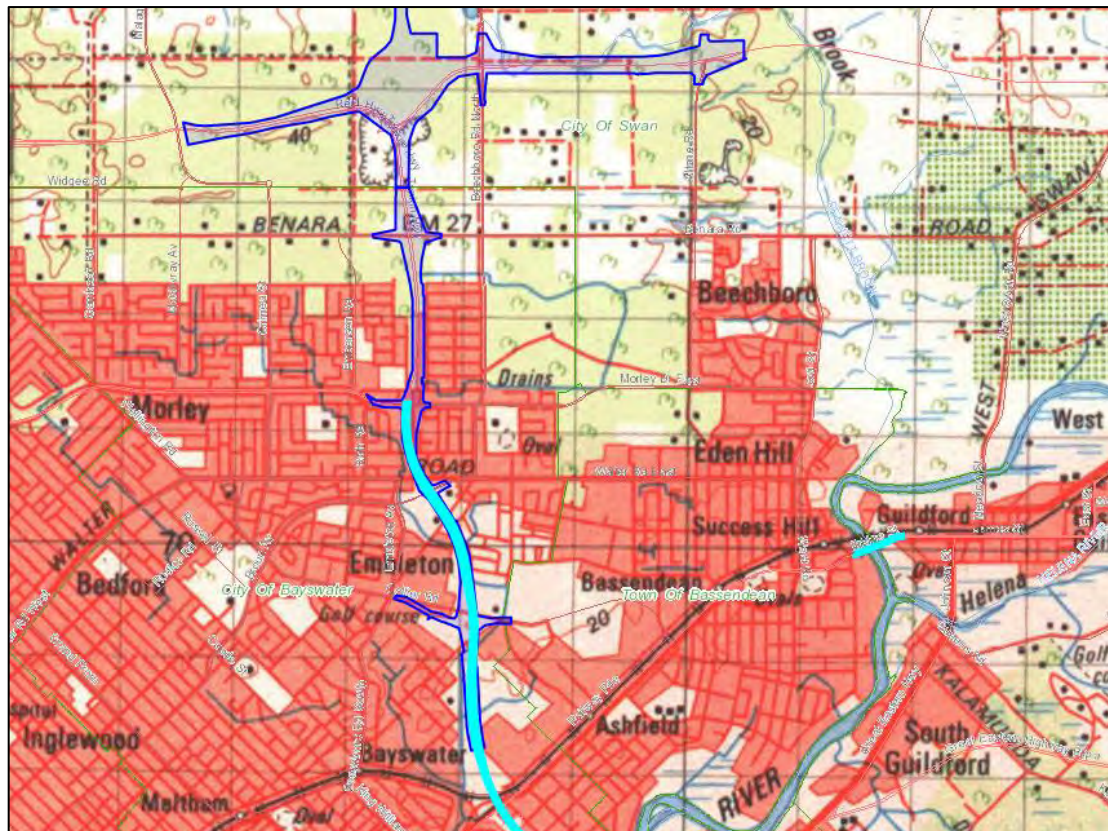
This research was undertaken to assist the WA Museum to determine whether proposed roadworks will affect ethnographic sites in the Perth metropolitan area. According to the AHIS, it included the southern half of the TGS (Figure 24).

The report identifies and describes a number of sites across the metropolitan area, all or most of which seem to be listed on the AHIS, including main camping areas. Brown reported:

*Since the time of first settlement of Perth Aborigines have been forced, or chosen, to camp on the fringes of the 'town' and suburbs. These fringe camps or locales' (McDonald 1976) have been/are located on either traditional camping sites ... or other vacant areas of land. Additionally specific areas (Reserves) have been set up at various times in the Perth metropolitan area for use by Aborigines (Brown 1983:19).*

Brown (1983:13), drawing on Robinson (1976), also refers to graves in the vicinity of Widgee Road. However, these reported burials were never located.





**Figure 24: Brown's (1983) survey area in relation to the current Project Area (Source: AHIS)**

### **Ethnographic Survey of the PDNH–Tonkin Link: Tonkin/Reid Hwy to Maralla Road, Ellenbrook (O'Connor 2012)**

In 2012, MRWA commissioned detailed environmental and heritage investigations to support alignment definition planning for the PDNH between Tonkin/Reid Hwy and Maralla Road, Ellenbrook. GHD, on behalf of MRWA, commissioned R. & E. O'Connor Pty Ltd to carry out the ethnographic survey and consultations (O'Connor 2012:1–2). The study area partially covers the southern portion of the current Project Area (see Figure 25).

A search of the Register of Aboriginal Sites identified two registered sites and one other heritage place intersecting with the study corridor. Of the registered sites, one of these (DAA Site ID 3426 'South Ballajura Camp' – Closed site) was found to be located outside the study area. O'Connor also obtained permission to access the site file for the other registered site, DAA Site ID 3692 'Bennett Brook In Toto'. As outlined above in our summary of DAA Site ID 3692, he reported:

*A small seasonal drainage system which feeds into the Bennett Brook headwaters in Whiteman Park, flows under the present Beechboro Road. It is unclear whether this is a man-made drain or natural feature. In any event, the waters which it carries after rain do flow into the Bennett Brook system... (O'Connor 2012, abstract)....*

*The tributary of Bennett Brook which, during heavy rains, drains under Beechboro Road in the brook's better defined headwaters in Whitemans [sic] Park, is part of the registered site and is within the survey area (O'Connor 2012:14).<sup>9</sup>*

The 'Other Heritage Place' referred to is DAA Site ID 3618 Whiteman's Cutting. As noted above, the site file states that these artefacts were collected. The corresponding archaeological survey carried out by Cecchi found that the area has been significantly altered by Hepburn Avenue and no archaeological material was located (Cecchi 2012:22).

The ethnographic survey and consultations, which took place in November and December 2012, involved representatives of the Whadjuk Native Title Claimants; next-of-kin of the deceased site informants [for DAA Site ID 3692 'Bennett Brook In Toto', i.e., Robert Bropho and Ken Colbung] and the surviving informant, Corrie Bodney; and others who have demonstrated knowledge including members of the Garlett, Headland/Corunna and Wilkes families, the Independent Aboriginal Environmental Group (IAEG) and the "Jacobs clan" (O'Connor 2012:17-18).

O'Connor reported that:

- Four of the groups consulted "gave unconditional approval for the proposed works";
- Two groups expressed concerns about potential pollution and contaminants entering the Bennett Brook catchment via the small seasonal creek which drains into Whiteman Park and requested strict controls and monitors; and
- Two of the groups did not approve the proposed works because of the dangers that they pose for the waters of the Gnangara Mound and also of Bennett Brook and the Swan River (O'Connor 2012:24-25).

O'Connor concluded that this section of the PDNH project would indirectly impact one Aboriginal site (DAA Site ID 3692 'Bennett Brook in Toto') on the basis of it crossing the small seasonal drain which connects with Bennett Brook in Whiteman Park with any pollution etc. entering the drain/Bennett Brook having the potential to damage the heritage values of the site. However, he stated that this could be avoided by implementing strict controls (O'Connor 2012:22).

It is worth noting that this tributary of Bennett Brook was not reported during O'Connor's earlier survey of the Pinjar Gas Turbine transmission line which follows a similar alignment in this area (O'Connor & Quartermaine 1988:7; see below).

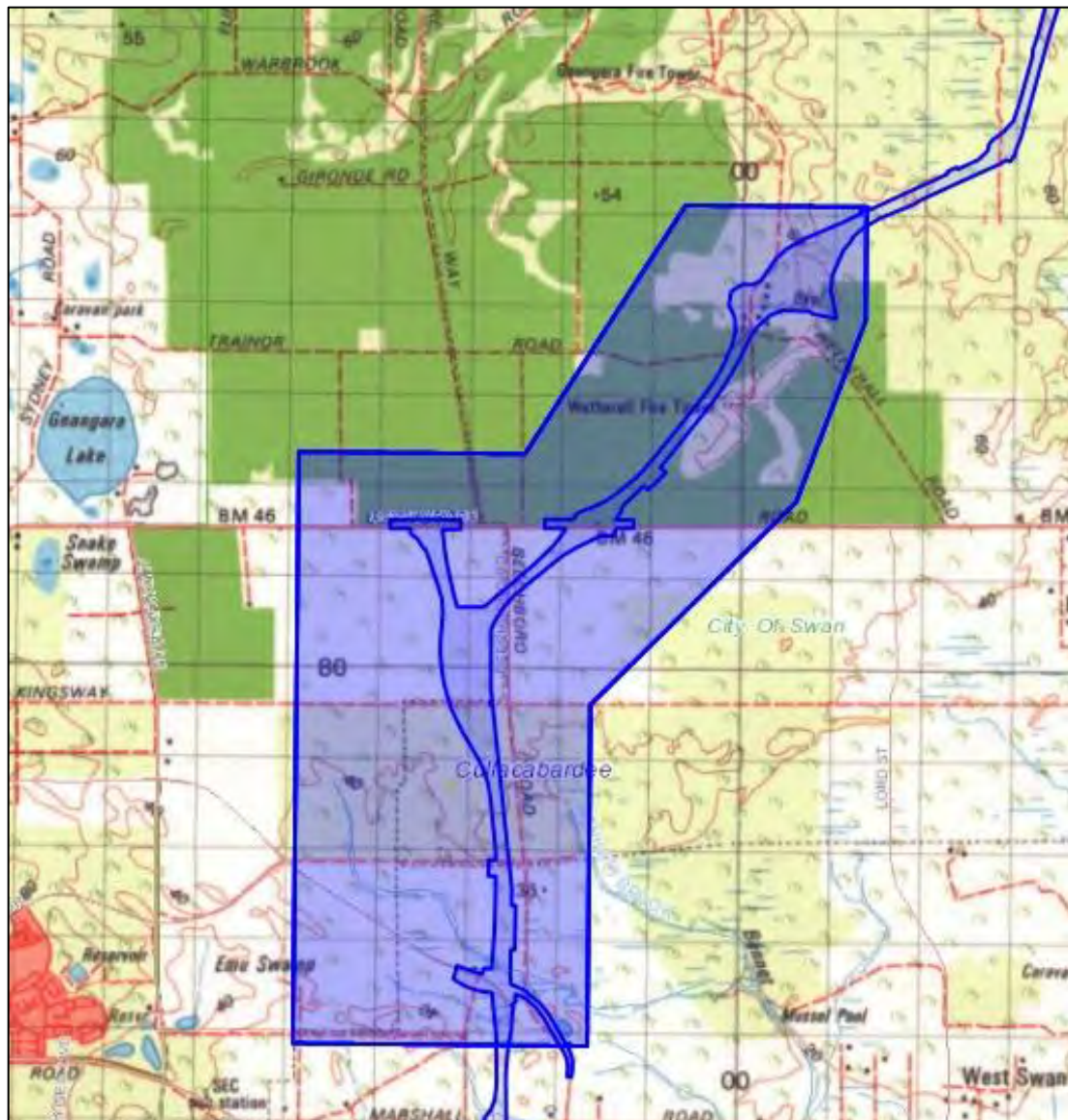
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<sup>9</sup> As we have pointed out above, this would appear to be at variance with his original report which stated that "this site extends approximately seven kilometres from the Bennett Brook/Swan River confluence to Mussel Pool in Whiteman Park, Whiteman" (O'Connor et al (1985) cited in O'Connor 2012:16).

### **Archaeological Survey of the PDNH–Tonkin Highway Link: Tonkin/Reid Hwy to Maralla Road, Ellenbrook (Cecchi 2012)**

This is the archaeological component of the heritage investigations undertaken by R. & E. O'Connor Pty Ltd on behalf GHD in relation to the PDNH between Tonkin/Reid Hwy and Maralla Road, Ellenbrook.

No archaeological sites or isolated artefacts were identified during the field survey. Cecchi postulated that "previous land use and overall moderate to high ground cover may have affected the results" (Cecchi 2012:5). Other reasons suggested for the lack of material included the lack of nearby water sources along parts of the route (Cecchi 2012:22).



**Figure 25: PDNH–Tonkin Highway Link Tonkin/Reid Hwy to Maralla Road study area in relation to the current Project Area (Source: AHIS)**



**Aboriginal Heritage Survey of the Proposed Perth–Darwin Highway, Lord Street Extensions, Ellenbrook: Gngangara Road to Maralla Road Section (MHA 1995)**

In May 1995, McDonald, Hales & Associates (MHA) was commissioned by the Shire of Swan to conduct an Aboriginal heritage survey of the proposed Perth–Darwin Highway, Gngangara Road to Maralla Road Section (Blockley & Lantzke 1995: 1). The study area covers a portion of the current Project Area (see Figure 26).

The research included an archaeological survey by Lantzke with the assistance of L. Collard which covered an area of 130m either side of a notional centreline; and an ethnographic survey conducted by Blockley and Walster covering an area of 250m either side of a notional centreline which involved seven key Aboriginal consultants.

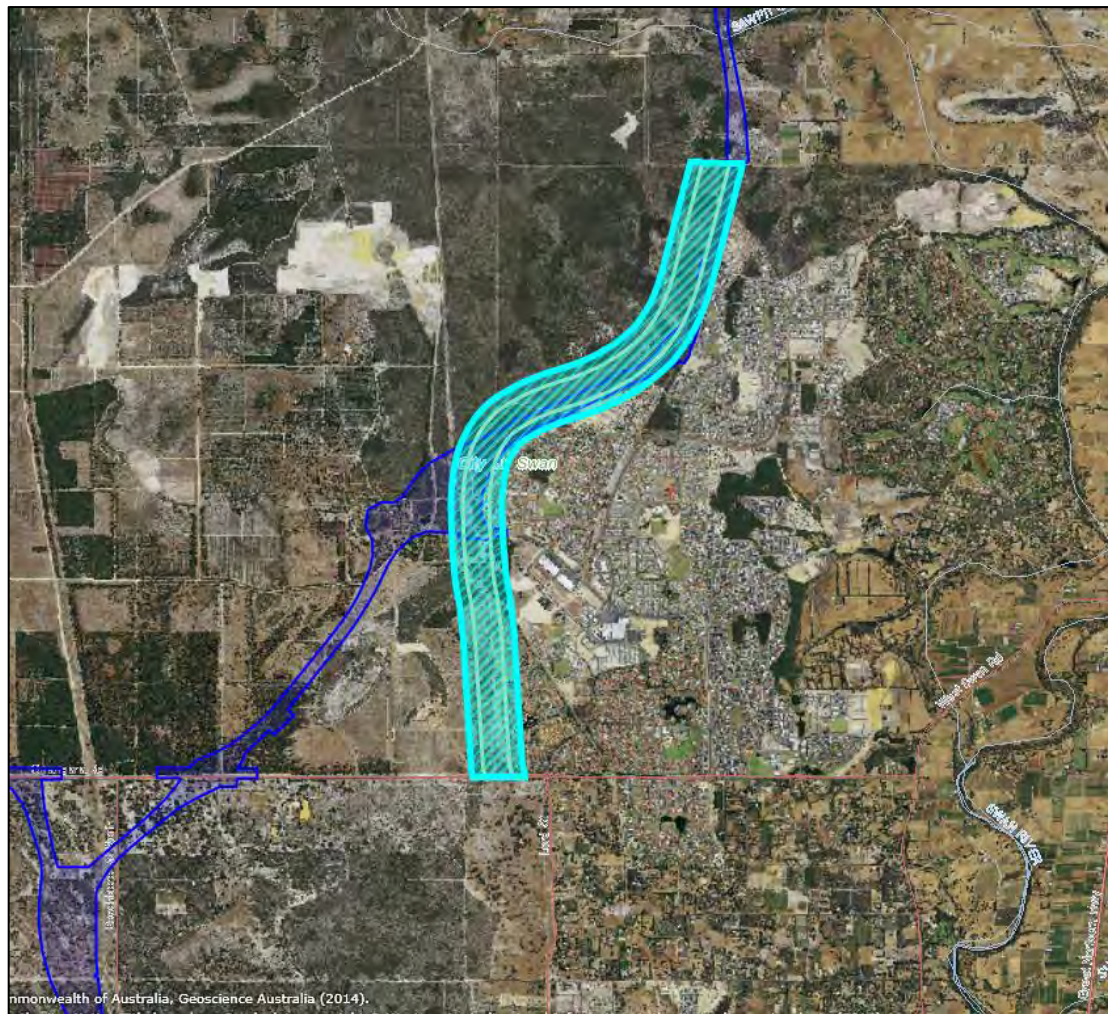
No archaeological sites had been previously recorded within the PDA and no artefacts were found during the survey. Similarly, no previously recorded ethnographic sites were located within the PDA and no new sites were reported.

Three ethnographic sites were reported outside the PDA to the south during the ethnographic survey of another section of the alignment (Blockley & Lantzke 1995: i; see also Lantzke & Walster 1995). These sites, which are now listed on the AHIS, are located outside of the current Project area.

With respect to watercourses and wetlands, Blockley & Lantzke (1995) explain:

*As discussed in the previous Report of an archaeological and ethnographic survey of the Reid Highway/Lord Street Extensions, Ellenbrook (Lantzke and Walster 1995) there are two schools of thought held by Nyungar people regarding the significance of wetlands. One school holds that all sources of freshwater are sacred because the Waugal created them, the other holds that only the specific places where the Waugal still lives are sacred (Blockley & Lantzke 1995: 23).*

The report concluded there are no ethnographic sites within the PDA. However, **“Owing to significance being attributed to wetland areas, all the Aboriginal Consultants involved in this survey have requested that a minimum of a 30 metre buffer zone be maintained around all wetland areas, to ensure that they and their surrounding vegetation are not disturbed or destroyed”** (Blockley & Lantzke 1995: 23–24).



**Figure 26: PDNH Lord Street Extensions Gngangara Road to Maralla Road Section (MHA 1995) study area in relation to the current Project Area (Source: AHIS)**

## Ethnographic Survey of the Perth–Darwin National Highway Maralla Road to MRS Boundary (O'Connor 2005)

In 2004, GHD commissioned an ethnographic field survey of the PDNH route between Maralla Road in Bullsbrook and the Perth MRS boundary in Muchea as part of an Alignment Definition Study (Figure 27). The ethnographic consultations were conducted by O'Connor between November 2004 and January 2005.

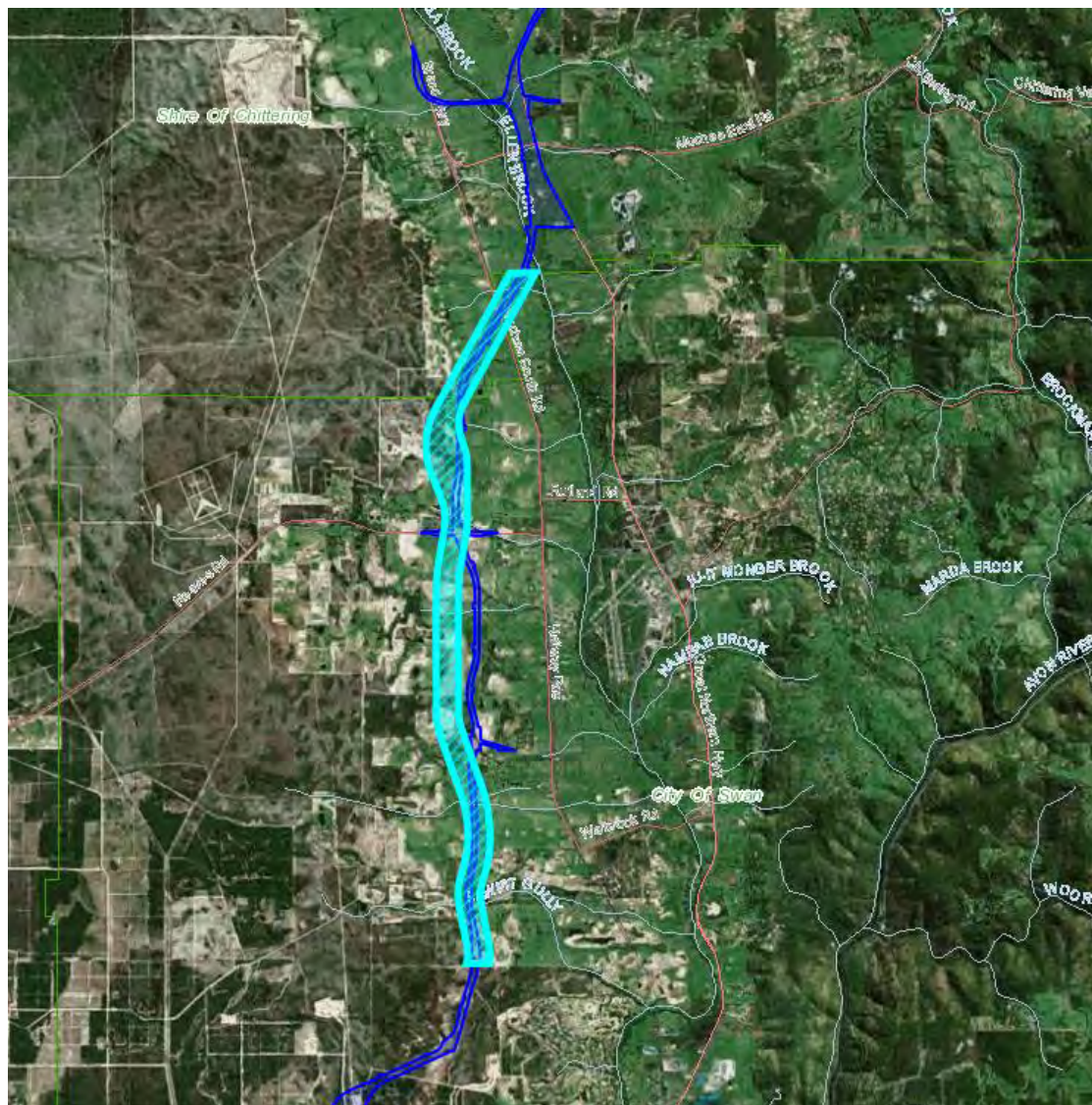
Three of the Aboriginal groups consulted gave their “approval” for the project to proceed, with one of these requesting monitors at all creek crossings. One of the groups declined to give approval due to concerns about impacts to the Gngangara Mound aquifer. However, GHD reportedly advised that the Gngangara Mound would not be impacted. Requests made by some of the Aboriginal consultants included monitoring at all creek crossings; monetary compensation per affected waterway; and further consultations (O’Connor 2005:15).



O'Connor advised that the PDNH was likely to cross a number of creeks and waterways that may be Aboriginal Sites and that S18 consent should be sought for the project.

## Archaeological Survey of the Perth–Darwin National Highway Maralla Road to MRS Boundary (Quartermaine 2004)

In 2004, Quartermaine Consultants were commissioned by GHD Pty Ltd on behalf of MRWA to undertake the archaeological investigation of a section of the proposed Perth–Darwin National Highway as part of the Alignment Definition Study. The study corridor was approximately 12.5km long and 500m wide (Figure 27). A desktop study established that no previously registered sites were located within the project corridor. A field survey, targeting accessible and undisturbed areas of the corridor, identified no new archaeological sites.



**Figure 27: Perth–Darwin National Highway Maralla Road to MRS Boundary study area in relation to the current Project Area (Source: AHIS)**

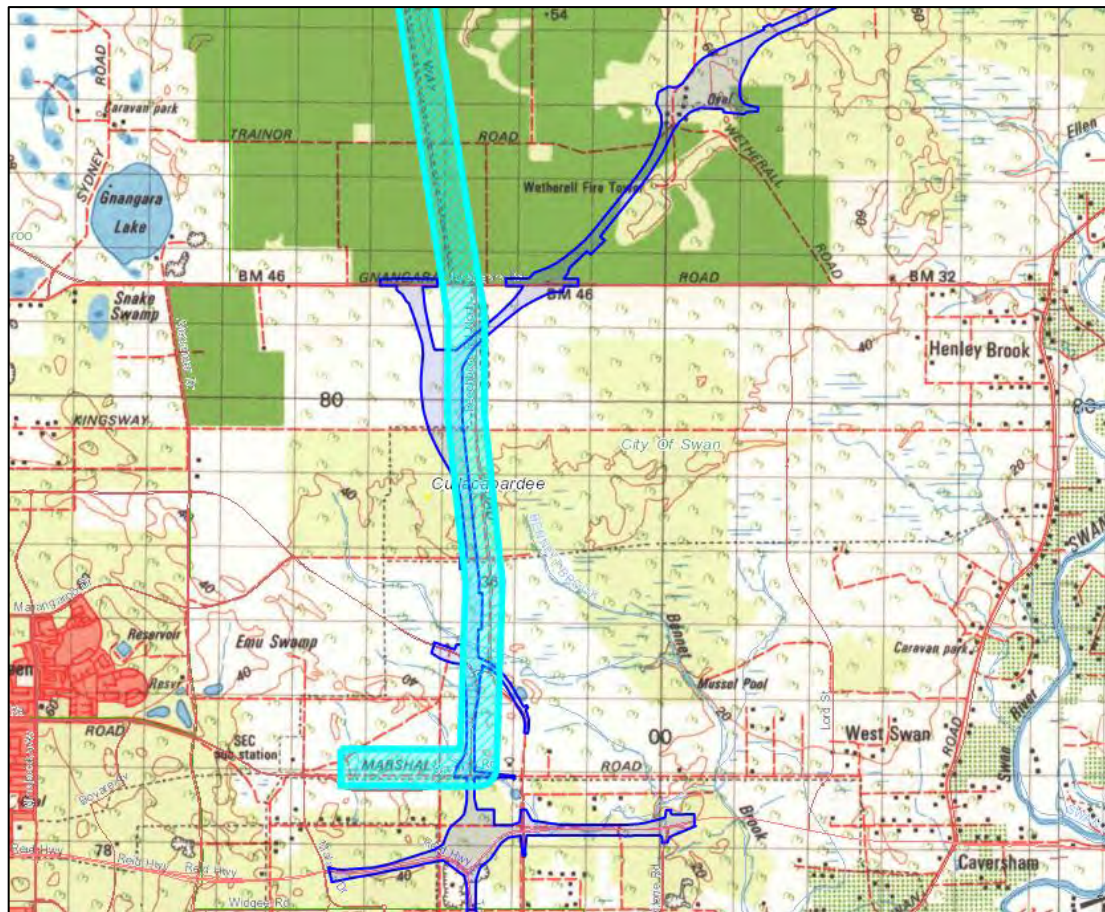
**Survey for Aboriginal Sites at the Proposed Pinjar Gas Turbine and Services Project (O'Connor & Quartermaine 1988)**

In January 1988, Rory O'Connor and Corrie Bodney carried out consultations in relation to the Pinjar Gas Turbine and Services Project for the State Energy Commission. The survey included a 500m corridor for a 132kV powerline linking the Metropolitan Northern Terminal to the proposed gas turbine site near the corner of Cypress and Perry Roads, Gnangara. The study area partially covers the southern portion of the current referral corridor (Figure 28).

The ethnographic component of the research involved consulting people from Muchea and the Perth metropolitan area. Referring to O'Connor et al 1985, the report states that no previously recorded sites of significance would be impacted (O'Connor & Quartermaine 1988:7). The Aboriginal people consulted in the course of the survey were reportedly "satisfied that the proposed development did not pose a threat to any areas of significance. The closest known sites are water sources, a considerable distance North of the proposed pipeline easement" (O'Connor & Quartermaine 1988:7). It is worth noting that the pipeline corridor appears to cross the same tributary of Bennett Brook (DAA Site ID 3692) that O'Connor has more recently reported to be part of that site (O'Connor 2012:14).

One newly identified archaeological site was identified inside the Gnangara Pine Plantation by Quartermaine during the archaeological survey of the transmission line corridor (Quartermaine 1990:6). This is now listed as DAA Site ID 3514 Payne Road (Stored Data) and lies to the west of the current Project area.



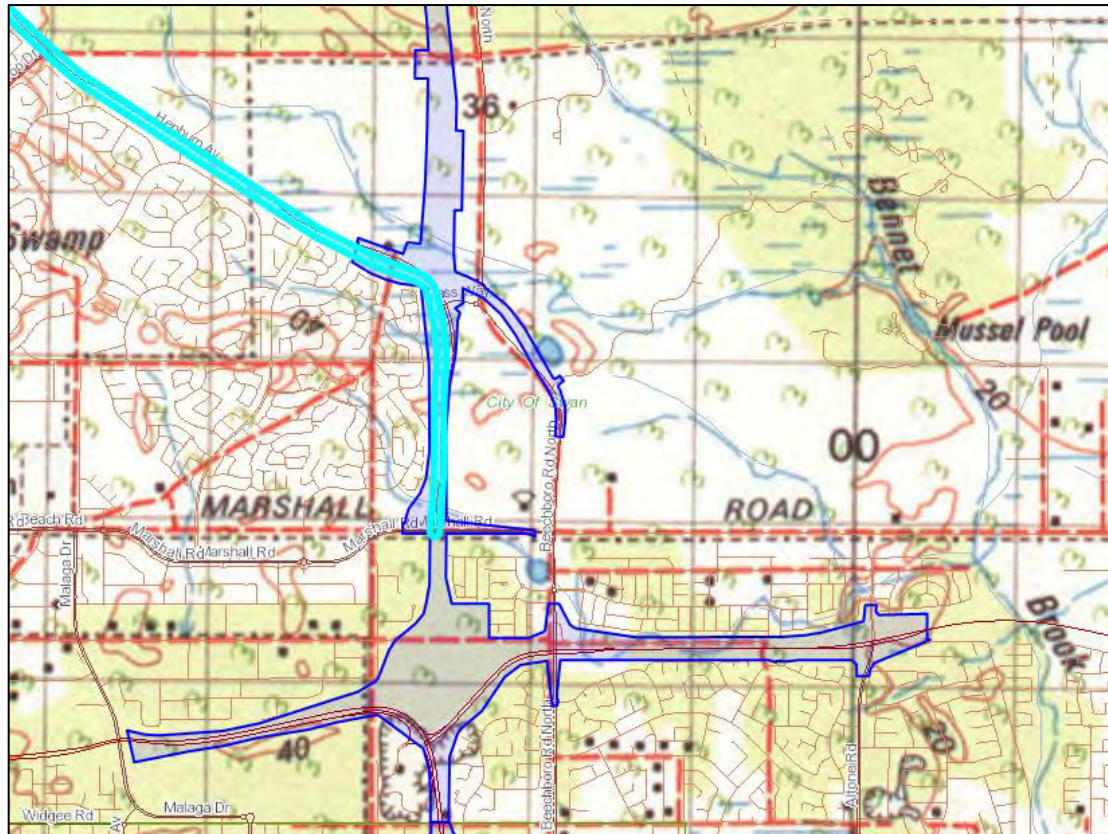


**Figure 28: Pinjar Gas Turbine and Services Project (O'Connor & Quartermaine 1988; Quartermaine 1990) study area in relation to the current Project Area (Source: AHIS)**

### **Consultations regarding the Proposed Extension to Hepburn Avenue (Hart 2000)**

In August 2000, Ted Hart was engaged by the City of Swan to consult members of the Combined Metropolitan Working Group and Rev. Jacobs' Group in relation to the extension of Hepburn Avenue from Alexander Drive to Marshall Road in Ballajura (Hart 2000: 1; Figure 29).

Hart reported that no areas of Aboriginal significance were previously reported in the vicinity of the proposed works (Hart 2000: 1). The Aboriginal consultants gave their "approval" for the project to proceed on the grounds that it would not impact any Aboriginal sites.



**Figure 29: Extension to Hepburn Avenue (Hart 2000) study area in relation to the current Project Area (Source: AHIS)**

### **Ethnographic Survey of Proposed Roadworks between Marshall Road and Reid Highway/Tonkin Highway Junction (O'Connor 2001)**

The City of Swan commissioned O'Connor to carry out an ethnographic survey of proposed roadworks between Marshall Road and Reid Highway/Tonkin Highway Junction in Ballajura. This work completed research carried out in August 2000 at which time the Hepburn Avenue extension between Alexander Drive and Marshall Road was considered (O'Connor 2001:1; Figure 35).

The survey involved representatives from the Bibbulmun, Ballaruk, IAEG, and Naramaya Aboriginal Corporation (Jacobs Clan). The Aboriginal consultants gave their "approval" for the project to proceed based on the understanding that no wetlands would be impacted (O'Connor 2001:9, 11).

One former camping area [DAA Site ID 18735 Beachboro Camping Area] was reported to be located close to the PDA to the west of Beechboro Road (O'Connor 2001:9). The Ballaruk group "gave its permission" for the project to proceed subject to avoidance of artefact scatters and:

*They also wish to ensure that the swamp area at the junction of Marshall Road and Beechboro Road (South West corner) is not damaged, as there*



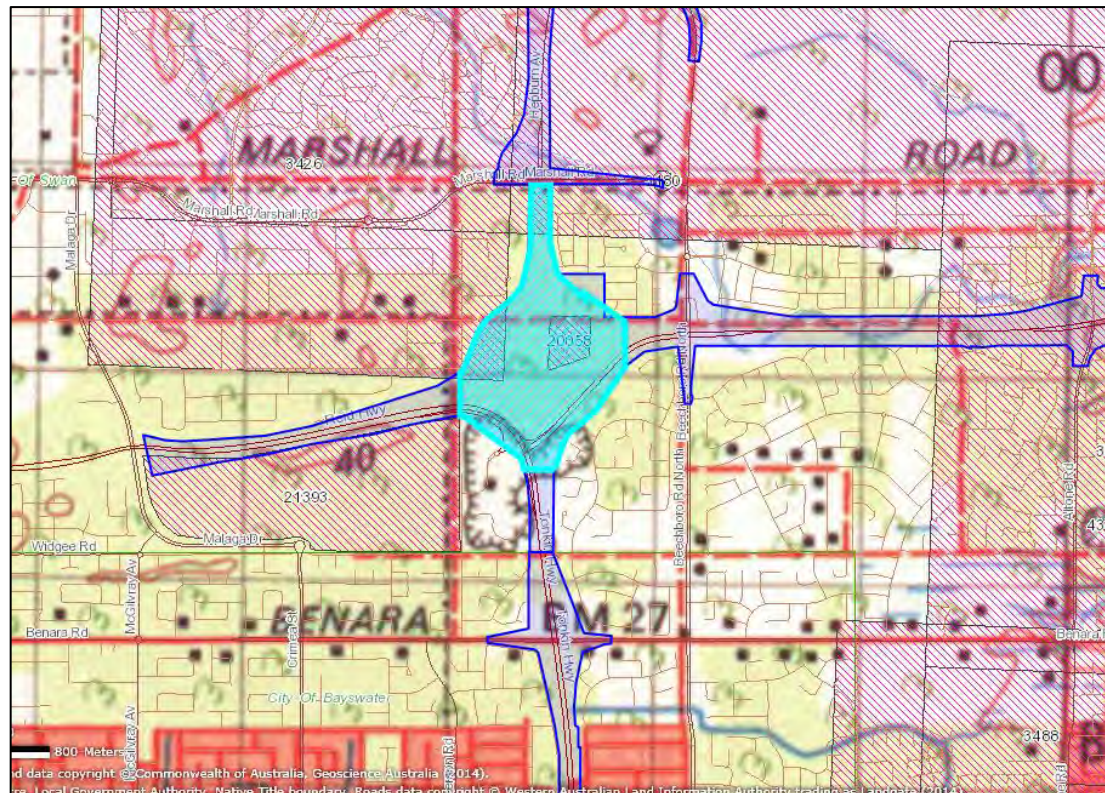
*are medicinal plants used by the Nyungar people growing there* [the swamp area described here, which is not listed on the AHIS, appears to be outside the referral corridor]. *Also there were camps used by the ancestors of the Ballaruk Didjarruk people about 150 metres along the track that became known as an extension of Victoria Road. These were to the west of Beechboro Road* (O'Connor 2001:8) [see above discussion on DAA Site ID 18735 Beachboro Camping Area].

O'Connor reported that "no physical signs of the former camps has remained to the present day." He reports that the camps were used occasionally by people travelling from Guildford/Bennett Brook to the Gnangara area on hunting trips which also took in parts of the present Whiteman Park and were used by members of the previous generation of Mippy and Worrell families. He reported that they were probably last used in the 1960s, and that shallow wells were dug near the camps to access water (O'Connor 2001:9–10; see above discussion on DAA Site ID 20058).

### **Consultation with the Combined Metropolitan Working Group regarding Proposed Roadworks at Marshall Road (Hart 2001)**

In August 2000, Ted Hart was engaged by the City of Swan to consult members of the Combined Metropolitan Working Group in relation to proposed roadworks between the Marshall Road and Tonkin Hwy/Reid Hwy intersection in Ballajura and Malaga (Hart 2001:1). This is the same project surveyed by O'Connor with the other groups as described above.

The Aboriginal consultants gave their "conditional approval" for the project to proceed (Hart 2000:2). Conditions reported included all lakes/waterways remaining in a natural state and revegetation; monitoring; and monetary compensation for each group (Hart 2001:2–3; see above discussion on DAA Site ID 20058).



**Figure 30: Roadworks between Marshall Road and Reid Highway/Tonkin Highway Junction (O'Connor 2001; Hart 2001) study area in relation to the current Project Area and registered Aboriginal Sites (Source: AHIS)**

### **Dampier–Bunbury Natural Gas Pipeline Duplication Survey (MHA 1999)**

In November 1999, MHA conducted an ethnographic survey for the DBNGP duplication (Mucnea section). Because of the different areas each group claimed as land it could speak for, the easement sections inspected varied in length between Moore River and the Bullsbrook terminus and Coonabidgee Rd and the Bullsbrook terminus.

Ethnographic sites reported were a series of waterholes along the Moore River which were said to be used for fishing and collecting fresh water crayfish. The second was a stand of Red Gums near Honey Suckle Rd. However, representatives of the Combined Metropolitan Native Title Claim were concerned about all wetlands and waterways. They felt that all water sources are sacred because they are associated with the Waugal. At no stage, however, did either of these groups recommend deviations or changes to the PPC. The Airfield Road wetlands, they felt, would best be avoided. It was explained by these groups that all land disturbance was unsettling because they felt that the earth itself is sacred to the Nyungars. However, one of the groups indicated that waterways had

traditionally been sources of food and water to local groups and thus possessed intrinsic importance but not possessed of a sacred/mythological character.

### **Dampier to Bunbury Natural Gas Pipeline Corridor – Management Report (Hames Consultancy Group, 2003)**

In 2002, the Department of Industry and Resources commissioned Hames Consultancy Group (HCG) to undertake an Aboriginal heritage survey of a 30m wide corridor extending approximately 70km from near the intersection of Della and Asher Roads in Bullsbrook to near the intersection of Thomas and Abercrombie Roads in Postans. The purpose of the survey was to ensure that future works can proceed within the existing DBNGP corridor without impacting Aboriginal sites (Hames 2003: 3). **HCG subsequently commissioned Rory O'Connor and AIC to undertake the ethnographic components of the survey and Donald Lantzke completed the archaeological survey.**

The study corridor intersected the current Project Area at Wetherall Road. No new ethnographic sites were identified during the survey and the groups were reportedly satisfied that no existing sites would be disturbed in an “unacceptable way” (Hames 2003: 7, 10). However, the Elders reportedly expressed their preference for there to be no disturbance to the bed or banks of any waterways, **though they apparently took a “pragmatic stance” where rivers were too wide to cross and agreed that any new pipeline could be laid directly on the riverbed** (Hames 2003: 7).

The desktop study identified 19 archaeological sites within the proposed corridor, all artefact scatters. Lantzke undertook the archaeological survey over the course of eight days between July 2002 and January 2003. In consideration of the high levels of disturbance and development around the pipeline corridor the archaeological survey targeted previously recorded sites and areas of minimal disturbance.

No new sites were identified as a result of the survey. Four previously recorded sites could not be located and 12 sites were found to be well outside the corridor. One site (DAA Site **ID 3888 'Munday Swamp/Poison Gully East'**) situated at Munday Swamp in the airport buffer zone was located within the corridor and likely to be disturbed by the pipeline construction. It was recommended that the proponent obtain consent under Section 18 of the *Aboriginal Heritage Act 1972* prior to disturbing the site and that Aboriginal monitors be employed during excavation and consulted regarding relocation of any artefacts.

**Anthropological Survey of Ellenbrook, Upper Swan (MHA 1989)**

McDonald Hales and Associates were commissioned by the Water Authority of Western Australia to conduct an anthropological survey of Ellen Brook and its immediate environs. The Water Authority originally proposed to lay a water pipe beneath the Brook to connect a newly-established estate (The Vines) with the mains water supply (MHA 1989:1).

Available information indicated that Ellen Brook holds significance for Aboriginal people because of its mythological and ecological dimensions. However, at the time, Ellen Brook was not listed with the Aboriginal Sites Department as a registered site. However, there was some difficulty in obtaining precise details about the reasons why the Brook is significant which the authors attributed to the secret/sacred nature of some of the material and because of the shortage of time. Aboriginal informants, while confirming independently the significance of the Brook, were reluctant to disclose specific details (MHA 1989:1–2).

As discussed above, MHA reported that Ellen Brook appears to be significant for Aboriginal people because of its relationship with turtles. This relationship was spoken about in two distinct but interrelated ways. First, the turtles are mythological creatures and the Brook plays a mythological role as their Dreaming Track. The Brook is also part of the greater system of waterways associated with the Rainbow Serpent or *Wagyl* [*Waugal*]. Second, the turtles are described in a secular manner as actual living creatures which use the Brook to swim down to the Swan River (MHA 1989:2).

**Ethnographic Investigation of a Road Bridge at Ellen Brook, Upper Swan (McDonald 1989)**

This survey related to a proposed bridge across Ellen Brook in the vicinity of Ellen Brook Avenue on The Vines Estate (McDonald 1989:3). The research found that significant members of the local Nyungar community would be opposed to the construction of a bridge which would entail interference with the water flow or the bed and banks of the brook (McDonald 1989:3).

As mentioned above, Ellen Brook (Gynning) is a mythological site associated with the spiritual 'turtle'. However, not all of those interviewed considered Ellen Brook to be mythologically significant (McDonald 1989:7).

The Brook is also of significance because of ecological factors. In regard to this latter factor, many Nyungars with associations in the Swan Valley are concerned about the protection of what Baines (1988) refers to as the Nyungar landscape. That is, they are concerned about the gradual destruction of the watercourses,



the natural bush and the native fauna in the area. Such a concern with the local landscape was also an issue in discussions regarding the development of Stratton Estate in Wexcombe (MHA 1989b) (McDonald 1989:7).

### **Summary of Aboriginal Heritage Research, Ellenbrook Estate (McDonald, Smith & Murphy 1991)**

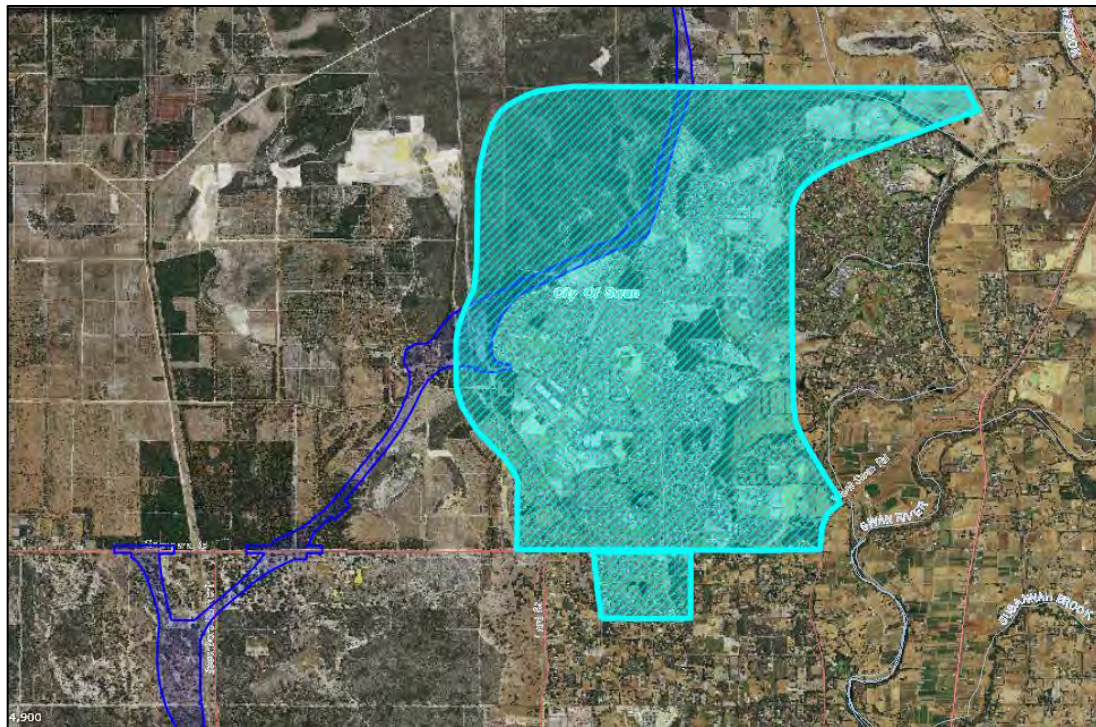
This report summarises the archaeological and ethnographic research for the Ellenbrook Estate in the Upper Swan area north of Gnangara Road. The current Project area travels through the study area (see Figure 31). The investigations involved desktop research (1989), archaeological and ethnographic field surveys (1989) and supplementary fieldwork (1991). The report includes some discussion on the known archaeological sites in the area and the results of surveys. No new sites were found and the area was reported to be highly disturbed.

Five Aboriginal consultants were interviewed during the first round of consultations, and six were interviewed during the second round. MHA had also undertaken research in the surrounding area including the water pipeline over Ellen Brook (McDonald & Moore 1989; Veth 1989); the proposed bridge over Ellen Brook (McDonald 1989); the proposed developments at the Mews, Sanwa Vines Resort (McDonald & Murphy 1991b); and the Water Authority mains pipeline along Great Northern Highway (Smith & McDonald 1989b; see also McDonald 1976 and Robinson 1976) (McDonald, Smith & Murphy 1991:6-7).

The Aboriginal consultants requested that endeavours be made to conserve the swamp/wetlands in the development area, and reported that the swamps had **been used for 'turtle' hunting** as late as the 1950s. The area was also described as containing dinner camps; that is, Nyungars would have gone to the area to hunt and the catch would have been cooked and eaten on the spot. The hunters would then have returned to their main camps or homes in adjacent areas. This would imply that there was no permanent camping in the areas surrounding the swamps. One informant reported that southern portions of the Study Area might have been used by Nyungars for contract wood cutting in the 1930s and 1940s. As a result, he thought there would have been semi-permanent camps in the area (McDonald, Smith & Murphy 1991:10).

Further consultations took place in February 1991 with some additional informants. They also reported that to their knowledge there were no sites of ethnographic significance in the proposed development area (McDonald, Smith & Murphy 1991:11). Further consultative meetings were held as part of public participation in the planning process. Aboriginal people who participated raised a

number of issues including compensation for loss of traditional hunting grounds; conservation of wetlands; access to conservation areas for hunting and gathering; and employment opportunities (McDonald, Smith & Murphy 1991: 12).



**Figure 31: MHA's Ellenbrook study area in relation to the current Project Area (Source: AHIS)**

### **Ethnographic Survey of the Proposed PDNH: MRS Boundary to Calingiri Road (O'Connor 2005)**

GHD commissioned an ethnographic survey of the PDNH route between the MRS boundary in Muchea and the junction of Great Northern Hwy and Calingiri Road. The field surveys were carried out by O'Connor between November 2004 and January 2005 and covered a 500m corridor centred on the proposed alignment (O'Connor 2005:1–3). This corridor covers the northern portion of the current Project Area with some deviation in the vicinity of Bullsbrook (see Figure 32).

Although four of the Aboriginal groups consulted gave their "approval" for the project, some opposed due to concerns about impacts to the Gnangara Mound aquifer. However, GHD reportedly advised that the Gnangara Mound would not be impacted. Requests made by some of the Aboriginal consultants included monitoring at all creek crossings; monetary compensation per affected waterway; and further consultations (O'Connor 2005:15).

O'Connor advised that the PDNH crosses both Ellen Brook (DAA Site ID 3525) and the headwaters of Lennard Brook (DAA Site ID 3929) and that S18 consent would be required to disturb these sites (O'Connor 2005:15–16). He reports,

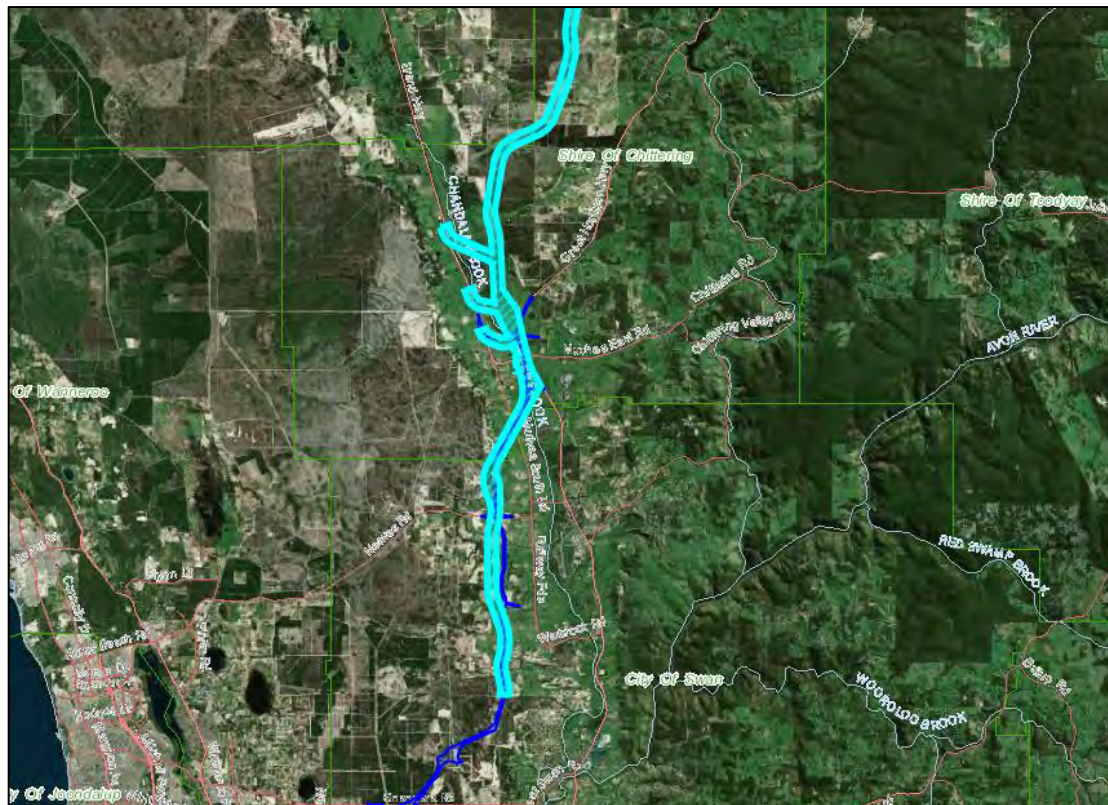
*... the Wilkes family ... have suggested that all tributaries of the main Ellen Brook and Lennard Brook systems are also part of the main creeks and therefore also included within the registered Aboriginal sites (O'Connor 2005: 16).*

O'Connor also advised that S18 consent should include all minor waterways due to the interconnectivity of the watercourses (O'Connor 2005:8).

### **Archaeological Survey of the Proposed PDNH: MRS Boundary to Calingiri Road (Quartermaine 2005)**

In 2004, Quartermaine Consultants were commissioned by GHD Pty Ltd, on behalf of MRWA, to undertake the corresponding archaeological investigation of the PDNH between the MRS boundary and the junction of Great Northern Hwy and Calingiri Road. The study corridor is situated between Bullsbrook and the Calingiri Road/Great Northern Highway intersection, approximately 62km long and 500m wide (Figure 32).

The desktop study established that no previously registered sites were located within the project corridor. A field survey, targeting accessible and undisturbed areas of the corridor, also identified no new archaeological sites.



**Figure 32: Section of the PDNH: MRS Boundary to Calingiri Road study area (O'Connor & Quartermaine 2005) in relation to the current Project Area (Source: AHIS)**

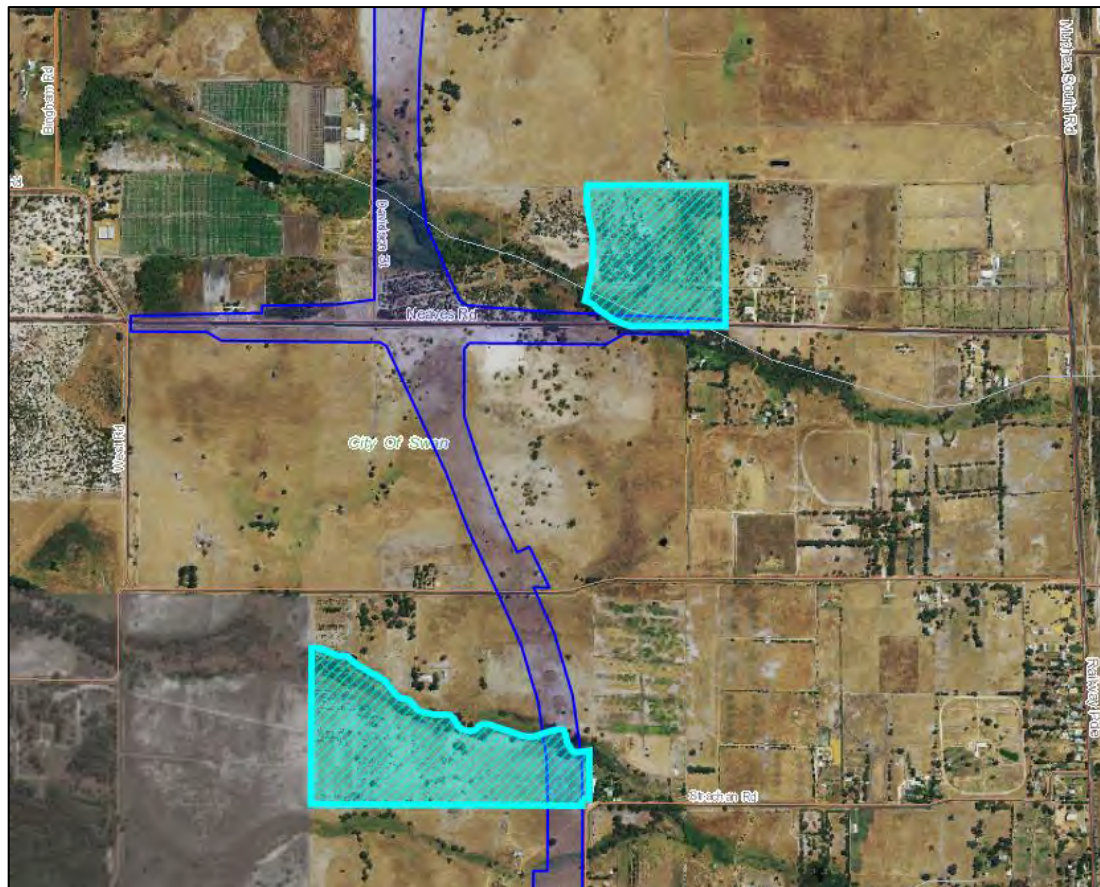
### **Aboriginal Heritage Assessment of the Ellen Brook Constructed Wetland Project, Bullsbrook (De Gand & Morse 2000)**

In July 2000, Archae-aus and De Gand Pty Ltd conducted an assessment of two proposed artificial wetlands within the Ellen Brook catchment at Bullsbrook. The proposed wetlands were designed to strip nutrients from surface streams before entering the Swan River. The surveyed locations were near Neaves Road (in the vicinity of Neaves Road Creek) and Strachan Road (along Bulls Brook itself) (de Gand & Morse 2000:1). The survey areas partially overlap with the current referral corridor (Figure 33).

During the ethnographic survey, which involved consultations with members of the Wilkes and Corunna families, the **Aboriginal consultants stated that "all wetlands have mythological and spiritual significance to them and that change and impact (including indirect impact such as pollution) to these waterways should be avoided if possible" (de Gand & Morse 2000:31).**

One archaeological site (NRC FS1) [DAA Site ID 21994; see above] was located in the Neaves Road Creek area (de Gand & Morse 2000: 35).





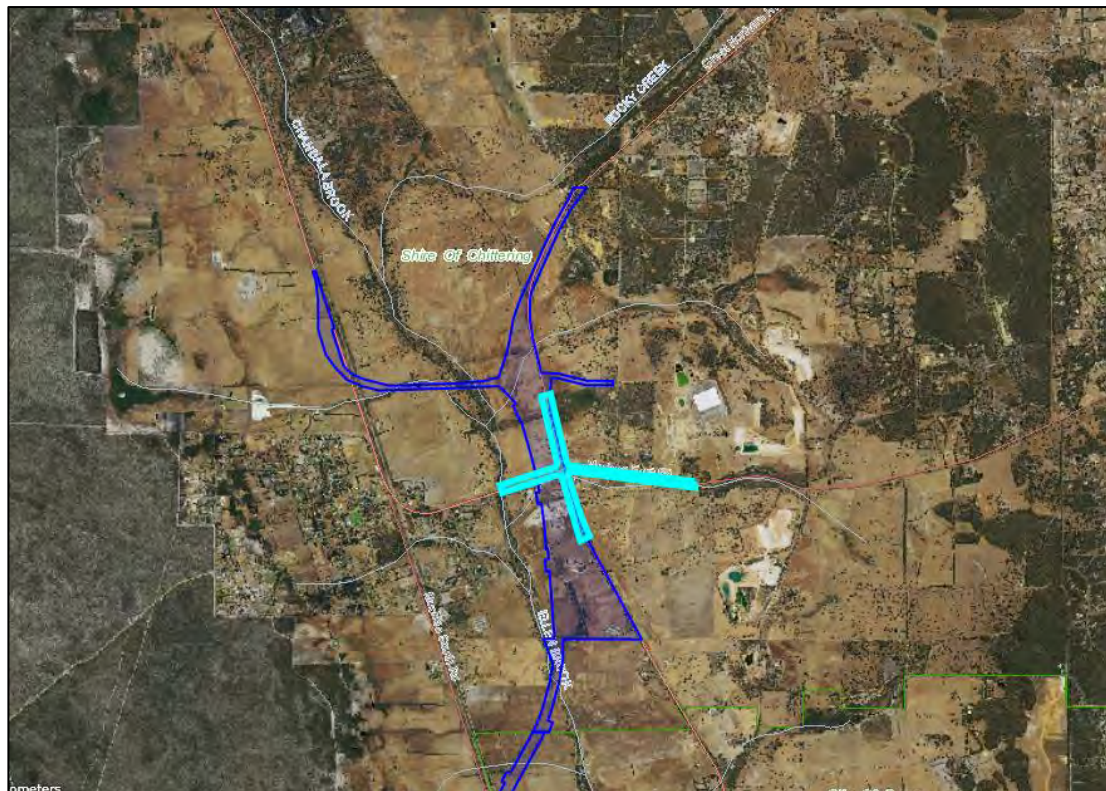
**Figure 33: Ellen Brook Constructed Wetland Project survey areas in relation to the current Project Area (Source: AHIS)**

### **Aboriginal Heritage Surveys and Section 18 Consultation regarding Proposed Road Upgrade Works near Muchea (Mattner, Chown & Bergin 2008)**

MRWA proposed to upgrade the intersection of Great Northern Hwy and Brand Hwy approximately 2km east of Muchea in the Shire of Chittering. Members of the Swan Valley and Swan Coastal Plain Native Title Holders Group (Bropho, Corunna, Garlett, Warrell and Wilkes families) were consulted on the 19th December 2007. Members of Colbung and Bodney families were consulted on the 20th December, and the Warrell family was consulted on the 22nd December. The survey area partially overlaps with the current referral corridor (Figure 34).

No ethnographic sites were reported in the project area. However, the research established that a minor drainage line which crosses the PDA was considered to be part of DAA Site ID 3525 Ellen Brook: Upper Swan. No concerns were expressed about impacts to the drainage line. However, some of the Aboriginal consultants objected to the project. The main requests were monitoring and avoidance of impacts to Ellen Brook.





**Figure 34: Proposed Road Upgrade Works near Muchea survey area in relation to the current Project Area (Source: AHIS)**

### **Ethnographic and Archaeological Survey for the Proposed Ellenbrook Sewerage Pressure Main Route to Malaga (Macintyre Dobson & Associates 1998)**

The Water Corporation commissioned archaeological and ethnographic surveys of the proposed Ellenbrook to Malaga sewerage pressure main from Alexander Drive in Malaga to the intersection of Lord Street and Gnangara Road, Ellenbrook. The alignment follows Marshall Road and crosses the current Project area.

The investigation involved desktop research and a physical inspection of the area. One previously recorded and registered site (an artefact scatter) was situated within the survey area, although physical inspection of the site showed that it had been disturbed by subsequent development and no archaeological material could be located. Physical survey of the route was conducted in a single day, targeting undisturbed areas and opportunistic exposures of subsurface material. No new archaeological sites were identified.

The ethnographic survey was conducted in May 1998. The proposed alignment crossed Bennett Brook [DAA Site ID 3692] using existing culverts and so will not impact it. There were no objections and no other ethnographic sites were reported.

**Ethnographic Survey of the Ellenbrook Pressure Main (O'Connor 1997)**

In 1997, O'Connor carried out consultations in relation to Water Corporation's Ellenbrook Pressure Main on behalf of GHD. The survey included a 200m wide corridor along Gngangara Road which would have included a portion of the current Project area (O'Connor 1997:1).

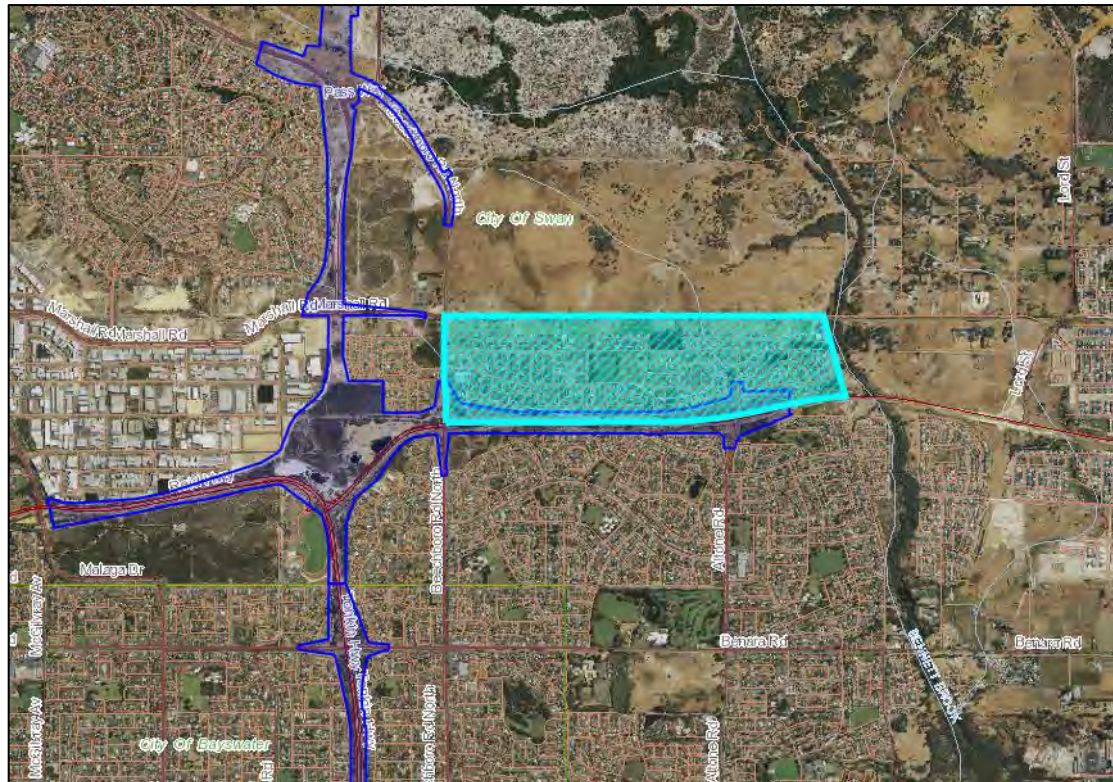
The report concluded that no known areas of Aboriginal significance would be disturbed other than the Bennett Brook Aboriginal site [DAA Site ID 3692] (O'Connor 1997:9). O'Connor notes that:

*The crossing of the Bennett Brook Aboriginal site by a high pressure gas pipeline [DBNGP?] was formerly the setting for a protracted, bitter and socially divisive dispute between Aboriginal people and their supporters and the (then) State Energy Commission of Western Australia. The potential for a similar dispute arising from further attempts to cross the Bennett Brook with pipelines, roadways or other development cannot be understated (O'Connor 1997:10).*

**Ethnographic Survey of the Beechboro Land Scheme (O'Connor 1998)**

O'Connor carried out consultations in relation to the Beechboro Land Scheme (housing subdivision) between August 1997 and January 1998. The survey area was bounded by Beechboro Road North to the west; Reid Hwy to the south; Marshall Road to the north and the Shire boundary to the east and covered a portion of the current Project area (O'Connor 1998:1; see Figure 35).

The corresponding archaeological survey was carried out by Quartermaine (O'Connor 1998:2). No areas of Aboriginal significance were identified inside the survey area (O'Connor 1998:9).



**Figure 35: Beechboro Land Scheme survey area (O'Connor 1998) (Source: AHIS)**

### **Archaeological Investigations, Great Northern Highway Muchea to Walebing Road Widening Program (Quartermaine 2005)**

In 2005, Quartermaine Consultants were commissioned by Sinclair Knight Merz, on behalf MRWA to undertake an archaeological survey of the proposed road works for the Great Northern Highway road widening project. The survey considered a 100m wide corridor extending between Muchea and Walebing (Figure 36).

A desktop survey of the DIA database established that two previously recorded sites (both scarred trees) were located within the survey corridor. Physical survey of the proposed development corridor identified one other archaeological site, another scarred tree.





**Figure 36: Muchea to Walebing Road Widening Program survey area (Quartermaine 2005) (Source: AHIS)**

### **Survey for Aboriginal Sites at the Proposed T102 Dry Plant Site, Muchea (O'Connor & Quartermaine 1987)**

In 1987, O'Connor, Bodney and Quartermaine carried out a survey for Aboriginal sites at T102 Corporation's proposed dry plant near Ellen Brook (O'Connor & Quartermaine 1987:1). O'Connor reported that "There are no previously recorded sites within the survey area. However, Aboriginal interest in Ellen Brook is widely known and has been previously reported (see Quartermaine, 1986)."

Following the consultations, he reported that:

*The Aboriginal people consulted were satisfied that no sites of cultural significance were located within the area of proposed development. However, as noted above, Ellen Brook is an area of current interest, due to its association with a Waugal myth. Accordingly, the people interviewed requested that the Brook and its banks should remain undisturbed, and that a reasonable buffer zone should be maintained between it and the proposed development at all times (O'Connor & Quartermaine 1987:2).*





**Figure 37: T102 Dry Plant Site study area (O'Connor & Quartermaine 1987) (Source: AHIS)**

### **Survey for Aboriginal Sites in the Vicinity of the Proposed Northern Perimeter Highway Road (O'Connor & Quartermaine 1987)**

In 1987, the Department of Main Roads commissioned Aboriginal surveys of the proposed Northern Perimeter Highway from Beechboro Road to the Mitchell Freeway. The ethnographic consultations were carried out in September 1987 and the corresponding archaeological survey was conducted by Quartermaine (O'Connor & Quartermaine 1987:1).

O'Connor reported that:

*There are no previously recorded ethnographic sites within the survey area. Sites previously recorded within the general area are sufficiently removed from the proposed development to be excluded by the Main Roads Department survey brief. These sites are listed in Table One (see also O'Connor, et al, 1985)" (O'Connor & Quartermaine 1987:3).*

Following the consultations, he reported that: "As far as could be ascertained in the course of the survey, there are no areas of significance to Aboriginal people located within the area of proposed development" (O'Connor & Quartermaine 1987:3). However, O'Connor noted that:

*A number of Aboriginal people expressed misgivings at the rate and scope of development in the Perth Metropolitan Area road network and of the effect this may have on the region's wetlands, especially its smaller lakes and brooks. Although this is not an issue in the case of the present*

*proposed development, it is important that the Department be aware of these misgivings; in order that they may, along with other social considerations, be given due consideration when further developments are being planned (O'Connor & Quartermaine 1987: 3).*

For example, “A spokesperson for the fringe dwellers of the Swan Valley was concerned at the likelihood of further development and construction in the vicinity of Bennett Brook and Swan River” (O’Connor & Quartermaine 1987:3).

As discussed above, “an occasional camp [that] could not be seen as an area of significance” [DAA Site ID 18735 ‘Beechboro Camping Area’] (O’Connor & Quartermaine 1987: 3). O’Connor reported similar findings in 2001 following the ethnographic survey of proposed roadworks between Marshall Road and Reid Highway/Tonkin Highway Junction (O’Connor 2001). However, as also discussed above, a camp was reported in this area by Cedric Jacobs in 1994 that he reported was of significance to his family and this is now registered as DAA Site ID 20058.

No archaeological sites were found during the archaeological survey. However, two isolated artefacts were located in **the road reserve (O'Connor & Quartermaine 1987: 13)**.



**Figure 38: Northern Perimeter Highway survey area (O'Connor & Quartermaine 1987) in relation to the current Project Area (Source: AHIS)**

**Study of Aboriginal Cultural Values on the Gnangara Mound (McDonald, Coldrick & Villiers 2005)**

Estill and Associates Pty Ltd was commissioned by the Department of Environment to conduct a study into Aboriginal cultural values associated with groundwater-related environmental features and processes on the Gnangara Mound in Perth's northern metropolitan region (Figure 39). The research was intended to assist the Department in determining the Social Water Requirements (SWRs) to be incorporated into a Sub-Regional Management Plan for use in the water allocation decision-making process.

The study involved a detailed literature review, a comprehensive examination of sites listed on the Register of Aboriginal Sites and consultation with key Aboriginal stakeholders. The study, which was not designed to be a comprehensive heritage survey, included exploring the key Aboriginal cultural values associated with groundwater-related environmental features and processes; identifying key places of cultural heritage interest associated with these values; highlighting the most significant places based on available information; discussing the potential impact on cultural values brought on by declining groundwater levels; and identifying ways in which Aboriginal people can become involved in the long-term management of groundwater resources on the Gnangara Mound.

The study found that Nyungars base much of their culture, identity and spirituality on their close association with groundwater and that they share these associations with Aboriginal groups throughout the Australian continent. Naturally, access to healthy freshwater sources was central to the survival of the Aboriginal people, and it has been argued that Aboriginal people are now so closely connected with groundwater in all its forms, that the long-term health of their culture depends on its maintenance.

There are a number of primary cultural values explored in this report. These include, and are expressed through, traditional knowledge and use of water resources; historical associations with groundwater features and groundwater-dependent ecological processes; spiritual values; rights and responsibilities; and archaeological evidence. Each of these issues is explored separately using information collected from the various sources utilised during the study including academic writings; published histories; nineteenth-century explorers' journals; heritage survey reports; studies and papers relating to similar issues elsewhere in Australia; the Register of Aboriginal Sites; and the consultations undertaken.

The findings demonstrate the close historical associations Nyungar people have with the groundwater features of the Gnangara Mound including its lakes, rivers,



swamps and springs. The historical, ethnographic and archaeological evidence collected over recent decades, mainly during development-led heritage surveys, highlights the intensity of Aboriginal activity around such places. They were the focus of camping, hunting, tool making, collecting plant resources, holding gatherings and ceremonies, and all other forms of human activity. It is little wonder that contemporary Nyungars feel such a close cultural attachment to groundwater features as almost everything their ancestors did took place in these locations.

Of primary importance are the groundwater-related spiritual values of the Nyungar people which centre on the *Waugal*, but also involve other creatures from the Dreaming including the dog/dingo (*Dwert*). The Waugal, like similar rainbow serpents across Australia, is believed to have created most of the major rivers, smaller creeks, springs and lakes which drain the Swan Coastal Plain. It is believed that during the Dreamtime, as the Waugal travelled through parts of the South West, it formed these rivers and wetlands and left other environmental features, including caves and other limestone formations, in its path. Many Nyungars believe that the spirit of the Waugal still inhabits deep water and that its life force is present in flowing water.

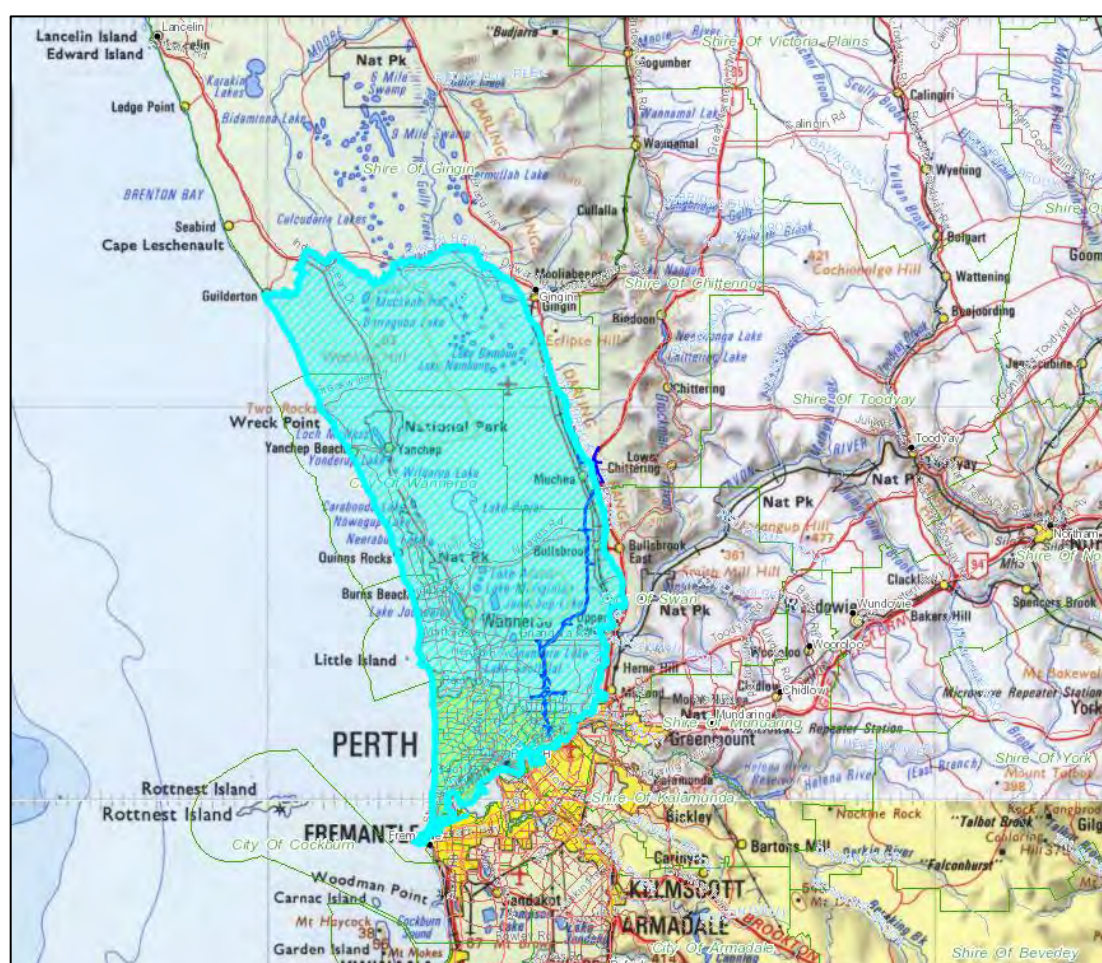
The health and wellbeing of the Waugal is directly connected to the vitality of the groundwater features, and both are intertwined with the health of Nyungar cultural identity. If the Waugal is killed or leaves, then the springs and other features with which it is associated will dry up and the processes of renewal with which it is associated will be brought to an end. Many Nyungars would argue that with the decline in groundwater levels, which is becoming increasingly visible, that this in fact happening.

Although most Nyungar people recognise that climate change is a contributing factor in this decline, they consider residential and industrial development as a greater and more immediate cause because these activities, coupled with the Gnangara Pine Plantation, are causing an unsustainable drawdown effect on increasingly limited groundwater resources. Many believe that this is causing the lakes, springs, swamps and caves to dry up which is not only leading to the loss of environmental features they value for historical, cultural and spiritual reasons, but is in turn impacting the flora and fauna that have also been central to Nyungar traditions and culture for millennia.

The report concluded that any actions Government takes to reverse the degradation of groundwater-related features and associated ecological processes, and to restore these to their natural state, will have the support of Aboriginal

people. Aboriginal people consistently request that water flow and vitality and associated ecological values (e.g. important natural habitats) be protected from development. Therefore, any long-term strategy to manage such resources over a large area such as the Gngangara Mound will be welcomed, particularly if the development and implementation of such a strategy includes a high level of Aboriginal involvement.

The report makes a number of recommendations aimed at avoiding further negative impacts on groundwater-dependent cultural values including limiting drawdown of groundwater; preserving and restoring wetlands; and preserving water flow.



**Figure 39: The Gngangara Mound study area (Estill 2005) in relation to the current Project Area (Source: AHIS)**

**Swan Area Archaeological Survey (Hallam, 1970s–80s)**

Between the 1970s and mid-1980s, Sylvia Hallam conducted archaeological studies across the Perth metropolitan area as part of the SAAS (Hallam 1972; Hallam 1977; Hallam 1987). The study was divided into two components: Area A, which was based close to the CBD, and Area B, which covered the rest of the Swan Coastal Plain and that near the NorthLink WA Project. While Area A was fairly intensive, the coverage of Area B was broader and not as comprehensive (Bowdler, Strawbridge et al. 1991:22).

**The investigation was seminal to local archaeological studies. Hallam's work** focussed on two key areas: the distribution of assemblages in relation to the geomorphic region of the Swan Coastal Plain; and the development of key phases **with which to 'date' archaeological assemblages. The results are discussed further** in the Archaeological Background and will not be repeated here.

One of the interesting by-products of her research is the collection of artefacts from numerous sites across the Perth area. Many assemblages, as detailed in the desktop review, have had many artefacts collected and archived in the WA Museum. These collections were usually comprehensive and repeat visits often identified very little materials remaining.



### 5.3 Relevant Aboriginal People

The DAA's current *Aboriginal Heritage Due Diligence Guidelines* (DIA 2013) identify four categories of 'relevant Aboriginal people' who should be consulted where there is a possibility that an Aboriginal Site will be affected. They are:

1. Determined Native Title Holders;
2. Registered Native Title Claimants;
3. Persons named as informants on Aboriginal site recording forms held in the Register at DIA [DAA]; and
4. Any other Aboriginal people who can demonstrate relevant cultural knowledge in a particular area (DIA 2013).

There are currently no determined Native Title Holders in the South West. However, the Project Area is encompassed by one registered Native Title Claim, **namely the 'Whadjuk People' Native Title Claim (WC2011/009)** which is represented by the South West Aboriginal Land and Sea Council (SWALSC). MRWA has already commenced consultations with SWALSC under the **'Whadjuk Protocol'** in relation to NorthLink and has obtained a list of nominated representatives for inclusion in the requested heritage surveys (see Table 4 below).

The Survey Area is also encompassed by an unregistered claim, namely the **'Swan River People 2' claim (WAD24/2011)** which comprises members of the Bropho, Warrell, Wilkes, Corunna and Garlett families. Mr Albert Corunna is the **group's primary representative**. Mr Corunna and representatives of some of these other families are included in the nominated consultants for NorthLink.

The third category of **'relevant Aboriginal people'** relates to **listed site informants (now also referred to as "knowledge holders") for previously reported heritage places**. The DAA has provided the names of informants for the three restricted files (DAA Site IDs 3525, 3692 and 20008) and we have been able to identify informants for the open sites from our own research. These are shown in Table 5, and contain a number of individuals who are not included in the list provided by SWALSC under the Whadjuk Protocol.

The final category of **'relevant Aboriginal people'** is **"any other Aboriginal people who can demonstrate relevant cultural knowledge in a particular area"**. This is a much more open-ended category and impossible to quantify or address in full. However, it is possible to identify such people from a review of previous Aboriginal heritage surveys (summarised above) and information relating to previously reported places. However, the inclusion of such people will be limited by budgetary and other practical constraints.

**Table 4: Aboriginal consultants nominated for NorthLink under the Whadjuk Protocol (Source: SWALSC)**

Name	Families Connected To
<b>Bella Bropho</b>	Nettle
<b>Joe Mourish</b>	Bennell
<b>Corrie Bodney</b>	Bodney
<b>Greg Garlett</b>	Bennell
<b>Albert Corunna</b>	Wilkes
<b>Theo Michael</b>	Mead
<b>Billy Narrier</b>	Warrell
<b>Kathy Penny</b>	Ryder
<b>Edith Warrell</b>	Nettle
<b>Greg Ugle</b>	Jackamarra
<b>Ron Gidgup Snr</b>	Gidgup
<b>Gloria Egan</b>	Egan
<b>Guy Ryder</b>	Ryder

**Table 5: Listed site informants where known**

Site ID	Site Name	Site Type	Informants
<b>3525</b>	Ellen Brook: Upper Swan	Mythological	Robert Bropho (DEC)
<b>3692</b>	Bennett Brook In Toto	Mythological	Robert Bropho (DEC) Corrie Bodney Ken Colbung (DEC)
<b>3748</b>	Nyibra Swamp		Corrie Bodney [O'Connor et al 1985 also identifies W. <b>Worrell</b> and "numerous – widely known" as his informants for this site]
<b>3749</b>	Bayswater Camp		Corrie Bodney C. Lawrence
<b>18735</b>	Beechboro Camping Area		Corrie Bodney Violet Bodney C. Dixon Violet Mippy (DEC)
<b>19138</b>	Wetlands & Watercourses Moore River To Bullsbrook	Mythological	Naagajua Native Title Claimants, 2002

Site ID	Site Name	Site Type	Informants
<b>20008</b>	Gingin Brook Waggyt Site	Mythological, Historical	Mr. Richard Wilkes Mr. William Warrell (DEC) Ms Olive Wilkes Mr. Malcom Ryder Ms Edna Ryder Ms Martha Borinelli Ms Diane Mippi Ms Allison Wilkes Mr. Albert Corunna Ms Gwen Corunna Ms Vanessa Corunna Ms Trina Corunna Ms Jennifer Mogridge
<b>20058</b>	Temporary Camp		Cedric Jacobs
<b>21392</b>	NOR/03 - Creek	Mythological	Patrick Hume Cedric Jacobs Combined Metropolitan Native Title Claimants Bibbulmun Tribal Group
<b>21393</b>	NOR/02 - Lightning Swamp	Ceremonial, Mythological,	Corrie Bodney Patrick Hume Cedric Jacobs Richard Wilkes (Combined Metropolitan Native Title Claimants Ken Colbung (Bibbulmun Tribal Group) (DEC)
<b>21620</b>	Chandala Brook	Mythological	Combined Metropolitan Native Title Claimants Independent Aboriginal Environmental Group



## 6. CONCLUSIONS

### 6.1 Previously Recorded Heritage Places

The research has found that twenty-eight (28) Aboriginal Sites and 'Other Heritage Places' as mapped by the DAA overlap the NorthLink Project (see Tables 1–3 and Figure 2).<sup>10</sup> These include nine (9) registered Aboriginal sites:

1. DAA Site ID **3179**: Clune Street (Artefacts/Scatter);
2. DAA Site ID **3180**: Marshall, Beechboro (Artefacts/Scatter);
3. DAA Site ID **3326**: Bayswater 1-3 (Artefacts/Scatter);
4. DAA Site ID **3692**: Bennett Brook In Toto (Mythological);
5. DAA Site ID **20008**: Gingin Brook Waggyt Site (Mythological, Historical);
6. DAA Site ID **20058**: Temporary Camp (Camp);
7. DAA Site ID **20749**: Moore River Waugal (Mythological);
8. DAA Site ID **21393**: NNOR/02 - Lightning Swamp (Ceremonial, Mythological); and
9. DAA Site ID **21620**: Chandala Brook (Mythological).

Three of these (DAA Site IDs 3179, 3180 and 3326) are artefact scatters. The remaining sites are ethnographic, though it is understood that two of these (DAA Site ID 20008 'Gingin Brook Waggyt Site' and DAA Site ID 20749 'Moore River Waugal') actually lie outside the Project area and are listed by virtue of their association with a site complex (Complex 42) which comprises all the wetlands and watercourses between Bullsbrook and Moore River. There should be no ground disturbance activities within these registered sites without Ministerial consent under Section 18 of the AHA.

In addition, the Project Area is overlapped by nine (9) lodged places, some of which could be found to constitute Aboriginal sites under Section 5 of the AHA:

10. DAA Site ID **3525**: Ellen Brook: Upper Swan (Mythological);
11. DAA Site ID **3618**: Whitemans Cutting (Artefacts/Scatter);
12. DAA Site ID **3619**: WHITEMANS QUARRY (Artefacts/Scatter);
13. DAA Site ID **20650**: Lennard Brook (Mythological);
14. DAA Site ID **21616**: Boonanarring Brook (Mythological);
15. DAA Site ID **21617**: Wallering Brook (Mythological);
16. DAA Site ID **21618**: Nullilla Brook (Mythological);
17. DAA Site ID **21619**: Breera Brook (Mythological); and

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<sup>10</sup> The restricted site that does not appear on the DAA's results is DAA Site ID 3426 'South Ballajura Camp'. According to O'Connor (2012), this site lies outside and to the west of his study area for the PDNH-Tonkin Link (O'Connor 2012:14).

18. DAA Site ID **21994**: Neaves Road Creek Field Site 1 (Artefacts/Scatter).

Apart from Ellen Brook (DAA Site ID 3525), the watercourses listed above actually appear to be located outside the Project Area and are listed by virtue of their association with site Complex 42. **DAA Site ID 3618 'Whitemans Cutting'** (Artefacts/Scatter) appears to have been destroyed by the extension of Hepburn Avenue. **DAA Site ID 21994 'Neaves Road Creek Field Site 1' (Artefacts/Scatter)** was recorded by Archae-aus in 2000 during an Aboriginal heritage assessment of the Ellen Brook Constructed Wetland Project in Bullsbrook and may have subsurface potential. There should be no ground disturbance activities within these lodged places unless Ministerial consent is obtained under Section 18 of the AHA and/or they are determined not be Aboriginal Sites within the meaning of Section 5.

Finally, there are ten places overlapping the Project that are listed in Stored Data (DAA Site IDs 3178, 3552, 3748, 3749, 4039, 4099, 18735, 19138, 19183 and 21392). Although these are not places to which the Act applies, some of these places/topographical features may still have significance for Aboriginal people and could therefore have implications for development should they potentially be impacted.

## **6.2 Archaeological Discussion**

The NorthLink WA Project and its surrounds have been subject to numerous contract archaeological investigations and academic research since the 1970s. Many archaeological sites have been identified and the record itself shows the changing nature of archaeological recording practices, especially in relation to site location and collection activities.

It is important to note within the context of this report that the manner in which the information is presented to the ACMC, the decisions about what constitutes an Aboriginal Site and the way they are managed has varied since the inception of the AHA. Archaeological sites DAA Site IDs 3178, 3179, 3180, 3326, 3618, 3619 and 4039 had much of their assemblages collected as part of the above process. While this is the case, Section 5 of the AHA 1972 emphasises the importance of **'place' as part of the ACMC process to determine what constitutes an Aboriginal Site**. As a result, DAA Site IDs 3179, 3180, 3326, 3618 and 3619 should be protected until authorisation under section 18 of the AHA has been received (as stated above, **DAA Site ID 3178 and 4039 are considered 'Stored Data' and are not protected under the AHA**).

Despite the intensity of surveys, much of the NorthLink WA Project has not been inspected thoroughly. As such, there remains the potential for as yet unrecorded sites to be disturbed during ground works. It is therefore recommended that archaeological monitoring take place prior to ground disturbance if works are required before the archaeological field survey takes place.

### 6.3 Ethnographic Discussion

With respect to ethnographic sites, the desktop research has highlighted the shift that has occurred over the past three decades in relation to the reporting of watercourses and their tributaries as Aboriginal *sites*. Whereas in early surveys, they tended not to be reported as sites (though their cultural significance was commented on), there has been a marked increase in the reporting of entire water systems, including main creeks and interconnecting tributaries, as “sites” due to largely generalised Waugal associations. Many of these features have now **become registered sites or ‘other heritage places’ and even** complexes, though there appears to have been a lack of consistency in terms of the assessment of the available information with respect to Section 5 of the AHA.

As we have shown, the Waugal was not the only ancestral being associated with water and water sources as Ellen Brook was previously reported to be associated **with the mythical ‘turtle’**. The ancestral dog/dingo [*dwert* or *doorda*] was the creator of an important water source in New Norcia (*Nyeerrgu*) and laid down laws associated with the use of the water (Bates 1992/1927: 177–79). However, it is rare now for ancestral beings other than the Waugal to be mentioned in relation to water in the context of heritage surveys.

**Further, the Waugal’s relationship to particular aspects of a local hydrological system may now only be understood and expressed in a general sense.** In other words, specific mythological and locally-contexted narratives are generally absent, in contrast to the former, traditional situation. Increasingly, the Waugal is now reported as being **in ‘everyplace’ water is found, rather than in specific contexts**, or no longer existing in places where water has disappeared (McDonald, Coldrick & Villiers 2005; McDonald, Coldrick & Christensen 2008).

Moreover, in some cases, it is water itself unmediated by the Waugal or other ancestral beings that is seen as being of cultural and spiritual importance. Indeed, it is becoming increasingly common for Nyungars to make statements such as: **“We believe in the spiritual aspects of water as part of the soul and being of Aboriginal culture and it should not be disturbed”; “It’s the water that’s ... significant”; “spirit is in the water – that’s the rainbow snake”** (Parker, Parker &

Lantzke 2004: 14)<sup>11</sup>; or more simply: “we worship *gabi*, the water” (McDonald 2011).<sup>12</sup> Such reports would be unlikely to satisfy the DAA/ACMC’s current assessment regime with respect to Section 5(b) of the AHA.

The upcoming ethnographic survey will seek to confirm the findings of previous consultations and surveys and attempt to elicit any further details about the significance of previously reported places and topographical features. The consultations will also be an opportunity to further consult and update the nominated representatives on the planning for the PDNH (as has been requested by some families/groups during previous surveys and consultations) as well as seek their comments in relation to heritage places that may be impacted and therefore require Section 18 approval.

However, it would appear unlikely given the level of previous research that any ‘new’ ethnographic sites with the potential to meet Section 5 of the AHA under the DAA’s current assessment regime would be reported; however, the possibility cannot be discounted.

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<sup>11</sup> This statement was made by a senior Nyungar Elder in reference to the water in a manmade drain during a survey carried out by AIC on behalf of TPG in the City of Stirling. The drain (DAA Site ID 21538) has been assessed by the ACMC as “not a site” under the AHA.

<sup>12</sup> McDonald, Coldrick & Christensen (2008) have observed that this increasing pattern at least to some extent reflects attenuated knowledge about the Dreaming, with discontinuities evident in the way significance is increasingly being read in *everyplace* rather than in specific ‘story places’.



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## APPENDIX 1: DAA'S AHIS SEARCH RESULTS

PLACE_ID	STATUS	FILE_F
3178	Stored Data / Not a Site	No
3179	Registered Site	No
3180	Registered Site	No
3326	Registered Site	No
3525	Lodged	Yes
3552	Stored Data / Not a Site	No
3618	Lodged	No
3619	Lodged	No
3692	Registered Site	Yes
3748	Stored Data / Not a Site	No
3749	Stored Data / Not a Site	No
4039	Stored Data / Not a Site	No
4099	Stored Data / Not a Site	No
18735	Stored Data / Not a Site	No
19138	Stored Data / Not a Site	No
19183	Stored Data / Not a Site	No
20008	Registered Site	Yes
20058	Registered Site	No
20650	Lodged	No
20749	Registered Site	No
21392	Stored Data / Not a Site	No
21393	Registered Site	No
21616	Lodged	No
21617	Lodged	No
21618	Lodged	No
21619	Lodged	No
21620	Registered Site	No
21994	Lodged	No

## **APPENDIX 2: PREVIOUS SURVEYS**



## Search Criteria

15 Heritage Surveys containing 15 Survey Areas in Shapefile - TGS\_Referral\_20140807

## Disclaimer

Heritage Surveys have been mapped using information from the reports and / or other relevant data sources. Heritage Surveys consisting of small discrete areas may not be visible except at large scales. Reports shown may not be held at DAA. Please consult report holder for more information. Refer to [www.daa.wa.gov.au/heritage](http://www.daa.wa.gov.au/heritage) for information on requesting reports held by DAA.

The information provided is made available in good faith and is predominately based on the information provided to the Department of Aboriginal Affairs by third parties. The information is provided solely on the basis that readers will be responsible for making their own assessment as to the accuracy of the information. If you find any errors or omissions in our records, including our maps, it would be appreciated if you email the details to the Department at [HeritageEnquiries@daa.wa.gov.au](mailto:HeritageEnquiries@daa.wa.gov.au) and we will make every effort to rectify it as soon as possible.

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## Access

Some reports are restricted.

## Spatial Accuracy

The following legend strictly applies to the spatial accuracy of heritage survey boundaries as captured by DAA.

Very Good	Boundaries captured from surveyed titles, GPS (2001 onwards) submitted maps georeferenced to within 20m accuracy.
Good / Moderate	Boundaries captured from GPS (pre 2001) submitted maps georeferenced to within 250m accuracy.
Unreliable	Boundaries captured from submitted maps georeferenced to an accuracy exceeding 250m.
Indeterminate	Surveys submitted with insufficient information to allow boundary capture.





## Survey Report 18203

**Title** Ethnographic Reports Natural Gas Laterals Perth Metropolitan Area. (South and East.).  
**Authors** Baines, P.  
**Lead Consultant** Patricia Baines  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 18203

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Natural Gas Laterals Perth Metropolitan Area (south and east) as shown in Figure 1.	Good	Field and Desktop

## Survey Report 21088

**Title** A Socio-economic Anthropological Survey of People of Aboriginal Descent in the Metropolitan Region of Perth, Western Australia  
**Authors** Makin, C F  
**Lead Consultant** C. Makin  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21088

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Metropolitan Region of Perth as shown in Figs. 1 and 2.	Very Good	Field and Desktop



## Survey Report 21100

**Title** Ethnographic and archaeological survey under the Aboriginal Heritage Act (1972) of Cresco Site Remediation Project at Bayswater, Western Australia

**Authors** Australian Interaction Consultants

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 21100

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Cresco Site Remediation Project at Bayswater. The land involves approximately 37ha and is situated north east of the intersection between Railway Parade and Tonkin Highway as shown in Map. 4	Very Good	Field and Desktop

## Survey Report 21753

**Title** Addendum to an ethnographic and archaeological survey under the Aboriginal Heritage Act (1972) of Cresco Site Remediation Project at Bayswater, Western Australia

**Authors** Australian Interaction Consultants

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21753

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Cresco Site Remediation Project at Bayswater, Western Australia.	Very Good	Field and Desktop



## Survey Report 21817

**Title** Ballaruk (traditional owners) Aboriginal site recording project  
**Authors** Machin, Barrie  
**Lead Consultant** Tamora Pty Ltd  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21817

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Whadjuk territorial boundaries the lands of the Ballaruk Peoples as shown in Figure 10.	Unreliable	Field and Desktop

## Survey Report 21818

**Title** Ballaruk (traditional owners of Whadjuk territorial boundaries the lands of the Ballaruk Peoples) Aboriginal site recording project : additional material  
**Authors** Machin, Barrie  
**Lead Consultant** Tamora Pty Ltd  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21818

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Whadjuk territorial boundaries the lands of the Ballaruk Peoples as shown in Figure 10.	Unreliable	Field and Desktop



## Survey Report 21909

**Title** Study of groundwater - related Aboriginal Cultural Values on the Gnangara Mound, Western Australia  
**Authors** McDonald Edward  
**Lead Consultant** Estill and Associates  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21909

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	The Gnangara Mound area as shown in Figure 2 of the Fisher report attached as appendix 3 to the Estill report.	Very Good	Field and Desktop





## Survey Report 102597

**Title** A Survey for Aboriginal Sites - Ethnographic Investigations Relating to some Proposed Highway & Road Developments in the Perth Metropolitan Area.

**Authors** Brown, S H

**Lead Consultant** Steve Brown

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 102597

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed Highway and Road Developments in the Perth Metropolita Area. Projects covered in this report are: 1) Beechboro-Gosnells Highway. Guildford Road to Morley Drive. 2) Beechboro-Gosnells Highway. Great Eastern Highway to Guildfor Road. 3) Beechboro-Gosnells Highway. Leach Higway to Great Eastern Highway. 4) Beechboro-Gosnells Highway. Newburn Road to Roe Highway (Forrestfield Railway Bridges). Beechboro-Gosnells Highway. Maida Vale Road Relocation.. 6) Guildford Road Bridge Duplicatio...	Unreliable	Field and Desktop



## Survey Report 102670

**Title** Preliminary Report on the Survey of Aboriginal Areas of Significance in the Perth Metropolitan & Murray River Regions July 1985.

**Authors** O'Connor, R

**Lead Consultant** C. Bodney

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 102670

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Perth Metropolitan & Murray River Regions. A roughly triangular region, with Yanchep National Park as the Northern point, Gidgegannup as the Eastern point and Pinjarra as the Southern point.	Indeterminate	Field and Desktop



## Survey Report 103564

**Title** An Archaeological Survey Project: The Perth Area, Western Australia. Apr 1972.  
**Authors** University of Western Australia.  
**Lead Consultant** University of Western Australia  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 103564

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	The Perth Area. 103 site locations in 67 site groups were investigated.	Indeterminate	Field and Desktop
2	Archaeological	The Perth Area. Sites included id's 3350, 4404, 3846	Unreliable	Field and Desktop
3	Archaeological and Ethnographic	The Perth Area. Closed site id 2887	Indeterminate	Field and Desktop



## Survey Report 103690

**Title** Beechboro - Gosnella C A H : Guildford to Morley Drive test excavations at Aboriginal site No S 0170  
**Authors** Brown, S H  
**Lead Consultant** Steve Brown  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 103690

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Beechboro-Gosnells CAH, Guildford Road to Morley Drive. Three test trenches were excavated at Site no. S0170 (3326), each varying between 1.5 and 2 metres squared as shown in Fig. 2 and 3	Unreliable	Field and Desktop

## Survey Report 104225

**Title** Beechboro \_ Gosnells C A H Guildford Road to Morley Drive : a survey for Aboriginal sites  
**Authors** Brown, S H  
**Lead Consultant** Steve Brown  
**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 104225

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Beechboro-Gosnells CAH. Guildford Road to Morley Drive as shown in Map 1 and 2.	Very Good	Field and Desktop





## Survey Report 104299

**Title** An archaeological survey for Aboriginal sites along gas pipeline laterals in the East Perth metropol

**Authors** Schwede, Madge L

**Lead Consultant** Madge Schwede

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 104299

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Gas Pipeline Laterals in the East Perth Metropolitan Area. The survey areas are as follows: an area behind the Bristle Brick Factory bordering the south side of the Valencia vineyards, northwest and west along Benara Road, south and west along Devonshire Street and Chaffers Street; directly south of Chaffers Street along the road reserve of the Beechboro-Gosnells CAH and; southwest of Guildford Road to the Swan River foreshore near the Garratt Road Bridge, across Maylands Peninsula and ag...	Good	Field and Desktop



## Survey Report 104379

**Title** Australian Research Grants Scheme: Final Report on the Project the Swan Coastal Plain, Western Australia.  
**Authors** Hallam, S.  
**Lead Consultant** S. J. Hallam  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 104379

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	The survey area comprises 396 DIA sites/heritage locations listed in Appendix, and distributed throughout the Coastal Plain and Darling Ranges and Darling Plateau, from Lancelin south past Mandurah, as shown in Figure 1. The survey area location and extent are as per the AHMS.	temp	Field and Desktop

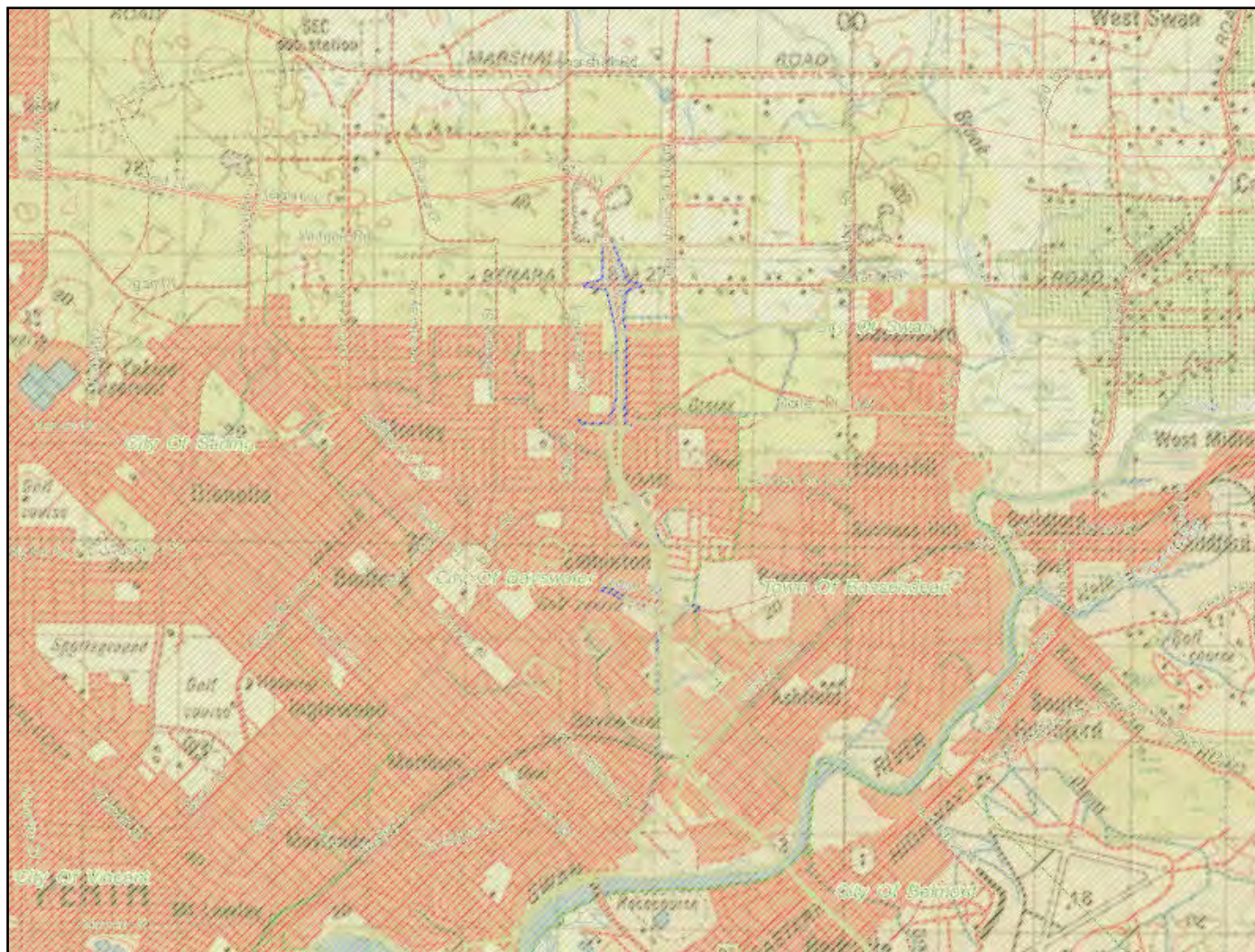


## Survey Report 104405

**Title** The pain's not over : fringe dwellers of the Swan Valley, Guilford, Western Australia  
**Authors** Tauss, Ray  
**Lead Consultant** Ray Tauss  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 104405

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Swan Valley, Guildford. Various Aboriginal camps in the Lockridge and Saunders Street Area were surveyed including site id's - 3326, 3444, 3445, 3607, 3609, 3610, 3612, 3613, 3614, 3615, 3616, 3700, 3749, 3769, 3771, as well as Caversham Camps, Grogan's Swamp Camps, Lockridge Camps, Roe's Vineyard Camps, Dickson's Bridge Camps, Whitemans Brick Hill Camps, Middle Swan as shown in Maps 1 and 2	Good	Field and Desktop
2	Ethnographic	Swan Valley, Guildford. Various Aboriginal camps in the Lockridge and Saunders Street Area were surveyed including Closed site 3608.	Indeterminate	Field and Desktop



## Legend

### Selected Heritage Surveys

-  Heritage Survey
-  Aboriginal Community Occupied
-  Aboriginal Community Unoccupied
-  Town
-  Search Area

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## Search Criteria

44 Heritage Surveys containing 47 Survey Areas in Shapefile - SVB\_Referral\_20140808

## Disclaimer

Heritage Surveys have been mapped using information from the reports and / or other relevant data sources. Heritage Surveys consisting of small discrete areas may not be visible except at large scales. Reports shown may not be held at DAA. Please consult report holder for more information. Refer to [www.daa.wa.gov.au/heritage](http://www.daa.wa.gov.au/heritage) for information on requesting reports held by DAA.

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## Access

Some reports are restricted.

## Spatial Accuracy

The following legend strictly applies to the spatial accuracy of heritage survey boundaries as captured by DAA.

Very Good	Boundaries captured from surveyed titles, GPS (2001 onwards) submitted maps georeferenced to within 20m accuracy.
Good / Moderate	Boundaries captured from GPS (pre 2001) submitted maps georeferenced to within 250m accuracy.
Unreliable	Boundaries captured from submitted maps georeferenced to an accuracy exceeding 250m.
Indeterminate	Surveys submitted with insufficient information to allow boundary capture.



## Survey Report 17059

**Title** Dampier to Perth Natural Gas Pipeline Route: A Survey for Aboriginal Sites. March 1979.  
**Authors** Dept of Aboriginal Sites.  
**Lead Consultant** Department of Aboriginal Sites, Western Australian Museum  
**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 17059

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	The survey area consists of the 1486km preferred route of the Dampier to Perth Natural Gas Pipeline. The survey extended from Dampier to Wagerup. The width of the survey corridor is not known. A default 5m width, either side of the centreline is assumed.	Unreliable	Field and Desktop

## Survey Report 18777

**Title** Report on archaeological investigation for Aboriginal and Heritage sites Hepburn Avenue extension  
**Authors** Quartermaine, Gary.  
**Lead Consultant** Quartermaine Consultants  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 18777

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Proposed extension to Hepburn Avenue from Alexander Drive, Ballajura, to Marshall Road, Malaga. This involves an alignment of 5.8km with a corridor width of 60 to 100m as shown in Fig. 2	Good	Field and Desktop



## Survey Report 18799

**Title** Consultation with the Combined Metropolitan Working Group and Rev. Jacobs Group regarding the proposed extension to Hepburn Avenue

**Authors** Hart, Ted

**Lead Consultant** Ted Hart

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 18799

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed extension to Hepburn Avenue from Alexander Drive to Marshall Road in Ballajura as shown in Fig. 1.1	Good	Field and Desktop

## Survey Report 18800

**Title** Report on an ethnographic survey of the proposed extension to Hepburn Avenue from Alexander Drive to Marshall Road

**Authors** O'Connor, R

**Lead Consultant** R & E O'Connor Pty Ltd

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 18800

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Extension to Hepburn Avenue from Alexander Drive to Marshall Road, Perth, Western Australia.	Good	Field and Desktop



## Survey Report 19292

**Title** Report on an ethnographic survey of proposed roadworks between Marshall Road and Reid Highway / Tonkin Highway Junction

**Authors** O'Connor, R

**Lead Consultant** R. O'Connor

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 19292

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed roadworks between Marshall Road and Reid Highway/Tonkin Highway Junction as shown in Fig. 1	Very Good	Field and Desktop

## Survey Report 19293

**Title** Consultation with combined Metropolitan Working Group regarding proposed roadworks at Marshall Road

**Authors** Hart, Ted

**Lead Consultant** Ted Hart

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 19293

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed Roadworks between Marshall Road and the Tonkin Highway/Reid Highway intersection in Ballajura and Malaga as shown in Fig. 1	Very Good	Field and Desktop





## Survey Report 20633

**Title** Management report of Aboriginal Heritage aspects of the Dampier to Bunbury Natural Gas Pipeline corridor through the Perth Metropolitan Area

**Authors** Hames Consultancy Group

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 20633

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Dampier to Bunbury Natural Gas Pipeline corridor, Bullsbrook to Postans, an alignment 70km long by 30m wide as shown in Sheets 1 & 2	Good	Field and Desktop

## Survey Report 21065

**Title** Report on an archaeological survey of the proposed Noranda regional recreation complex section 18 consultation under the Aboriginal Heritage Act (1972)

**Authors** Australian Interaction Consultants

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 21065

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Lot 102 Della Road, which is presently vacant land between Della Road and Tonkin and Reid Highway.	Very Good	Field only



## Survey Report 21066

**Title** Section 18 application under the Aboriginal Heritage Act (1972) for the development of the Noranda regional recreation complex.

**Authors** Hames Consultancy Group

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 21066

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Lot 102 Della Road, Noranda.	Very Good	Field only

## Survey Report 21088

**Title** A Socio-economic Anthropological Survey of People of Aboriginal Descent in the Metropolitan Region of Perth, Western Australia

**Authors** Makin, C F

**Lead Consultant** C. Makin

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21088

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Metropolitan Region of Perth as shown in Figs. 1 and 2.	Very Good	Field and Desktop



## Survey Report 21521

**Title** The report of an Aboriginal Heritage assessment of the Ellen Brook Constructed Wetland Project, Bullsbrook, Perth

**Authors** De Gand, Daniel

**Lead Consultant** Archae-aus Pty Ltd

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 21521

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Ellen Brook Constructed Wetland Project, Bullsbrook. Two distinct areas defined as Neaves Road and Strachan Road as shown in Figures 2 and 3.	Very Good	Field and Desktop

## Survey Report 21633

**Title** Perth - Darwin National Highway - alignment definition study : indigenous Heritage issues report filed survey and consultation : Southern section - Maralla Road to the MRS Boundary

**Authors** GHD

**Lead Consultant** Quartermaine Consultants

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 21633

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	The proposed area is situated in the North-East Metropolitan Area of Perth. It involves the Marella Road to the MRS Boundary Section of the Perth Darwin National Highway. This section is approximately 12.50km in length within a 500m corridor. As shown in Figures 1 & 2a-b	Very Good	Field and Desktop



## Survey Report 21634

**Title** Perth - Darwin National Highway - alignment definition study : indigenous Heritage issues report filed survey and consultation : Northern section - MRS Boundary to Calingiri Road

**Authors** GHD

**Lead Consultant** Quartermaine Consultants

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 21634

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Northern Section - MRS Boundary to Calingiri Road. Corridor width of 500m.	Very Good	Field and Desktop

## Survey Report 21817

**Title** Ballaruk (traditional owners) Aboriginal site recording project

**Authors** Machin, Barrie

**Lead Consultant** Tamora Pty Ltd

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21817

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Whadjuk territorial boundaries the lands of the Ballaruk Peoples as shown in Figure 10.	Unreliable	Field and Desktop





## Survey Report 21818

**Title** Ballaruk (traditional owners of Whadjuk territorial boundaries the lands of the Ballaruk Peoples) Aboriginal site recording project : additional material

**Authors** Machin, Barrie

**Lead Consultant** Tamora Pty Ltd

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21818

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Whadjuk territorial boundaries the lands of the Ballaruk Peoples as shown in Figure 10.	Unreliable	Field and Desktop

## Survey Report 21909

**Title** Study of groundwater - related Aboriginal Cultural Values on the Gngangara Mound, Western Australia

**Authors** McDonald Edward

**Lead Consultant** Estill and Associates

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21909

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	The Gngangara Mound area as shown in Figure 2 of the Fisher report attached as appendix 3 to the Estill report.	Very Good	Field and Desktop



## Survey Report 21948

**Title** Report on an ethnographic survey of proposed road widening and passing lane areas between SLK 37.20 and SLK 146 Great Northern Highway

**Authors** R & E O'Connor Pty Ltd

**Lead Consultant** Rory O'Connor & Associates Pty Ltd

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 21948

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Road widening and passing lane areas between SLK 37.20 and SLK 146, Great Northern Highway, between Muchea and Walebing, Western Australia	Good	Field and Desktop

## Survey Report 21949

**Title** Report on further archaeological investigations for Aboriginal Sites Great Northern Highway H0006 Muchea to Walebing Road widening programme

**Authors** Quartermaine, Gary.

**Lead Consultant** Quartermaine Consultants

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 21949

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Great Northern Highway road widening project, between Muchea and Walebing, Western Australia. It involves a survey corridor of fifty metres on each side of the highway at several sections.	Good	Field and Desktop



## Survey Report 22338

**Title** Report on a section 18 consultation of the Department of Fisheries proposed plan to control and eradicate introduced feral fish within Bennett Brook, Western Australia

**Authors** Australian Interaction Consultants

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 22338

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Bennett Brook Catchment Area, Western Australia	Moderate	Field and Desktop

## Survey Report 22789

**Title** Aboriginal Heritage Surveys & Section 18 consultation proposed road upgrade works near Muchea

**Authors** Mattner, Joe

**Lead Consultant** Artefaxion Pty Ltd

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 22789

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	The proposed road upgrade is located at the intersection of Great Northern Highway with Brand Highway and Muchea East Road.	Moderate	Field and Desktop



## Survey Report 23894

**Title** Site Identification Survey Report of the Proposed Lighting Swamp Boardwalk Installation at Noranda Western Australia

**Authors** Australian Interaction Consultants

**Lead Consultant** Australian Interaction Consultants

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 23894

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	The survey area comprised two areas within the Lightning Swamp Bushland. The first area is a 100m long, 5m wide corridor following the path of the Boardwalk, and the second is a 20m <sup>2</sup> area around three groundwater monitoring bores.	Good	Field and Desktop

## Survey Report 24064

**Title** Ethnographic and Archaeological Heritage Assessment: Final Report: Metropolitan Area Indigenous Groups. Whiteman Park Project

**Authors** Big Island Research

**Lead Consultant** Big Island Research Pty Ltd

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 24064

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	The proposed project area is located on the Swan Coastal Plain immediately south of Whiteman Park in the Perth suburb of Beechboro.	Good	Field and Desktop





## Survey Report 101889

**Title** Report on an ethnographic and archaeological survey for the proposed Ellenbrook sewerage pressure main route to Malaga

**Authors** Macintyre Dobson & Associates Pty Ltd

**Lead Consultant** Macintyre Dobson & Associates Pty Ltd

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 101889

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Proposed Ellenbrook sewerage pressure main route to Malaga. The survey corridor is 16.6km long from Alexander Drive in Malaga to the intersection of Lord Street and Gngara Road Ellenbrook as shown in Fig. 1	Good	Field and Desktop

## Survey Report 102230

**Title** A summary of the research on Aboriginal sites on the Ellenbrook Estate and the Aboriginal consultative process

**Authors** McDonald, E M

**Lead Consultant** McDonald, Hales and Associates Pty Ltd

**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 102230

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Ellenbrook Estate is located in the Upper Swan area north of Gngara Road as shown in Fig. 1	Good	Field and Desktop



## Survey Report 102670

**Title** Preliminary Report on the Survey of Aboriginal Areas of Significance in the Perth Metropolitan & Murray River Regions July 1985.

**Authors** O'Connor, R

**Lead Consultant** C. Bodney

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 102670

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Perth Metropolitan & Murray River Regions. A roughly triangular region, with Yanchep National Park as the Northern point, Gidgegannup as the Eastern point and Pinjarra as the Southern point.	Indeterminate	Field and Desktop



## Survey Report 103243

**Title** Aboriginal site survey : report on an archaeological survey for Aboriginal sites at the proposed Homeswest housing development part locations I and K, Ballajura

**Authors** Quartermaine G

**Lead Consultant** Gary Quartermaine

**Survey Types** Archaeological

## Related Survey Areas for Survey Report 103243

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Proposed Homeswest Housing Development Part Locations I and K, Ballajura. The proposed development involves approximately 119.7 ha of land on the northern side of Marshall Road, west of the Proposed Tonkin Highway and south of Harrow Road as shown in Fig. 1	Moderate	Field and Desktop



## Survey Report 103248

**Title** Report on an Archaeological Survey for Aboriginal Sites, Beechboro Land Scheme. Aug.1997.

**Authors** Quartermaine G

**Lead Consultant** Quartermaine Consultants

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 103248

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Beechboro Land Scheme, involving a housing subdivision encompassing a total of approximately 146.7336 ha. It is bounded by Beechboro Road North on the western side, Reid Highway on the southern side, Marshall Road on the northern side and the shire boundary on the eastern side as shown in Plan 2.	Good	Field and Desktop

## Survey Report 103265

**Title** Report of a Preliminary Study for Aboriginal Sites at Proposed Cliffs International Ltd Developments at Coolup and Bullsbrook, WA. February 1986.

**Authors** Quartermaine G

**Lead Consultant** Gary Quartermaine

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 103265

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	The survey area comprises a proposed Charcoal Production Plant site, near Coolup; and proposed Silicon Plant site, near Bullsbrook, as per Figures 1 and 2.	Very Good	Field and Desktop





## Survey Report 103372

**Title** Report of an archaeological survey of a proposed subdivision, east Malaga (T.P.S. 14 ), Western Australia

**Authors** Veth, Peter.

**Lead Consultant** University of Western Australia

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 103372

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Proposed subdivision, East Malaga (TPS 14). The proposed development covers an area of approximately 2sq.km and is flanked by Marshall Road to the north, Delta Road to the east and North Perimeter Highway to the south. The western boundary is located approximately 700m west from Malaga Road as shown in Fig. 1	Very Good	Field and Desktop



## Survey Report 103564

**Title** An Archaeological Survey Project: The Perth Area, Western Australia. Apr 1972.  
**Authors** University of Western Australia.  
**Lead Consultant** University of Western Australia  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 103564

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	The Perth Area. 103 site locations in 67 site groups were investigated.	Indeterminate	Field and Desktop
2	Archaeological	The Perth Area. Sites included id's 3350, 4404, 3846	Unreliable	Field and Desktop
3	Archaeological and Ethnographic	The Perth Area. Closed site id 2887	Indeterminate	Field and Desktop



## Survey Report 103697

**Title** Report on an Ethnographic Survey of the Ellenbrook Pressure Main. Nov.1997.  
**Authors** O'Connor, R. & E.  
**Lead Consultant** R. & E. O'Connor Pty Ltd  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 103697

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Ellenbrook Pressure Main. The route covers a total of approximately 14km of corridor between Woolybush Road in Ellenbrook and Hartman Drive in Wangara. A 200m wide corridor centred upon the existing Gngangara Road was surveyed as shown in Fig. 1	Very Good	Field only



## Survey Report 103700

**Title** Addendum to a Report of an Aboriginal Heriatge Survey. Proposed Perth-Darwin Highway, Lord Street Extensions, Ellenbrook Gnaragara Road to Maralla Road Section. October 1995.

**Authors** Blockley, E. & Lantzke, D.

**Lead Consultant** McDonald, Hales and Associates Pty Ltd

**Survey Types** Ethnographic

## Related Survey Areas for Survey Report 103700

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
2	Ethnographic	Proposed Perth-Darwin Highway, Lord St. Extensions, Ellenbrook Gnaragara Road to Maralla Road Section. A corridor of 250m either side of the centreline was surveyed as shown in Fig. 1-1	Very Good	Field and Desktop
1	Archaeological	Proposed Perth-Darwin Highway, Lord St. Extensions, Ellenbrook Gnaragara Road to Maralla Road Section. A corridor of 130m either side of the centreline was surveyed as shown in Fig. 1-1	Very Good	Field and Desktop



## Survey Report 103901

**Title** Documents on the Widgee Road Camps (Incl. Reports by M Robinson E McDonald and P D'Abbs) August 1995.

**Authors** Robinson, M.

**Lead Consultant** Anon

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 103901

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	The Widgee Road Camps, Beechboro. The camp is located near the junction of Widgee and Lanius Roads, and between Hassell Street and Bennett Brook, on lot 103 (Swan Location L) which is owned by Gold Estates of Australia Ltd as shown in Fig. 1	Indeterminate	Field and Desktop
2	Ethnographic	The Widgee Road Camps, Beechboro. The present camp is located on lots 103 and 104 (Swan Location M) which is owned by The SHC, positions in the west side are owned by the Swan Shire. The present camp was developed after the destruction of the previous camp on Lot 103.	Indeterminate	Field and Desktop





## Survey Report 104037

**Title** Report on an Archaeological Survey at Swan Location K, Beechboro. Dec.1994.  
**Authors** Harris, J.  
**Lead Consultant** Jacqueline Harris  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 104037

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Swan Location K. Beechboro. The proposed housing development is located in the south western corner of the junction of Beechboro Road North and Marshall Road. The area comprises approximately 29ha as shown in Fig. 1	Very Good	Field and Desktop

## Survey Report 104078

**Title** Report of an Aboriginal Heritage Survey Proposed Passing Lanes Great Northern Highway, Bullsbrook. July 1996.  
**Authors** Prince, C  
**Lead Consultant** McDonald, Hales and Associates Pty Ltd  
**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 104078

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Proposed passing lanes Great Northern Highway, Bullsbrook. Reserves on either side of the highway and small areas of recently acquired private land for the development of four passing lanes as shown in Locality Plan. 1	Good	Field and Desktop



## Survey Report 104087

**Title** An archaeological survey of the Dampier to Perth natural gas pipeline route : section 6 Muchea to Wagerup.

**Authors** Pickering, M.

**Lead Consultant** Department of Aboriginal Sites, Western Australian Museum

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 104087

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Dampier to Perth Naturla Gas Pipeline Route, Muchea to Wagerup. This section runs from the 1314km point, 6 km south west of Muchea, to the 1478km point at Wagerup, a total distance of 164km as shown in Fig. 1.	Unreliable	Field and Desktop

## Survey Report 104199

**Title** Report on an Ethnographic Survey of the Beechboro Land Scheme. Jan.1998.

**Authors** O'Connor, R.

**Lead Consultant** R. O'Connor

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 104199

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Beechboro Land Scheme, proposed land subdivision bounded by Beechboro Road North on its western side, Reid Highway on its southern side, Marshall Road on its northern side and the Shire boundary on its eastern side as shown in Fig. 1	Very Good	Field and Desktop



## Survey Report 104230

**Title** Report of a survey for Aboriginal sites at the proposed Pinjar Gas Turbine and Services Project, near Wanneroo.

**Authors** O'Connor, Rory.

**Lead Consultant** Gary Quartermaine

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 104230

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed Pinjar Gas Turbine and Services Project, near Wanneroo. The project area includes the following: a) a 132kV overhead powerline on a 500m corridor from the Metropolitan Northern Terminal to the proposed gas turbine site,  b) a gas turbine and ancillary facilities to be located on a 30ha block near the corner of Cypress and Perry Roads, Gnangara, c) a 20m wide gas pipeline easement from the Dampier - Perth main pipeline to the turbine site as shown in Figures 1-4.	Good	Field and Desktop
2	Archaeological	Proposed Pinjar Gas Turbine and Services Project, near Wanneroo. The project area includes a gas turbine and ancillary facilities to be located on a 30ha block near the corner of Cypress and Perry Roads, Gnangara, as shown in Fig. 1	Good	Field and Desktop



## Survey Report 104250

**Title** Report of a survey for Aboriginal sites at the proposed TIO2 Dry Plant site, Muchea  
**Authors** O'Connor, R.  
**Lead Consultant** Gary Quartermaine  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 104250

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	The survey area comprises of the proposed mineral sands plant which is located less than 1km north of Muchea, immediately east of the railway line and west of Ellen Brook(see figures 1 & 2).	Very Good	Field and Desktop

## Survey Report 104252

**Title** Comments on Aboriginal sites in vicinity of proposed Homeswest development at Bennett Brook  
**Authors** O'Connor, R  
**Lead Consultant** R. O'Connor and Associates Pty Ltd  
**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 104252

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed Homeswest development at Bennet Brook.	Indeterminate	Field and Desktop



## Survey Report 104253

**Title** Report on the Survey for Aboriginal Sites in the Vicinty of the Proposed Northern Perimeter Highway Route, Perth Metropolitan Area. Oct. 1987.

**Authors** O'Connor, R. & Quartermaine, G.

**Lead Consultant** Gary Quartermaine

**Survey Types** Ethnographic

### Related Survey Areas for Survey Report 104253

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Ethnographic	Proposed Northern Perimeter Highway Route. The proposed Highway alignment between Mitchell Freeway and Beechboro Road. The inspections included a 50m buffer zone either side of the proposed road reserve.	Unreliable	Field and Desktop
2	Archaeological	Proposed Northern Perimeter Highway Route. The route runs east-west from 450m east of the Swan River across the Coastal Plain, crossing Bennett Brook, until it intersects with the Mitchell Freeway approximately 4.5km from the coast. The Northern Perimeter Highway runs from Great Northern Highway to Mitchell Freeway, a length of approximately 25km. The route runs along Middle Swan road in the east, then Victoria Road, just north of Widgee Road, immediately south of Curlington and Wilmington ...	Unreliable	Field and Desktop





## Survey Report 104263

**Title** Report of the survey for Aboriginal heritage significance of the proposed Balga to Wundowie 132kv po  
**Authors** O'Connor, R  
**Lead Consultant** Gary Quartermaine  
**Survey Types** Archaeological and Ethnographic

### Related Survey Areas for Survey Report 104263

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological and Ethnographic	Proposed Balga to Wundowie 132kV Powerline Route. The proposed route runs east, from the Balga Northern Terminal Substation, along Marshall Road until it crosses the Swan River. It continues along the existing 330kV line then turns North along Swan Road just east of the Great Northern Highway. It follows Dalgety Road East then turns North into Campersic Road. Just south of Lennard Street, it heads east-north-east until it meets the 132kV line which it follows east until Bunning Road where ...	Unreliable	Field and Desktop



## Survey Report 104379

**Title** Australian Research Grants Scheme: Final Report on the Project the Swan Coastal Plain, Western Australia.  
**Authors** Hallam, S.  
**Lead Consultant** S. J. Hallam  
**Survey Types** Archaeological

### Related Survey Areas for Survey Report 104379

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	The survey area comprises 396 DIA sites/heritage locations listed in Appendix, and distributed throughout the Coastal Plain and Darling Ranges and Darling Plateau, from Lancelin south past Mandurah, as shown in Figure 1. The survey area location and extent are as per the AHMS.	temp	Field and Desktop



## Survey Report 105471

**Title** Report on an archaeological investigation for Aboriginal sites proposed Whiteman Park access road

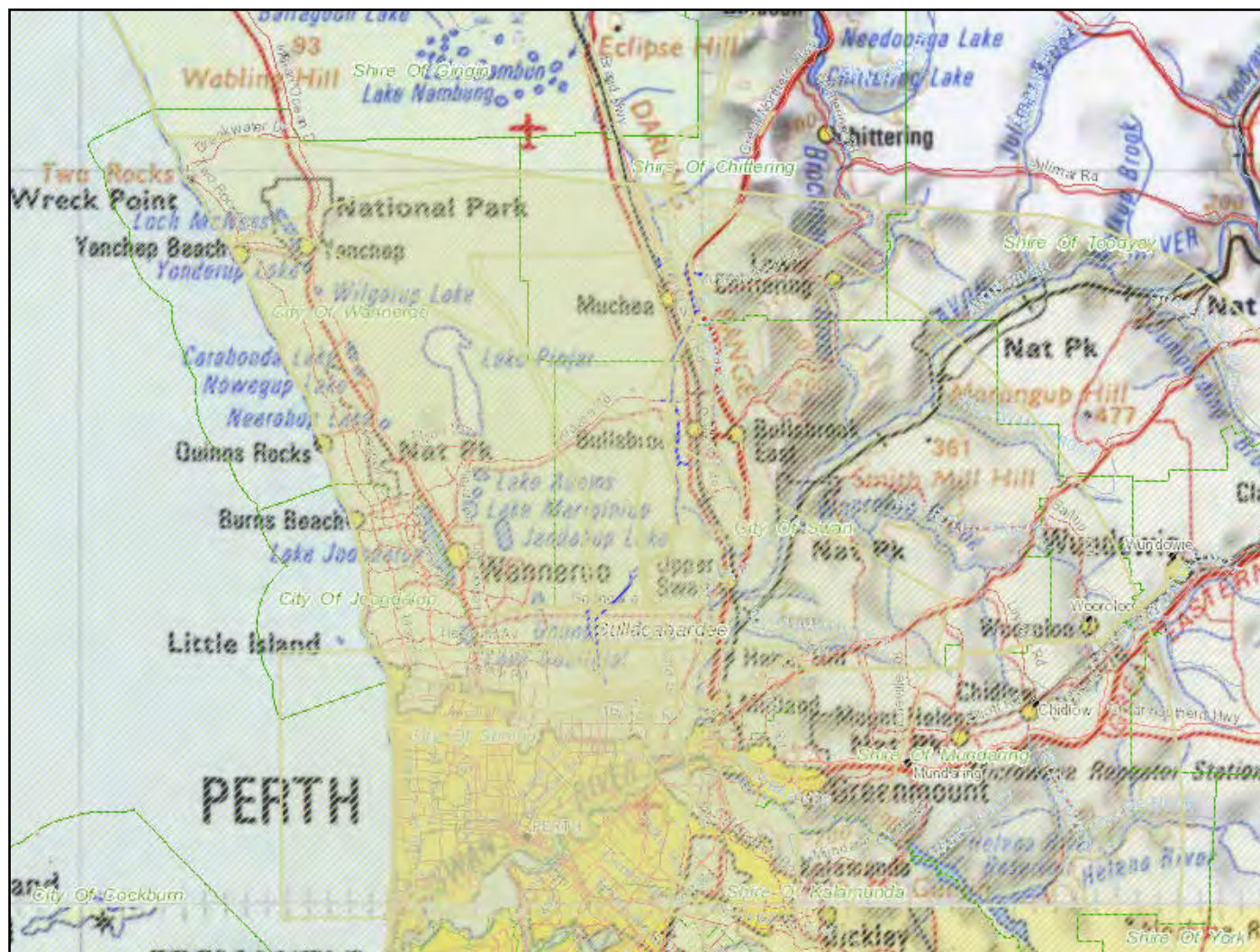
**Authors** Quartermaine, Gary.

**Lead Consultant** Quartermaine Consultants

**Survey Types** Archaeological

### Related Survey Areas for Survey Report 105471

Area Number	Survey Type	Area Description	Spatial Accuracy	Field / Desktop
1	Archaeological	Proposed Whiteman Park Access Road. From Beechboro Road to Whiteman Park Village. It involves an alignment of 3.3.5km with a corridor width of 50m. An alternative crossing, Option B, for the crossing of a Bennett Brook tributary is 700m in length as shown in Fig. 3	Very Good	Field and Desktop



## Legend

### Selected Heritage Surveys

-  Heritage Survey
-  Aboriginal Community Occupied
-  Aboriginal Community Unoccupied
-  Town
-  Search Area

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