

# Archaeological assessment and research design Castle Hill Station

North West Rail Link

Prepared for Baulderstone Pty Ltd | 18 July 2013





---

## Archaeological assessment and research design

Castle Hill Station | North West Rail Link

Prepared for Baulderstone Pty Ltd | 18 July 2013

---

Ground Floor, Suite 01, 20 Chandos Street  
St Leonards, NSW, 2065

T +61 2 9493 9500  
F +61 2 9493 9599  
E [info@emgamm.com](mailto:info@emgamm.com)

[emgamm.com](http://emgamm.com)

---

## Archaeological assessment and research design

Final

Report J13006RP1 | Prepared for Boulderstone Pty Ltd | 18 July 2013

---

Prepared by **Ryan Desic**

Approved by **Pamela Kottaras**

Position Archaeologist

Position Heritage Team Leader

Signature 

Signature 

Date 17 July 2013

Date 17 July 2013

---

This report has been prepared in accordance with the brief provided by the client and has relied upon the information collected at or under the times and conditions specified in the report. All findings, conclusions or recommendations contained in the report are based on the aforementioned circumstances. The report is for the use of the client and no responsibility will be taken for its use by other parties. The client may, at its discretion, use the report to inform regulators and the public.

© Reproduction of this report for educational or other non-commercial purposes is authorised without prior written permission from EMM provided the source is fully acknowledged. Reproduction of this report for resale or other commercial purposes is prohibited without EMM's prior written permission.

### Document Control

Version	Date	Prepared by	Reviewed by
V1	17.07.2013	Ryan Desic	Pamela Kottaras



T +61 (0)2 9493 9500 | F +61 (0)2 9493 9599

Ground Floor | Suite 01 | 20 Chandos Street | St Leonards | New South Wales | 2065 | Australia

[emgamm.com](http://emgamm.com)

## Executive Summary

---

The North West Rail Link is a priority transport infrastructure project for NSW and will provide a new 23 km electrified passenger rail line between Epping and Rouse Hill. The Project includes eight new stations (Cherrybrook, Castle Hill, Hills Centre, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road), a stabling facility and associated infrastructure.

Transport for NSW (TfNSW, the NSW Department of Transport) has commissioned Boulderstone Pty Ltd (BPL) as the managing contractor for the 'Early Works' to allow construction site establishment prior to commencement of the major works for the NWRL. Works at the Castle Hill site are expected to result in removal of a large amount of soil to create the tunnel and the station building and to widen Castle Hill Road. This will result in removal of all potential archaeological evidence at the site.

Heritage constraints were initially identified in the preliminary phases of the project, specifically in relation to the former Castle Hill Tramway (1909–1921) and subsequent Castle Hill Station and railway to Rogan's Hill (1923–1932) (GML 2012a p. 24). The initial investigation identified the Castle Hill Station and railway to have existed within the study area. However, the Castle Hill Tramway occurred over 50 m to the west of the study area, and has been excluded from impacts through additional research conducted for this report. Furthermore, an 1890 subdivision plan of Castle Hill showed two structures in the western apex of the study area: one being a cottage and residence of the Knight Family, and the other a local community hall known as "Oddfellows Hall". The hall was translocated from the study area in 1909, however the fate of the cottage is only known up until 1908 upon the death of Thomas Knight. After the closure of the Castle Hill station and railway in 1932, the majority of the study area became Castle Hill Park (what is now Arthur Whitling Reserve), with the western apex set aside for the ANZAC memorial hall (1935–2005), and the remaining two lots (created in a 1921 subdivision) left for residential and farming purposes. Today the majority of the study area is Arthur Whitling Park, with one remaining lot being the site of a commercial office building.

The historical and archaeological research has concluded that there is moderate potential for the remains of the nineteenth century cottage, the Castle Hill Station building, and the ANZAC Memorial Hall.

Relics associated with the late nineteenth century cottage and the Castle Hill Station and railway were assessed to be of local heritage significance. The remaining potential archaeological resources did not fulfil local or state heritage significance criteria.

The late nineteenth century cottage may yield information relating to its material, structure and layout. The cottage may also provide information on the lives of the fruit growers/orchardists who inhabited the site, namely the well-known Knight Family. The Knight Family, including Thomas Knight were successful orchardists in the Castle Hill area.

The Castle Hill Station and railway has the potential to yield information relating to its layout and dimensions, structural materials, and design. Artefacts relating to the station and railway also may exist. Railways and trains are generally well documented by historians and train enthusiasts. Historically, the focus tends to be on the trains and the structural components of the railway lines. The potential archaeological resource within the study area may provide greater insights into the Castle Hill Station building which would have been a landmark during its short-lived existence.

The recommendations relating to the archaeological resource are to:

- conduct an archaeological test excavation on targeted areas of the site to test the conclusions of this report. The targeted archaeological test excavations are to determine the extent of the significant archaeological resource and this archaeological excavation program is provided in Appendix A;
- prepare a Research Design to guide the archaeological test excavation and frame the approach. This Research Design is provided in Appendix A; and
- ensure that if during the course of excavation, Aboriginal cultural material is found, work ceases and the indigenous heritage consultant is alerted.

# Table of Contents

---

<b>Executive Summary</b>	E.1
<b>Chapter 1 Introduction</b>	1
1.1 Background	1
1.2 Project description	1
1.3 Castle Hill Station	2
1.4 Area of archaeological investigation	6
1.5 Legislative context	6
1.6 Objectives	7
1.7 Research Method	7
1.8 Consultation	8
1.9 Limitations of the investigation	8
1.10 Authorship	8
1.11 Acknowledgments	9
<b>Chapter 2 Historical analysis</b>	11
2.1 Aboriginal people	11
2.2 Historical context	11
2.3 Development of the Castle Hill study area	14
2.3.1 1800–1900: Early grants to citrus orchards	14
2.3.2 Castle Hill tram and railway: 1909–1934	21
2.3.3 1930s–present	30
2.4 Historic themes	36
<b>Chapter 3 Site evaluation</b>	37
3.1 Overview from research	37
3.2 Early grants	37
3.3 Orchardng and agriculture	37
3.4 Subdivision	38
3.5 Study area site inspection	38
3.6 Supervision of tree removal	46
3.6.1 Historic maps and plans	47
3.6.2 Historical aerial photographs	48
3.6.3 Existing land use and disturbance	51
3.6.4 Comparative studies	52
3.6.5 Data from geotechnical investigations	55
3.7 Archaeological potential	57
3.7.1 Aboriginal occupation	57
3.7.2 Assessment of archaeological potential	57

## Table of Contents *(Cont'd)*

---

3.8	Heritage significance	62
3.9	Statement of significance for the potential archaeological remains	67

---

<b>Chapter 4</b>	<b>Impact assessment</b>	<b>69</b>
4.1	Impacts from the proposed development	69

---

<b>Chapter 5</b>	<b>Conclusions and recommendations</b>	<b>71</b>
5.1	Conclusions	71
5.2	Recommendations	72

---

**References**

---

**Glossary of Terms** i

---

## Appendices

A	Research design
B	Curricular Vitae

## Tables

3.1	Assessment of significance summary	62
-----	------------------------------------	----

## Figures

1.1	Archaeological potential — GML 2012	3
1.2	North West Rail Link Early Works sites	4
1.3	Castle Hill study area	5
2.1	Part of the plan of the settlements of NSW 1799 Grimes and Fletcher, with additions to 1815	13
2.2	Bemi's Castle Hill Parish Map 1840s	16
2.3	Higinbotham and Robinson's Pennant Hills Parish Map 1882	17
2.4	Castle Hill Parish Map 1897	18
2.5	Castle Hill Township Estate subdivision 1890	19



## Figures

2.6	Medcalfe Estate Subdivision	22
2.7	Detail sketch showing the tramway terminus and rail loop. Approximate western extent of study area boundary shown in red (source: Singleton 1955)	23
2.8	Garthowen Estate Subdivision 1921	24
2.9	NSW Department of Railways plan of Castle Hill Station and railway line c1924	26
2.10	Castle Hill Parish Map 1924 showing Castle Hill Station and railway	27
2.11	Gungaroo Estate Subdivision	28
2.12	Sellars Estate subdivision	29
2.13	Aerial Photograph of Castle Hill 1943	31
2.14	The study area in 1961	34
3.1	Castle Hill Township subdivision overlay	39
3.2	Garthowen Estate subdivision overlay	40
3.3	Gungaroo Estate subdivision overlay	41
3.4	Sellars Estate subdivision overlay	42
3.5	1924 aerial photograph onto 2013 aerial photograph	49
3.6	1943 aerial photography overlay	50
3.7	Plan of Kentwell Cottage Showing the original built structure (rooms labelled 1 and 2) and subsequent additions	54
3.8	Geotechnical investigations plan	56
3.9	Plan identifying the potential remains of archaeological significance	58
4.1	Castle Hill Station Development	70
A.1	Potential remains of significance and test trench locations	A.10

## Photographs

2.1	Oddfellows Hall c.1908 (source: Watson 2010)	20
2.2	Laying of the tram tracks in 1909 (source: Hills District Historical Society 1990)	21
2.3	Steam tram at Castle Hill terminus (source: Watson 2010)	23
2.4	Train entering Castle Hill goods yard and station area on opening day 28 January 1923 (source: Watson 2010)	30
2.5	ANZAC Castle Hill Memorial Hall opening c1935 (source: Watson 2010)	32
2.6	ANZAC Memorial Hall in southern end of Castle Hill Park c.1960 facing east (source: Watson 2010)	33
2.7	of Herbert Mobbs' packing shed taken from the southern end of Castle Hill Park c1940. The Old Northern Road would be in the north-eastern corner of the image (source: Watson 2010)	35
3.1	Potential location of late nineteenth century cottage residence of the Knight Family.	

## Photographs

	The stairs are likely to have been built for the park.	43
3.2	Arthur Whitling Reserve (facing north)	44
3.3	Central garden feature at Arthur Whitling Reserve (facing west)	44
3.4	Extant brick remnants delineating the driveway of the ANZAC Memorial Hall running to the left (photograph facing south east)	45
3.5	ANZAC memorial at northern end of park (facing south-west)	45
3.6	Earthworks for the translocation of the Memorial Plane Tree located within the central portion of the reserve (facing west)	46
3.7	Trench soil profile showing fill deposit in-between dark brown loamy clay layers (facing south)	47
3.8	ANZAC Day c1980 at Arthur Whitling Reserve	51
3.9	Potential location of late nineteenth century cottage residence of the Knight Family (note that the stairs and paving are not likely to be the cottage)	60

# 1 Introduction

## 1.1 Background

EMGA Mitchell McLennan Pty Ltd (EMM) has been commissioned by Boulderstone Pty Ltd (BPL) to undertake an archaeological program at the Castle Hill Station construction site (the Project). This report details the archaeological assessment and research design for the archaeological program.

Heritage constraints were initially identified in the preliminary phases of the project. This included the extant Arthur Whitling Reserve, established in 1934 on the site of the former Castle Hill Railway Station (1923–1932). The reserve once hosted an Anzac Memorial Hall until 2005, and a number of historic items still exist within the reserve, including memorial plaques, commemorative trees, as well as some other mature trees. The reserve was assessed to be of local significance by Godden Mackay Logan Pty Limited (GML) in their 2012 assessment of Project area (GML 2012a p.25); however, no statutory listing currently applies. The historic items within the reserve were subject to photographic archival recording in February 2013 (EMM 2013a) and the collection of significant items currently underway by the Hills Shire Council. As such, all extant heritage items within the reserve are currently being managed in accordance with Project approval and are therefore outside the scope of this assessment.

An area of archaeological potential was identified within the Project area by Casey and Lowe in 2006. This was identified as the Castle Hill tramway that comprised of a single track with a reversing loop at Castle Hill. In 2012, GML further addressed the archaeological potential by suggesting that evidence of a railway may also exist (p 24) (see Figure 1.1). GML proposed that the Project area was unlikely retain archaeological evidence of the tramway/railway because of the level of disturbance involved in the construction of the extant reserve. The current EMM report has aimed to assess the archaeological potential of the tramway/railway and any other potential archaeological deposits within the Project area identified from this investigation.

## 1.2 Project description

The North West Rail Link (NWRL) is a priority transport infrastructure project for NSW and will provide a new 23 km electrified passenger rail line between Epping and Rouse Hill. The Project includes eight new stations (Cherrybrook, Castle Hill, Hills Centre, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong Road), a stabling facility and associated infrastructure (Figure 1.2). The Early Works include site establishment prior to the commencement of the Major Works and can be grouped into the following categories:

- tunnelling construction power – high voltage power supplies for construction;
- demolition – demolition of a mixture of residential and commercial properties and/or facilities;
- roads and traffic – road adjustments, signalling, and existing transport network facilities relocation; and
- precinct preparation – utilities, services relocations and miscellaneous works.

Transport for NSW (TfNSW, the NSW Department of Transport) has commissioned BPL as the managing contractor for the 'Early Works' to allow construction site establishment prior to commencement of the major works for the NWRL. Construction works at the Project site will result in extensive subsurface

excavation of up to 25 m for the emplacement of a cut and box cover structure. This will result in the removal of all potential archaeological evidence within the Project area.

The proposed construction works will also involve partial closure of the Old Northern Road as well as removal of the war memorial (relevant historic plaques have already been collected by the Castle Hill RSL Club in association with TfNSW), relocation of the existing bus interchange, open cut excavation works for the station, and excavation of tunnel crossovers beside the station. At the completion of the works the Project area will become the Castle Hill Station.

### 1.3 Castle Hill Station

Construction is proposed in the Project area selected for the location of Castle Hill Station. The Project area is approximately 18,000 m<sup>2</sup> and located in the commercial centre of Castle Hill. The site occupies most of the existing Arthur Whitling Reserve and is bound by Old Castle Hill Road to the north, Old Northern Road to the south and McMullen Avenue to the east. The affected lots are listed below and have been assessed for their archaeological potential.

- Lot 7006/DP 93757;
- Lot 1/DP 1129465
- Lot 215/DP 752020; and
- Lot 198/DP 752020.

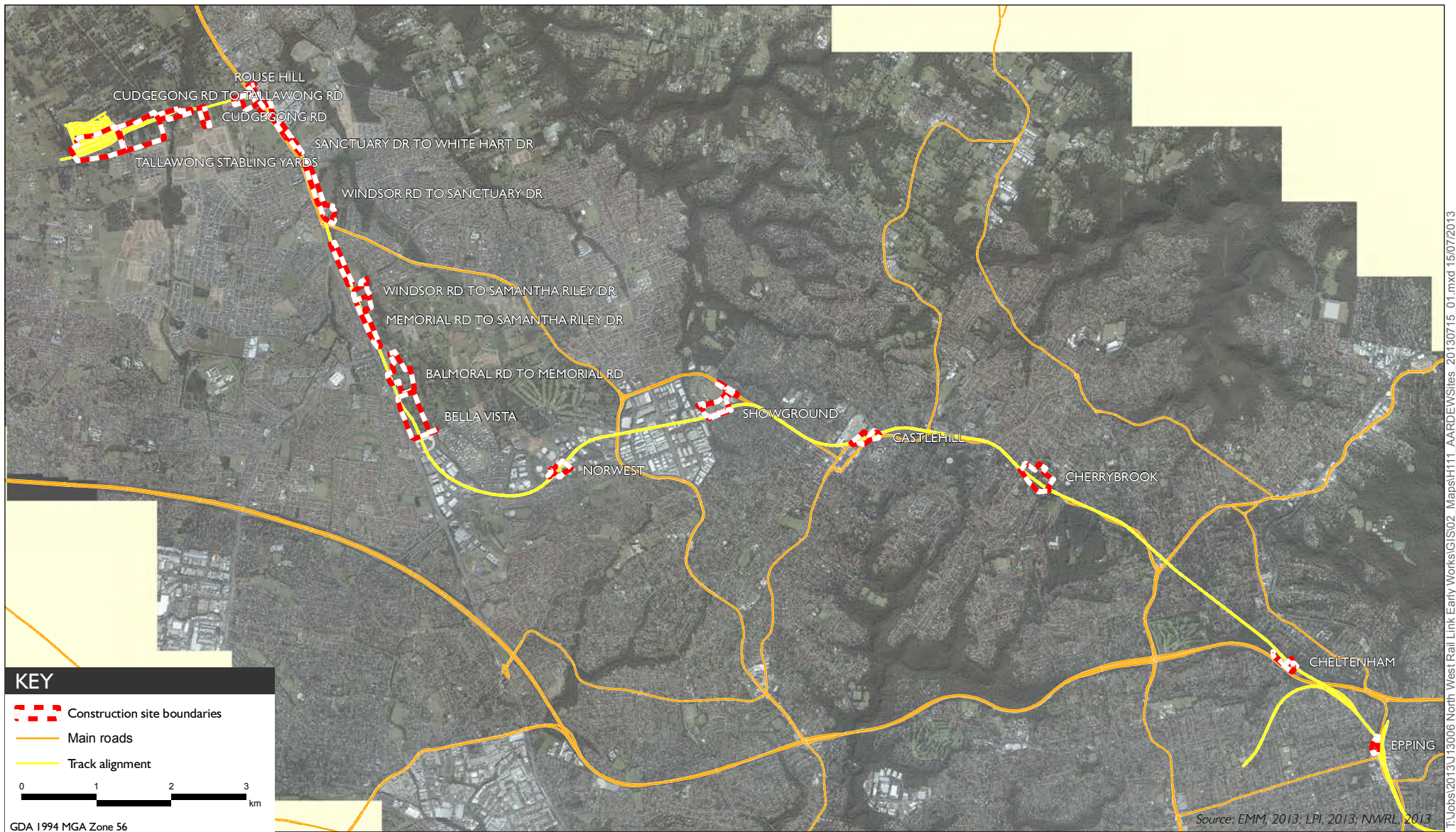
The construction site boundary for the Project is shown in Figure 1.1.



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H110\_AARDCastleHillGML\_20130718\_03.mxd 18/07/2013



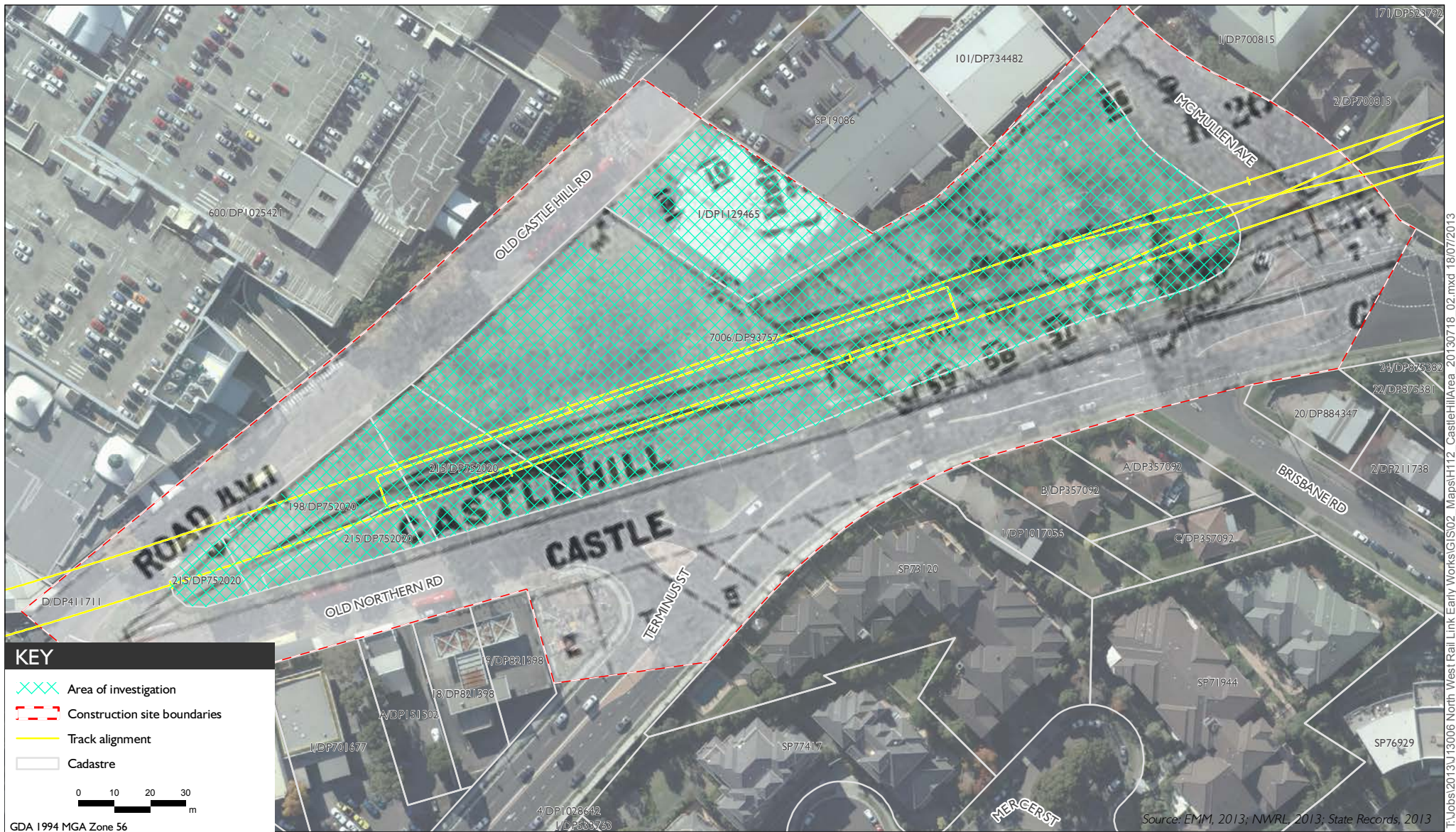
**Archaeological potential - GML 2012a**  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 1.1



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H111\_AARDEWSites\_20130715\_01.mxd 15/07/2013



**North West Rail Link Early Works sites**  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 1.2



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H112\_CastleHillArea\_20130718\_02.mxd 18/07/2013



**Castle Hill study area**  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 1.3

## 1.4 Area of archaeological investigation

The land under investigation (the study area) at Castle Hill station encompasses all the lot numbers identified in Section 1.3 and shown on Figure 1.3. The scope of this report does not include Lot 101/SP 19086 and Lot 101/DP 734482 as they are outside the study area.

The majority of study area is within the Arthur Whitling Reserve in The Hills Shire Local Government Area (LGA). The reserve currently hosts remnants of the Parramatta to Castle Hill tramway in a commemorative plaque and a rail signal is on display nearby. The Reserve also contains a number of mature plantings, various other small garden beds and an ANZAC memorial at its eastern end. Sandstone steps and garden edging provide access from Old Northern Road close to the south western end of the site and opposite is a raised area behind a retaining wall adjacent to Old Castle Hill Road.

The study area has recently been subject to preparation works for the NWRL construction program. This has included the collection of movable heritage items, including memorial plaques, within Arthur Whitling Reserve by The Hills Shire Council.

Pre-construction works have also included machine-aided transplantation works of a historically significant tree (the Lone Plane Tree) that stood in Arthur Whitling Reserve. This tree was removed from the study area to be relocated to a nearby park. Due to the time constraints on the Project, a preliminary assessment was completed by EMM archaeologists who concluded that no areas of archaeological potential were expected to be impacted. As an additional heritage safeguard, the transplanting works involved monitoring by an EMM archaeologist. The observations made during the excavation have been considered in this report and are further addressed in Section 3.6.

No statutory heritage listed items or other heritage items occur in the immediate vicinity of the study area.

## 1.5 Legislative context

In 2012, the Early Works were approved under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The planning approval process does not involve the requirement for excavation permit approval under the *Heritage Act 1977* (s140) but retains the notification for unexpected finds clause (s146) of the Act. The management strategies presented in this report are a response to the Minister's Conditions of Approval (MCoA), which require consultation with the Heritage Council of NSW.

The MCoAs list a number of requirements for heritage including the heritage management tasks EH1 to EH19 in the Heritage Report (GML 2012a) to mitigate the associated impacts. Not all the MCoAs relate to potential archaeological sites but the following relates specifically to this report:

*E10. Prior to the commencement of pre-construction and/or construction activities that will impact the historical archaeological sites identified in Table 4.2 of the North West Rail Link EIS: Technical Paper 3 – European Heritage, dated March 2012, the Proponent shall undertake an archaeological excavation program in accordance with the Heritage Council of NSW Archaeological Assessments Guideline (1996) using a methodology prepared in consultation with the Heritage Council of NSW, and to the satisfaction of the Director General. This work shall be undertaken by an appropriately qualified heritage consultant.*

*Within 2 years of completing the above work, unless otherwise agreed by the Director General, the Proponent shall submit a report containing the findings of the excavations, including artefact analysis and the identification of a final repository for any finds, prepared in consultation with the Heritage Council of NSW and to the satisfaction of the Director General.*



This report details the methodology devised for the archaeological excavation program for review and comment from the Heritage Council and the Department of Planning and Infrastructure (DP&I).

## 1.6 Objectives

This report has been prepared to fulfil the MCoA listed above for the NWRL Early Works Project and the conditions detailed in the Construction Heritage Management Plan (Baulderstone 2013). This report also aims to:

- investigate the historic archaeological resource identified in the Heritage Report (GML 2012a) through historical research;
- determine the likely location of the archaeological resource;
- assess the level of potential for archaeological resources;
- provide a preliminary assessment of significance;
- present appropriate archaeological management strategies for the historic archaeology; and
- provide recommendations on future procedures required to best mitigate impacts on the archaeological resource.

## 1.7 Research Method

This report was prepared in accordance with the *Archaeological Assessment Guidelines* (Heritage Council 1996) as prescribed by the MCoA. This report is also guided by the philosophy of the *Charter for Places of Cultural Significance* commonly known as the *Burra Charter* (Australian International Council on Monuments and Sites, ICOMOS 1999).

Significance and impacts to significance have been assessed using the following guidelines:

- *Statements of Heritage Impact Guidelines* (Heritage Office 2006);
- *Investigating Heritage Significance* (Heritage Office 2004);
- *Assessing Significance for Historical Archaeological Sites and 'Relics'* (Heritage Branch Department of Planning 2009);
- *Historical Archaeology Code of Practice* (Heritage Office 2006); and
- *How to Prepare Archival Records of Heritage Items* (Heritage Office 1998).

At this stage the significance assessment is preliminary and based on the historical documentation obtained thus far. If an archaeological field program is determined to be the most appropriate management strategy, the assessment of significance will be updated to reflect new data recovered through excavation.

To determine the likely location, survival and heritage significance of the archaeological resource, the following sources were consulted:

- historic maps and plans;

- Picture Australia for historic photographs;
- previous historical or archaeological reports;
- geotechnical investigations of the site;
- modern and historic aerial photography; and
- additional local historical resources including rate books and probate records.

Research was undertaken a number of sources listed below:

- Land and Property Information: title searches;
- Land and Property Information: Six Spatial Information Exchange (online);
- the Mitchell Library;
- the State Records Authority NSW;
- Hills Shire Local Studies Library;
- Trove Newspapers online;
- Heritage Branch Library: Consultant reports;

## 1.8 Consultation

A meeting with the Heritage Branch, TfNSW and EMM occurred on 13 June 2013. This meeting presented information on each of the study areas with archaeological potential and the preliminary research and excavation strategies planned for each. The Heritage Branch comments from that meeting noted the requirement that this report be submitted to the Heritage Branch on behalf of the Heritage Council for review and comment.

## 1.9 Limitations of the investigation

This investigation deals specifically with the items of potential archaeological significance within the study area. Existing movable and non movable heritage items within Arthur Whitling Reserve have been managed in accordance with the NWRL Construction Heritage Management Plan (Condition E46(e) of Project Approval), and relevant heritage items have been subject to archival recording in accordance with Condition E8 of Project approval (see EMM 2013a for draft archival record report). This report does not include the assessment of the extant heritage items within the reserve, although these items have been considered in the assessment of the potential archaeological resource.

This report does not include an Aboriginal heritage assessment for the Project, nor does it consider potential Aboriginal archaeology in the study area. A detailed assessment of Aboriginal heritage for the study area is separate to this report.

## 1.10 Authorship

This report was written by Ryan Desic BA Hons (Historic and Prehistoric Archaeology) (EMM) with assistance from Rebecca Newell BA Hons (Archaeology and Heritage Studies). Research was conducted by

Rebecca Newell, Ryan Desic and Louise Doherty (Heritage Advisory Services). Analysis, report direction and review was provided by Pamela Kottaras BA Hons (Archaeology) – Associate Archaeologist (EMM) and David Kelly BTP (Hons) – Senior Environmental Planner (EMM). External review was undertaken by Tory Stening of Comber Consultants, who is the nominated excavation director.

### 1.11 Acknowledgments

Staff at the State Library and the State Records provided invaluable assistance. Assistance in investigating land titles and early mapping was provided by Robert Parkinson at the Land and Property Information Division of the Department of Finance and Services. Research in the Castle Hill area was provided by Castle Hill Local studies librarian Kylie Dobbie and the Hills Historical Society.



## 2 Historical analysis

### 2.1 Aboriginal people

The majority of information about the social and cultural structure of Aboriginal society before contact with new settlers comes from accounts made by Europeans. These accounts and observations were made after massive social disruption due to disease and displacement. As a result, this information is often contentious, particularly in relation to language area boundaries. The discussion below is based on information obtained from early settlers and explorers in the Castle Hill area.

The dominant Aboriginal language group for the study area was the Darug (hinterland) (Attenbrow 2010 p. 34). Their territory extended from the mouth of the Hawkesbury River inland to Mount Victoria, Campbelltown and Liverpool (Tindale 1974). The surrounding landscape, including the Hawkesbury River, would have provided fresh drinking water and yielded fresh water fish, crustaceans and shellfish. Men and women fished, women hunted small animals such as lizards and snakes while men hunted the larger animals such as kangaroos (GML 2012c, Hornsby Shire Council 2013). This diet was supplemented by edible flowers and plant roots, honey, berries and fruits.

Suitable stone for manufacture of stone tools occurs across the Cumberland Plain. The closest raw material would have been the silcrete of the St Mary's formation at Plumpton Ridge, Eastern Creek and Marsden Park (GML 2012c p.13).

The Aboriginal cultural heritage issues on site have been addressed in GML 2012c.

### 2.2 Historical context

The Castle Hill area was initially reserved by the colonial Government as part of a 34,539 acre area known as the Government Grounds, shown in Figure 2.1 (Carr et al 1997). This area was largely uninhabited by the new settlers but included government run model farms to test the productivity of the soil (Carr *et al* 1997). In 1811, a lunatic asylum was created in Castle Hill by Governor Macquarie, while the remaining area of the Government Grounds remained unoccupied but under the Government's control (Neil 1992 p.6). After approximately 1815, the Government Grounds were released to settlers as Crown Grants and the asylum was closed in 1826 (Carr *et al* 1997).

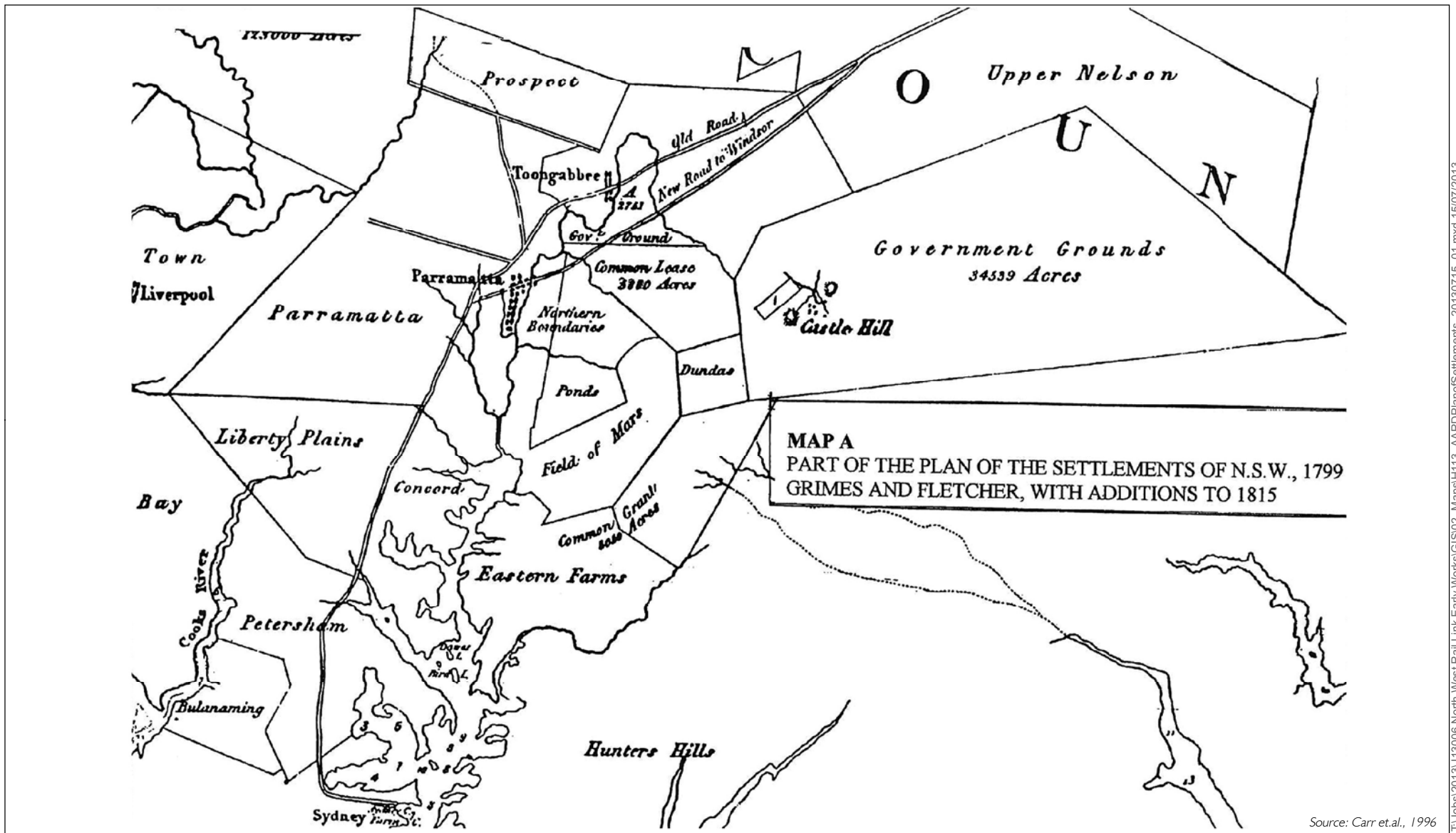
The model farms were a moderate success and the settlers who came to the area created a large agricultural district. Large land grants were given to George Suttor, the Mobbs family, Andrew McDougall and Matthew Pearce. The rich loamy soil of the area was suitable for the cultivation of fruit trees, particularly citrus, nectarines and peaches. Numerous plans, surveys and aerial photos note a number of orchards along Old Castle Hill Road, Old Northern Road (former Castle Hill Road) and the greater Castle Hill rural area to the west.

The study area and surrounds was subject to more intensive subdivisions in the late nineteenth century, which portioned off large 40–100 acre grants into smaller estates to accommodate residential housing. Early subdivisions included the *Castle Hill Township* (1889) which was part of the original 157 acre Jenner Estate and comprised parts of three grants. This was centred on the Castle Hill Township (including the study area) and consisted of 74 quarter acre house blocks closest to the main roads. Initially, areas radiating out from the town centre were generally larger in size and ranged from one to 10 acres.

Residential and business subdivisions around the town centre increased into the twentieth century. The location of Castle Hill's business area became clear when the Parramatta to Baulkham Hills tramway was

extended to Castle Hill in 1910, with its terminus at the Castle Street/Cranes Lane intersection. The area around the study area became a focus for fruit growers to transport their produce to the greater Sydney Market. A railway and station was built at the town centre from 1923, and due to financial difficulties and increased vehicle traffic on the roads, the railway was closed in 1932.

The study area has remained undeveloped since the closure of the railway, and has been the site of Arthur Whiting Reserve (the former Castle Hill Park) since 1934. The broader Castle Hill area remained largely rural until the 1960's, which opened the area to further growth, and land holdings were reduced to suburban blocks common in the area today. From the 1990s, the emphasis of development has been towards medium and high density housing. The rezoning of the land closest to public transport and a major shopping centre, The Castle Towers, has seen the demolition of many houses and the erection of some apartment buildings.



Source: Carr et al., 1996

Part of the plan of the settlements of NSW 1799 Grimes and Fletcher, with additions to 1815

North West Rail Link Early Works  
Archaeological Assessment and Research Design - Castle Hill

Figure 2.1

## 2.3 Development of the Castle Hill study area

### 2.3.1 1800–1900: Early grants to citrus orchards

From 1788 to approximately 1815 the study area was part of the Government Grounds (Figure 2.1). The first land grants on the study area were a 60 acre Crown Grant to James Duff in 1818 (eastern portion of the study area) and a 40 acre grant to Stephen Hunter (the western portion of the study area). Their names are noted on parish maps for Castle Hill in 1840 and 1897 and for Pennant Hills in 1882 (Figure 2.2 Figure 2.3 and Figure 2.4). In 1821, James Duff was listed in the Sydney Gazette for tendering supplies of wheat (100 bushels) for the use of the Crown's stores (Sydney Gazette 1821). When the Great North Road was surveyed in 1826, it was shown to cut Stephen Hunter's and James Duff's properties into sections, leaving a triangular portion which is the study area today.

Stephen Hunter was the Constable in the Cow Pastures, tasked to protect the cattle of the Hills district (The Sydney Gazette and NSW Advertiser 1817). Stephen Hunter's grant was obtained by the McCarthy family in the 1850s. Martin McCarthy senior died in the estate in 1860 and the land passed to his three small children Martin McCarthy Junior, Joseph McCarthy and Amelia Ann McCarthy. Samuel Moore became guardian of the McCarthy estate until Martin McCarthy Junior turned 21 in 1882. It appears that the land was leased to three different groups while the McCarthy's lived across Old Northern Road to the south.

At the junction of Old Castle Hill Road and Old Northern Road, the land was leased to William Matchett, a storekeeper, Edwin Joseph Black, a farmer and Daniel Purdy Horwood, a blacksmith in 1879 on behalf of the Oddfellows Society for the provision of a hall for the brothers of which all three were members.

The Manchester Unity Independent Order of Oddfellows (M.U.I.O.O.F) was first established in Australia in 1839. Eight brothers that had been members of the Manchester Unity Friendly Society in England opened the M.U.I.O.O.F in Sydney (Manchester Unity 2013). The first branch was named Strangers Refuge. M.U.I.O.O.F is a friendly society which is an association in which voluntary subscription of its members provide for the relief and maintenance of members and their families in sickness and old age. A lodge was soon formed in Parramatta in the 1840s (Manchester Unity 2013). The Prince of Wales Lodge was the name of the lodge in the Windsor and Castle Hill areas.

Edwin Black while listed as a farmer was also a coach proprietor establishing a line of coaches between Galston and Parramatta (The Cumberland Argus and Fruitgrowers Advocate 1932). He received the contract to deliver the post in 1895 and 1896 (The Cumberland Argus and Fruitgrowers Advocate 1896). He was a keen horse breeder and was one of the founders of the Castle Hill Show (The Cumberland Argus and Fruitgrowers Advocate 1932).

Daniel Horwood was a blacksmith and publican. He built the second of three hotels on the site of the current Bull and Bush Hotel at the junction of Windsor and Old Northern Roads in Baulkham Hills. His obituary states that he lived in the Hills district his whole life and was known as the 'Grand Old Man' of the Hills (The Cumberland Argus and Fruitgrowers Advocate 1946). Adjacent to this parcel of land in the east the land was leased to William and Thomas Knight in approximately 1884. The rest of the land was owned and leased by a number of people including Francis Thomas Watkins (1884), George Sargent (1892) and William Thomas Armstrong (1920). William Armstrong was a member of the Oddfellows Lodge and on his death had reached the office of Noble Grand (Windsor and Richmond Gazette 1943). Sargent appears to have leased the land to Robert Miller and lived instead in Craig Gowan a mansion in Castle Hill (The Cumberland Argus and Fruitgrowers Advocate 1906).



A small section of the land now considered to be Lot 1 DP 1129465 was then obtained by John Strang in 1921. The Strang family were well known in the area, Mrs Strang being a member of the Windsor Branch of the Country Women's Association (Windsor and Richmond Gazette 1948). By 1941 it appears that the family had moved to the larger Garthowen (The Cumberland Argus and Fruitgrowers Advocate 1941).

The late nineteenth century saw the earliest subdivisions occur in the greater Castle Hill area. In 1889 the study area is shown to have bordered on the *Castle Hill Township* subdivision (Figure 2.5) which extended from Showground Road and along Old Northern Road and Old Castle Hill Road (Watson 2010 p.49). Nearby Castle and Pennant Streets were created in this plan. The subdivision included 74 quarter acre lots with large house blocks closest to the main roads. Lots of increasing size (of one, two, three, and four acres) were situated away from the town centre. The subdivision plan shows two structures within the study area close to the fork of Old Castle Hill Road and the Old Northern Road (former Castle Hill Road). One building is labelled as Oddfellows Hall and the other is labelled as the house of William Knight.



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS\02\_Maps\H114\_AARD\Bemis\_20130715\_01.mxd 15/07/2013



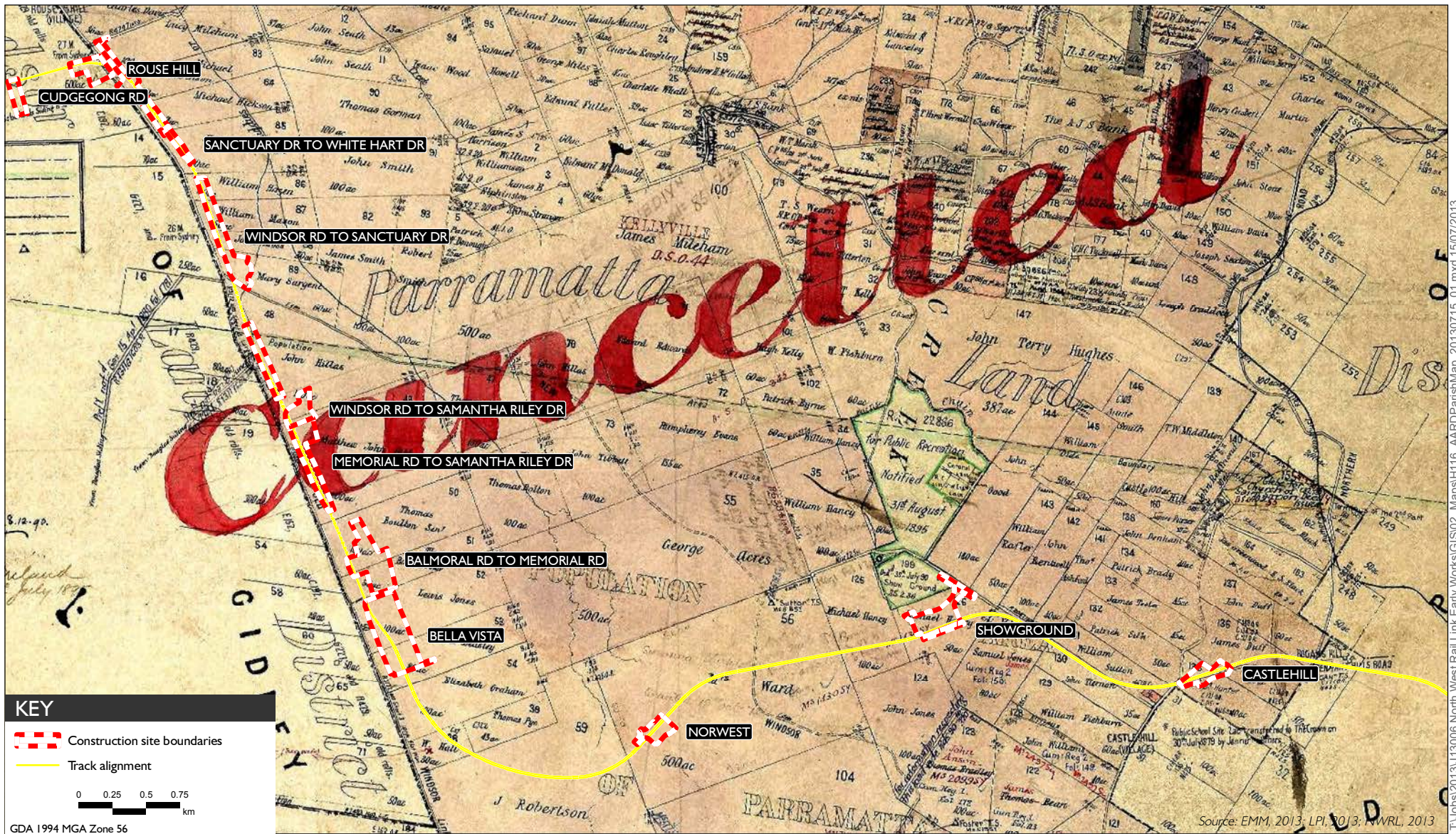
**Bemi's Castle Hill Parish Map 1840s**  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 2.2

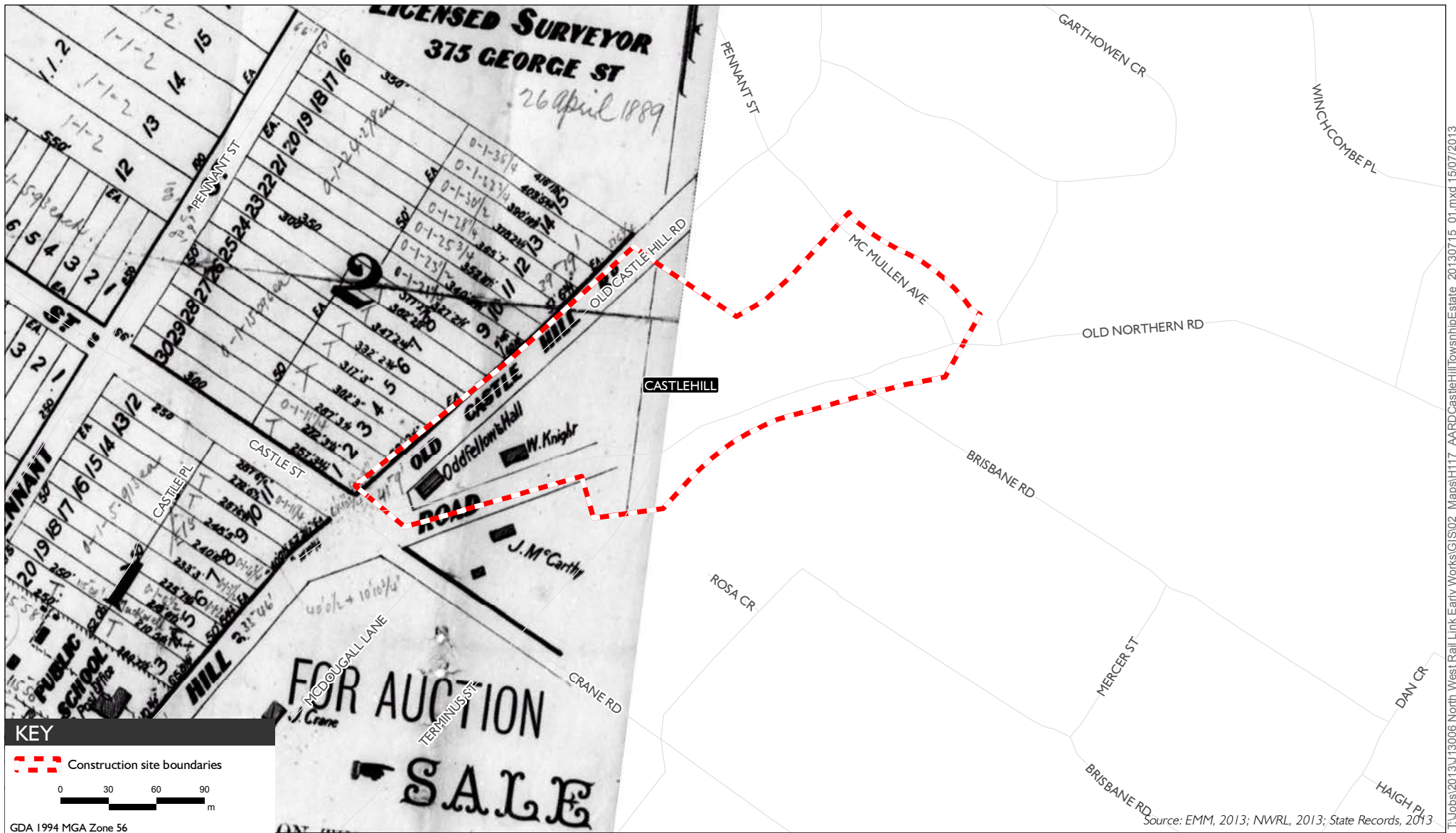


T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H115\_AARD\Higinbotham\_20130715\_01.mxd 15/07/2013



Higinbotham and Robinson's Pennant Hills Parish Map 1882  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 2.3





Castle Hill Township Estate subdivision 1889  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 2.5

Oddfellows Hall was the first public hall erected in Castle Hill. It was a weatherboard structure built for the Independent Order of Good Templars on Algernon James Medcalfe's property in 1878 (The Hills Historic Society 2013). The Hall received a considerable amount of media attention in the early 1890s for being the location of public meetings focused on the topic of The Prohibition. The Good Templars (also known as the Sons of Temperance), who hosted weekly meetings at the Hall, were renowned for practising temperance and were noted to have supported The Prohibition, much to the distaste of local publicans (*The Cumberland Argus and Fruitgrowers Advocate* 1891a, 1891b, 1891c). Oddfellows Hall was destroyed by fire in May 1894 only one night before a social was to be held at the Hall (*Evening News* 1894). The *Evening News* paper refers to the Hall being on the property of Thomas Knight who was a 'well-known fruit grower' (1894a). The Hall was rebuilt in August of the same year and where it stood for a further 15 years in the study area (see Photograph 2.1). The Methodists purchased the hall in 1909 and moved it to the northern side of Castle Hill Public School in Old Northern Road to use as a church (the Hills Historic Society).



**Photograph 2.1**      **Oddfellows Hall c.1908 (source: Watson 2010)**

The house structure shown in Figure 2.5 was owned by William Knight in 1889. He was to die only three years later at the age of 72 at his Castle Hill property. The *Cumberland Argus and Fruitgrowers Advocate* 1891c). The property was then given to Thomas William Knight as noted on the land title application for John Strang in 1921. A newspaper article dedicated to Thomas Knight's death in 1908 indicates his success as a fruit grower for over 30 years (*The Cumberland Argus and Fruitgrowers Advocate* 1908). It makes the interesting point that Knight's oranges stayed on the trees very late and commanded the highest prices at the markets. The article also stated that the late William Knight and his son Thomas formerly resided at the 'Castle Hill hall (Oddfellows Hall), and the cottage and small orchard adjoining being their property' (*The Cumberland Argus and Fruitgrowers Advocate* 1908). Until his death, Thomas remained devoted to his business and not to public affairs or the business of his neighbours (*The Cumberland Argus and Fruitgrowers Advocate* 1908). With his wife Jane, Thomas had seven children, who remained living in the house after Thomas' death. Thomas Knight lectured to the Mildura Horticultural society and provided advice on fruit growing and tree stock for the Castle Hill areas (*The Cumberland Argus and Fruitgrowers Advocate* 1892).

In 1897, a portion of James Duff's 1818 grant was subdivided into the Medcalfe Estate (Figure 2.6). This division was bounded to the west by Old Castle Hill Road, crossing Old Northern Road to north-east to

Rogans Hill. The estate was divided into 10 farms averaging 10 acres each. Lot 2 of this subdivision contained the northern half of the study area.

Subdivisions surrounding the study area occurred in the early twentieth century. This included the *Tram Terminus Estate* in 1910, which was comprised of 28 blocks averaging less than half an acre starting at the corner of Old Northern Road and Crane Road to the south-east of the study area. The *Rebecca Hill Estate* further subdivided Stephen Hunter's 40 acre grant on the eastern side of Old Northern Road (to the east of the study area). This included nine house blocks on Old Northern Road and 22 larger, deeper blocks, along Brisbane Road.

### 2.3.2 Castle Hill tram and railway: 1909–1934

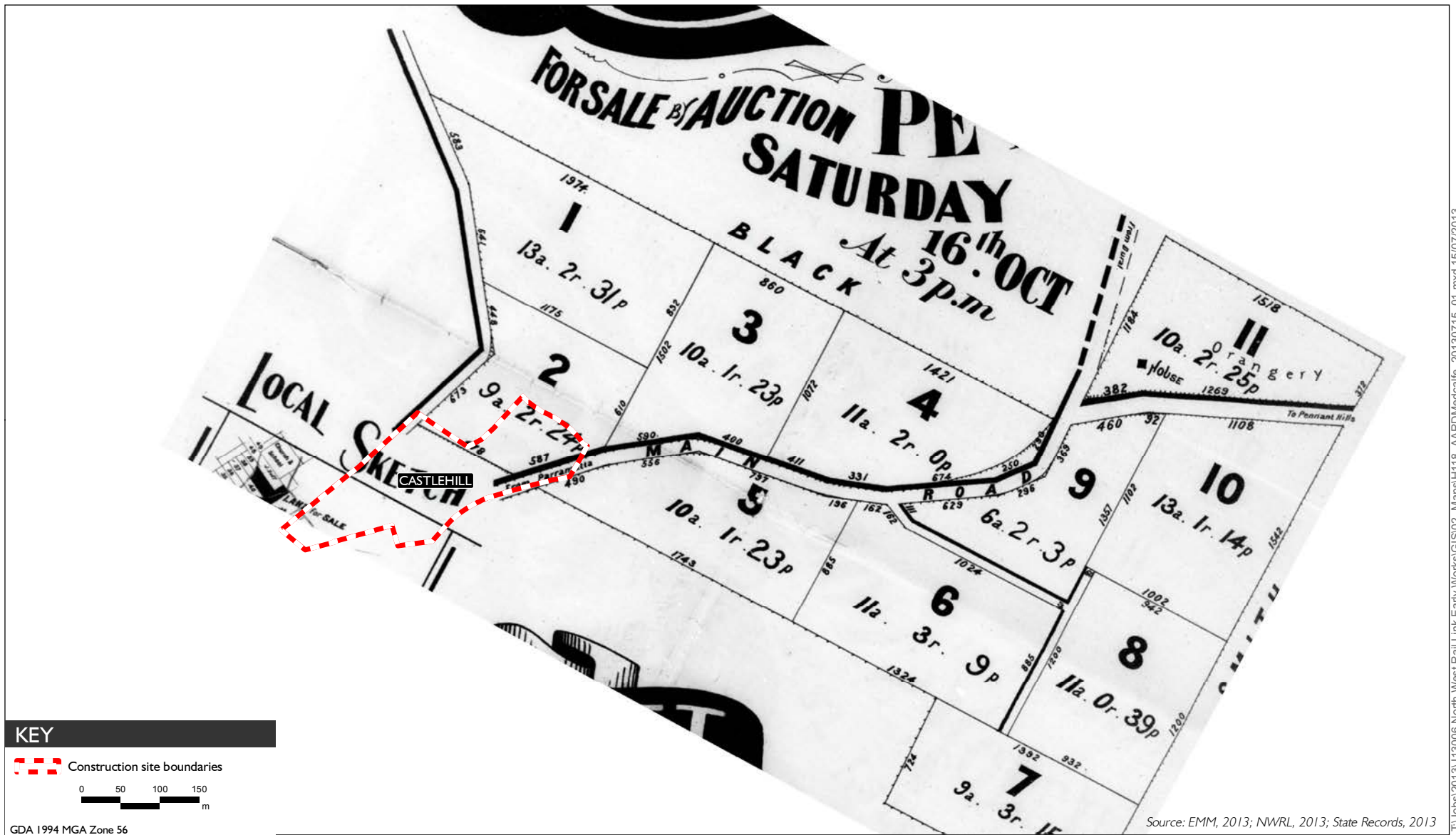
Castle Hill and the surrounding areas were characterised by their large rural estates that were prime locations for fruit growing. As the colony expanded in the late nineteenth and early twentieth century's, so too did the demand for produce in Parramatta and Sydney region.

Interest in encouraging trade with the Castle Hill area was first considered in the late nineteenth century but the farmers of Castle Hill called for a more efficient means of transporting fruit to markets in Parramatta and Sydney. This was to be achieved by the extension of a steam tramway that existed from Parramatta to Baulkham Hills. A number of proposals to extend a tramway from Parramatta to Castle Hill, firstly in 1893 and then in 1897, were unsuccessful (Forsythe and Dease 1950 p.4). However, the latter proposal did result in the construction of a tramway from Parramatta to Baulkham Hills, which was completed in 1902.

It was not until 1909 that construction started for a tramway extending to Castle Hill from Baulkham Hills. The extension was commissioned by the Minister for Works, Mr. Lees, with the intention for it to carry goods as well as passengers. It was also the Minister's initial intension for the extension to be capable of carrying railway wagons too. However, the reality of the construction was less than what was anticipated; which produced only an extension fit for a steam tram locomotive (Irwin 1996 p.5).



**Photograph 2.2** Laying of the tram tracks in 1909 (source: Hills District Historical Society 1990)



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H118\_AARD\Medcalfe\_20130715\_01.mxd 15/07/2013



From 1910 the tramway transported goods traffic in flat ballast bogie (a wheeled wagon) vehicles (Photograph 2.3). The line consisted of a single track with a reversing loop at on Old Northern Road, close to the junction of Crane Road. Subdivision plans for Garthowen Estate in 1921 show the tramway as terminating at Castle Street and Cranes Lane (now Cranes Road) (Figure 2.8). The length of the tramway was 2 miles 18 chains and it terminated approximately 5 m short of the Castle Street-Cranes Lane intersection (Irwin 1996) and to the south. The terminal loop was laid 3 chains clear, with a terminal stub of 150 feet (Irwin 1996). The rail loop is shown to have occurred just south of Crane Street before the terminal stub (Singleton 1955 p.77). The line was laid with 60 lb T-rail throughout fastened to hardwood sleepers with white metal used for ballast (Irwin 1996).



Photograph 2.3 Steam tram at Castle Hill terminus (source: Watson 2010)

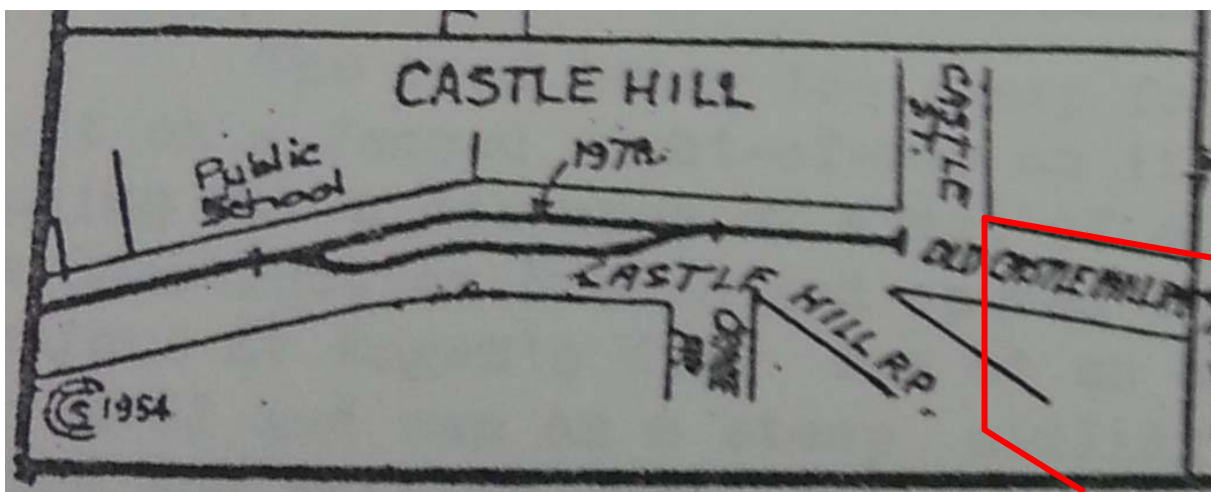
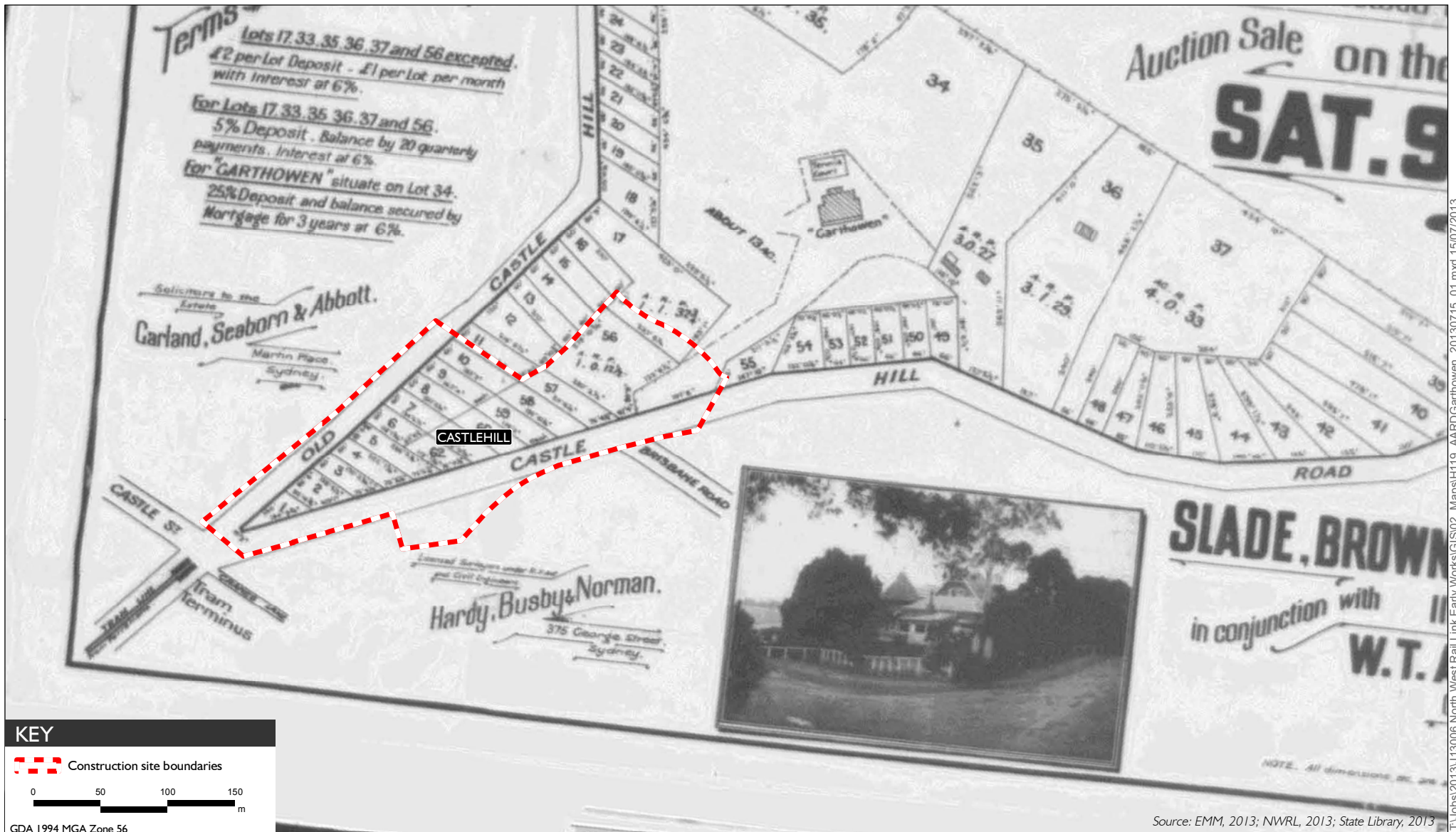


Figure 2.7 Detail sketch showing the tramway terminus and rail loop. Approximate western extent of study area boundary shown in red (source: Singleton 1955)



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H119\_AARDGarthowen\_20130715\_01.mxd 15/07/2013

Ten return trips were completed each week day to Castle Hill, 16 on Saturday and 12 on Sunday. The service was extended and in 1923 18 return journeys were being operated daily to and from Castle Hill (Irwin 1996 p.30). At its height in 1922 it carried over 1 million passengers (Forsythe and Dease 1950 p.6).

During the late 1910s, plans were made to change the tramway into a railway to further integrate the Sydney rail network and increase the movement of produce between Castle Hill and Sydney. Apart from the fruit growers, most locals thought it an expensive and useless modification (Irwin 1996, p.80). Singleton argues that in 1919, the Minister for Works was influenced by certain 'outside sources' and began to take a paternal interest in the proposed conversion, thereby encouraging the subdivision of local estates for residential purposes (Singleton 1955 p.76).

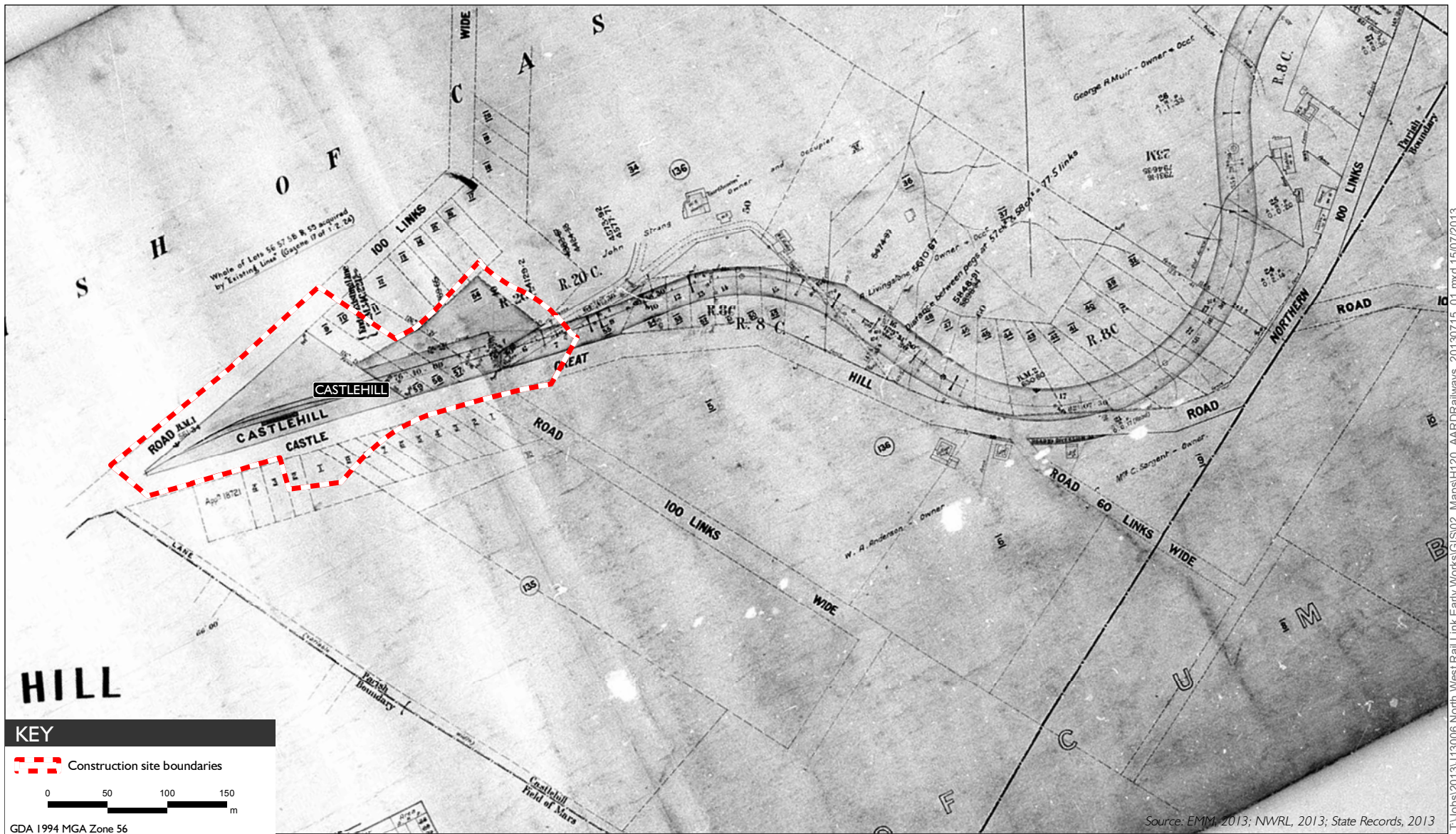
At this time the Kentwell family purchased land in to the north-east of the study area. They built a weatherboard cottage on the site in 1912 and Alice Kentwell lived there until her death in 1948 (The Cumberland Argus and Fruitgrowers Advocate 1948). The Kentwell family were Methodists (Watson 2010) and possibly encouraged the sale and movement of the Oddfellows hall to the Methodist Church. The Kentwell house is visible on the 1947 aerial photograph and was present until the late 1980s. Other houses were built in adjoining lots and are visible on aerial photographs however there is little information on their owners.

In April 1921 a portion of the study area was part of the *Garthowen Estate* subdivision. The study area comprised 17 lots; including a small portion of an 18<sup>th</sup> lot (Lot 17 —Figure 2.8). These lots were likely to be part of either the 'business sites (and) residential' lots advertised by the subdivision plan. The advertisement also included the 13 acre 'Garthowen' house and property to the north-east of the study area. The subdivision also had the luxury of access to city water which was advertised in the estate subdivision.

The auction on 9 April 1921 saw the NSW Department of Railways acquire a large portion of the study area for the construction of the Castle Hill Railway Station. Work to convert and extend the tramway to become the Castle Hill to Rogans Hill Railway commenced late in 1921 (Irwin 1996 p.69). The grading of the tramway had to be reduced to 1 in 25 and the whole width of the affected roads was re-graded (Irwin 1996 p.69). Removal of the Castle Hill tramway loop finished in late 1922.

By 1924, the entirety of the lots containing the railway had been acquired (as shown in Figure 2.9). Within the study area, only Lots 9 and 10 (currently occupied by a business complex) and a small portion of Lot 17 remained in private ownership.

In January 1923, the Castle Hill Railway and Station was officially opened. The railway was extended to Rogan's Hill in 1924. The area of Arthur Whitling Reserve was originally the site of the Castle Hill to Rogans Hill Railway including the Castle Hill station building (Irwin 1996 p.72). The Castle Hill station was a standard platform of 70 feet in length (Forsythe and Dease 1950 p.8). A run-round loop and a goods siding to accommodate 13 trucks were also built (Forsythe and Dease 1950 p.8). The NSW Government Railway plan shows the station at the west apex of the Reserve and train tracks running through the park and along Castle Hill Road towards Rogans Hill where the train terminated (Figure 3.5). The plan also shows the main railway line, the run-round loop and dead-end goods siding within the study area. The goods siding and station area can be seen in Photograph 2.4 and the station platform was situated towards the fork of Old Castle Hill Road and Old Northern Road. The 1924 parish map of Castle Hill also confirms this location (Figure 2.10). The subdivision plan for the Gungaroo Estate along Cecile Avenue (Figure 2.11) and the Sellars Estate subdivision (Figure 2.12) also show the train platform but place it much closer to the fork of Old Castle Hill Road and Old Northern Road.

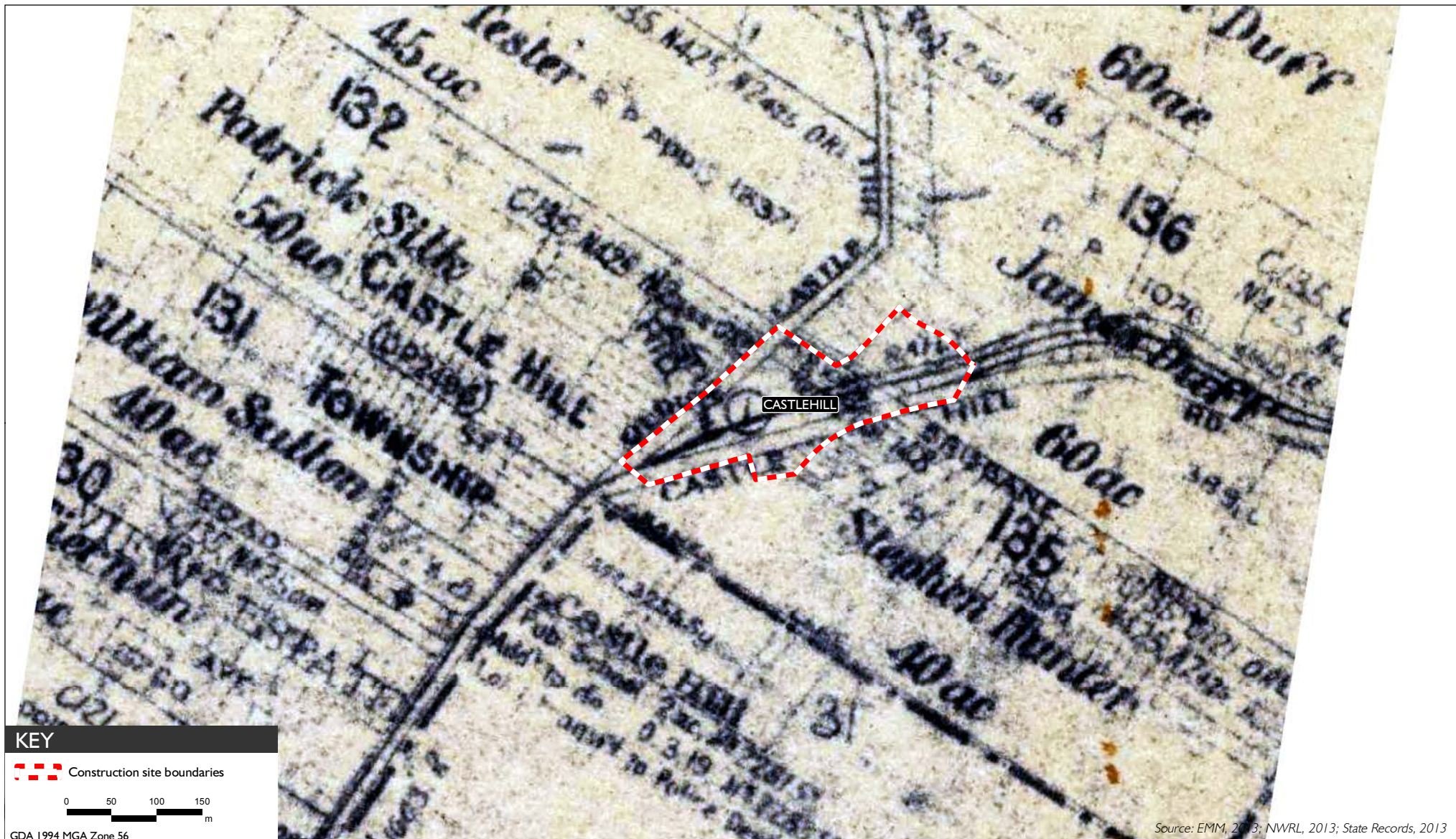


NSW Department of Railways plan of Castle Hill Station and railway line c1924

North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill

Figure 2.9





T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H121\_AARD\ParishMap1924\_20130715\_01.mxd 15/07/2013

CASTLE HILL PLATFORM

# GUNGAROO ESTATE

# CASTLE HILL

— 465 feet above sea level — 22 miles from Sydney —

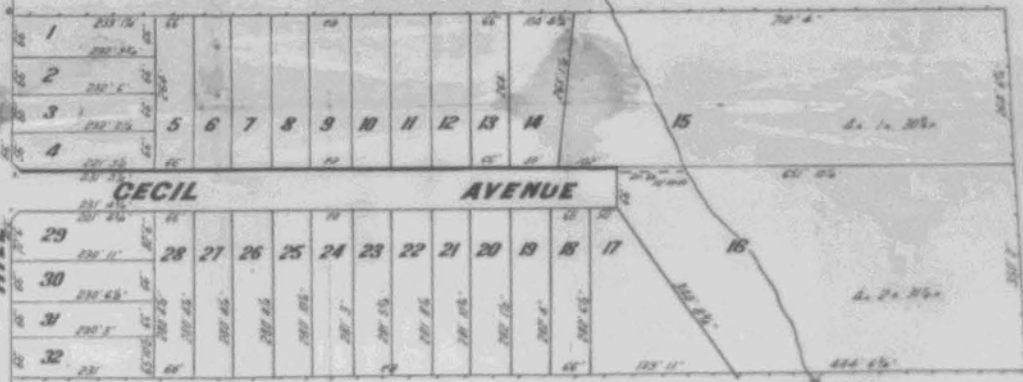
FOR PRIVATE SALE BY

## ARTHUR RICKARD & CO LTD

"Rickard House" 84 Pitt Street Sydney

Elevated Sites within about 500 yards of either Castle Hill or Parsonage Lane Platforms. The greater part of the Estate has been under cultivation & possesses rich fertile soil. City water & electricity available along Castle Hill Road.

### Torrens Title



### Terms

5% deposit & the balance including interest payable by instalments of 10/- per month for each £25 of purchase money. Interest at 6% per annum calculated on the quarterly balance charged half yearly to buyers accounts.

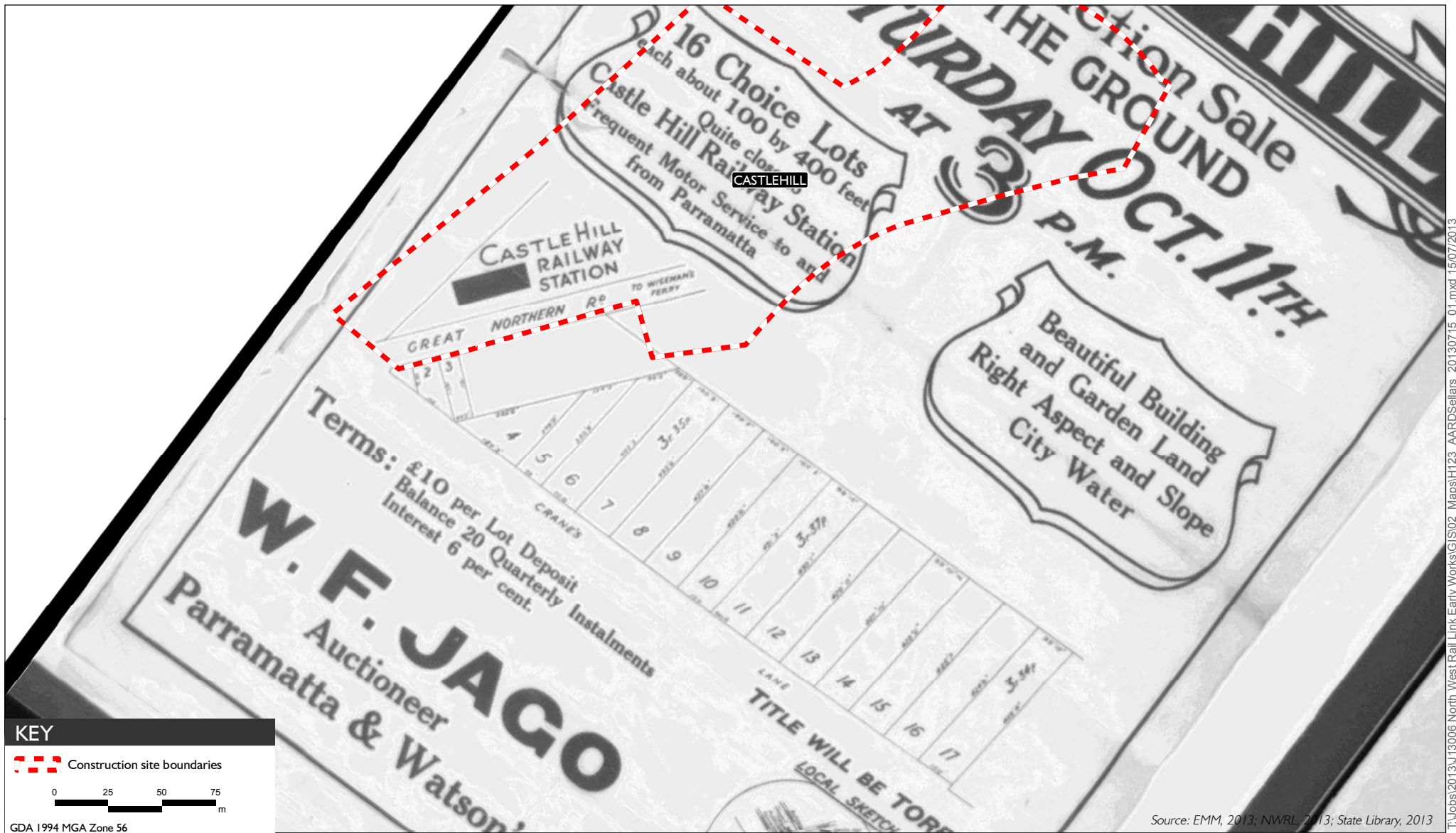
Part of Field of Mars  
Shire of Baulkham Hills  
County of Cumberland

**Hawson Hope & Glenville**  
Licensed Surveyors & P.L.S.  
84 Pitt St. Sydney

All measurements areas & bearings correct to date for C13/4

F. Cunninghame & Co. Ltd. Litho. Sydney

Source: EMM, 2012; State Library, 2013



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Mapsh123\_AARDESELLERS\_20130715\_01.mxd 15/07/2013

Source: EMM, 2013; NWRL, 2013; State Library, 2013



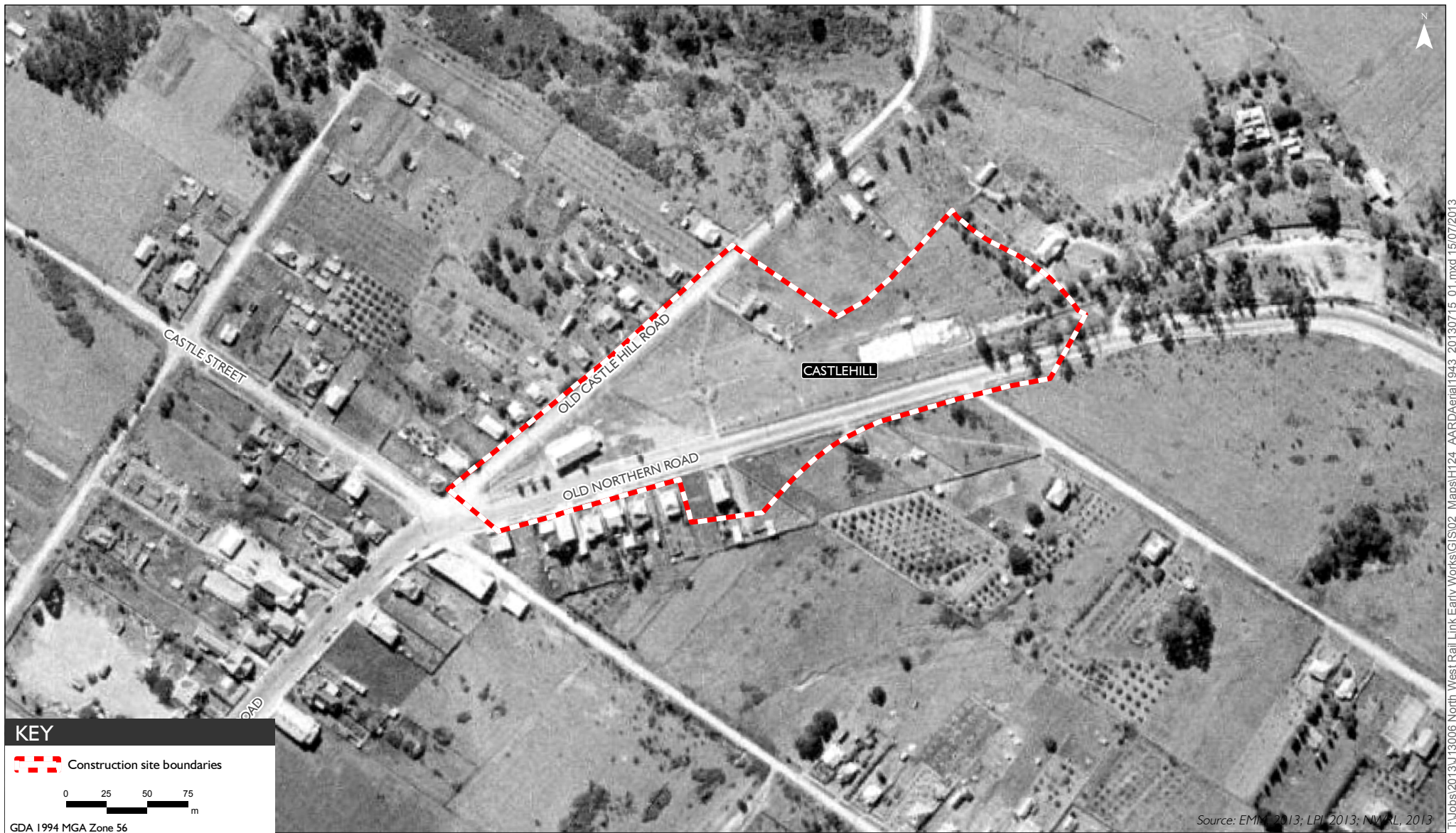
**Photograph 2.4** Train entering Castle Hill goods yard and station area on opening day 28 January 1923 (source: Watson 2010)

From the beginning, the conversion from tramway to railway was unpopular with most of the community. The railway lost money from its first year as fruit growers took advantage of the increase in motorised road trucks. Additionally, the timetable was inferior both to the previous tram timetable and to the comparable bus services, which were also cheaper. In 1926 the railway lost over £22,000 and only carried 64,273 passengers (Forsythe and Dease 1950 p.10). As traffic increased on Old Northern and Windsor Roads, calls to either move or close the railway were frequent (Irwin 1996 p.80). The railway was closed in 1932 and most components were removed by 1934 (Forsythe and Dease 1950 p.11).

### 2.3.3 1930s–present

After the closure of the railway and the removal of the majority of its components, most of the study area remained unused and became Castle Hill Park. In c.1935 the Commissioner of Railways released the southern portion of the study area for the construction of the Castle Hill ANZAC Memorial Hall. Local resident Ron Smith (born 1930 and quoted in Watson 2010) recalls that prior to WWII the only structures within the park were ‘a couple of tennis courts’ — these can be seen in the 1943 aerial (Figure 2.13).





The ANZAC Memorial Hall was used for many local functions, including dances and weddings (Smith 2009). After the completion of the Hall in around 1935, it was realised that local veterans did not have a club room. The space beneath the hall's stage (being 5 ft off the ground) was excavated by hand to approximate dimensions of 12 ft wide by 30 ft long. The club house was known as the 'Dugout' and it would have involved an approximate 3 ft depth of ground excavation (Smith 2009). Entry was gained by a set of steps leading from the park. Around this time, an old army hut from the Masonic Schools was erected adjacent to the 'Dugout' to cater for the increasing club member populations.



**Photograph 2.5** ANZAC Castle Hill Memorial Hall opening c1935 (source: Watson 2010)

In 1954 the club was granted a liquor licence and became a legal identity known as the "The Castle Hill RSL Sub-Branch Club". This was Castle Hill's first RSL club. Up until this time the club was operating illegally but was tolerated by the authorities (Castle Hill RSL Club 2013). By 1974 there was some level of local distaste of the Hall's location, with parking congestion being a notable problem (Smith 2009). In 1974 the RSL moved venue to Castle Street.

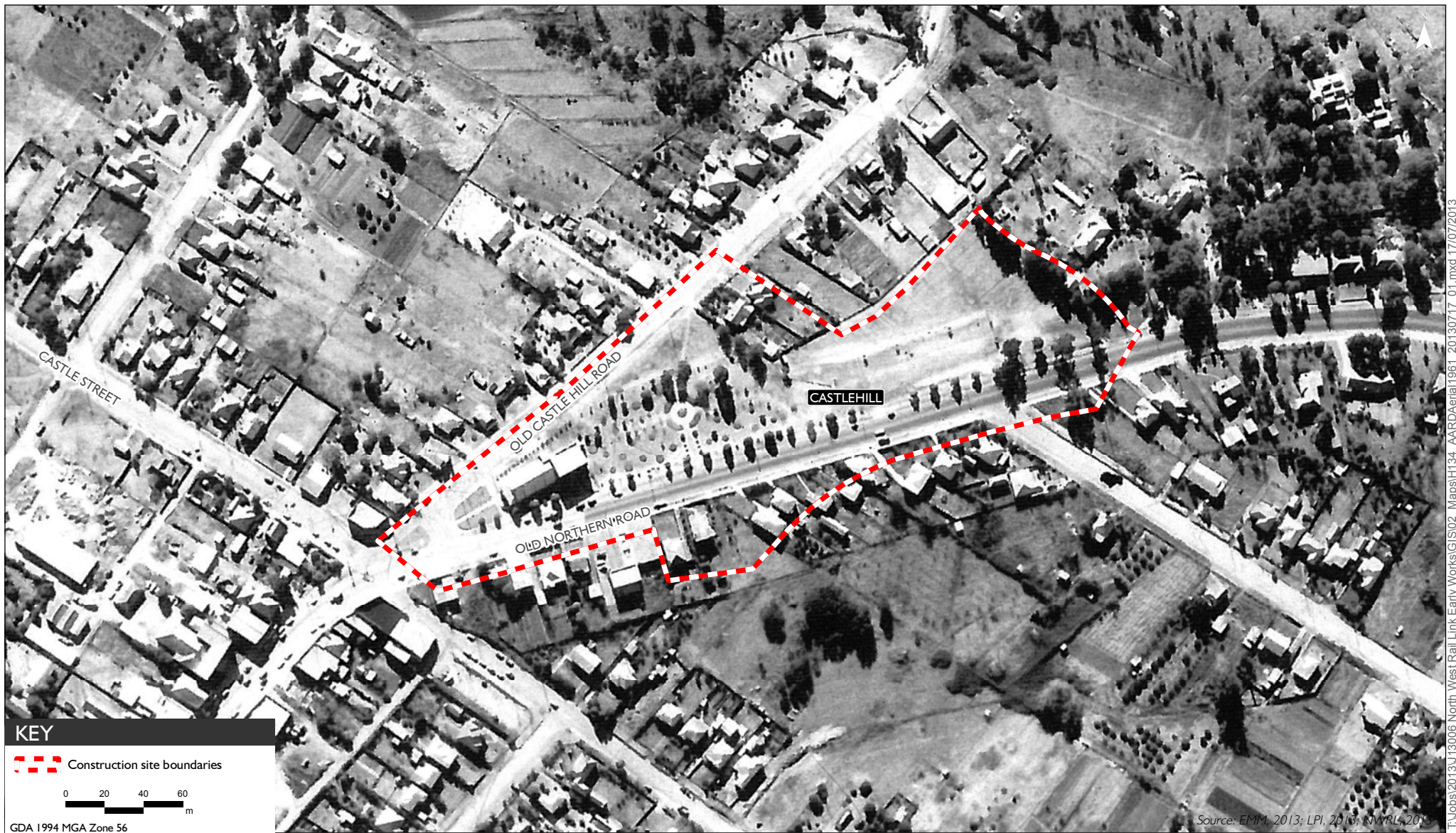


**Photograph 2.6** ANZAC Memorial Hall in southern end of Castle Hill Park c.1960 facing east (source: Watson 2010)

From 1974 the Hall was converted into the Castle Hill Community Centre. This included the Castle Hill Library and the Hills District Historical Society Museum that was located in the former Dugout. The hall was demolished in 2005 after the new Castle Hill Library and Community Centre was opened in Castle Street in 2004.

On 26 January 1989 Castle Hill Park was renamed Arthur Whitling Reserve in honour of the councillor who served The Hills Shire from 1908–1948, 19 of the 40 years in the capacity of Shire President. It was funded by contributions from Baulkham Hills Shire Council, Castle Hill RSL Club Ltd, and Commonwealth Government’s “Australia Remembers 1945-1995” initiative. An earlier memorial had been unveiled on 20 April 1969 (Watson 2010 2013).

The only record of residential housing within the study area apart from the Knight Family’s late nineteenth century cottage is that of a house, sheds and property that belonged to Herbert Mobbs. Sources cannot quantify when the Mobbs Family purchased the land or when the structures were built, however they firstly appear between 1928 and 1943 according to aerial imagery of the study area. Another house is visible in the adjacent lot in a 1956 aerial photograph. These structures were located outside Castle Hill Park, to the north of the ANZAC memorial (within the current Lot 1/DP 1129465) (see Figure 2.14). Some of the shed structures can be seen in a photograph taken from the southern end of Castle Hill Park c.1940 (Photograph 2.7). The house and sheds have since been replaced by a modern business complex, which includes a car park basement.



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS\02\_Maps\H134\_AA\RAerial1961\_L\_20130717\_01.mxd 17/07/2013



**Photograph 2.7**      **Photograph of Herbert Mobbs' packing shed taken from the southern end of Castle Hill Park c1940. The Old Northern Road would be in the north-eastern corner of the image (source: Watson 2010)**

Today the majority of the study area is in the Arthur Whitling Reserve. A War Memorial (replacing a previous smaller memorial erected by the Castle Hill RSL Club) that was completed in May 2001 is located at the northern end of the reserve and features a Cenotaph and a Remembrance Pool. The reserve currently hosts remnants of the Parramatta to Castle Hill tramway in a commemorative plaque and a rail signal is on display nearby. A number of mature plantings and various other small garden beds are scattered throughout. The plaques and heritage items are currently being removed by the Hills Shire Council. The study area outside the reserve within Lot 1/DP 1129465 has undergone extensive development for a commercial office building, constructed in the early 1990s.

## 2.4 Historic themes

The historic themes relevant to the archaeological investigation of the site were taken from the NSW Heritage Branch website ([www.environment.nsw.gov.au/heritage/index.htm](http://www.environment.nsw.gov.au/heritage/index.htm)). These have been used as a source and starting point in the formulation of research questions for the proposed archaeological program. The national historic themes relating to the study area are:

- building settlements, towns and cities;
- marking the phases of life;
- developing Australia's cultural life; and
- developing local, regional and national economies.

The NSW historic state themes relating to the study area are:

- transport;
- commerce;
- social institutions;
- agriculture;
- leisure
- towns, suburbs and villages
- accommodation;
- domestic life;
- land tenure;
- environment – cultural landscape; and
- persons.

## 3 Site evaluation

### 3.1 Overview from research

An evaluation of the study area aids in the identification of archaeological potential as well as the significance of potential relics (that is, archaeological resources of local or State significance). Significance is understood through a process of analysing the archival sources, historical maps, plans and photographs, comparing historic aerials with modern aerials and the results of the site visit, as well as reviewing previous reports for sites in the vicinity. The following sections address the sources of information that have assisted with the assessment of archaeological potential and assessment of significance.

### 3.2 Early grants

The study area was originally part of the 34,539 acre Government Grounds and used for farm production until approximately 1815. The study area was part of the Government farm and the asylum was located approximately 3 km to the north. It is likely that the study area and its surrounds were used for cattle grazing and crops during this time. While it is possible that vernacular structures were built illegally, on government grounds, no documentary evidence has been found that suggests this and any evidence of early structures may have survived only in fragmentary form. Subsequent subdivision and cultivation of the land is likely to have disturbed the context of early structures.

The study area was divided between Stephen Hunter and James Duff in 1818. After the construction of the Great North Road, the study area was bound by Old Castle Hill Road and The Northern Road (formerly Castle Hill Road). Stephen Hunter's portion of the study area was restricted in size and layout by the orientation of these roads. It is unlikely that extensive crops would have been grown within the study area portion of Hunter's grant. On the other hand, Duff's grant was mostly contained between the forks of these roads. It is known that James and John Duff were producing wheat supplies for the crown in 1821 (Sydney Gazette 1821). No information has been found that suggests structures during the initial landholders' ownership.

### 3.3 Orcharding and agriculture

The dominant industry in the area was orcharding and the cultivation of crops. The soil proved very good for fruit trees, particularly citrus and so large portions of the Castle Hill were turned into orchards, a practice that continued well into the twentieth century in the less developed areas of Castle Hill. Wheat cultivation was also popular in the early nineteenth century. Orcharding existed to a minor extent within the study area — with The Knight Family's residence adjoining a small orchard (*The Cumberland Argus and Fruitgrowers Advocate* 1908). There is also reference to wheat cultivation in the study area (See Section 3.1.1). Apart from this information, there is no evidence of furrows and tracks associated with orcharding or other crops available from aerial photography.

The sporadic but continual development of this area, including a railway line, buildings, tennis courts, memorials, and gardens are likely to have destroyed any evidence of the orcharding and wheat cultivation. Structures associated with nineteenth century agriculture such as sheds may have survived and been reused for other purposes, however, none of these items were visible on aerial photographs within the study area.

### 3.4 Subdivision

The land title records and subdivision plans show the development of the subdivision of the study area from the original 60 acre Crown Grant of James Duff and the 40 acre Crown Grant of Stephen Hunter in 1818 to the present date.

The Castle Hill Township subdivision of 1889 was the very first subdivision of Castle Hill (Figure 3.1). This was comprised of 157 acres owned by Samuel Jenner, and included quarter acre blocks along the main road with block sizes increasing to the north and west. This subdivision occurred immediately opposite the study area on the western side of Old Castle Hill Road. It was along the western side of Old Castle Hill that some of the first intensified residential housing occurred. It was not until 1897 that the upper portion of the study area was subdivided in the Medcalfe Estate.

The first major change in the subdivision layout of the study area occurred in 1921 when the study area and land to the north was redivided and relabelled for the Garthowen Estate subdivision. The study area contained over 17 lots designated for use as residential or business sites (Figure 3.2). However, the majority of these lots were purchased by the NSW Department of Railways in the same year and were subsequently amalgamated for the Castle Hill railway and station. Only two lots within the study area were excluded from the NSW Railway Department's ownership. These lots were used for housing and farming in the 1930s and were later developed into a commercial building that remains today. These changes can also be seen on the Gungaroo Estate (Figure 3.3) and Sellars Estate (Figure 3.4) subdivisions in the 1920s.

After the closure of the railway in 1932, the southern portion of the study area was subdivided from the majority of Arthur Whitling Reserve to host the ANZAC Memorial Hall. The remainder of the study area was largely unaffected post-1930s and has remained the site of the Arthur Whitling Reserve. After the demolition of the former ANZAC Memorial Hall in 2005, the southern portion of the site was also incorporated into the Arthur Whitling Reserve. The study area was spared the later major Castle Hill subdivisions of the 1960s, 1980s and 1990s. As the lands around the study area were subdivided for medium to high density housing and commercial areas, the study area remained a public park.

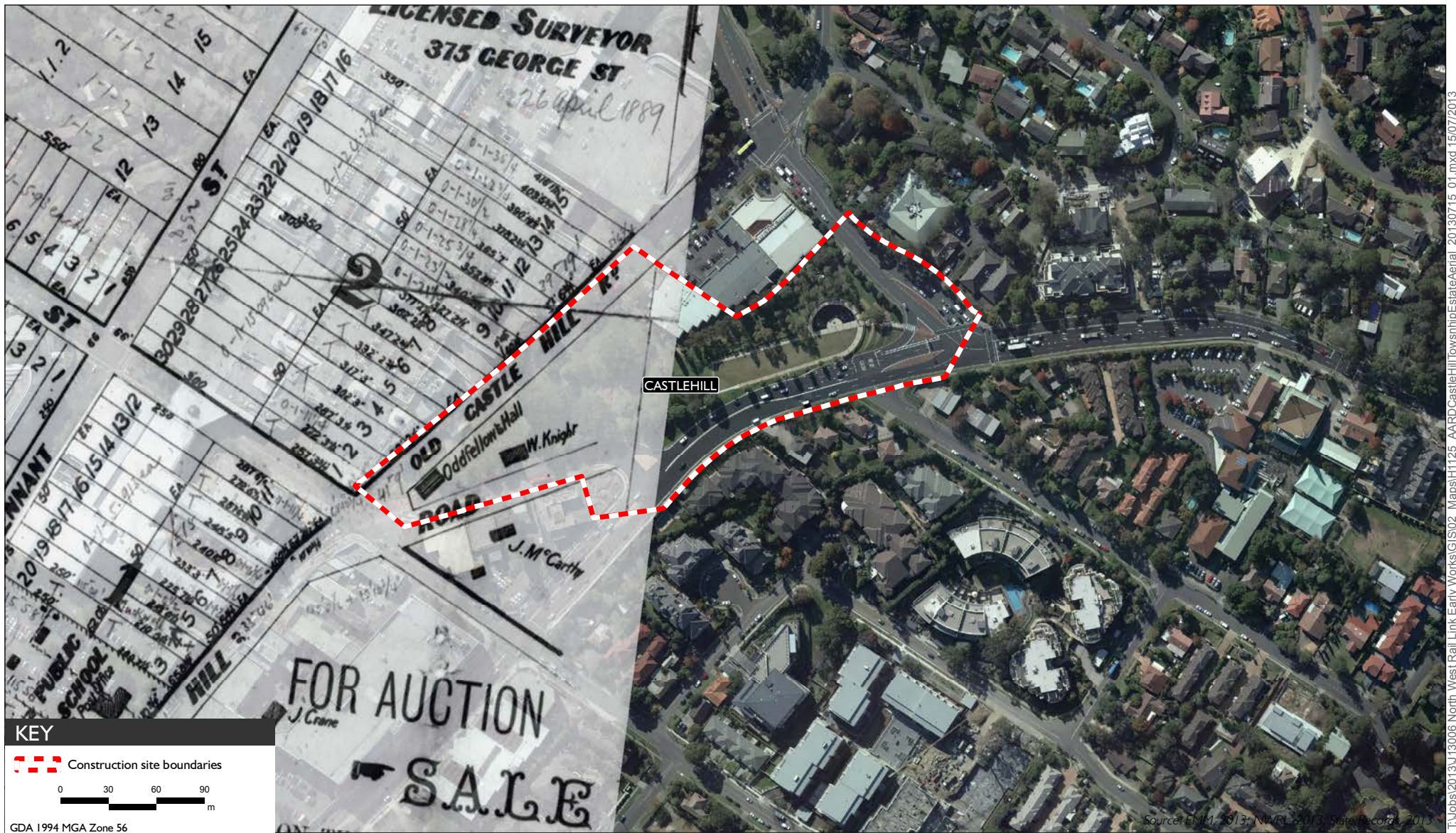
The subdivisions show that the majority of the study area has had limited opportunity to host residential structures apart from Lot 1/DP 1129465. The study area in the late nineteenth century did contain a cottage belonging to William Knight, and it is likely that this was the only residential structure to exist within the Arthur Whitling Reserve portion of the study area. For a large part of the twentieth century this portion has been publically accessible property, with the original community hall built in 1879, followed by the Castle Hill Railway, the ANZAC Memorial Hall, and finally its use as a public park. Taken as a whole, the study area has existed as public space for over 100 years.

### 3.5 Study area site inspection

An inspection of the study area was undertaken in February 2013. Generally the area was observed to be in good condition as a reserve. The reserve comprised of mowed grass lawns, interspersed with garden beds, immature and mature trees, pathways and memorial items including an ANZAC memorial at the northern end of the study area (Photographs 3.1–3.5). The ANZAC memorial has involved subsurface excavation for the placement of the Remembrance Pool. It was observed during site inspection that the pool's depth is approximately 50 cm.

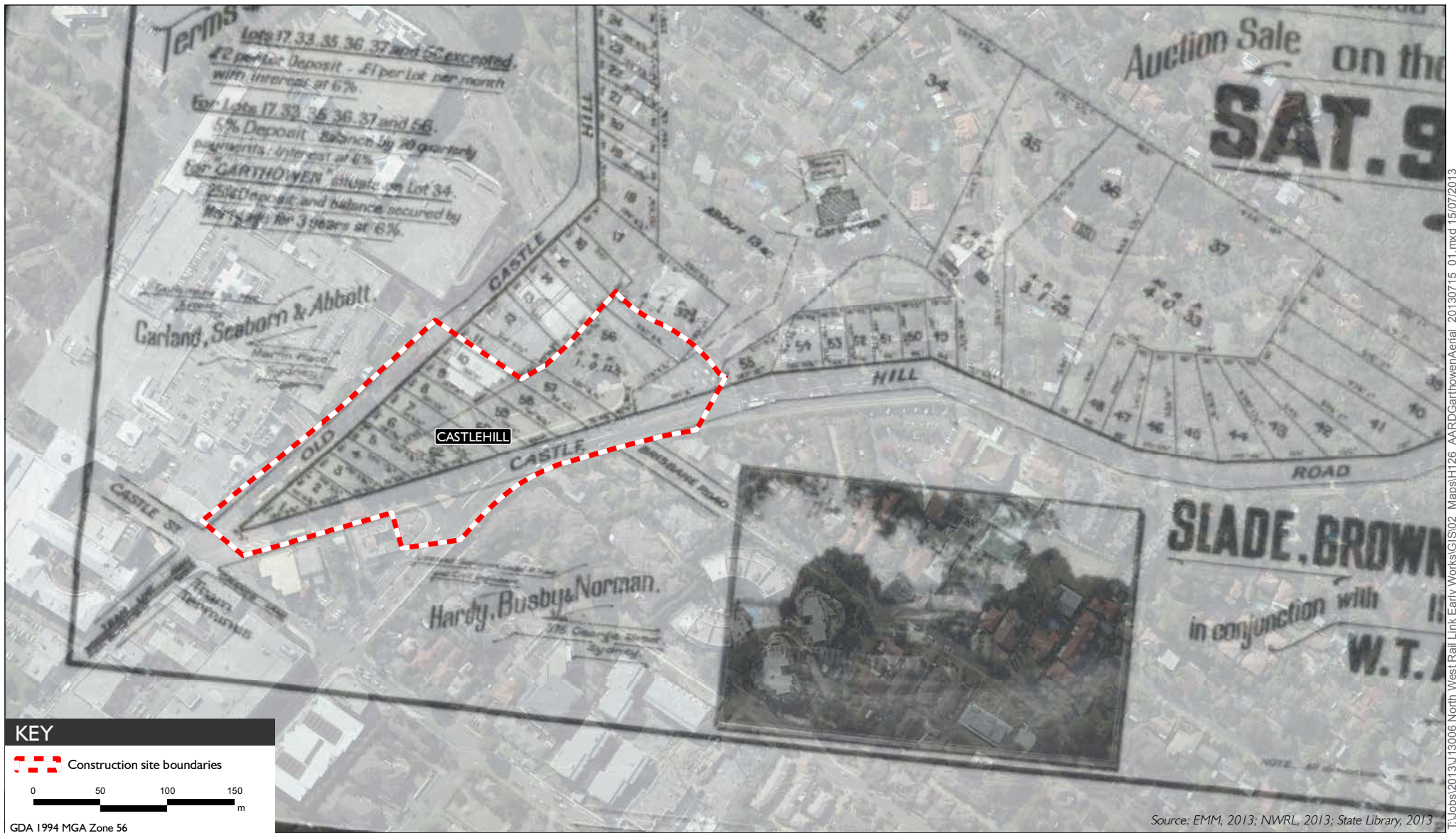
The southern portion of the study area features grass exposures and remnants of old pathways in some areas. There is also machine-made brick coursing that delineates a small grass island that once marked the driveway south of the ANZAC Memorial Hall.





Castle Hill Township Estate subdivision 1889 overlay onto 2013 aerial photograph  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill

Figure 3.1



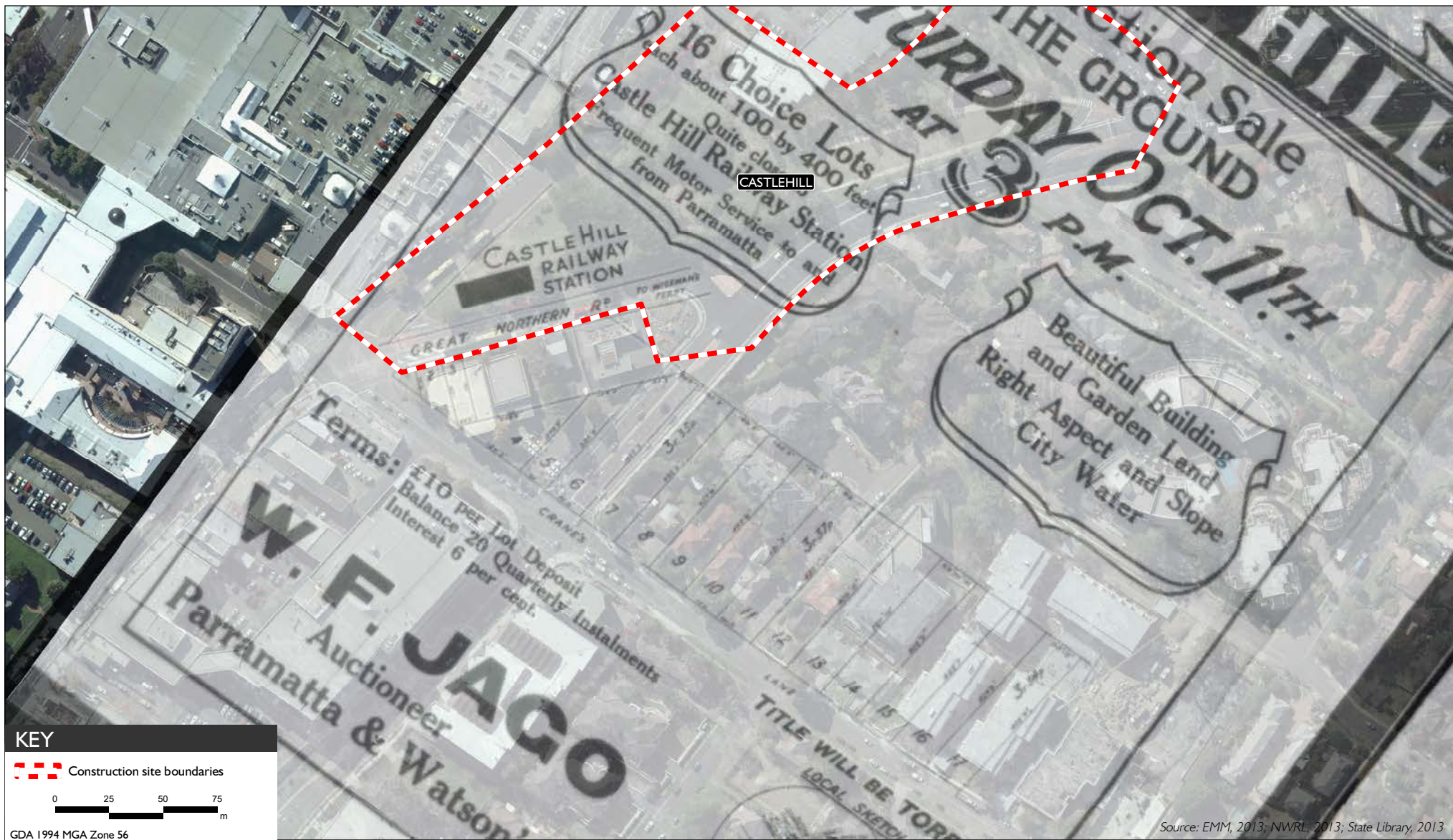
T:\Jobs\2013\13006 North West Rail Link Early Works\GIS\02\_Maps\H126\_AAR\GarthowenAerial\_20130715\_01.mxd 15/07/2013

Garthowen Estate Subdivision 1921 overlay onto 2013 aerial photograph  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 3.2



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H133\_AARDGungahrooAerial\_20130715\_01.mxd 16/07/2013

Gungahroo Estate subdivision overlay onto 2013 aerial photograph  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 3.3



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS\02\_Maps\H127\_AA\RRDSellersAerial\_2013\0715\_01.mxd 15/07/2013

Sellers Estate subdivision overlay onto 2013 aerial photograph  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 3.4

It was also observed that potential possible location for the nineteenth century cottage is on an area comprised of grassed lawns and a sandstone bordered garden bed, stairs and path. It is unlikely that the garden and sandstone features would have significantly disturbed the potential remains of the cottage as the area appears to be built-up to some extent as shown in Photograph 3.1

There is a railway signal post located in the central area of the park. This is not associated with the Castle Hill station and railway.

The study area outside Arthur Whitling Reserve (Lot 1/DP 1129465) has undergone extensive development for a commercial office building, constructed in the late 1980s. This is a glass, brick and concrete two-storey building with basement parking for 50 vehicles. The area has undergone extensive modification that has cut well beneath the original ground layer.

Apart from the commercial building outside Arthur Whitling Reserve and the ANZAC memorial, the study area shows no obvious disturbance events. It is likely that that multiple recent land fill events have occurred to landscape and level the reserve grounds. This would have included levelling fill after the demolition of the railway and station, tennis courts, and the ANZAC Memorial Hall.

The Hills Shire Council was contacted for further information about the study area's development. No images or other information of previous works at the park were available.



**Photograph 3.1** Potential location of late nineteenth century cottage residence of the Knight Family. The stairs are likely to have been built for the park.



**Photograph 3.2** Arthur Whitling Reserve (facing north)



**Photograph 3.3** Central garden feature at Arthur Whitling Reserve (facing west)



**Photograph 3.4** Extant brick remnants delineating the driveway of the ANZAC Memorial Hall running to the left (photograph facing south east)



**Photograph 3.5** ANZAC memorial at northern end of park (facing south-west)

### 3.6 Supervision of tree removal

In June 2013, archaeological monitoring at Arthur Whitling Reserve took place for the translocation works of the Memorial Plane Tree, which was an existing heritage item within the study area. It was predicted that the transplantation excavation works would not occur within areas of archaeological potential as determined by a preliminary report prepared by EMM.

The excavated trench revealed that the upper 100 mm of the soil profile was comprised of dark brown loamy clay. This was followed by a clay fill layer with frequent brick rubble, stone and crushed sandstone inclusions to a depth of approximately 600 mm (Photograph 3.7). This material was fragmentary and cannot be associated with any structure or event. A dark brown silty clay layer was observed beneath the fill layer from 600–800 mm which indicated an intact soil profile. Red/orange basal clay was observed past 800 mm where excavation ceased.

The results observed from monitoring did not identify any relics or archaeological deposits. The layer of fill observed in the trench profile suggests that the land has been subject to a ground levelling event. A fill layer is likely to have extended over a portion or the entirety of Arthur Whitling Park to bring the land to its current elevation. Preliminary observation of the soil profile beneath the fill layer indicates a more intact soil profile.



**Photograph 3.6** Earthworks for the translocation of the Memorial Plane Tree located within the central portion of the reserve (facing west)





**Photograph 3.7** Trench soil profile showing fill deposit in-between dark brown loamy clay layers (facing south)

### 3.6.1 Historic maps and plans

Minimal information has been obtained for the majority of the title holders of the study area from maps and plans, particularly in relation to any structures which may have been present during their holding of the title.

The parish maps do not provide any further indication of structures on the sites except for the railway which is included in the 1924 Castle Hill parish map. All parish maps regardless of year show Stephen Hunter and James Duff as the Crown Grant owners of portions of the study area. This information is confirmed through land title documents.

Little other mapping information was forthcoming. Town water and sewerage was not connected in Castle Hill until after 1917, thus it was considered unlikely that water board plans of the area would be present or able to provide further information on the site at Castle Hill. Similarly, fire and insurance maps were also considered but relevant information was not obtained.

Subdivision plans have provided information of the earliest structures present within the study area. The Castle Hill Township Subdivision c.1901 plan indicates two structures within the south western end of the study area. One of these is labelled as Oddfellows Hall and the other is William Knight's cottage (Figure 3.1). The Garthowen Estate subdivision of 1921 shows the location of the tramline and terminus to be outside the study area. Finally, the Gungaroo Estate and Sellars Estate subdivision plans show the location of the Castle Hill Station and railway (see Figure 3.3, and Figure 3.4).

Although the majority of early structures are shown through subdivision plans, their locations on these plans should not be considered to be precise. The structures within the study area are only shown on subdivision plans outside the areas advertised for subdivision. It is likely that some structures were

appropriated into these plans for advertising purposes. Therefore the structure locations provided should be indicative only.

One NSW Department of Railways plan c.1924 provides the most reliable location of the Castle Hill Station and Railway. This plan places the station approximately 100 m north-east of the locations provided in the subdivision plans (Figure 3.5). The parish map of 1924 also provides a similar location of the station as the railway plans. The railway plan is considerably more technical and detailed than the subdivision plans, having been planned through systematic survey for government use. Therefore, this assessment has relied on the railway plan for the location of the station and railway.

### 3.6.2 Historical aerial photographs

There were numerous historical aerial photographs available for the study area. These date back to 1928 and are a maximum of 15 years apart until present. The quality of the photographs is generally of moderate quality, and some do not provide clear indications of structures within the study area.

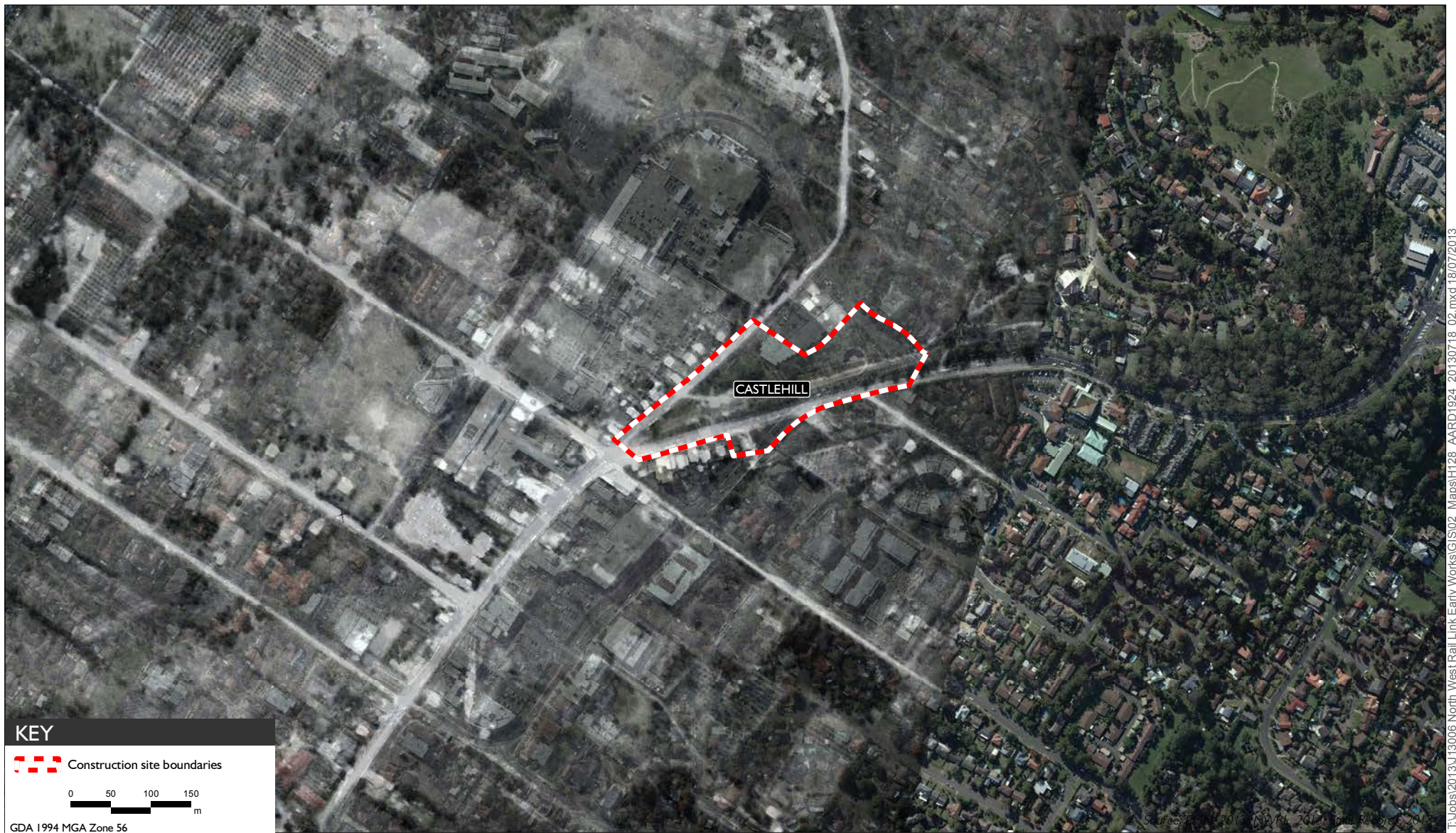
In a 1928 aerial photograph a structure or structures are discernible within a cleared portion of the study area. This is likely to be the Castle Hill Station. The railway line is also faintly visible in this photograph.

The 1943 NSW Government aerial photographs of Sydney provide the most clear and detailed imagery of the study area. Within the Arthur Whitling Reserve portion of the study area, the ANZAC Memorial Hall (1935), tennis courts and related structure (late 1930s) and the original garden and path layout of Castle Hill Park is visible (Figure 3.6). Faint linear markings in the study area may indicate the original railway path. This is most notable at the southern apex of the study area, and also may be associated with the east-west garden path and the alignment of the tennis court.

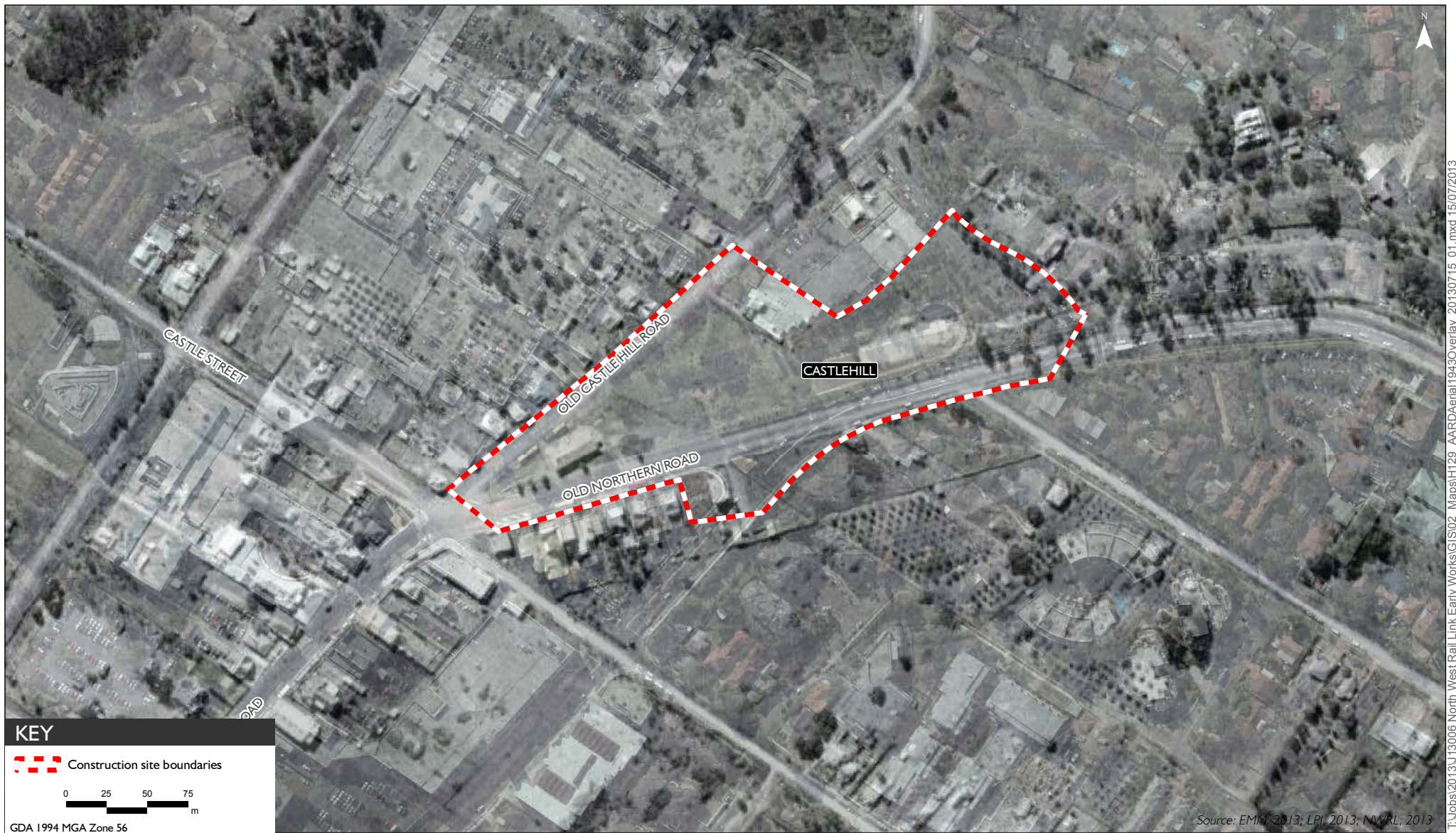
The 1943 imagery also shows a house structure, sheds or outbuildings and fence lines occurring within Lot 1/DP 1129465. This structure is not visible in the 1928 photograph and must have been constructed in the 15 years between the photographs. One shed structure or outbuilding appears to encroach on the Arthur Whitling Reserve portion of the study area (see Figure 3.6).

The houses in Lot 1/DP 1129465 are visible up until 1991, until they are replaced by a commercial building by 1991. By 1986 the tennis court is no longer visible. There are also undefinable possible structures in this image. There is a structure in the far eastern portion of the study area that is likely to be part of an ANZAC memorial as shown in

The aerial photography in the late twentieth and early twenty-first century matches the recent historic information provided for the study area. By 2002 the ANZAC Memorial and Remembrance Pool is shown at the eastern end of the study area, and by 2005 the ANZAC Memorial Hall at the south-western end of the study has been demolished.



1924 aerial photograph onto 2013 aerial photograph  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 3.5



1943 Aerial photograph overlay onto 2013 aerial photograph  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure 3.6



**Photograph 3.8** ANZAC Day c1980 at Arthur Whitling Reserve

### 3.6.3 Existing land use and disturbance

The majority of the study area is now Arthur Whitling Reserve, with a small portion being a commercial office building (Lot 1/DP 1129465). The Reserve has undergone minimal visible subsurface disturbance except for excavation of the ANZAC Memorial Remembrance Pool. However, the development of a commercial office building on Lot 1/DP 1129465 in the 1980s has resulted in considerable subsurface excavation for the building and car park that would have removed any evidence of the 1930s house, sheds and outbuildings within.

A Dial Before You Dig online query was completed on 10 July 2013. The results of the query provided relevant plans indicating existing utilities and other subsurface disturbance within the study area. The types of disturbance within the study area include fibre optic and telecommunications network cables and electricity cable. These disturbance patterns are linear and typically do not exceed 1 m in width. The trenches excavated for these utilities may have a minor impact on any potential archaeological deposit within the study area. These activities would not have removed whole deposits, however, they may have affected the intactness of certain archaeological features or deposits.

The numerous construction events that occurred within Arthur Whitling Reserve are also likely to have disturbed previous archaeological deposits. This is particularly relevant to the western portion of the study area where up to four buildings were constructed. This includes the Oddfellows Hall, the house of W. Knight, the Castle Hill Station and railway and the ANZAC Memorial Hall. Research has indicated that spatial overlapping of these sites may have occurred. The main impact is likely to have been from the ANZAC Memorial Hall which included the construction of a driveway cutting through the study area on a north-south axis. 'The Dugout' feature of the ANZAC Memorial Hall involved the excavation of soil to provide a clubhouse. This activity is likely to have disturbed any previous archaeological deposit in the footprint of 'The Dugout'.

### 3.6.4 Comparative studies

#### i Scope

The study area has experienced multiple and varied phases of occupation from the early nineteenth century until present. Comparative analysis has focused on potential archaeological deposits of significance within the study area. Therefore areas that have been assessed to be of low to nil potential archaeological significance have been excluded from comparative analysis. The previous houses within Lot 1/DP 1129465 (outside Arthur Whitling) have been excluded because of the post-depositional impacts of the existing commercial office building. The ANZAC Memorial Hall has been excluded from the study due to the substantial amount of information already available for the site.

Comparative studies relevant to this assessment can be grouped into the following themes:

- late nineteenth century vernacular buildings and the orcharding industry; and
- railways and railway stations.

#### ii Overview of studies in the local area

The local area has been subject to a limited number of archaeological investigations relating to domestic vernacular buildings in the late nineteenth century and beyond. This is also the case for investigations regarding previously destroyed and dismantled railways and railway stations. The majority of railway related studies involve the conservation and management of existing stations and railways. As such, a search of the Heritage Branch library catalogue and other library resources identified only a few relevant previous investigations.

The most prominent archaeological investigation in the local area relates Castle Hill Heritage Park which is assessed to be of State heritage significance. The Castle Hill Heritage Park contains a number of known and potential archaeological sites, including the Third Government Farm, a lunatic asylum and barracks, a church and school, the remains of early dwellings and wells, roads, tracks fencing, and bridges of the early to mid-nineteenth century. The site was later adapted for orcharding from 1870 to 1930 (GML 2007). The Castle Hill Heritage Park has little comparative value with the current study area as it does not encompass late nineteenth to early twentieth vernacular buildings that were occupied during the orcharding phase of the study area. A mid-twentieth century domestic building and cistern remains in the north-east quadrant of the heritage park, however, it is likely to post-date any historical buildings constructed within the study area.

#### iii Vernacular buildings

The study area is shown to have included the residence of the Knight Family. Apart from this structure being referenced as a cottage and its location marked on a subdivision plan, there is little indication of which structural type this building belonged to. As such, previous investigations of vernacular residences in Castle Hill may provide insights into the structure within the study area.

In 2006, an historic and archaeological study was completed for a nearby domestic house and property known as 'Kentwell Cottage' at 244 Old Northern Road Castle Hill (Edward Higginbotham and Associates 2006). This was undertaken in response to a proposed road widening that would impact the site. The Kentwell Cottage property was owned by John Kentwell from 1823, while the house was owned and occupied by the Kentwell family from its construction c. 1857 through to the 1890s and demonstrates the improvement, extension and additions to the cottage. The house was one of the few surviving 'slab'

cottages in the Baulkham Hills Shire Council Area: an upstanding single-storey timber cottage with several outbuildings in various states of collapse.

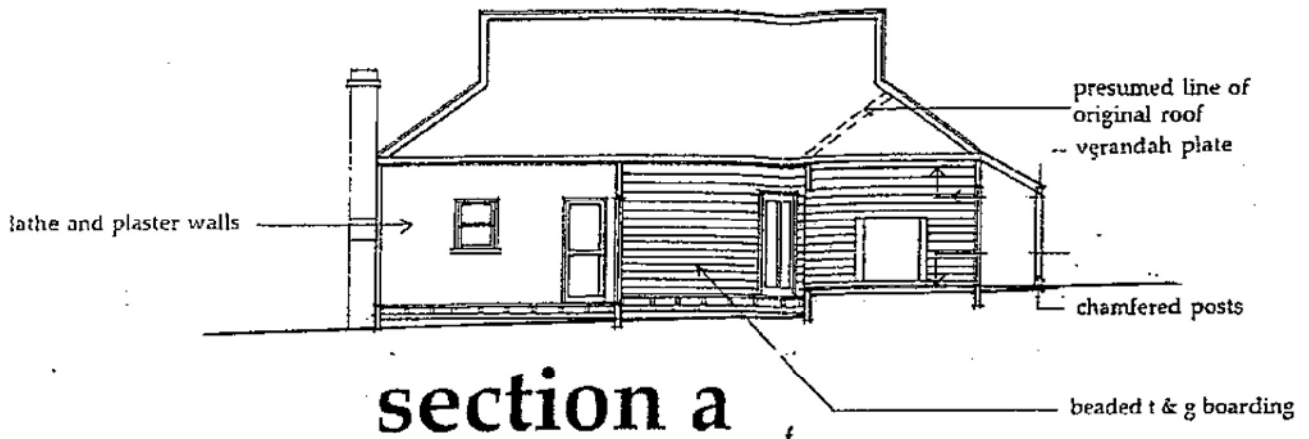
The house was originally a two-roomed wooden slab construction with a shingle roof, later covered with weatherboards and a galvanised iron roof. It was observed that this vernacular design dated back to the first years of historic settlement in Australia (Higginbotham 2006 p. 25). The original house contained a fireplace (with a chimney of sandstock bricks) in the larger room and a smaller bedroom, with possibility of a detached kitchen. Initial weatherboarding of the house was likely to have occurred in the 1890s (based on cladding method and nails; see Higginbotham 2006 p. 30). Kentwell Cottage underwent considerable additions into the twentieth century, and contained eight rooms in total. Outbuildings on the property included a toilet and laundry (each with cement floors), a carport and a shed (Figure 3.7).

Kentwell Cottage was considered to have State significance, and was listed on the Baulkham Hills Council 1991 LEP as an item of local significance only. It was considered that Kentwell Cottage was an item of rare local significance as the majority of slab cottages are found in other local government areas and regions. However, the Hills Shire Council LEP 2012 does not list the Kentwell Cottage in its heritage schedule as it was removed during construction of new apartments, which are now present at 244 Old Northern Road. Kentwell Cottage also had potential to yield important information concerning the structural and technological development of vernacular buildings over time. It was recommended that the house be subject archival recording dismantled and relocated as part of heritage management and conservation. The current assessment was unable to verify whether or not the proposed management measures for Kentwell Cottage were undertaken.

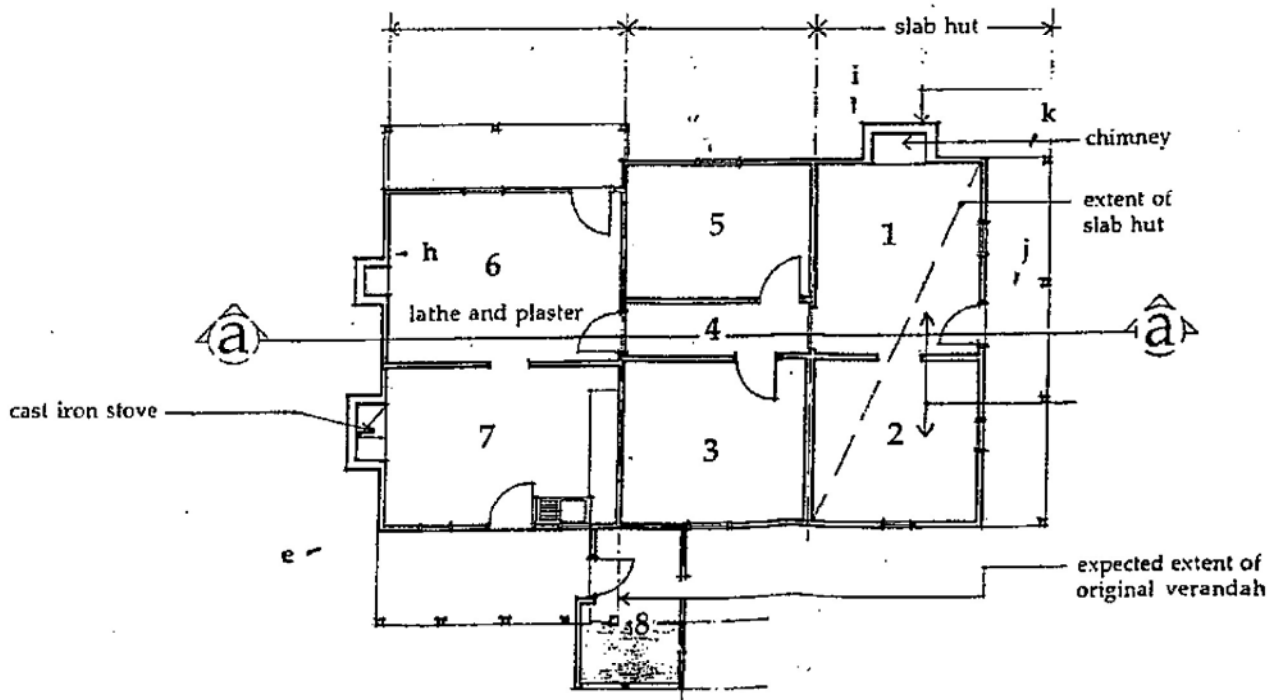
Kentwell Cottage shares similar and historic themes with the current study area as it follows the historical development of the Castle Hill Area from mixed agricultural to fruit growing and orchards. It may also provide insights into the archaeological potential of the cottage and outbuildings built before the twentieth century. Kentwell Cottage and the current study area share a similar context of having vernacular buildings constructed on land used for agriculture and orchards in the late nineteenth century. As such, it is likely that similar construction methods and materials were used for the cottage as those mentioned above for Kentwell Cottage. The archaeological potential of the study area is discussed further in Section 3.7.

The previous investigation of Kentwell Cottage may provide information on the nature of the archaeological remains in the study area; however this is based only on the assessment of an existing standing structure. There is therefore limited comparative information on the subsurface potential and survival for the cottage and other outbuildings within the study area.

An historic archaeological assessment was undertaken in June–July 2013 for the NWRL Cherrybrook Station (EMM). This assessment identified two potential archaeological sites relating to a weatherboard cottage and outbuildings constructed in the 1880s. These structures existed within the context of the orcharding industry of the late nineteenth and early twentieth century's. The site was assessed to be of local heritage significance and to have moderate potential for relics relating to a weatherboard structure. Subsequently, a research design and test excavation methodology was prepared to further investigate the potential archaeological resource. The test excavation will aim to answer research questions about the structures, their material and design and the orchardists who inhabited the site. The 2013 EMM assessment at Cherrybrook station is directly relevant to the current assessment. The research questions relating to the cottage's structure, its date, and the lives of the people who inhabited the residence are also applicable to the current study area. The locally well-known Knight family resided in the cottage within the current study area. There are numerous local paper articles about Thomas Knight in particular, which refers to his expertise as an orchardist and his commendable character. As such, this assessment may provide information on some of the more notable local characters associated with orcharding, than that of the Cherrybrook Station assessment.



**section a**



**plan**

Source: Edward Higginbotham and Associates, 2006

Plan of Kentwell Cottage showing the original built structure (rooms labelled 1 and 2) and additions  
 North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill

Figure 3.7



In 2003, Archaeological Management and Consulting Group Pty Limited (AMAC) prepared an archaeological assessment and research design for a section of land (9–13 Garthowen Crescent and 286a–296 Old Northern Road, Castle Hill) associated with the Castle Hill to Rogans Hill Railway Station. The assessment comprised land approximately 200 m north east of the current study area. This included a section of land where the Castle Hill to Rogans Hills Railway traversed. The site inspection for the study area observed that none of the built elements of the railway existed. However, numerous sections of cuttings for the railway track of up to 1.5 m were observed as the railway traversed the hill slope of Garthowen Crescent. The report noted that as the railway sloped downhill towards Castle Hill Station, the ground levelled and therefore did not require any further cuttings into the local topography.

The assessment concluded that archaeological sensitivity for the site related mainly to the cutting for the railway infrastructure. It was considered that these remnants had a high degree of local historic and archaeological significance.

This study is relevant to the current study as they both featured sections of the Castle Hill to Rogans Hill Railway. However, apart from the potential for artefactual remains of the Castle Hill Railway, there is little comparable evidence useful for the current study. The current study is highly unlikely to feature cuttings for the railway line similar to the AMAC assessment as the study area is on relatively flat ground, and not cutting into a hill slope.

### 3.6.5 Data from geotechnical investigations

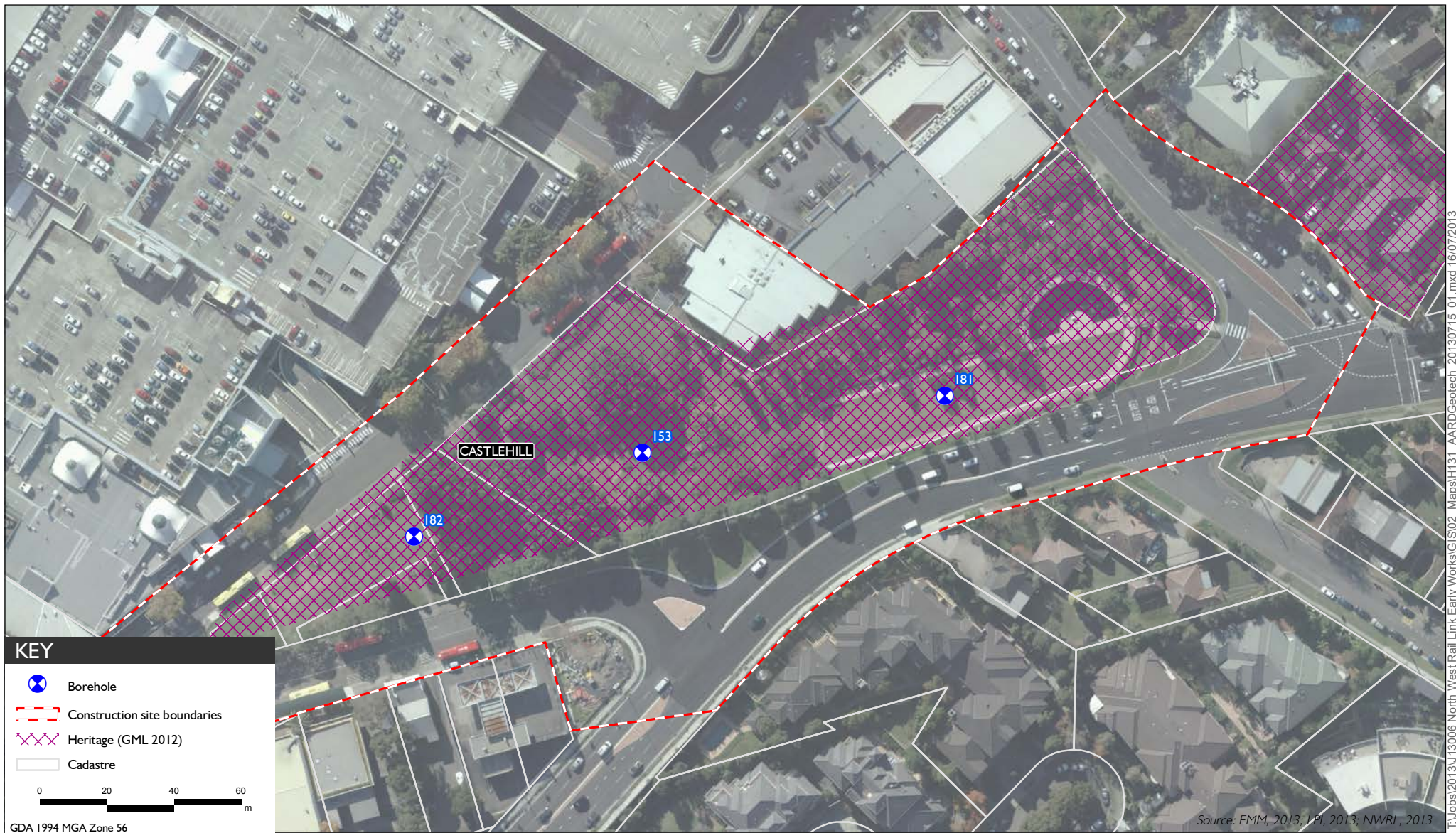
A range of geotechnical testing has been conducted by Coffey, Geotechnics for the proposed Castle Hill Station. A total of 10 geotechnical test sites were located within Arthur Whitling Reserve (Figure 3.8). The three most recently drilled boreholes are listed and discussed as they are located from west to east in Figure 3.8.

Borehole (BH) 182 was located in the western section of Arthur Whitling Reserve. It was drilled in November 2012. The first meter was identified as dark brown sandy silt topsoil and fill overlaying an orange-brown residual soil layer. Bedrock was reached at 1.8 m.

BH 153 was located towards the centre of Arthur Whitling Reserve. It was drilled in October 2012. The first 0.5 m was identified as dark brown sandy clay with some coarse sub angular gravel inclusions overlaid on orange brown residual soil. Extremely weathered red brown siltstone was reached at 1.8 m and bedrock was reached at 2.8 m.

BH 181 was located within the eastern portion of Arthur Whitling Reserve. It was drilled in November 2012. The first 0.5 m was identified as brown silty sand fill overlaid on red, orange, brown residual soil. Bedrock was reached at 1.3 m.

The boreholes identified fill that is relatively clean. The recorded data from the geotechnical samples did not yield material that could be described as archaeological deposit or potential artefactual material. It is possible that the gravel inclusions in BHs 182 and 153 are remnant ballast from the train line or vernacular drain structures built by residents on the site.



## 3.7 Archaeological potential

The assessment of the potential for archaeological evidence, known as “archaeological potential”, is based on a predictive model that assumes historical archaeological evidence is generally located in close proximity to occupation and activity areas.

“Archaeological potential” refers to an area’s potential to contain archaeological relics, which fall under the provisions of the *Heritage Act 1977*. This potential is identified through historical research and by judging whether current building or earlier development activities have removed all evidence of known previous lands uses (Heritage Council 1996). From this evidence conclusions are drawn in this section to identify the likely location, survival of the archaeological evidence.

### 3.7.1 Aboriginal occupation

Aboriginal people utilised and passed through the Castle Hill area for thousands of years. An Aboriginal heritage assessment by GML and Jo McDonald Cultural Heritage Management (CHM) did not identify any potential Aboriginal heritage in the study area. With high levels of disturbance as a contributing factor, the study area was assessed to have a very low potential for intact Aboriginal sites.

In the event that any subsurface deposits containing Aboriginal relics are found, they are likely to consist of isolated or low density artefacts with disturbed soil profiles. The unexpected finds protocol includes Aboriginal heritage objects and should these objects be found, all work will cease in the vicinity of the finds until an assessment of significance can be made in consultation with the registered Aboriginal parties for the project.

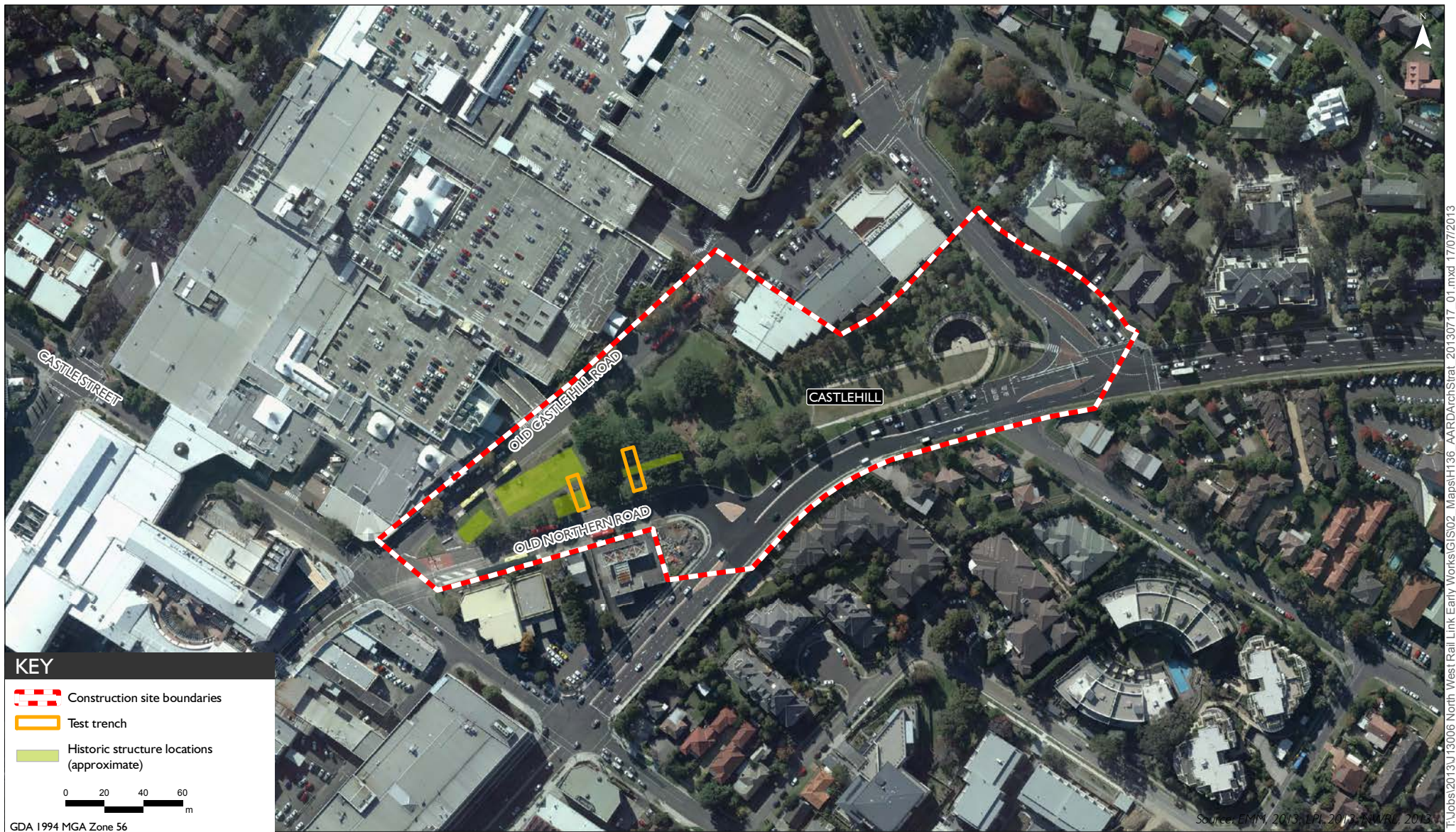
### 3.7.2 Assessment of archaeological potential

Figure 3.9 presents the evidence for where the remains of structures are likely to be found. This is based on the most accurate information available from the research. There is likely to be some margin of error in the maps and plans in relation to the real location of archaeological deposits. This can be attributed to inaccuracies in historic plans and the difficulties of geo-referencing the various historical data sources. This assessment has used the most reliable sources available to identify areas of archaeological potential.

The study area has previously been assessed to have low archaeological potential (GML 2012). However, the assessment was based on preliminary historic information and only considered the Castle Hill Station, the railway and the tramway. The GML assessment suggested that the construction and development of the reserve was likely to have disturbed any archaeological deposits. The current study has identified additional potential archaeological resources while also discounting some resources suggested by the GML report.

#### i Government farming

The property was once part of the Castle Hill Government Reserve, and more specifically the Government Farm within. There is no historical evidence supporting the study area’s use as a Government farm. Post-depositional events such as the Castle Hill Railway along landscaping events associated with the reserve make the likelihood of felling or crop growing evidence being extremely low.



Potential remains of significance and the appropriate archaeological management strategy

North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure A.1

## ii Late nineteenth century cottage

There is no historical evidence of structures or other archaeological deposits within the study area from the early land grants in 1818 until the late 1800s. The Castle Hill Township subdivision plan (1889) indicates that a house structure belonging to William Knight existed within the south-western corner of the study area, as did Oddfellows Hall. There are references to William's son, Thomas Knight, having lived at the cottage up until his death in 1908 (*The Cumberland Argus and Fruitgrowers Advocate* 1908), but by the 1921 Garthowen Estate Subdivision, the house is no longer referenced or shown on any plans. If the house was not already demolished by 1921, this would have occurred soon after to allow for the Castle Hill Station and railway built later that year. It is possible that the Castle Hill Station and railway may have disturbed the northern portions of the cottage remnants, but the station is placed approximately 30 m to the east (as shown in the NSW Department Railway Plan c.1924).

It is also possible that the ANZAC Memorial Hall has disturbed the most westerly portion of the cottage. At present, the potential location of the cottage is on an area comprised of grassed lawns and a sandstone bordered garden bed, stairs and path. It is unlikely that the garden and sandstone features would have significantly disturbed the archaeological resource as the area appears to be built-up to some extent (see Photograph 3.1). This may have conserved, rather than disturbed, the deposit by adding layers of fill.

Overall, it is possible that remnants of the cottage such as walls and subfloor deposits exist. Houses during this period were built with tongue and groove floorboards, reducing the amount of subfloor deposit that would normally accumulate under other types of floorboards. However, this house was built in a rural setting remote from the city and may have been built using earlier techniques. Therefore, underfloor deposits may exist and if it is found that the house was built prior to the 1870s, there may be the potential for earlier structural evidence such as an earthen floor and slab construction.

A review of comparative studies in the local area has indicated that the cottage and possible outbuildings may share common features with the nearby Kentwell Cottage (see Section 3.6.1).

In summary, the assessment concludes that the following may exist below the ground surface:

- a house demonstrated by remnants of wooden slabs, posts, framework, subfloor deposits and earthen floor;
- bricks as remnants of a fireplace;
- postholes for shed structure;
- structural materials, including nails and wire;
- cesspits/wells/cisterns;
- rubbish pits;
- cement pads for outbuildings such as toilets or laundries; and
- remnants of fencing including fence post holes and wire.



**Photograph 3.9** Potential location of late nineteenth century cottage residence of the Knight Family (note that the stairs and paving are not likely to be the cottage)

iii Oddfellows Hall

Remnants of Oddfellows Hall (1878–1909) which once stood at the south-western extremity of the study area are unlikely to exist. The original Hall burnt down in 1894, however was promptly rebuilt in the same year. In 1909 the Hall was translocated from the study area to 270 Old Northern Road in 1909. The action of moving the Hall is likely to have removed the majority of its structural evidence. A photograph of the Hall in 1908 indicates that the building may have been constructed on a concrete slab as it is shown sitting directly on the ground surface (Photograph 2.1). The subsequent construction of the ANZAC Memorial Hall in 1935 (including the subsurface club house ‘The Dugout’) was placed almost directly on Oddfellows Hall, and is likely to have removed the majority of any concrete slab or other remnants.

iv Castle Hill Tramway

The tramway at Castle Hill (1910–1922) did not extend into the study area. Subdivision plans for Garthowen in 1921 and the historic sources (Irwin 1996) indicate that the tramway terminated 5 m short of the Castle Street and Cranes Lane intersection. This evidence places the tramway terminus approximately 50 m south of the study area. Therefore the potential for tram or tramway evidence is very low.

v Castle Hill Station and railway

Castle Hill Station and railway (1921–1934) occurred within the south-western section of the study area. The station was a standard platform of 70 feet in length, and included a run-round loop and a goods siding built to accommodate 13 trucks. The station building was unlikely to have been a substantial

structure, however an area for a junior porter to issue tickets from may have existed (Singleton 1955 p. 79). Sources claim that no components of the railway remained by 1934 after the site was decommissioned in 1932 (Singleton 1955, Irwin 1996, Forsythe and Dease 1950). It is likely that the tracks were removed and utilised for other purposes, but research has not confirmed this. Sections of potential remnant railway features are likely to have been disturbed in certain areas by the ANZAC Memorial Hall (1935), landscaping activities, and the construction of the ANZAC Memorial Remembrance Pool (2001). Furthermore, extant mature trees may have disturbed some portions the Castle Hill Station building.

Overall, the level of intactness of the potential archaeological resource is unknown. There is moderate potential for the Castle Hill Station building, such as structural elements and post holes, and also for indicators of the railway track alignment. There is low potential for the railway tracks to exist.

#### vi ANZAC Memorial Hall

Archaeological remains of the ANZAC Memorial Hall (1935–2005) may exist. Architectural plans, aerial photographs, historic photographs, and oral histories of the Hall exist. The Hall was a brick structure with an excavated basement named the ‘The Dugout’. This building was demolished relatively recently and ground markings, including the Hall’s driveway, are still visible today. A request for information regarding the demolition of the building was made to the Hills Shire Council, which was subsequently unfruitful. The site of the demolished hall is now the reserve’s lawn.

There is moderate potential for structural elements of the Hall, such a brick walls, foundations, and cuttings for ‘The Dugout’.

#### vii Tennis courts

Archaeological evidence of the tennis courts (c1930s–c1970s) shown on the 1943 aerial imagery may still exist. It is likely that the tennis courts were layered with fill as part of landscaping the current reserve. This is likely to have conserved the archaeological deposit. The majority of the site is now grassed lawns. However, some portions of the tennis courts are likely to have been disturbed by the construction of the ANZAC Memorial Remembrance Pool.

#### viii 1930’s residence, sheds and outbuildings

The late 1930’s house, sheds and outbuildings provided on the 1943 aerial imagery has been extremely disturbed by post-depositional development. Lot 1/DP 1129465 remained privately owned and was not a part of the Castle Hill Railway or the subsequent reserve. This lot has been extensively developed in the late 1980s to accommodate a commercial office building and basement car park. The obvious subsurface excavation required for the car park would have removed any archaeological deposit within this area. As such, there is very low to nil archaeological potential for the 1930s house and associated sheds and outbuilding.

### 3.8 Heritage significance

The following section presents the assessment of significance for the potential archaeological resources within the study area.

The assessment and statement of significance is based on the guideline *Assessing Heritage Significance* (Heritage Office 2001). No previous statement of heritage significance has been completed for these potential archaeological remains. Analysis in Section 2 and 3 of this report presented a range of evidence regarding the potential archaeological remains which has been used in the assessment of significance.

The concept of cultural significance is defined as “aesthetic, historic, scientific, social or spiritual value for past, present or future generations” (*Burra Charter* 1999: Article 1.2). It identifies that conservation of an item of cultural significance should be guided by the item’s level of significance.

Table 3.1 provides a summary of the assessment criteria and their application to the potential archaeological remains. Section 3.9 provides a full statement of significance.

**Table 3.1 Assessment of significance summary**

NSW Heritage criteria (NSW Heritage Act 1977)	The potential archaeological remains at Castle Hill Station.
Criterion (a) an item is important in the course, or pattern, of NSW’s cultural or natural history (or the local area);	<p data-bbox="587 1055 1015 1077"><i>Nineteenth century structures and orchards</i></p> <p data-bbox="587 1093 1417 1234">The potential archaeological resources is historically associated with the late eighteenth and early twentieth century use of the local area particularly orcharding and farming. The agricultural use of the site demonstrates the importance of the region in producing food for the region and was one of many such orchards, none of which survive commercially in the local area.</p> <p data-bbox="587 1249 1378 1330">Archaeological evidence demonstrating the commercial uses of the study area is unlikely to be found. However, evidence of domestic use of the study area associated with orcharding would be of local significance.</p> <p data-bbox="587 1379 887 1402"><i>Castle Hill Station and Railway</i></p> <p data-bbox="587 1417 1417 1588">The Castle Hill Station and a section of the Castle Hill–Rogans Hill railway passed through the study area. Evidence of the railway would be significant at a local level for demonstrating the growth of the area around industry; it would be significant at a local level, as infrastructure development during a period of transition from earlier forms of transport to motorised road vehicle transport and so represents an infrastructure investment that was impacted by this transition.</p> <p data-bbox="587 1637 804 1659"><i>ANZAC Memorial Hall</i></p> <p data-bbox="587 1675 1401 1727">The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p data-bbox="587 1776 880 1798"><i>1930s house and outbuildings</i></p> <p data-bbox="587 1814 1401 1868">The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p>
Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW’s cultural or natural history (or the	<p data-bbox="587 1917 1015 1939"><i>Nineteenth century structures and orchards</i></p> <p data-bbox="587 1955 1390 2065">The Knight Family were people of interest key to the local orcharding industry. William Knight had the Oddfellows Hall community hall built on his property and records indicate he was a religious and community orientated man. William’s son Thomas Knight was a locally famed orchardist who made appearances in the local</p>



**Table 3.1 Assessment of significance summary**

NSW Heritage criteria (NSW Heritage Act 1977)	The potential archaeological remains at Castle Hill Station.
local area);	<p>paper regarding his fruit growing expertise. Archaeological evidence associated with the Knight cottage would provide further information of their lives and contribute to an understanding of this locally significant family.</p> <p>At a local level Oddfellows Hall was locally significant as it hosted community and religious events, some of which were associated with the Good Templars and the Manchester Unity Independent Order of Oddfellows. The Hall was also associated with the Knight Family who commissioned the Hall to be built. Although the hall represented evidence of rural religious minorities and insight into the Knight family's life and beliefs, it was removed in 1909.</p> <p>The low archaeological potential of this site is unlikely to add to the knowledge of the Good Templars, the Manchester Unity Independent Order of Oddfellows, or the Knight Family.</p> <p><i>Castle Hill Station and Railway</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>ANZAC Memorial Hall</i></p> <p>The ANAZ Memorial Hall (1935) is locally significant as it provides a strong link with local veterans and the associated culture. However, evidence of the Hall and its varied function over time is already well documented. The Hall was demolished relatively recently in 2005. The potential archaeological remains of the Hall are not likely to contribute knowledge that no other resource or site can.</p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>1930s house and outbuildings</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p>
Criterion (c) an item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area);	<p><i>Nineteenth century structures and orchards</i></p> <p>The research conducted to date has not indicated that the potential archaeological resource fulfils this criterion. The expected archaeological resource may include remains of a cottage that is unlikely to be aesthetically significant. However, if evidence survives that demonstrates rudimentary building techniques such as slab construction, these technical aspects of the resource would be of local significance.</p> <p><i>Castle Hill Station and Railway</i></p> <p>The research conducted to date has not indicated that the potential archaeological resource fulfils this criterion. Any evidence of the railway station or the railway is unlikely to be aesthetically significant. The archaeological remains are likely to be fragmentary and would not embody any engineering of technological style.</p> <p><i>ANZAC Memorial Hall</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>1930s house and outbuildings</i></p>

**Table 3.1 Assessment of significance summary**

NSW Heritage criteria (NSW Heritage Act 1977)	The potential archaeological remains at Castle Hill Station.
Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons (or the local area);	<p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>Nineteenth century structures and orchards</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfils this criterion.</p> <p>Oddfellows Hall was locally significant as it housed regular meetings for The Good Templars and the Manchester Unity Independent Order of Oddfellows — two minority groups in Australia that practiced the field of temperance. The second version of the hall, rebuilt after a fire in 1894, existed on the study area for 15 years before its removal in 1909.</p> <p>The low archaeological potential of this site is unlikely to add to the knowledge of the Good Templars or the Manchester Unity Independent Order of Oddfellows.</p> <p><i>Castle Hill Station and Railway</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>ANZAC Memorial Hall</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>1930s house and outbuildings</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p>

**Table 3.1 Assessment of significance summary**

NSW Heritage criteria (NSW Heritage Act 1977)	The potential archaeological remains at Castle Hill Station.
<p>Criterion (e) an item has potential to yield information that will contribute to an understanding of NSW’s cultural or natural history (or the local area);</p>	<p><i>Nineteenth century structures and orchards</i></p> <p>The subject site is likely to include archaeological resources relating to a vernacular cottage. The site has the potential to yield new information that would contribute to an understanding of land use and possible some insights into the construction techniques and materials used to build the cottage. Information gained from an archaeological excavation of this phase of the site could be used to compare similar archaeological sites in the local area, particularly where related to the once extensive orcharding industry and to contribute to our understanding of a former industry that was important to the growing colony</p> <p>In addition, archaeological evidence relating to the life of the Knight Family that lived there may shed light on their way of life, their economic situation as well as answer questions related to farming in what had been recognised as an important food-producing area on the outskirts of Sydney.</p> <p><i>Castle Hill Station and Railway</i></p> <p>The potential archaeological resource in the study has potential to provide scientific archaeological data on Castle Hill Station and railway on a local level. There is likely to be minimal archaeological evidence for the railway, however there is potential for the structure and layout of the station and platform.</p> <p>Although there is substantial historical information of the Castle Hill to Rogan’s Hill Railway, there is little detailed reference to the associated structures. There is photographic evidence of the nearby Rogan’s Hill Station and platform, but none for the structures at Castle Hill. The potential archaeological resource at the former Castle Hill Station could provide information about its layout and dimensions, structural materials, and design. The archaeological resource related to Castle Hill Station and Railway would be of local significance.</p> <p><i>ANZAC Memorial Hall</i></p> <p>The potential archaeological remains of the hall are unlikely to contribute any information not already known for item. The item has detailed photographic and historical records that already describe the hall’s function and significance to the community. The site had not previously been considered to have heritage significance before it was demolished in 2005.</p> <p><i>1930s house and outbuildings</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p>

**Table 3.1 Assessment of significance summary**

NSW Heritage criteria (NSW Heritage Act 1977)	The potential archaeological remains at Castle Hill Station.
Criterion (f) an item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history (or the local area); and	<p><i>Nineteenth century structures and orchards</i></p> <p>Archaeologically, there is little known about structures and the domestic life of the orcharding industry. The nearby investigation of Kentwell Cottage is the only of its type into housing of this period. Even so, the study was of a standing house and not the archaeological remains. The cottage remnants may provide insight into the important but deleted history of the area. This resource fulfils this criterion at a local level.</p> <p><i>Castle Hill Station and Railway</i></p> <p>There is little archaeological evidence of the early twentieth century railway that passed through this area besides track cuttings that occur to the east at Garthowen Crescent. Railway paraphernalia exists within Arthur Whitling Park today, however they are not related to the study area. The potential resource fulfils this criterion at a local level. Any archaeological remains of the station or railway would provide a tangible link to the historically well-documented railway.</p> <p><i>ANZAC Memorial Hall</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>1930s house and outbuildings</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p>
Criterion (g) an item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places or cultural or natural environments (or the local area).	<p><i>Nineteenth century structures and orchards</i></p> <p>The potential archaeological remains of the cottage are likely to be a good example of a successful orcharding and farming family and their life. The potential archaeological resources are associated with the Knight Family who owned the study area and Oddfellows Hall. The archaeological evidence would be of local significance.</p> <p><i>Castle Hill Station and Railway</i></p> <p>The potential remains of the Castle Hill Station and Railway are likely to be a good representation of the techniques used to construct the railway and of railway station building construction and railway practice in the early twentieth century. The archaeological evidence would be of local significance.</p> <p><i>ANZAC Memorial Hall</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p> <p><i>1930s house and outbuildings</i></p> <p>The research conducted to date has not indicated that the potential archaeological remains fulfil this criterion.</p>

### 3.9 Statement of significance for the potential archaeological remains

The potential remnants of the late nineteenth century cottage and Castle Hill Station and associated railway line are considered to be of local heritage significance. The cottage was the residence of the locally well-known Knight family for multiple generations. If archaeological resources of the cottage survive, they have the potential to contribute to our understanding of a well-known orchardist's domestic life, at a local level, during the late nineteenth and early twentieth century. The potential archaeological resource may also yield information relating to the construction techniques used to build the cottage.

The Castle Hill Station and railway is a significant aspect of NSW's rural transport history and also marks an attempt to develop local and regional economies — despite its ill-fated end. Remnants of the Castle Hill Station and railway may contribute to the understanding its structural components and layout and would be of local significance as documentary sources are rudimentary at best.

The potential archaeological remains of the ANZAC Memorial Hall are not considered to be of local significance. Architectural plans, aerial photographs, historic photographs, and oral histories of the Hall already provide more information than the archaeological resource could.

Remnants of the 1930s house and outbuildings in Lot 1/DP 1129465 are likely to have been completely removed from post depositional activities in the study area. Therefore no heritage significance currently applies to this area and therefore no associated archaeological significance.



## 4 Impact assessment

### 4.1 Impacts from the proposed development

The entire area of the Castle Hill Station footprint will be disturbed before the construction of the station. Construction activities and landscaping will result in the majority of the study area being excavated in some way. Impacts to all areas of archaeological potential are expected due to the large amount of soil subject to excavation.

The potential archaeological remains will be impacted by:

- the removal of soil to create the station area;
- the levelling and landscaping of areas surrounding the station area to create walkways, parks ; and
- excavation for services including water, sewer and electricity.

Figure 4.1 shows the shows the development plan for the Castle Hill Station site. It is noted that the current development plan may be revised during construction and installation of the station buildings. However, this is not expected to change the comprehensive impacts to the potential archaeological remains.



T:\Jobs\2013\13006 North West Rail Link Early Works\GIS02\_Maps\H132\_AA\RD\CastleHillStation\_20130715\_01.mxd 16/07/2013



## 5 Conclusions and recommendations

### 5.1 Conclusions

The Castle Hill Station study area has been subject to multiple and varied phases of occupation. The study area was initially part of a rural landscape where it may have been used for crops in the early to mid nineteenth century. The study area was then used for orcharding in the late nineteenth and early twentieth century which followed the trend occurring in Castle Hill and the greater Hills Shire. During this time, the study area also hosted a community hall (Oddfellows Hall) that was frequented by religious minorities such as the Good Templars and the Manchester Unity Independent Order of Oddfellows. After major subdivisions, the study area hosted the former Castle Hill Station and a section of the Castle Hill to Rogan's Hill Railway. After the demise and removal of the railway and station, the majority of the study area was converted into Castle Hill Park (now Arthur Whitling Reserve), with one portion reserved for residential land and another portion reserved for the ANZAC Memorial Hall (1935). The study area has largely remained unchanged since its use as a reserve, except for the commercial development of one of the private lots.

Research on the nature of the structures and potential archaeological deposits within the study area has shown that there is moderate potential for the remains of a late nineteenth century cottage structure related to the Knight Family to be present. There is also moderate potential for the remains of the Castle Hill Station building to exist. The potential for remnants of the railway line is considered to be low because of its removal in 1934. These potential archaeological remains are assessed to be of local significance and are therefore "relics" as defined by the *Heritage Act 1977*.

Relics associated with the nineteenth century cottage have the potential to yield information relating to the construction, size and building techniques of a vernacular residence of the period. It may also determine if the building was indeed vernacular. The archaeological resource may also be able to answer questions relating to the date of the construction.

The cottage may also provide information about the locally significant orchardists of the Knight Family. The lives of fruit growers/orchardists who supplied the market in Sydney but were located beyond what was then the outskirts of the town, is not well understood. There are historical references to the expertise of the Knight family in their fruit growing pursuits and their honourable character, however their domestic lives are not well documented. The Knight Family, and notably Thomas Knight, may be examples of a group of people who left their physical marks on the landscape. The potential archaeological resource may provide information on how the Knights lived and therefore contribute to knowledge about life in the orchard district on the outskirts of Sydney.

The Castle Hill Station and railway has the potential to yield information relating to its layout and dimensions, structural materials, and design. Artefacts relating to the station and railway also may exist. Railways and trains are generally well documented by historians and train enthusiasts. Historically, the focus tends to be on the trains and the structural components of the railway lines. The potential archaeological resource within the study area may provide greater insights into the Castle Hill Station building which would have been a landmark during its existence.

The study area and its potential archaeological resources of local significance have been subject to various but isolated areas of post-depositional disturbance. These events may have affected the intactness of the archaeological resources to some extent.

There is moderate potential for remains of the ANZAC Memorial Hall to exist within the study area. However, this assessment has found that the item does not fulfil local or state heritage criteria.

The 1930s house and outbuildings located in Lot 1/DP 1129465 are highly likely to have been removed by a subsequent commercial housing development in the late 1980s. As such, these items are unlikely to exist and subsequently do not fulfil local or state heritage criteria.

## 5.2 Recommendations

Research undertaken for this report indicates that the potential for relics exists within the study area and that these resources from multiple phases of history may be able to answer questions relating to the growth of local agricultural economies and the families that drove them, and the transport industry of Sydney. The recommendations relating to the archaeological resource are to:

- conduct an archaeological test excavation on targeted areas of the site to test the conclusions of this report. The targeted archaeological test excavations seek to determine the extent of significant archaeological resource. This archaeological excavation program is provided in Appendix A.
- prepare a Research Design to guide the archaeological test excavation and frame the approach. This Research Design is provided in Appendix A.
- ensure that if during the course of excavation Aboriginal cultural material is found, work must cease and the indigenous heritage consultant be alerted.

## References

---

Archaeological Management and Consulting Group Pty Limited (AMAC), 2003, *Archaeological Assessment, Research Design and Excavation Methodology, 286a–296 Old Northern Road & Garthowen Crescent — including sections of the former Castle Hill–Rogans Hill Railway Line, Castle Hill N.S.W.* Report prepared for Tyrone Group.

Australia International Council on Monuments and Sites (ICOMOS), 1999, *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS Inc.

Attenbrow J, 2010, *Sydney's Aboriginal Past*, Sydney: UNSW Press.

Boulderstone Pty Ltd, 2013, *Construction Heritage Management Plan for the North West Rail link Early Works*, report prepared for Transport for NSW.

Carr H, Wilson P, Pullen N, McClusky L, 1997, *Settlement of Baulkham Hills and Castle Hill townships 1791 – 1997*, Sydney: Hills District Historical Society.

Casey & Lowe, October 2006, *Heritage Review: North West Rail Link — Epping to Rouse Hill*. Prepared for GHD Ltd on behalf of Transport Infrastructure Development Corporation.

Castle Hill RSL Club 2013, History, viewed 1 July 2013, <http://www.castlehillrsl.com.au/corporate/about>.

Edward Higginbotham and Associates Pty Ltd, 2006, *Historical and Archaeological assessment of Kentwell cottage, 244 Old Northern Road Castle Hill NSW*, prepared for Baulkham Hills Shire Council.

EMGA Mitchell McLennan (EMM) 2013a, *North West Rail Link Early Works Photographic Archival Report of Heritage Items Within The Proposed Construction Sites*, report prepared for Boulderstone.

*Evening News*, 1894, 'Fire at Castle Hill', 25 May, p.3.

Forsythe RC, and Dease JS, 1950, *Parramatta to Castle Hill tramway – railway 1902 – 1932*, Castle Hill, Hills District Historical Society.

Godden Mackay Logan (GML) 2012a, *North West Rail Link: EIS 1 — Major Civil Construction Works European Heritage Report*. Report prepared for NWRL Planning Approvals Team.

- May 2012b, North West Rail Link: Heritage Zoning Plan. Report prepared for AECOM.
- 2012c, *North West Rail Link: EIS 1 Major Civil Construction Works Aboriginal Heritage Report*. Report prepared for NWRL Planning Approvals Team.

Heritage Branch, Office of Environment and Heritage NSW, website viewed 24 October 2011, <<http://www.heritage.nsw.gov.au/>>.

Heritage Office, Department of Planning NSW, 2009, *Assessing Significance for Historical Archaeological Sites and 'Relics'*, NSW Heritage Branch.

- 2006, *Statements of Heritage Impact*, NSW Heritage Branch.
- 2006, *Historical Archaeology Code of Practice*, NSW Heritage Branch.

- 2004, *Investigating Heritage Significance*, NSW Heritage Branch.
- 1998 *How to Prepare Archival Records of Heritage Items*, NSW Heritage Branch.
- 1996, *Archaeological Assessments Guidelines*, NSW Heritage Branch.

Hornsby Shire Council, 2013, Aboriginal heritage, accessed from <http://www.hornsby.nsw.gov.au/our-community/history/aboriginal-heritage>, accessed on 25 June 2013.

Irwin BS, 1996, *Penny-a-section tuppence-a-case: a history of the Parramatta to Castle Hill tramway*, Round Corner: Bruce S Irwin Publishing.

NSW Land and Property Information, 2012, *Castle Hill Parish Maps*, published online at <http://www.lpi.nsw.gov.au/>.

- 2013, Aerial photographs 1928 – 2006,

Neil WD, 1992, *The lunatic asylum at Castle Hill: Australia's first psychiatric hospital, 1811-1826*, Castle Hill: Dryas.

Manchester Unity 2013, *The History of Manchester Unity Independent Order of Oddfellows*, accessed from <http://www.manchesterunitynsw.org/st.php?uv=355I711I0I0>, accessed on 16 July 2013.

Roads and Maritime Services 2013, *Six Maps*, accessed on 20 Jun 2013, accessed from <http://maps.six.nsw.gov.au/>.

Singleton, C 1955, *The Railways and Tramways of the Parramatta Hills District*, The Australian Railway Historical Society, Bulletin No. 212, June.

Smith, R 2009, *Castle Hill RSL Club*, The Hills Voices Online, viewed 1 July 2013, <http://www.thehills.nsw.gov.au/external/hillsvoices/RonSmith01.htm>.

*Sydney Gazette*, 1821, 'Deputy Commissary General's Office', May 5, p.4.

Tindale, NB 1974, *Aboriginal Tribes of Australia*, ANU Press, Canberra.

The Cumberland Argus and Fruitgrowers Advocate, 1948, *Grand Old Lady Passes On*, Wednesday 25 February 1948.

- 1946, *Daniel Horwood Dies At Age Of 96*, Wednesday 31 July 1946.
- 1941, *For Active Service*, Wednesday 14 May 1941.
- 1932, *Mr E.J Black Death Last week Pioneer Coach Proprietor*, Thursday 21 April 1932.
- 1908a, *Death of Thomas Knight A Pioneer Orange Grower*, Wednesday 3 June 1908.
- 1908b, *The Late Mr T Knight*, Saturday 6 June 1908.
- 1906, *A Big Purchase*, Saturday 20 October 1906.
- 1896, *Postal Contracts*, Saturday 29 February 1896.

- 1892, *Mr Knight on the Subject*, Saturday 17 September 1892.
- 1891a, *Temperance Meetings at Castle Hill*, 28 February, p.5.
- 1891b, *Castle Hill. State Prohibition*, 9 May, p.7.
- 1891c, *Publicans' Licenses Further Restriction Bill. Public Meeting at Castle Hill*, 23 May, p.6.
- 1891d, *Family Notices — Death*, 3 January 1891, p.4.

The Sydney Gazette and New South Wales Advertiser, 1817, *Government and General Orders, Government House Sydney 28 June 1817*, Saturday 28 June 1817.

Windsor and Richmond Gazette, 1948, *CWA Branch Meeting, Prominent Member Honoured*, Wednesday 21 April 1948.

- 1943, *Obituary William Armstrong*, Wednesday 6 January 1943.
- 1912, *Baulkham Hill Shire Council*, Saturday 30 November 1912.

Watson, H, 2010, *Castle Hill: Where have all the orchards gone?* The Hills District Historical Society: Castle Hill.

#### **Land Title References**

Application No 23255;

Volume (Vol) 3170 Folio (Fol) 66;

Vol 5828 Fol 146;

Vol 5990 Fol 121.

Vol 7006 Fol 93757.



## Glossary of Terms

---

Many of these definitions use throughout this report have been taken from the *Archaeological Assessments Guidelines* (Heritage Branch 1996).

**Archaeological Potential:** a sites potential to contain archaeological relics as defined in the Heritage Act 1977. The degree of physical evidence present on an archaeological site usually assessed on the basis of physical evaluation and historical research. It refers to the surviving condition of archaeological sites). Common terms for describing archaeological potential are:

- known archaeological features/sites (high archaeological potential);
- potential archaeological features/sites (medium archaeological potential); and
- no archaeological features/sites (low archaeological potential).

**Archaeological Site:** a place that contains evidence of past human activity. Below ground archaeological sites may include building foundations, occupation deposits, features, artefacts and relics. Above ground archaeological sites may include buildings, works, or industrial structures that are intact or ruined.

**Archaeology:** the study of the human past using material evidence.

**Archaeological investigation or excavation:** the manual excavation of an archaeological site.

**Artefact:** an object produced by human activity. In historical archaeology the term usually refers to small objects contained within occupation deposits. The term may also encompass food or plant remains and ecological features (for example, pollen).

**Conservation:** all of the processes of looking after a place so as to retain its cultural significance.

**Building:** a part of a building, structure or part of a structure.

**Heritage:** encompasses both Aboriginal and historic heritage including sites that predate European settlement and a shared history since European settlement such as the shared associations in pastoral landscapes as well as associated link with the mission period.

**Heritage Item:** an item defined under the *Heritage Act 1977* and assessed as being of local, State and/or National heritage significance

**Heritage Significance:** a term used to encompass all aspects of significance (see Cultural Significance). Defined in the *Heritage Act 1977* (Section 4A) as being of State or Local significance in relation to historical, scientific, cultural, social, archaeological, natural or aesthetic value of the item.

**Historical Archaeology:** in NSW historical archaeology is the study of the physical remains of the past, in association with historical documentation, since European occupation of NSW in 1788.

**Item:** a place, building, work, relic, moveable object or precinct.

**Listing:** an item is placed on a statutory heritage list.

**Local Significance:** in relation to a place, building, work, relic, moveable object or precinct, means significance to an area in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item.

**Place:** site, area, land, landscape, building or other work group of buildings or other works and may include components, contents, spaces and views.

**Potential Archaeological Site:** a place which may contain physical evidence of past human activity (see Archaeological Site).

**Relic:** any deposit object or material evidence that (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and (b) is of State or local heritage significance.

**Research Design:** a set of questions, which can be investigated using archaeological evidence and a methodology for addressing them. A research design is intended to ensure that archaeological investigations focus on genuine research needs. It is an important tool which ensures that when archaeological resources are destroyed by excavation, their information content can be preserved and can contribute to current and relevant knowledge.

**Research Potential:** the ability of a site or feature to yield information through archaeological investigation. The significance of archaeological sites is assessed according to their ability to contribute information to research questions.

**State Significance:** in relation to a place, building, work, relic, moveable object or precinct, means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. An item can be both of State heritage significance and local heritage significance. An item that is of local heritage significance may or may not be of State heritage significance.



## Appendix A

### Research design

---

## A.1 Introduction

### A.1.1 Background

EMGA Mitchell McLennan Pty Ltd (EMM) has been commissioned by Baulderstone to undertake an archaeological program at the Castle Hill construction site. This report details the research design for the archaeological program.

The requirements for the archaeological program come from Condition E10 of the Ministers Conditions of Approval. Condition E10 states that:

*E10. Prior to the commencement of pre-construction and/or construction activities that will impact the historical archaeological sites identified in Table 4.2 of the North West Rail Link EIS: Technical Paper 3 – European Heritage, dated March 2012, the Proponent shall undertake an archaeological excavation program in accordance with the Heritage Council of NSW Archaeological Assessments Guideline (1996) using a methodology prepared in consultation with the Heritage Council of NSW, and to the satisfaction of the Director General. This work shall be undertaken by an appropriately qualified heritage consultant.*

Additionally TfNSW has requested that the archaeological investigations for these sites are completed in the earliest possible timeframe to facilitate a smooth transition between the various stages of the project.

Heritage constraints were initially identified in the preliminary phases of the project, specifically in relation to the former Castle Hill Tramway (1909–1921) and subsequent Castle Hill Station and railway to Rogan’s Hill (1923–1932) (GML 2012a p. 24). The initial investigation identified the Castle Hill Station and railway to have existed within the study area. However, the Castle Hill Tramway occurred over 50 m to the west of the study area, and was excluded from further assessment as it would not be impacted by the construction of the proposed Castle Hill Station site. Furthermore, an 1890 subdivision plan of Castle Hill showed two structures in the western apex of the study area: one being a cottage and residence of the Knight Family, and the other a local community hall known as Oddfellows Hall. The hall was translocated from the study area in 1909, however the fate of the cottage is only known up until 1908 upon the death of Thomas Knight. After the closure of the Castle Hill station and railway in 1932, the majority of the study area became Castle Hill Park (what is now Arthur Whitling Reserve), with the western apex set aside for the ANZAC memorial hall (1935–2005), and the remaining two lots (created in an 1921 subdivision) left for residential and farming purposes. Today the majority of the study area is Arthur Whitling Park, with one remaining lot being the site of a commercial office building.

The historical and archaeological research has concluded that there is moderate potential for the remains of the nineteenth century cottage, the Castle Hill Station building, and the ANZAC Memorial Hall.

The late nineteenth century cottage and the Castle Hill Station and railway were assessed to be of local heritage significance. The remaining potential archaeological resources did not fulfil local or state heritage significance criteria.

The late nineteenth century cottage may yield information relating to its material, structure and layout. The cottage may also provide information on the lives of the fruit growers/orchardists who inhabited the site, namely the well-known Knight Family. The Knight Family, including Thomas Knight were a good example of successful orchardists in the Castle Hill area.

The Castle Hill Station and railway has the potential to yield information relating to its layout and dimensions, structural materials, and design. Artefacts relating to the station and railway also may exist. Railways and trains are generally well documented by historians and train enthusiasts. Historically, the

focus tends to be on the trains and the structural components of the railway lines. The potential archaeological resource within the study area may provide greater insights into the Castle Hill Station building which would have been a landmark during its existence.

The recommendations relating to the archaeological resource are to:

- Conduct an archaeological test excavation on targeted areas of the site to test the conclusions of this report. The targeted archaeological test excavations to determine the extent of significant archaeological resource and this section is the archaeological excavation program;
- Prepare a Research Design to guide the archaeological test excavation and frame the approach. This is the Research Design.
- Ensure that if during the course of excavation Aboriginal cultural material is found, work must cease and the indigenous heritage consultant be alerted.

### A.1.2 Site location

Early works construction is proposed in the area selected for the location of the Castle Hill Station. The proposed station site covers approximately 18,000 m<sup>2</sup> of land in the commercial centre of Castle Hill. The site occupies most of the extant Arthur Whitling Reserve and is bound by Old Castle Hill Road to the north, Old Northern Road to the south and McMullen Avenue to the east. The affected lots are listed below and have been assessed for their archaeological potential.

- Lot 7006/DP 93757;
- Lot 1/DP 1129465
- Lot 215/DP 752020; and
- Lot 198/DP 752020.

### A.1.3 Limitations

This report deals specifically with items of historical archaeological significance within the study area. Issues related to heritage items outside the scope of the NWRL Project are not covered in this report. A detailed assessment of Aboriginal heritage for the study area is separate to this report.

### A.1.4 Author Identification

This report has been prepared by Ryan Desic BA Hons (Archaeology) and Rebecca Newell BA Hons (Archaeology). The report was reviewed by Pamela Kottaras BA Hons (Archaeology) — Associate and Archaeology Team Leader and David Kelly (BTP) (Hons) — Senior Environmental Planner EMM. It was also externally reviewed by Tory Stening from Comber Consultants.

## A.2 Development proposal

### A.2.1 Project description

The North West Rail Link is a priority transport infrastructure project for NSW and will provide a new 23 km electrified passenger rail line between Epping and Rouse Hill. The Project includes eight new stations (Cherrybrook, Castle Hill, Hills Centre, Norwest, Bella Vista, Kellyville, Rouse Hill and Cudgegong

Road), a stabling facility and associated infrastructure (Figure 1.1 of the archaeological assessment report. The Early Works include site establishment prior to the commencement of the Major Works and can be grouped into the following categories:

- tunnelling construction power – high voltage power supplies for construction;
- demolition – demolition of a mixture of residential and commercial properties and/or facilities;
- roads and traffic – road adjustments, signalling, and existing transport network facilities relocation; and
- precinct preparation – utilities, services relocations and miscellaneous works.

Transport for NSW (TfNSW, the NSW Department of Transport) has commissioned BPL as the managing contractor for the 'Early Works' to allow construction sites establishment prior to commencement of the major works for the NWRL. Works at the Castle Hill Station site are expected to result in removal of a large amount of soil to create the tunnel, station building, plaza zones and landscaped park areas. This will result in removal of all potential archaeological evidence at the Castle Hill Station site.

The works program specific to the Castle Hill Station construction area includes the demolition and removal of the commercial buildings, mature trees, gardens and structures associated with ANZAC memorials and the levelling, and landscaping of the construction area in preparation for the forthcoming tunnelling and station construction. At the completion of the works the study area will become Castle Hill Station.

## A.2.2 Impacts from the proposed development

The entire area of the Castle Hill Station footprint will be disturbed before the construction of the station. Construction activities and landscaping will require the majority of the study area to be excavated in some way. Impacts to all areas of archaeological potential are expected due to the large amount of soil subject to excavation.

The potential archaeological remains will be impacted by:

- the removal of soil to create the station area;
- the levelling and landscaping of areas surrounding the station area to create walkways, parks ; and
- excavation for services including water, sewer and electricity; and

Figure 4.1 of the archaeological assessment report the shows the development plan for the Castle Hill Station site. It is noted that the current development plan may be revised during construction and installation of the station buildings. However, this is not expected to change the comprehensive impacts to the potential archaeological remains.

## A.3 Proposed research design and archaeological program

### A.3.1 Research design

A research design is a set of research questions developed for a specific site, which contributes to current and relevant knowledge. The questions posed must be responsive to the nature of the archaeological

evidence that is likely to be encountered. In addition, the how and where of the excavation is described in this document.

The archaeological assessment for Castle Hill Station by EMM (2013) assessed the site as having moderate potential for the remains of a cottage built in the late nineteenth century. There is also moderate potential for the remains of the Castle Hill Station building and artefacts associated with the station and former Castle Hill to Rogans Hill railway (1923–1932). The significance of the potential archaeological resources has been assessed to be of *local* heritage significance.

Also identified was moderate potential for the remains of the Castle Hill Memorial Hall (1935–2005). The EMM assessment considered that this resource did not meet *local* or *State* heritage significance criteria.

This research design proposes a program of archaeological testing to record the nature and extent of the archaeological resource present at the site. The archaeological program will aim to clarify the archaeological potential of the site by verifying the presence or absence of the remains of late nineteenth century cottage house structure and possible associated outbuildings or features. The program will also target the remains of the Castle Hill Station building and associated structures, artefacts or railway remnants. This research design also includes the provision for salvage excavation for particular areas of significance.

### A.3.2 Research questions

The archaeological remains of interest are those associated with the occupation of the site in the late nineteenth and early twentieth century. There are potential archaeological remains of interest related to two separate events of the site: the late nineteenth century cottage and the Castle Hill Station building and railway.

The cottage is within the context of a rural landscape characterised by orcharding and farming, where it belonged to locally eminent fruit growers known as the Knight Family. Remnants of a house structure and associated structures and deposits have the potential to exist as subsurface relics.

The Castle Hill Station building and railway was part of the Castle Hill to Rogan's Hill Railway and signified the attempts of the NSW Government to develop local economies by transport infrastructure. Remnants of the Castle Hill Station building, the railway and associated artefacts have the potential to exist as subsurface relics.

At present, it is not discernible whether or not post-depositional development and land use has removed the site's archaeology. It is possible that post-depositional events have affected the intactness of the potential archaeological resource, but which have not removed the archaeology completely.

Research questions for the cottage have been guided by comparative study of a nearby weatherboard house and property in Castle Hill named 'Kentwell Cottage' (described in Section 3.6 of EMM 2013). This report has considered the structural components and physical layout of Kentwell Cottage in the formulation of site specific research questions. Further information may be gained at the completion of the former house site in the Cherrybrook Station area, which will be subject to archaeological excavation in the near future.

Research questions for the Castle Hill Station and railway have also been guided by the investigation of the section of the Castle Hill to Rogan's Hill Railway (described in Section 3.6 of EMM 2013). This report has considered the predicted structural components and artefacts of the Castle Hill to Rogan's Hill Railway in the formulation of site specific research questions.

Research questions have been guided by historic themes relevant to the site which have been taken for the NSW Heritage Branch website ([www.environment.nsw.gov.au/heritage/index.htm](http://www.environment.nsw.gov.au/heritage/index.htm)). These have been used to ensure that the site may be a comparable resource for previous and future archaeological investigations in NSW and nationally.

The national historic themes relating to the study area are:

- building settlements, towns and cities;
- marking the phases of life;
- developing Australia's cultural life; and
- developing local, regional and national economies.

The NSW historic state themes relating to the study area are:

- transport;
- commerce;
- social institutions;
- agriculture;
- leisure
- towns, suburbs and villages
- accommodation;
- domestic life;
- land tenure;
- environment – cultural landscape; and
- persons.

#### i [General research questions](#)

- Does the archaeological resource verify the assessed potential and significance of the site?

That is:

- i) What is the condition and extent of the surviving archaeological evidence?
- ii) What is the nature of extant archaeological features?
- iii) Do the deposits and features contribute new information about the occupation and development of the site?

General questions concerning the settlement of rural north-western Sydney, agricultural economies and the cultural life surrounding these events in the late nineteenth and early twentieth century are also appropriate for comparative purposes.

#### i Site specific research questions

##### *Late nineteenth century cottage*

- iv) If physical evidence of the cottage structure, or associated outbuildings survive, can the data assist with understanding the spatial organisation of the house and its associated features?
- v) Do any structural remains or material culture deposits at the site tell us about the social status and standard of living of those who occupied the site? If, so can this information be tied to a particular family, namely the Knight Family?
- vi) Do the structural remains indicate a specific design or style of vernacular architecture? If so, are they comparable to other archaeological sites, or existing structures on a local, regional or national level?
- vii) Do the structural remains indicate additions or alterations over time, and does this coincide with changes in occupancy as shown in the historic record?
- viii) Is there evidence of domestic occupation at the site? If so, does the material culture assemblage change through time and with phases of occupation? Is there any historical evidence linking these changes to certain people, occupational phases, or other events?
- ix) Does any domestic material deposit provide a link to the local orcharding industry? If so, what can it tell us about people's domestic lives in relation to their work?
- x) What does the material cultural assemblage reveal about the owners and occupants of the house, when compared with assemblages from other sites?
- xi) Is there any evidence of agricultural produce at the site, especially fruit growing? If so what form does it take and how does the information contribute to our knowledge of the agricultural practices in the area?

##### *Castle Hill Station building and railway*

- xii) Is there any physical evidence of the original layout of the Castle Hill Station building, platform or railway components such as rail loop and goods siding?
- xiii) To what extent have the station and railway components been removed from the site after it was decommissioned in 1932?
- xiv) What artefactual evidence of the railway remains, for example track and fittings, fixtures, signage, and fencing?
- xv) Does any archaeological evidence provide wider information about the economic growth and transport of the local area?
- xvi) Does the archaeological evidence provide any information about the people who worked or frequented the station?

- xvii) Is there any evidence of what goods and materials were transported by rail? Specifically, is this evidence related to the goods siding area that occurs parallel to the main rail line and passing loop?

It should be noted that the archaeological program may uncover a range of information not expected and the research questions are likely to evolve depending upon the type of evidence and artefacts found at the site.

## A.4 Methodology

An excavation strategy has been prepared which represents the most appropriate archaeological methodologies for the archaeological program. This strategy responds to the requirements above, the development plans and the local heritage significance of the site.

As mentioned in the previous section, it is difficult to discern how much of the site is likely to contain intact archaeological resources that are associated with the weatherboard house and/or shed. Recent utility ground works deposition of the archaeological evidence may have disturbed the subsurface deposit to some extent. Subsequently, archaeological test excavation is the only reliable method to quantify and characterise any potential subsurface deposit. This archaeological management strategy presented here is based on the findings of the archaeological assessment (EMM 2013) and geotechnical testing within the site.

The archaeological investigation of the site will involve the excavation of test trenches targeted at locating specific archaeological evidence, followed by the monitoring of areas within the site that are considered to be lower archaeological sensitivity. There is also a provision for the salvage excavation of areas that have the potential to contribute knowledge that no other site or resource can. The knowledge retrieved from salvage will aim to answer the general and specific research questions provided in the research design.

### A.4.1 Archaeological testing

Excavation of test trenches will determine the nature and extent of archaeological features associated with previous structures and may determine the stratigraphy across the site. Areas with existing utility trenches and other previous development areas will be avoided where possible. Targeting predicted deposits with the least known post-disturbance will increase the likelihood of locating intact archaeological evidence. The test excavation will also aim to sample the widest cross-section of features and associated deposit as possible.

Archaeological testing will be designated to the western portion of the study area where the potential archaeological resources have been identified. Testing will target the nineteenth century cottage, the Castle Hill Station building and the railway components. Test trenches will be used and orientated to catch as much information as possible from limited trench dimensions. If testing confirms archaeological evidence, then it will be fully recorded and an assessment will be made on its heritage significance. The archaeological remains and its significance will determine if salvage excavation is warranted.

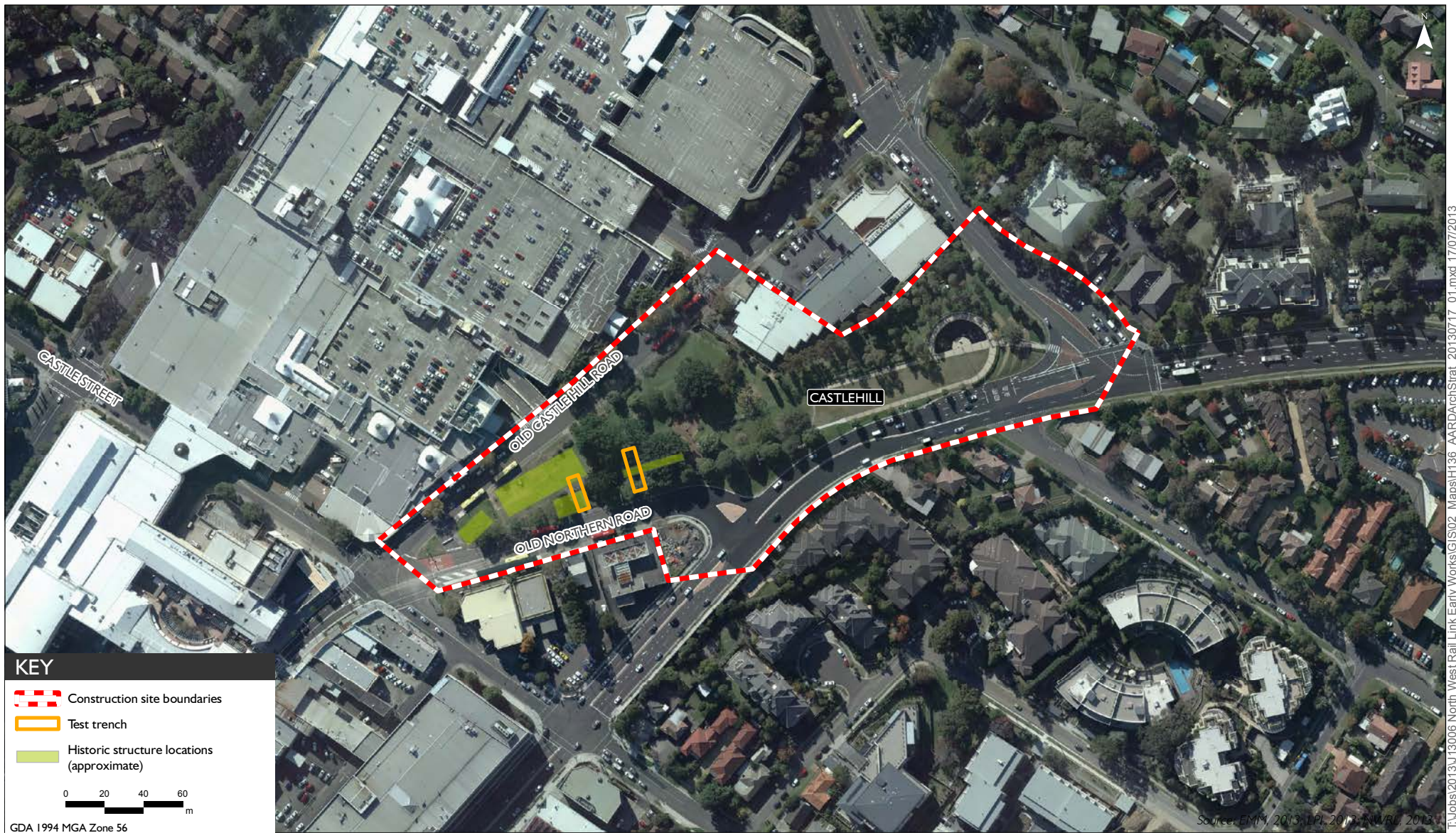
The testing program will require the use of an excavator with a smooth edged mud bucket, to remove overburden down to just above any occupational surface, structural remains or natural soil levels. At all stages of the test excavation, the archaeologist will have the authority to halt work if archaeological evidence is suspected. Any archaeological evidence will be verified by hand excavation techniques.

The proposed test pit layout is shown in Figure A.1. The archaeological testing program will be undertaken by:



- Targeting test trenches in order to investigate the archaeological evidence according to historical imagery and plans.
- Test trenching via machine-excavation to a depth the archaeologist consider appropriate for finding relics, and also to determine culturally sterile layers.
- Excavating one 17 m by 6 m trench at the predicted location of the cottage. This will aim to identify any structural remains, including walls. The width of the trench also has the potential to include occupational deposits inside or outside any structure.
- Excavating one 22 m by 6 m trench at the predicted location of the Castle Hill Station building on a north-south axis so as to catch any remnants of the railway line, the rail loop, and the goods siding track.
- Excavation of the test areas to remove overburden will proceed by using appropriate machinery, including a 5 tonne excavator with a smooth-edged mud bucket.
- Monitoring the removal of any overburden, fill or other culturally non-significant layers until any significant archaeological evidence, occupational surface or structure is identified by a qualified archaeologist.
- Hand excavation by field archaeologists to fully expose or characterise the archaeological evidence. The decision to excavation stratigraphically or by feature will be determined in the field based on the archaeological evidence uncovered. For example, cesspits and wells would be excavated as features.
- Recording of remains and deposits according to the detailed recording methodology outlined below.
- Dealing with artefacts according to the artefact methodology outlined below.
- Implementing salvage excavation if sufficient evidence of the presence of archaeological deposits of local significance occur. If the deposits are of state heritage significance, the Heritage Branch will be contacted to review the excavation. Salvage excavation would preferably commence within a week of finishing the test excavation.

Salvage excavations will follow the salvage excavation methodology outlined below.



Potential remains of significance and the appropriate archaeological management strategy

North West Rail Link Early Works  
 Archaeological Assessment and Research Design - Castle Hill  
 Figure A.1

Where appropriate, the archaeologist will sample any cultural and non-cultural deposits that may provide significant information regarding the pre and post European environment and occupation of the site. Soil samples will be analysed by a soil specialist.

In the event that evidence of Aboriginal cultural remains are found on site all works in the immediate vicinity of the area will cease and Boulderstone will be contacted. Appropriate measures provided in the NWRL Early Work Aboriginal Cultural Heritage Management Plan will be adhered to before works recommence.

#### A.4.2 Salvage excavation approach

Salvage excavation will be undertaken subsequent to test excavation if significant archaeological remains warranting further excavation are found. Salvage excavation will largely be guided by the nature and extent of the archaeological remains uncovered from test excavation. The basic principles of open area salvage excavation that will be used on the site are:

- salvage excavation will aim to retrieve a level of information relative to the significance and intactness of the archaeological resources;
- salvage excavation will aim to answer research questions provided in the research design;
- salvage excavation will involve the expansion of test trenches to adequately characterise the archaeological evidence initially exposed; and
- a similar methodology to that outlined for the testing will be followed.

#### A.4.3 Recording methodology

All recording will be undertaken using the following principles:

- the establishment of an appropriate site grid;
- use of surveying techniques for location of remains;
- detailed archaeological scale plans;
- the use of context recording forms and context numbers to record all archaeological information;
- use of Harris matrix as part of the recording program;
- all structural remains, post holes and features will be planned using an established survey point;
- detailed photographic recording;
- collection, labelling, safe storage, washing, sorting and boxing of artefacts.

#### A.4.4 Artefact methodology

Any artefacts recovered from the site will be the subject of a detailed cataloguing and analysis program, including:

- all artefacts will be catalogued by specialist cataloguers using a system that identifies and allows easy retrieval of the item;
- the specialists' cataloguers will produce reports on the artefacts outlining issues of importance;
- important artefacts will be the subject of materials conservation which would include the gluing of pottery or the conservation of important metal or leather materials; and
- artefacts which are the subject of materials conservation may be used in artefact displays in interpretation of the stations.

The excavation report will contain an analysis of artefacts and their deposits and contexts. This analyses will be illustrated using tables in the final report.

#### A.4.5 Excavation Report

A detailed excavation report will be produced describing the results of the archaeological program. The report will include the artefact analysis and response to research questions.

### A.5 Public interpretation of the archaeological program

The information and artefacts from the excavation may be used in interpretation of the site and in displays as part of the new station complex.

The following are suggested ways in which information about the site can be disseminated to be public:

- public information leaflets;
- regular updates on the archaeological program on the NWRL webpage; and
- media releases.

### A.6 Aboriginal archaeology

No Aboriginal heritage constraints were identified for this site in GML 2012c. No further Aboriginal heritage investigation has occurred at this site. Should Aboriginal heritage items be identified during historic heritage excavation, works work will cease in the vicinity of the finds until an assessment of significance can be made in consultation with the registered Aboriginal parties for the project.

### A.7 Public interpretation in the completed Castle Hill Station site

Interpretation could utilise a range of archaeological material including:

- archaeological drawings, plans and images; and
- artefacts.

### A.8 Personnel

The excavation program will be directed by Jillian Comber with Tory Stening as an alternate excavation director. Pamela Kottaras is the nominated excavation co-director. The following staff will also assist as site supervisors:

- Ryan Desic; and
- Rebecca Newell.

As the major constraint is time, it is intended to have a team of 6 archaeologists on call to complete the test excavation. If relics are uncovered in the proposed test trenches, concurrent excavation may contract the amount of time required on site. The final decision however, rests with the excavation director.

We are intending to use a number of assistants and other staff where required. CV's and references for key personnel listed above are contained in Appendix B.



## Appendix B

### Curricular Vitae

---





# Curriculum vitae

## Pamela Kottaras

Associate Archaeologist

Pamela has over 13 years experience as a heritage consultant and leads EMM's heritage service.

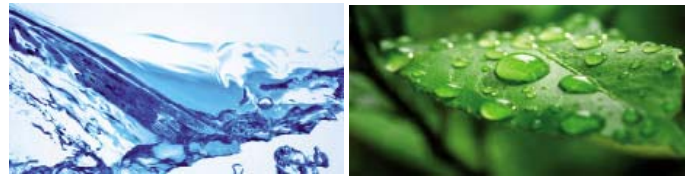
Her strengths include project direction and management of complex historic period assessments and heritage impact statements and Aboriginal heritage assessments, site analysis, archival recording, heritage statutory planning and policy review, and major excavation and survey planning and supervision.

Pamela's exceptional communication and interpersonal skills are demonstrated by her strong working relationships with historic and Aboriginal heritage communities, government agencies and clients.

She has undertaken heritage assessments for multiple sectors including: energy, infrastructure and utility providers; and property and construction.

### Qualifications and memberships

- Bachelor of Arts (Hons) Prehistoric and Historical Archaeology, University of Sydney, 1997
- Laboratory Technician Certificate, Sydney Technical Collage, 1987
- Australian Society for Historical Archaeology
- Australasian Archaeological Association
- Australia ICOMOS Inc



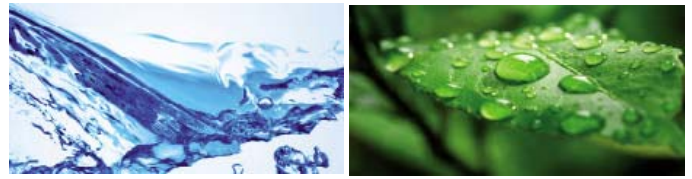
### Career

- EMGA Mitchell McLennan, 2013present
- Team Leader Cultural heritage, Biosis Pty Ltd, 2009–2013
- Consultant, Austral Archaeology, 2004–2009
- Manager, Austral Archaeology, 20072009
- Heritage Consultant, City Plan Heritage, 2003–2004
- Research Assistant, Otto Cserhalmi & Partners Architects, 2001–2003
- Research assistant, Heritech Consulting, 19982001

### Representative experience

- Windsor Bridge Replacement Project, historical heritage statement of heritage impacts, Sydney NSW for RMS (Biosis Pty Ltd with CRM)
- Grafton Bridge Duplication Project, non-Aboriginal heritage constraints reports and options report, Grafton NSW for Arup on behalf of RMS (Biosis Pty Ltd)
- Pipehead and Potts Hill Reservoirs 330 kV underground cable: statement of heritage impacts, Sydney NSW for Perram and Partners on behalf of Transgrid (Biosis Pty Ltd)
- Hume Highway Bypass at Tarcutta, archival record of Hambledon Homestead, Humula, Tarcutta Cemetery, Regional NSW for Leighton Contractors on behalf of RTA (Biosis Pty Ltd)

# Curriculum vitae

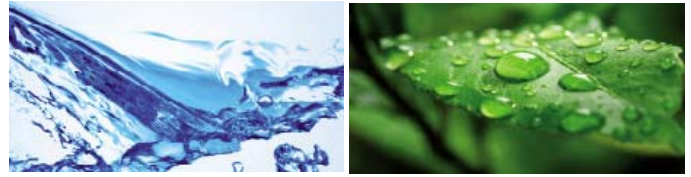


## Pamela Kottaras

---

- Hume Highway Bypass at Tarcutta Unexpected Finds Reports: Tarcutta stock camp and buried bridge, Regional NSW for Leighton Contractors on behalf of RTA (Biosis Pty Ltd)
- Tallawarra Lands Redevelopment, Historical Heritage Assessment, Wollongong NSW for TruEnergy (Biosis Pty Ltd)
- Nundah Bank Third Track, historical heritage assessment and statement of heritage for KMH on behalf of ARTC (Biosis Pty Ltd)
- Erskine Park Archaeological Salvage Excavation, Sydney NSW for RTA (Biosis Pty Ltd)
- Spring Farm Trunk Main, Aboriginal test excavation in accordance with the code of practice, Sydney NSW for Networks Alliance (Biosis Pty Ltd)
- North-West Growth Centre, heritage assessment, Sydney NSW for Sydney Water Corporation (Biosis Pty Ltd)
- Windsor Bridge Options Study: Assessment of Historical Heritage Constraints, Sydney NSW for the RTA (Austral Archaeology Pty Ltd)
- Edmondson Park Wastewater Planning Study, Aboriginal and historical risk assessment, Sydney NSW for SKM on behalf of Sydney Water (Austral Archaeology Pty Ltd)
- Proposed Holroyd Substation: Aboriginal archaeological and cultural assessment, Sydney NSW for SKM on behalf of Transgrid (Austral Archaeology Pty Ltd)
- Stevens Weir Deniliquin: proposal to install a vertical slot fishway statement of heritage impact, Regional NSW for the Department of Water and Energy on behalf of State Water (Austral Archaeology Pty Ltd)
- Great Western Highway Upgrade, Lawson: heritage construction management plan, heritage management report, Regional NSW (RTA with Austral Archaeology Pty Ltd)
- Wollondibby Project, Alpine Way, Jindabyne NSW Preliminary Heritage Advice, Snowy River Shire for Jay Harrison (Austral Archaeology Pty Ltd with City Plan Heritage Pty Ltd)
- Goat Island, conservation management plan. archaeological assessment, site analysis, archaeological policies & recommendations, Port Jackson NSW with Paul Davies Pty Ltd & Geoffrey Britton Environment Design for the National Parks & Wildlife Service (Austral Archaeology Pty Ltd)
- Bonnyrigg House, conservation management plan. archaeological assessment, site analysis and policies, Sydney NSW with Paul Davies Pty Ltd & Geoffrey Britton Environment Design for TSP Consulting on behalf of the Department of Planning (Austral Archaeology Pty Ltd)
- Proposed Subdivision of Bonnyrigg Male Orphan School Site Bonnyrigg, statement of heritage impact, Sydney NSW with Paul Davies Pty Ltd & Geoffrey Britton Environment Design for TSP Consulting on behalf of the Department of Planning (Austral Archaeology Pty Ltd)

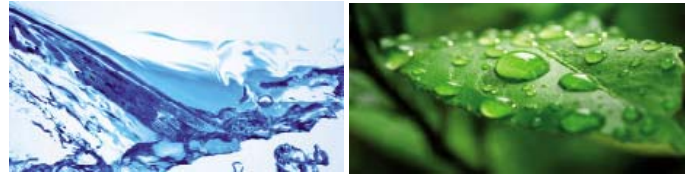
# Curriculum vitae



## Pamela Kottaras

- Holy Trinity (Garrison) Church at Millers Point, archaeological assessment and exemption notification, Sydney NSW (under standard exemption 4) (Anglican Properties Trust with Austral Archaeology Pty Ltd)
- Gogeldrie Weir and Yanco Old Weir, statement of heritage impact & exemption notification, for NSW State Water, Leeton Branch (Austral Archaeology Pty Ltd)
- Australian Technology Park, temporary car parking innovation plaza upper, middle and lower car parks, Sydney NSW for The Australian Technology Park Management Pty Ltd (Austral Archaeology Pty Ltd)
- Australian Technology Park, Bays 3, 4 and 5 north internal fitout: statement of heritage impact and Section 60 application, Sydney NSW for The Australian Technology Park Management Pty Ltd (Austral Archaeology Pty Ltd)
- Australian Technology Park, Bays 6 and 7 north internal fitout: statement of heritage impact and Section 60 application for APP Corporation Pty Ltd on behalf of Fuji Xerox Australia (Austral Archaeology Pty Ltd)
- North West Transitway Project, Sydney NSW for Leighton Contractors (Austral Archaeology Pty Ltd)
- North West Transitway, archaeological assessments and research designs, for Leighton Contractors (Austral Archaeology Pty Ltd)
- 330–348 George Street, Sydney, archaeological assessment & research design, Sydney NSW for Hemmes Pty Ltd (Austral Archaeology Pty Ltd)
- Boggo Road Gaol: Excavation of Former One Division, Dutton Park, Brisbane Qld for Allom Lovell Architects on behalf of QLD govt (Austral Archaeology)
- 299–305 Sussex Street, Sydney, archaeological assessment & research design, Sydney NSW (City Plan Heritage Pty Ltd)
- University of Sydney School of Information Technologies, archaeological assessments & research design, Sydney NSW (City Plan Heritage Pty Ltd)
- RTA Heritage and Conservation Register Update, analysis & history, Warringah sub-region, NSW for the RTA with City Plan Heritage Pty Ltd)
- Spit Bridge, heritage impact statement review, Sydney NSW (City Plan Heritage Pty Ltd)
- Review Fort Scratchley Historic Site, Newcastle Conservation Management Plan, Newcastle NSW for the Heritage Office, Department of Planning (City Plan Heritage Pty Ltd)
- Review Wallarah and Moonee Collieries Conservation Management Plan, Central Coast NSW for the Heritage Office, Department of Planning (City Plan Heritage Pty Ltd)
- Review Dyke Point Conservation Management Plan, Newcastle NSW for the NSW Heritage Office (City Plan Heritage Pty Ltd)

# Curriculum vitae



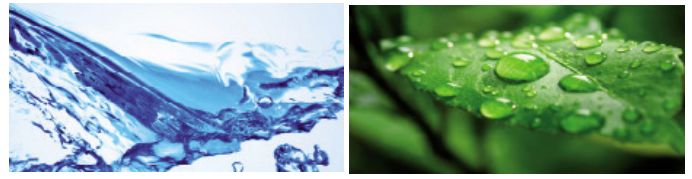
## Pamela Kottaras

---

- Review Tracks into History Conservation Management Plan for the NSW Heritage Office (City Plan Heritage Pty Ltd)
- Review Sewage Pumping Station SP0038, Conservation Management Plan, Sydney Water for the NSW Heritage Office (City Plan Heritage Pty Ltd)
- Review Sewage Pumping Station SP0271, Conservation Management Plan, Sydney NSW for the NSW Heritage Office (City Plan Heritage Pty Ltd)
- Review White Bay Power Station, Conservation Management Plan, Sydney NSW for the NSW Heritage Office (City Plan Heritage Pty Ltd)

# Curriculum vitae

## Ryan Desic



Archaeologist

Ryan is an archaeologist with consulting and field experience in NSW. He has worked in both historic and Aboriginal and heritage.

He has worked on a number of major Aboriginal and historic archaeological investigations including the Hume Highway Duplication Project and the Barangaroo redevelopment project.

Ryan's key skills are in archaeological excavation and recording, and Aboriginal and historic artefact identification and analysis. His work has involved providing site supervision, field assistance, technical expertise and report writing.

### Qualifications

- Bachelor of Arts (Hons) in Prehistoric and Historical Archaeology, University of Sydney, 2009
- Nationally recognised OH&S construction induction White Card

### Career

- EMGA Mitchell McLennan, 2012–present
- Archaeologist, subcontractor to multiple Sydney-based heritage companies, 2010–2012

### Representative experience

#### Environmental impact assessments

- Cobbora Coal Project, Cobbora NSW (Cobbora Holding Company)
- Newcastle LNG Gas Storage Facility and Pipeline Project Modification, Tomago NSW (AGL)

- Camden Gas Project Modifications, Sydney NSW (AGL)

#### Reviews of environmental factors

- Gloucester Gas Project Exploration, Wards River pilot testing, Wards River NSW (AGL)
- Cobbora Coal Project, geotechnical investigations, Cobbora NSW (Cobbora Holding Company)

#### Heritage management plans

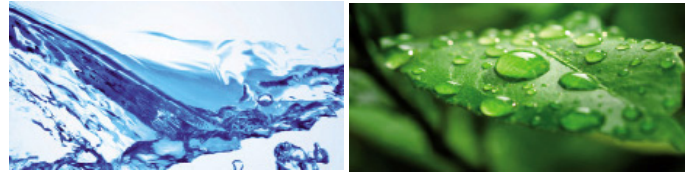
- Gloucester Gloucester Gas Project Exploration, aboriginal cultural heritage management plan, Gloucester NSW (AGL Energy)

#### Archaeological excavations

- Barangaroo Development, historic excavation and on site artefact management, Sydney CBD NSW (Casey and Lowe in association with Bovis Lend Lease)
- Cobbora Coal Project, Aboriginal cultural heritage test excavation, Cobbora NSW (Cobbora Holding Company)
- Hume Highway Duplication Project, Aboriginal excavation Tarcutta–Woomargama NSW (Kelleher Nightingale in association with Roads and Traffic Authority)
- Penrith Lakes Scheme, Aboriginal excavation, Sydney NSW (Penrith Lakes Development Corporation)
- Darling Walk Development, historic excavation, Sydney CBD NSW (Casey and Lowe in association with Bovis Lend Lease)

# Curriculum vitae

**Ryan Desic**



## **Archaeological excavation reports**

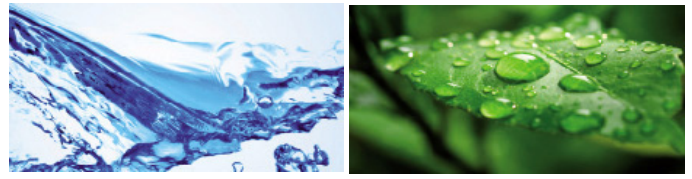
- Cobbora Coal Project: Aboriginal cultural heritage test excavation report, Cobbora NSW (Cobbora Holding Company)
- Australand Eastern Creek, Aboriginal cultural heritage test excavation report (Kelleher Nightingale Consulting)

## **Aboriginal opportunities and constraints**

- Hume Coal, opportunities and constraints study, Southern Highlands NSW (Cockatoo Coal)

# Curriculum vitae

## Rebecca Newell



Archaeologist

Rebecca is an archaeologist with consulting and field experience in NSW and Tasmania. She has worked with industry leaders in both historic (European) and Aboriginal archaeology and heritage.

Her skills are in excavation and field survey techniques, artefact management, public communication and community engagement.

Rebecca has worked on a number of historic and Aboriginal archaeological excavations and surveys. This work has involved providing field assistance, site supervision and providing technical expertise.

### Qualifications

- Bachelor of Arts (Hons Class 1) in Archaeology and Heritage Studies, University of Sydney, 2010
- Senior first aid certificate
- Nationally recognised OH&S construction induction certificate White Card

### Representative experience

#### Environmental impact assessments

- Cobbora Coal Project, historic and Aboriginal heritage, Cobbora NSW (Cobbora Holding Company)
- Mount Penny coal mine, historic heritage, Mt Penny NSW (Mt Penny Coal)
- Peppertree Quarry, historic and Aboriginal heritage, Marulan South NSW (Boral Property Group)

#### Reviews of environmental factors

- Cobbora Coal Project geotechnical investigations, Cobbora NSW (Cobbora Holding Company)
- Hunter Gas Project, pilot testing, Windermere and Monkey Place, Hunter Valley NSW (AGL)

#### Archaeological excavations

- Cobbora Coal Project, Aboriginal heritage test excavation, Cobbora NSW (Cobbora Holding Company)
- Penrith Lakes Scheme, Aboriginal heritage excavation, Sydney NSW (Penrith Lakes)
- Oatlands Gaol and Mill, historic heritage excavation, Oatlands TAS (Southern Midlands Council)
- Cumberland and Gloucester Streets, historic excavation and artefact processing, Sydney CBD NSW (Godden Mackay Logan)
- Rouse Hill House, historic school house excavation, Sydney NSW (Historic Houses Trust)

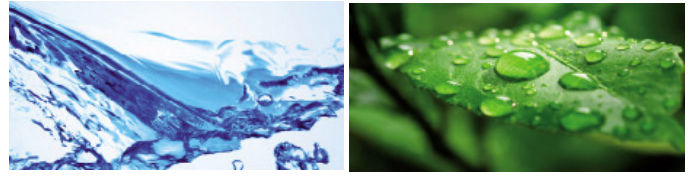
#### Aboriginal heritage impact permit (AHIP) applications and due diligence assessments

- Aboriginal heritage due diligence report Peppertree Quarry, Marulan South (Boral Property Group)
- Muswellbrook Sewer AHIP report, Hunter Valley NSW (NSW Public Works)
- Badgally Road, Camden Aboriginal Heritage due diligence report, Sydney NSW (Dart West Developments)

# Curriculum vitae

**Rebecca Newell**

---



## **Heritage management plans and strategies**

- Sydney Bennelong Stormwater Channel Heritage Management Strategy, Sydney NSW (Kembla Watertech)
- North West Rail Link Early Works Heritage Management Plan, Sydney NSW (Boulderstone)





**Jillian Comber**, B.A., Litt.B., P.C.Arb, M.AACAI., M.ICOMOS, J.P.

Archaeologist/ Heritage Consultant

Mediator/Arbitrator

Adjunct Research Fellow, Flinders University

Guest Lecturer University of Sydney and Flinders University

DIRECTOR

**JILLIAN COMBER**

ASSOCIATE DIRECTOR, SYSTEMS

**DAVID NUTLEY**

ASSOCIATE DIRECTOR, PROJECTS

**TORY STENING**

#### Skills:

- Historical & Aboriginal Archaeology
- Cultural Heritage Management
- Heritage Advisor
- Alternative Dispute Resolution
- Grade 1 Arbitrator
- Graded Mediator
- Expert advice

#### Affiliations:

- Australian Association of Consulting Archaeologists, Full Member
- Australian Archaeological Association
- Australasian Society of Historical Archaeology
- International Council on Monuments and Sites, Full Member
- Australasian Institute of Maritime Archaeology
- Institute of Arbitrators & Mediators Australia
- NSW Justices Association

#### Relevant Expertise:

- Aboriginal and non-Aboriginal site and place management including an understanding of relevant legislation
- Implementation of Heritage Council procedures outlined in the *Heritage Manual*
- Facilitation of OEH's *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.
- Implementation of OEH's *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* and *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW*.
- Heritage Conservation advice.
- Provision of Aboriginal and non-Aboriginal Heritage Management advice for planning and conservation documents.
- Site survey and excavation including background research and AHIMS searches.
- Impact assessment and mitigation.
- Significance assessment & provision of management recommendations.
- Site inductions and site management.
- Land Management Mediation and Arbitration
- Native Title Mediation.
- Provision of expert advice.
- Expert Witness.
- Preparation and delivery of cultural heritage education.

#### Qualifications:

- B.A (Archaeology/Anthropology)
- Litt.B (Aboriginal & Historical Archaeology)
- PhD Candidate, Sydney University
- Practitioners Certificate in Mediation and Conciliation
- Professional Certificate in Arbitration

#### Summary

Jillian Comber, the Director of Comber Consultants has over 25 years experience in Aboriginal and non-Aboriginal archaeology and cultural heritage management. She is experienced at survey, assessment, monitoring, testing and excavation. She has extensive skills in significance assessment and report writing and can provide the cultural heritage component for conservation management plans, REF's and other planning documents. She has a sound understanding of NSW's planning legislation, policies and procedures.

Jillian has a particular expertise in cultural landscape and open area management. As the Director of the Parramatta Park Trust for five years, Jillian led a team of natural and cultural heritage specialists in the management and conservation of Parramatta Park. Parramatta Park is of national significance and has been inscribed on the World Heritage List. In this role Jillian had full delegated powers from the Heritage Council of NSW.

In addition, Jillian has extensive experience in the management of historical archaeological sites and places. She can provide advice on appropriate management strategies all formulated within best practice management and in accordance with Heritage Council requirements. Jillian undertakes assessments, monitoring and excavation of a broad range of historical archaeological site types and has held s140 and s60 permits from the NSW Heritage Council, including those listed below. To obtain permits she prepares the research design and permit application and liaises with the Heritage Branch. Her detailed Curriculum Vitae has previously been submitted to the New South Wales Heritage Branch, Department of Planning and is held on their files. Following is an example of permits from the Heritage Council held by Jillian:



### *Delegated Powers*

Delegated powers from the Heritage Council to Jillian Comber in her role as Director of the State heritage listed and World Heritage inscribed Parramatta Park. In this role Jillian supervised conservation works and archaeological monitoring and excavation at the Dairy Precinct, the second oldest extant building in Australia; at the Macquarie Street Gatehouse and other ongoing projects related to landscaping and park maintenance.

### *s60 permits (Sites listed on the State Heritage Register)*

- Permit to undertake archaeological monitoring at Kenmore Hospital site (current) on behalf of Goulburn-Mulwaree Council.
- Permit to undertake archaeological monitoring and excavation at Googong (current) on behalf of CIC Australia
- Monitoring, excavation and conservation of *Puckeys Saltworks* for Wollongong City Council.
- Permit to undertake archaeological excavations at Newtown Railway Station, on behalf of RailCorp.
- Permit to undertake archaeological monitoring at the Marsden Street Weir and Parramatta Park Weir on behalf of Parramatta City Council .
- Permit to undertake archaeological monitoring and excavation at Mulawa Women's Correctional Facility on behalf of the Department of Commerce.
- Permit to undertake archaeological excavation at Belmore Basin, Wollongong.

### *s140 permits*

- Permit to undertake archaeological monitoring and testing at Belmore Basin for Wollongong City Council.
- Permit to undertake archaeological monitoring at the Captain Cook Hotel, Botany Bay on behalf of Gale Street Pty Limited.
- Permit to undertake archaeological monitoring at Leura Mall.

Jillian can provide advice on which permit is required and whether an Exception would be more suitable.

All of the above projects have been undertaken according to best practice management and in consideration of critical path delivery.

### *Tenures:*

Jillian has held or continues to hold the following tenures:

- Member, Waverley City Council's Heritage Review Panel.
- Part-time Lecturer Sydney University and Flinders University in Aboriginal Cultural Heritage Management
- Former Heritage Advisor to Bourke, Cobar, Parkes, Lachlan and Cowra Shire Councils and Wollongong City Council.
- Past member of Marrickville City Council's Heritage Promotions Committee.
- Previous Lecturer in Aboriginal Cultural Heritage Management at Canberra University.
- Member of the Heritage Office's Experts Workshop in respect of the review of the *Heritage Act 1977*

### *Previous Positions:*

Jillian has held the following positions

- 1997-2001: Director, Parramatta Park Trust, NSW
- 1994-1997: Regional Manager, Cultural Heritage, Department of Environment & Heritage, Far North Queensland.
- 1992-1994: Cultural Heritage Coordinator, NSW National Parks & Wildlife Service
- 1988-1993: Consultant Archaeologist, NSW

### *Integrated Management System*

Comber Consultants has a certified integrated management system to the requirements of ISO 9001:2008 (quality), ISO 14001:2004 (environmental), OHSAS 18001:2007 (health and safety) and AS/NZS 4801:2001 (health and safety). This is your assurance that Comber Consultants is committed to excellence, quality and best practice and are regularly subjected to rigorous, independent assessments to ensure that we comply with stringent Management System Standard/s.



In all projects, Jillian is supported by the dedicated Comber Consultants team of archaeologists, anthropologists, historian, specialist photographer and administration staff to ensure best practice heritage management. The Comber Consultants team is committed to providing outstanding customer service and is able to work within tight timeframes and budget commitments.



**Tory Stening**, BA, MA, JP  
Associate Director, Projects  
Senior Archaeologist

DIRECTOR

JILLIAN COMBER

ASSOCIATE DIRECTOR, SYSTEMS

DAVID NUTLEY

ASSOCIATE DIRECTOR, PROJECTS

TORY STENING

#### Skills:

- > Aboriginal and non-Aboriginal Archaeology
- > Cultural Heritage Management
- > Aboriginal Community Consultation

#### Relevant Expertise:

- > Historical archaeological survey, assessment, monitoring and excavation.
- > Identification of impacts and provision of mitigation strategies in respect of historical archaeological sites and places.
- > Implementation of historical archaeological procedures and strategies in accordance with best practice management and the NSW Heritage Manual.
- > Aboriginal place management including an understanding of relevant legislation.
- > Aboriginal community consultation.
- > Facilitation of OEH's *Aboriginal Consultation Requirements for Proponents 2010*.
- > Preparation of reports in accordance with OEH's *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW and Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW*.
- > Aboriginal site survey and excavation including background research and AHIMS searches.
- > Documentation, mapping and predictive modelling.
- > Significance assessment & provision of management recommendations.
- > Site inductions and site management.
- > Delivery of Cultural Heritage Training.
- > Critical path delivery of projects;
- > Justice of the Peace for New South Wales since 2010;
- > Expertise in stone tool identification and analysis.

#### Qualifications:

- > Bachelor of Arts (Archaeology);
- > Master of Arts (Archaeology).

#### Affiliations:

- > Australian Archaeological Association (AAA);
- > Australasian Society of Historical Archaeology (ASHA);
- > International Council on Monuments and Sites, Full Member (M.ICOMOS);
- > Australasian Institute of Maritime Archaeology (AIMA);
- > World Archaeological Congress (WAC).

#### Sample of Relevant Projects:

- > Historical archaeological monitoring and excavation of Denmark Cottage, Ashfield for Blue Eagle Construction.
- > Historical archaeological excavations at Brighton Lawn Reserve, Belmore Basin, Wollongong for Wollongong City Council (State significance).
- > Historical archaeological excavations in respect of the "small miserable hut" at Belgenny Farm, Camden Park Estate, Camden for the Belgenny Farm Trust for Ted Higginbotham (State significance).
- > Historical archaeological excavations at the corner of Marsden and Macquarie Streets, Parramatta for Ted Higginbotham.
- > Identification and assessment of potential impacts on historic archaeology in respect of the Camden Zone Substation for Endeavour Energy.
- > Historical archaeological monitoring and excavation at Lawson Town Centre for Blue Mountains City Council.
- > Historical archaeological assessment for the upgrade of Kunama Dam, Tumut for Tumut Shire Council.
- > Historical archaeological assessment for the extension of St Mary's Church, North Sydney for David Scobie Architects.
- > Historical archaeological monitoring and archival recording of the Marsden Street Weir for Parramatta City Council (State significance).



Tory Stening, the Associate Director, Projects, of Comber Consultants has over 7 years experience in both Aboriginal and non-Aboriginal archaeology and cultural heritage management. She is experienced in both Aboriginal and non-Aboriginal archaeological survey, assessment, excavation and recording.

Tory has experience in supervising and undertaking historic surveys, assessments, provision of management recommendations, testing and excavations. She is experienced in the cleaning and cataloguing of historical archaeological artefacts using Comber Consultants easily retrievable archaeological cataloguing program.

She has extensive skills in significance assessment and report writing and can provide the cultural heritage component for conservation management plans, REF's and other planning documents. She has a sound understanding of NSW's planning legislation, policies and procedures.

Tory has specialist knowledge and experience in the assessment and management of historic buildings. She has undertaken training in the Conservation of Traditional Buildings and works closely with property owners to ensure best practice conservation management. Tory prepares Statements of Heritage Impact and Conservation Management Plans.

Tory also has an expertise in Aboriginal stone tool analysis with a detailed understanding of the process of stone tool manufacture and is experienced in the cataloguing and analyses of Aboriginal stone tools. She has a Master of Arts (Archaeology) from the University of New England. Her Master's Thesis was an analyses of stone tools excavated at Cowra.

In all projects, Tory is supported by the dedicated Comber Consultants team of archaeologists, anthropologists, historian, specialist photographer and administration staff to ensure best practice heritage management. The Comber Consultants team is committed to providing outstanding customer service and is able to work within tight timeframes and budget commitments.

Comber Consultants has a certified integrated management system to the requirements of ISO 9001:2008 (quality), ISO 14001:2004 (environmental), OHSAS 18001:2007 (health and safety) and AS/NZS 4801:2001 (health and safety). This is your assurance that Comber Consultants is committed to excellence, quality and best practice and are regularly subjected to rigorous, independent assessments to ensure that we comply with stringent Management System Standard/s.





**SYDNEY**

Ground floor, Suite 1, 20 Chandos Street  
St Leonards, New South Wales, 2065  
T 02 9493 9500 F 02 9493 9599

**NEWCASTLE**

Level 1, 6 Bolton Street  
Newcastle, New South Wales, 2300  
T 02 4927 0506 F 02 4926 1312

**BRISBANE**

Suite 1, Level 4, 87 Wickham Terrace  
Spring Hill, Queensland, 4000  
T 07 3839 1800 F 07 3839 1866

