

Lot 2 DP1169320 Gundy Road
Scone NSW
Proposed residential subdivision
Aboriginal Cultural Heritage Archaeological Due Diligence
Assessment

Report to MM Hyndes



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November 2017

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1. Executive Summary

MM Hyndes on behalf of Charles David Pty Ltd commissioned Insite Heritage to provide and Aboriginal Archaeological Assessment to address the proposed subdivision of Lot 2 DP 1169320, located on Gundy Road, Scone NSW (Figure 1). The subdivision will be assessed by Upper Hunter Shire Council.

The subdivision of the 58 ha property will yield 423 residential lots around a drainage / wetland reserve which dissects the property from east to west.

The property is cleared and has been impacted by agricultural / grazing activity. Remnant shade trees remain on the property.

An AHIMS search of the property did not locate any Aboriginal sites or objects within the property boundary. One possible modified tree was located on the adjacent lot (the Strathearn Aged Care Facility). The AHIMS GDA co-ordinates plot the site as located within the study area however ground truthing located the modified tree on the lot to the north.

A field survey was conducted with Wannaruah Local Aboriginal Land Council (WLALC). A possible modified tree was located and this tree will be avoided and incorporated into open space. No other Aboriginal objects were located by the field survey.

2. Introduction

MM Hyndes on behalf of Charles David Pty Ltd commissioned Insite Heritage to provide an Aboriginal Archaeological Assessment and Cultural Heritage Assessment Report to address the proposed subdivision of Lot 2 DP 1169320, located on Gundy Road, Scone NSW (Figure 1). The subdivision will be assessed by Upper Hunter Shire Council.

The subdivision of the 58 ha property will result in 423 residential lots and associated infrastructure (Figure 2).

The report has been prepared in consideration of the Office of Environment & Heritage (OEH) *Guide to investigating, assessing and report on Aboriginal cultural heritage in NSW (2011)*.

The site was inspected in conjunction with Wanaruah Local Aboriginal Land Council (WALC).

A possible modified tree was located on the property and the tree will not be impacted by the development. The boundaries of the public space have been adjusted to ensure that the tree will be conserved. No other sites were identified during the field survey and the extreme dry conditions prior to the inspection, provided adequate surface visibility, to locate objects if present.

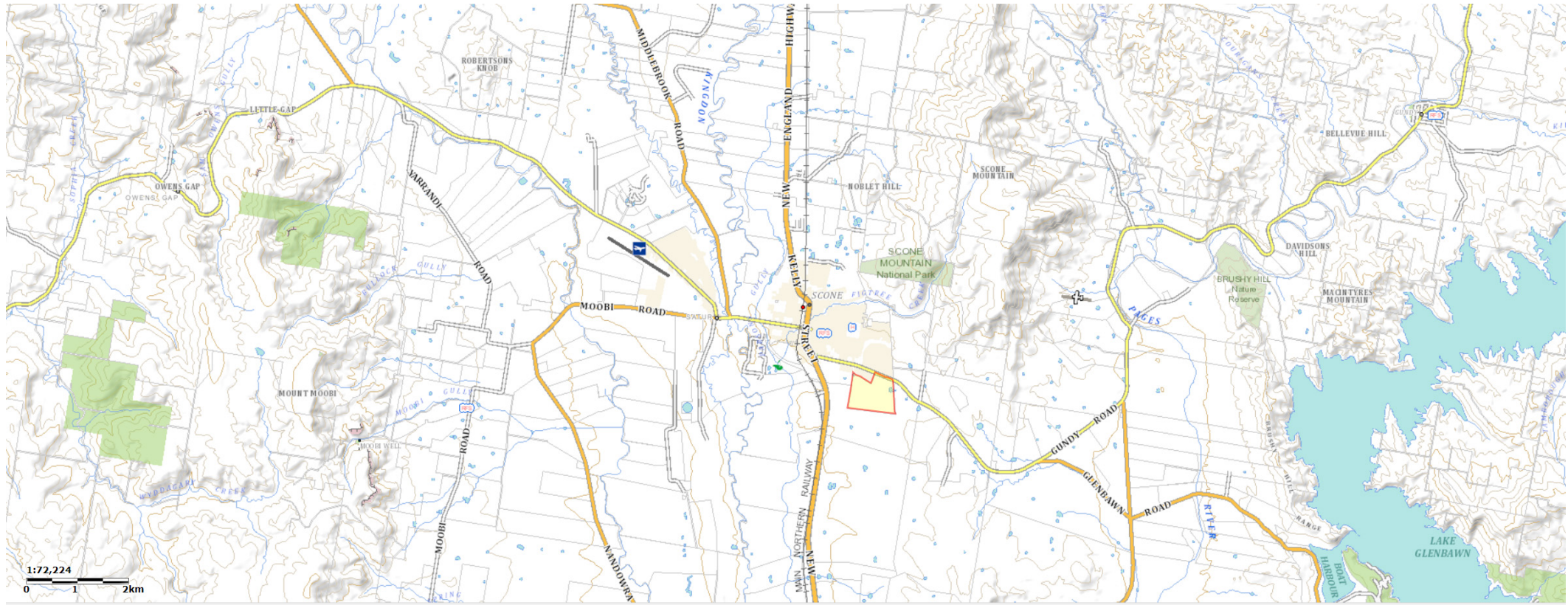


Figure 1 Study area location, outlined in red – south east of Scone courtesy of SIX Maps

3. Description of the study area

Geology and soils

The study area is located in the Central Lowlands located between Murrurundi and Singleton. Lot 2 DP1169320 is located on the south-eastern margins of Scone, north of Aberdeen and south of the Scone Mountain escarpments. The study area is located approximately 9 km east of the Hunter River.

The study area is dissected by a first order creek draining toward the Pages River. The underlying geology is that of the Colonel Soil Landscape with rolling hills and rolling mountains often with scree slopes. Soils include Grey Clays on some mid-slopes with Red Clays on mid to lower slopes. Terra Rossa Soils occur on limestone outcrops with shallow loams¹. The massive rolling hills often have irregular shape and elevations from 180 – 660 m. slope range from 18 – 50% with slope lengths commonly 600 – 800m. Local Relief is generally between 160 – 400m. Tributary drainage lines are 300 -1400m apart and form a radial pattern around the landscape. Rock out-crops are common (ibid).

Parent rock is conglomerate, lithic sandstone, siltstone, carbonaceous shale, tuff, rhyodacitic, ignimbrite and volcanic breccia. Soils are in-situ weathered parent rock and colluvium.

Soils are shallow and subject to sheet erosion and gullying where cleared of vegetation.

The north western area of the study area borders onto the Dartbrook Soil Landscape of smooth undulating rises and low hills of Brown Clays and some Black Earths with minor to moderate sheet erosion on some slopes.

Vegetation of the study area include white box, grey box, yellow box and blakelys red gum generally cleared with red ironbark and narrow-leaved ironbark, grey gum and white mahogany with forest oaks on the upper slopes.

The CSIRO soil resource information system classifies the study area as very poorly drained².

The site has been historically cleared for agricultural, and given the lots location on the margins of Scone, it was probably cleared many years ago.

4. Consultation Process

Consultation regarding the project has been carried out in conjunction with Wannaruah LALC whom participated in the field assessment. No cultural values associated with Lot 2 were identified by the WLALC representative in the field (Owen Davidson) and this report has been supplied to the WLALC.

5. Archaeological Context

A search of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken, over an area 50 sq km with a fifty metre buffer. Two Aboriginal sites appeared on the register. 37-2-1847 an open camp site north east of Scone and 37-2-5385 is a possible modified tree located in the Strathearn Aged Care facility immediately north of the study area, fronting to Gundy Road south of Scone (Wannaruah LALC 2012). The tree is dead but still standing and is fenced off.

The AHIMS listing places the modified tree within Lot 2. However the site plan / location on the site card and a visual inspection of the study area places the tree within the Strathearn Aged Care development immediately north of the study area. The co-ordinates on the site card will be amended to reflect the true position. Note that the tree was also assessed by an arborist and considered not to be of Aboriginal origin. Site 37-2-5385 (site name SAC-ST1), 299646 east 6450870 north is actually located at 299755 east 6451059 north – the amended site card is located in Appendix B.

¹ Kovac, M. & Lawrie, J. 1991 *Soil landscapes of the Singleton 1:250000 Sheet* Soil Conservation Service of NSW, Sydney.

² <http://www.asris.csiro.au/mapping/viewer.htm>

A survey of Lot 17 DP 1196235 situated 2km south east of the study area (Insite Heritage 2017) located five isolated finds in areas of exposure along drainage lines. The creek lines were 2nd order creeks, and the visibility of the creek lines was high due to grazing and erosion. The visibility of the remainder of the lot was considered moderate.

Predictive Model

The study area has been disturbed by agricultural and grazing activity. It was anticipated that stone artefacts and may be located particularly within 50m of the creek that traverses the lot from east to west in the northern third of the lot. The creek is a first order stream therefore large open sites are not anticipated as these tend to occur on third order or higher stream systems. Modified trees may remain amongst the remnant shade trees along the watercourse.

Isolated finds were anticipated as the only likely site type on the slope of the southern portion of the lot, due to distance to water and as the land has been cleared.



Figure 2 Clear and discernable disturbance as a result of agricultural and grazing activity.

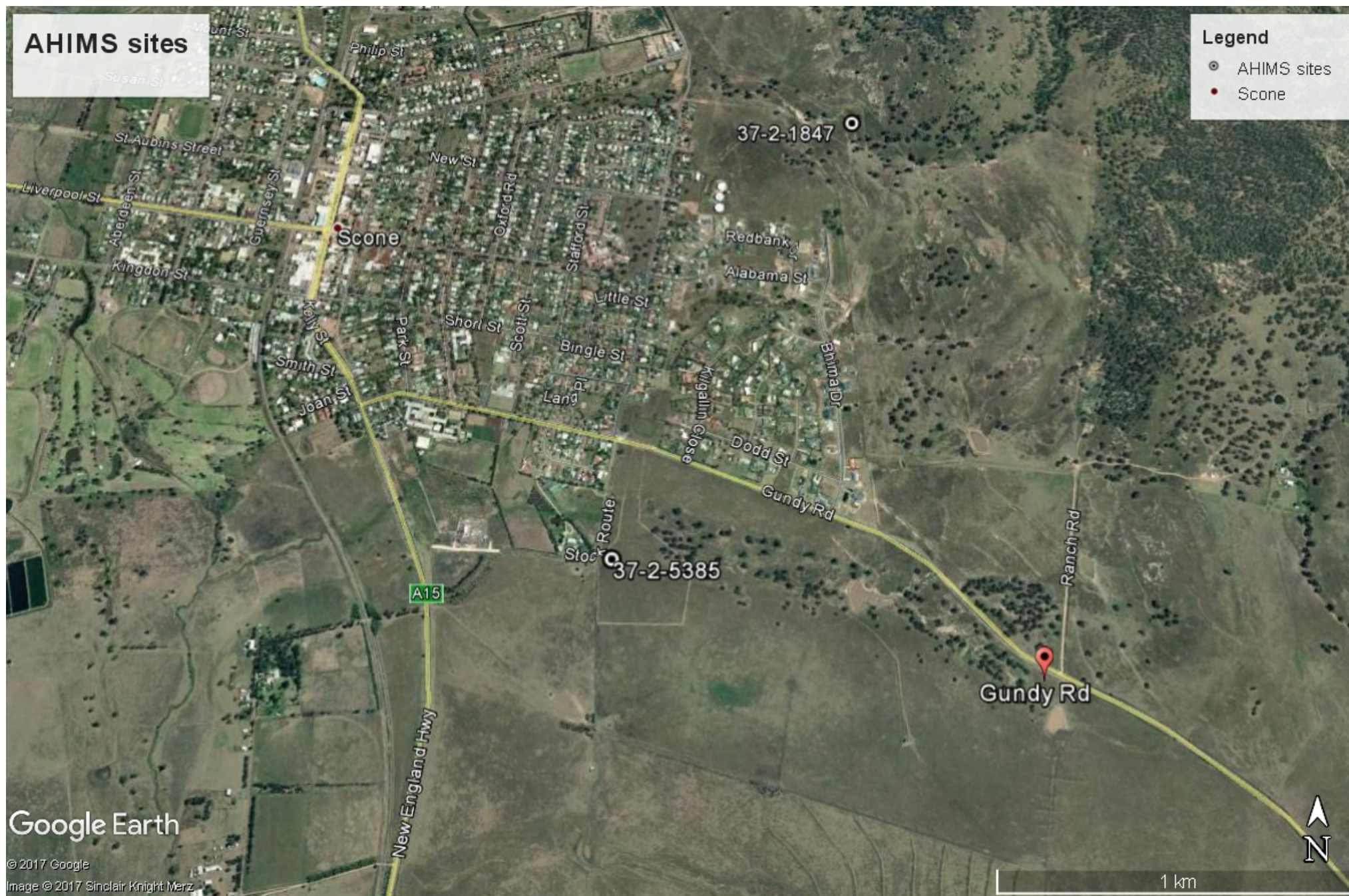


Figure 3 Registered AHIMS Aboriginal sites



Figure 4 Location of 37-2-5385 - actual location within the Strathearn development

6. Cultural heritage values and Statement of Significance

In an archaeological context the identified site (possible modified tree) is consistent with the findings of other surveys in the broader area. The cultural values of the study area are determined by the Aboriginal community as represented by Wannaruah LALC. No specific cultural values were identified during the field inspection.

Scientifically the site is not significant due to the historical disturbance caused by agricultural activity. The first order creek dissecting the site is also indicative of low potential for complex sites or potential archaeological deposit.



Plate 1 View north-west from the northern portion of Lot 2 toward Strathearn.



Plate 2 View east from the mid-section of the first order creek.



Plate 3 View north from the southern end of the development site.

7. The Proposed Activity

Charles David Pty Ltd propose to subdivide Lot 2 DP 1169320, located on Gundy Road, Scone NSW. The subdivision will yield 423 lots accessed from Gundy Road (Figure 5). The natural water course through the site shall be utilised to contain and manage storm water runoff, with a series of wetlands that reflect the natural flow of water through the site.



Figure 5 The proposed subdivision layout of Lot 2 – courtesy of MM Hyndes Bailey & Co.

8. Avoiding and / or mitigating harm

The one potential site that was located within the study area is a possible modified tree. The tree will be avoided and is incorporated into public space to enable the long term conservation of the potential site. If at any time in the future the tree may be impacted the origins of the scar on the tree should be determined by an arborist. In the interim the tree has been recorded on AHIMS (awaiting confirmation).



Plate 4 Possible modified tree - two scars on a river gum.



Plate 5 The twin scars on the tree above

9. Physical Assessment

The study area (that is the area of rezoning) was inspected with Owen Davidson and Tasha Kellet of Wanaruah Local Aboriginal Land Council, and Angela Besant of Insite Heritage.

Transects were conducted sampling the different landforms (Figure 6). The principle landform units are 1st order creek, and slope. Surface visibility at the time of inspection was approximately 20% in areas along the creek lines and 10% in the remainder of the area. Survey coverage data can be seen in Table 1.



Plate 6 Surface visibility on the slope area. Transect 9



Plate 7 Area of exposure inspected mid slope – Transect 8



Figure 6 General location of transects undertaken

Table 1 Survey coverage - note each transect was 15m wide

Transect	Landform	Length	Surface Vis	Arch vis	Total cover	Site recorded
1	Slope	400m	2%	90%	108 sqm	Nil
2	Slope	250m	2%	90%	67.5 sqm	Possible modified tree
3	Creek margin	300m	10%	90%	405 sqm	Nil
4	Creek margin	300m	10%	90%	27 sqm	Nil
5	Creek margin	400m	10%	90%	540 sqm	Nil
6	Slope	500m	2%	90%	135 sqm	Nil
7	Slope	500m	2%	90%	135 sqm	Nil
8	Slope	600m	5%	90%	162 sqm	Nil
9	Slope	300m	10%	90%	40.5 sqm	Nil
10	Slope	200m	20%	90%	540 sqm	Nil
11	Creek margin	150m	5%	90%	101.25sqm	Nil
12	Slope	150m	10%	90%	202 sqm	Nil

10. Statement of Heritage Impact

The development will not impact on any identified items of Aboriginal heritage as no items were identified by this assessment. The possible modified tree will be conserved in-situ and if any potential impact on the tree is proposed the modification should be assessed by an arborist to determine the modifications origin.

11. Mitigation Measures

General Mitigation Measures

- If any unexpected or suspected Aboriginal objects are located during the proposed works, all work in the area must stop immediately and OEH, Wannaruah Local Aboriginal Land Council, and a qualified archaeologist be contacted to assess the find. Permits may be required before works can recommence

If at any time, suspected human remains are located, cease works immediately, secure the area and contact OEH and NSW police.

12. Recommendations

As no sites will be impacted by the proposed subdivision there is no requirement for an AHIP prior to works may proceed with caution and the application of the mitigation measures above.

If in the future impact may occur on the possible modified tree within the public reserve, an arborist should be consulted to confirm or otherwise the origin of the markings on the tree (Figure 7).



13. Due Diligence Assessment

Generic Due Diligence Assessment –Office of Environment & Heritage (OEH) Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (2010).

Step 1. Will the activity disturb the ground surface or any culturally modified trees?

Yes. The construction of the residential development will disturb the ground surface, as will the construction of associated infrastructure.

Whilst there is a possible culturally modified tree located within the proposed development, the tree shall be protected from any form of disturbance.

Step 2 a) Are there any relevant confirmed site records or other associated landscape features on AHIMS?

A search of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken to identify the sites recorded as part of the subdivision study, and any other sites recorded at a later date.

There were no confirmed site records or associated landscape features on AHIMS.

Step 2 b) Are there any landscape features that are likely to indicate presence of Aboriginal objects?

Consequently, if your proposed activity is:

- ***within 200m of waters, or***
- ***located within a sand dune system, or***
- ***located on a ridge top, ridge line or headland, or***
- ***located within 200m below or above a cliff face, or***
- ***within 20m of or in a cave, rock shelter, or a cave mouth;***
- ***and is on land that is not disturbed land (see definitions) then you must go to step 3.***

Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable.

Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.

The study area is dissected by an unnamed first order creek in a generally east west direction, and is therefore located within 200m of waters.

The study area also meets the definition of disturbed, with clear and discernable evidence of historical grazing and other agricultural activities such as ploughing. The site has been cleared and numerous fences form paddocks. The creek line is degraded and becomes ill-defined at the western end.

Step 3. Can harm to an Aboriginal object listed on AHIMS or identified by other sources of information and /or can the carrying out of the activity at the relevant landscape features be avoided?

This step only applies if your activity is on land that is not disturbed land or contains known Aboriginal objects.

There has been one possible modified tree located within the study area. The tree will be avoided and conserved in-situ within an area of open space.

Step 4. Does a desktop assessment and visual inspection confirm that there are Aboriginal objects?

This step only applies if your activity is on land that is not disturbed land or contains known Aboriginal objects.

The visual inspection located the possible modified tree and no other site types. Although it was predicted that isolated finds may occur in the study, none were located by the visual inspection.

Appendix A AHIMS Search



AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : Scone Casson

Client Service ID : 291473

<u>SiteID</u>	<u>SiteName</u>	<u>Datum</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>	<u>Context</u>	<u>Site Status</u>	<u>SiteFeatures</u>	<u>SiteTypes</u>	<u>Reports</u>
37-2-5385	SAC-ST1	GDA	56	299646	6450870	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	<u>Contact</u>									
		<u>Recorders</u>	Ms.Suzie Worth,Wanaruah LALC						<u>Permits</u>	

Report generated by AHIMS Web Service on 05/09/2017 for Angela Besant for the following area at Lot : 2, DP:DP1169320 with a Buffer of 1000 meters. Additional Info : due diligence.

Number of Aboriginal sites and Aboriginal objects found is 1

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Appendix B – Amended site card 37-2-5385



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 37-2-5385

Date recorded: 13-11-2017

Site Location Information

Site name: SAC-ST1

Easting: 298755

Northing: 6451059

Coordinates must be in GDA (MGA)

Horizontal Accuracy (m):

10

Zone: 56

Location method:

Non-Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title

Surname

First name

Ms.

Besant

Angela

Organisation: Insite Heritage

Address: PO Box 98 Wangi Wangi 2267

Phone: 0412838031

E-mail: angela@insiteheritage.com.au

Site Context Information

Land Form
Pattern:

Land Use:

Land Form
Unit:

Vegetation:

Distance to
Water (m):

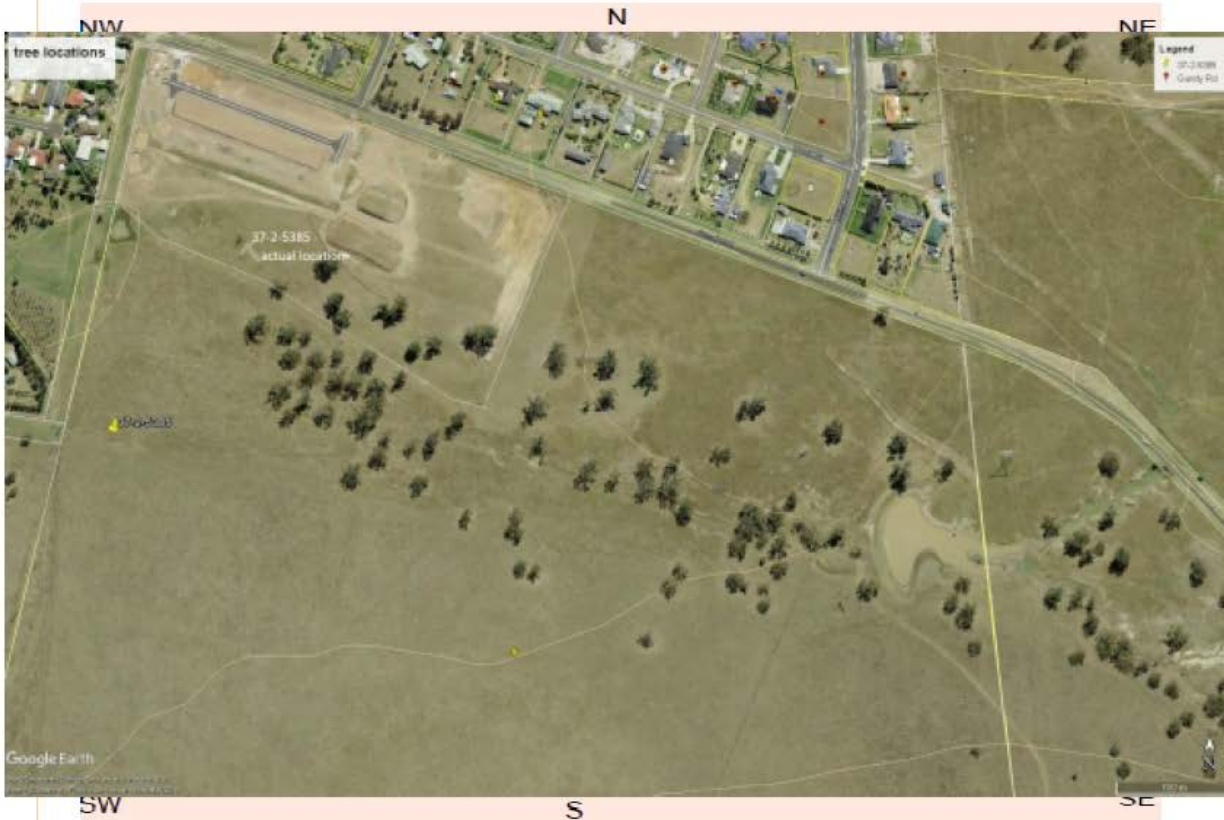
Primary
Report:

How to get
to the site:

Other site
information:

dead tree - not located on Lot 2 as per current co-ordinates - located
on lot 1 DP1189320 as per amended co-ordinates

Site location map



Site contents information

open/closed site:

Site condition:

Features:

1.

Modified Tree

Number of
features

1

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

15

Regrowth
(cm)

10

Scar shape

120

Tree Species

30

Oval

Other Eucalypt

Description:

modified tree - correcting co-ordinates only

Features:

2.

Number of
features

Length of
feature(s)
extent (m)

Width of
feature (s)
extent (m)

Scarred Trees

Scar Depth
(cm)

Regrowth
(cm)

Scar shape

Tree Species

Description:

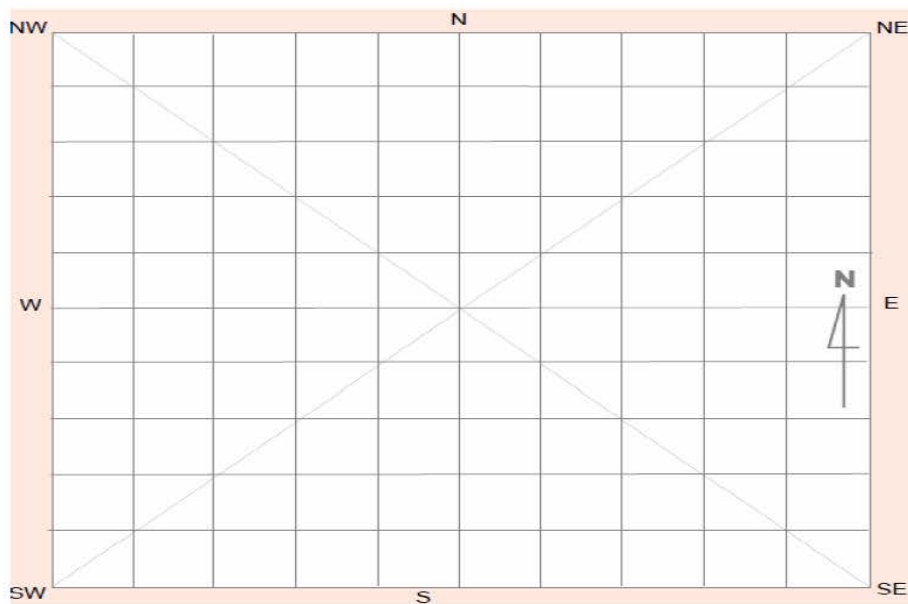
Features:		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees
3.	<div style="border: 1px solid black; height: 20px; width: 280px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="display: flex; justify-content: space-between;"> <div>Scar Depth (cm)</div> <div>Regrowth (cm)</div> <div>Scar shape</div> <div>Tree Species</div> </div> <div style="display: flex; justify-content: space-between;"> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> </div>
Description: <div style="border: 1px solid black; height: 40px; width: 100%;"></div>					

Features:		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees
4.	<div style="border: 1px solid black; height: 20px; width: 280px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="display: flex; justify-content: space-between;"> <div>Scar Depth (cm)</div> <div>Regrowth (cm)</div> <div>Scar shape</div> <div>Tree Species</div> </div> <div style="display: flex; justify-content: space-between;"> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> </div>
Description: <div style="border: 1px solid black; height: 40px; width: 100%;"></div>					

Features:		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees
5.	<div style="border: 1px solid black; height: 20px; width: 280px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="border: 1px solid black; width: 20px; height: 20px;"></div>	<div style="display: flex; justify-content: space-between;"> <div>Scar Depth (cm)</div> <div>Regrowth (cm)</div> <div>Scar shape</div> <div>Tree Species</div> </div> <div style="display: flex; justify-content: space-between;"> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> <div><div style="border: 1px solid black; width: 20px; height: 20px;"></div></div> </div>
Description: <div style="border: 1px solid black; height: 40px; width: 100%;"></div>					

Other Site Info:	dead tree - not located on Lot 2 as per current co-ordinates - located on lot 1 DP1188320 as per amended co-ordinates
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Site plan

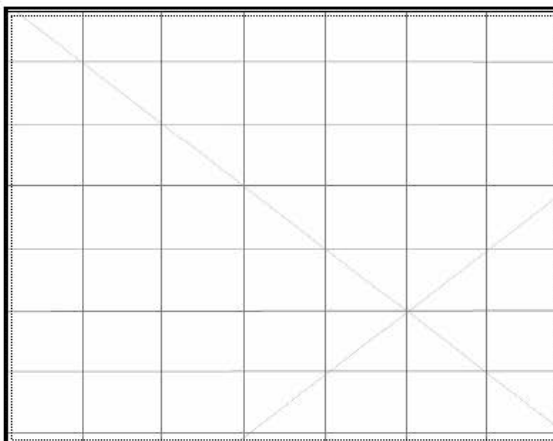


3

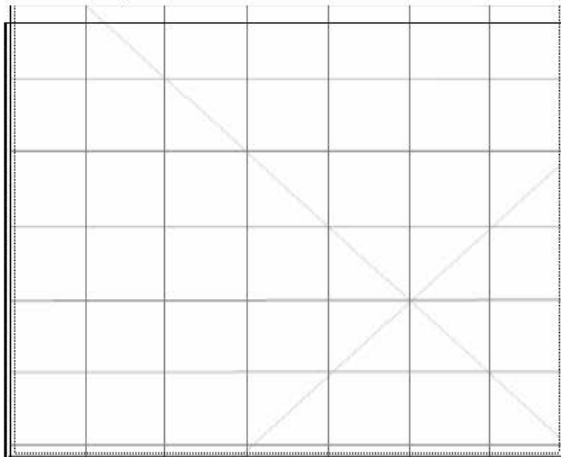
Site photographs



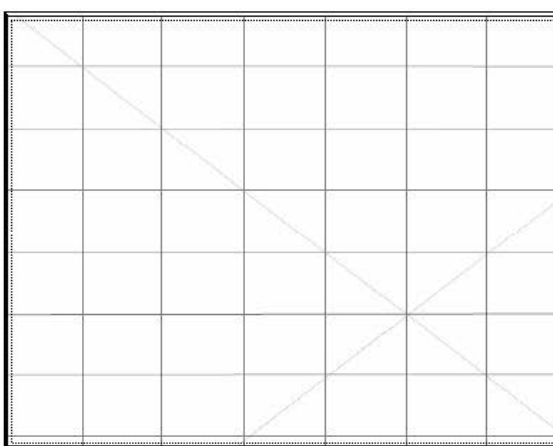
Description:



Description:



Description:



Description:

Site restrictions

Do you want to
Restrict this site?:

Restriction type:

Why is this site restricted?:

Further information contact

Title Surname First name
 Organisation:
 Address:
 Phone: E-mail:

Appendix C – Site card GR ST1 – 37-2-5569



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 37-2-5569

Date recorded: 13-11-2017

Site Location Information

Site name: GR ST1

Easting: 300314

Northing: 6450887

Coordinates must be in GDA (MGA)

Horizontal Accuracy (m):

2

Zone: 56

Location method:

Non-Differential GPS

Recorder Information

(The person responsible for the completion and submission of this form)

Title

Surname

First name

Ms.

Besant

Angela

Organisation: Insite Heritage

Address: PO Box 98 Wangi Wangi 2267

Phone: 0412836031

E-mail: angela@insiteheritage.com.au

Site Context Information

Land Form
Pattern:

Plain

Land Use:

Urban Expansion

Land Form
Unit:

Plain

Vegetation:

Cleared

Distance to
Water (m):

86

Primary
Report:

Lot 2 DP1169320 Archaeology assessment

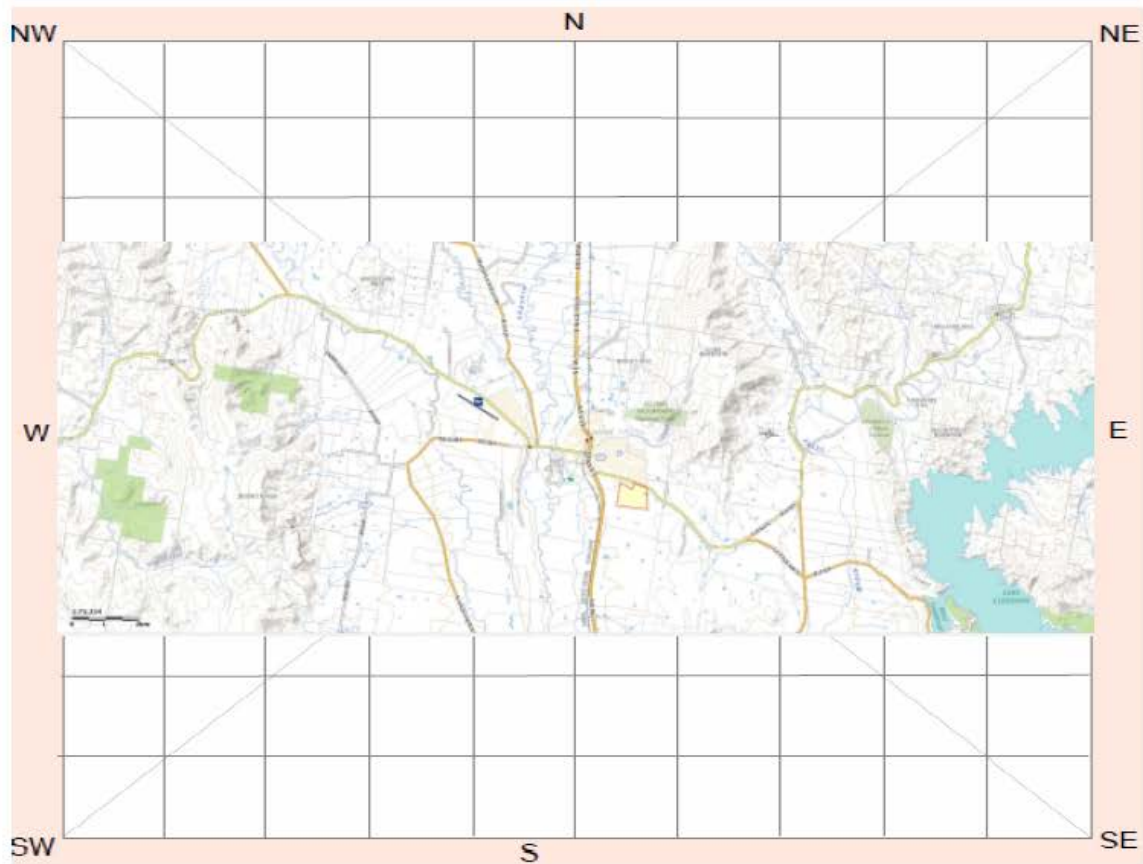
How to get
to the site:

Located on Lot 2 DP 1169320 accessed from Gundy Rd Scone

Other site
information:

possible modified tree but likely to be natural - shall be protected
by incorporation into open space

Site location map



Site contents information

open/closed site:

Site condition:

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
1. <input type="text" value="Modified Tree"/>	<input type="text" value="2"/>	<input type="text"/>	<input type="text"/>

Description:

twin scars on hold river gum - possibly natural

Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text" value="60"/>	<input type="text" value="50"/>	<input type="text" value="Oval"/>	<input type="text" value="Other Eucalypt"/>

Features:

	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Description:

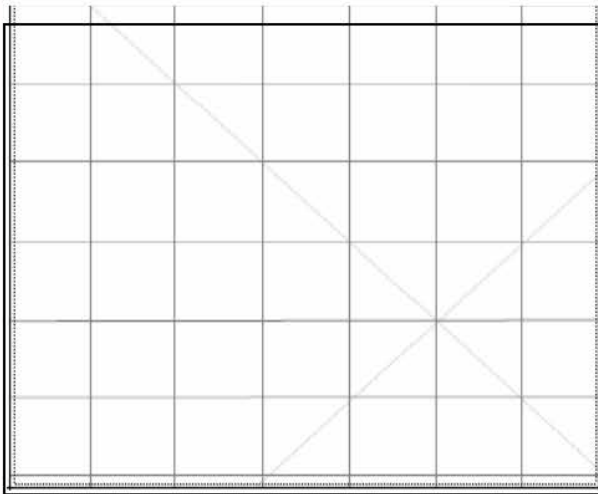
Scarred Trees

Scar Depth (cm)	Regrowth (cm)	Scar shape	Tree Species
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

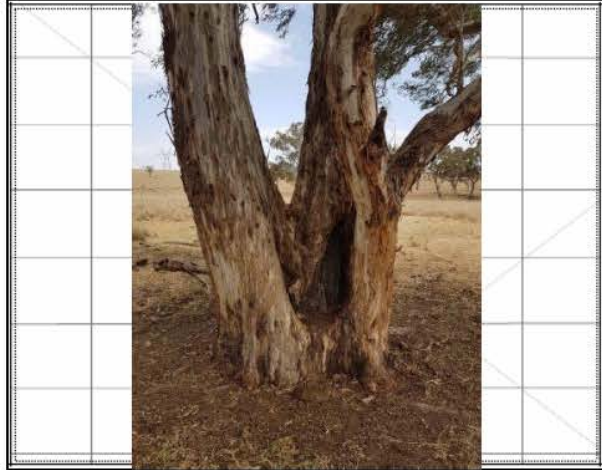
Site photographs



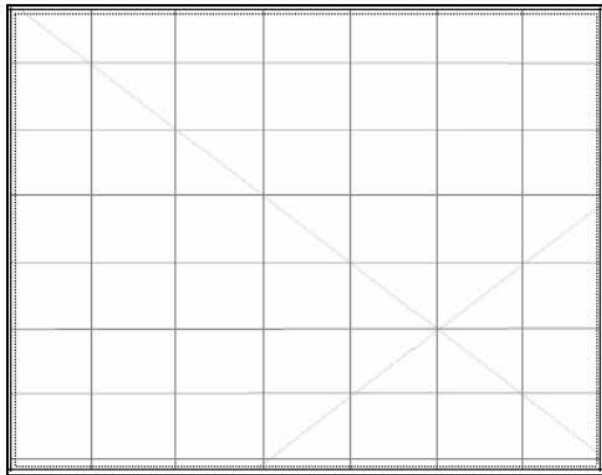
Description:



Description:



Description:



Description:

Site restrictions

Do you want to
Restrict this site?:

Restriction type:

Why is this site restricted?:

Further information contact

Title Surname First name

Organisation:

Address:

Phone: E-mail: