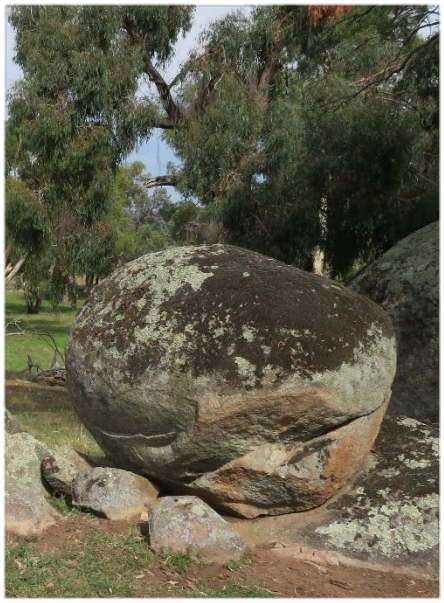
Aboriginal Heritage Due Diligence Assessment

Jindera Residential Rezoning

March 2022

Project Number: 21-782



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W. www.nghconsulting.com.au

E. ngh@nghconsulting.com.au

BEGA - ACT & SOUTH EAST NSW
Suite 11, 89-91 Auckland Street
(PO Box 470) Bega NSW 2550
T. (02) 6492 8333

NEWCASTLE - HUNTER & NORTH COAST
Level 1, 31-33 Beaumont Street
Hamilton NSW 2303
T. (02) 4929 2301

BRISBANE
T3, Level 7, 348 Edward Street
Brisbane QLD 4000
T. (07) 3129 7633

SYDNEY REGION
Unit 17, 21 Mary Street
Surry Hills NSW 2010
T. (02) 8202 8333

CANBERRA - NSW SE & ACT
Unit 8, 27 Yallourn Street
(PO Box 62) Fyshwick ACT 2609
T. (02) 6280 5053

WAGGA WAGGA - RIVERINA & WESTERN NSW
35 Kincaid Street (PO Box 5464)
Wagga Wagga NSW 2650
T. (02) 6971 9696

GOLD COAST
19a Philippine Parade
Palm Beach QLD 4221
(PO Box 466 Tugun QLD 4224)
T. (07) 3129 7633

WODONGA
Unit 2, 83 Hume Street
(PO Box 506) Wodonga VIC 3690
T. (02) 6067 2533

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Acronyms and abbreviations

ACHA	Aboriginal Cultural Heritage Assessment
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
Due Diligence	Aboriginal Heritage Due Diligence Assessment
Due Diligence Code	*Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*
ha	hectares
Heritage Act	*Heritage Act 1977* (NSW)
Heritage NSW	Heritage NSW, within the Department of Premier and Cabinet
LEP	Local Environmental Plan
LGA	Local Government Area
NGH	NGH Pty Ltd.
NPW Act	*National Parks and Wildlife Act 1974* (NSW)
NPW Regulation	National Parks and Wildlife Regulation 2019 (NSW)
NSW	New South Wales
PAD	Potential Archaeological Deposit
Project Area	Area as assessed in this report

Executive summary

NGH Pty Ltd was commissioned by BioPlan on behalf of Hurst Earthmoving to undertake an Aboriginal Heritage Due Diligence assessment in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW, 2010) in support of a Rezoning Application for the rezoning of land currently zoned as RU4 - Primary Production Small Lots into R5 Large Lot Residential. The proposed subdivision that will result of the proposed rezone would require assessment under Part 4 of the NSW *Environmental Planning and Assessment Act 1979*. The Project Area includes Lot 5, DP260275; Lot 22, DP635058; Lot 121, DP753345; Lot 122, DP753345, Lot 153, DP753345, and Lot 1, DP785168 east of Jindera within the Greater Hume Local Government Area.

Background and desktop assessment

An extensive search of the Aboriginal Heritage Information Management System database was undertaken that covered an area approximately 14km x 18km centred on the Project Area. There were 115 Aboriginal sites and nil declared Aboriginal Places recorded within the search area. Site types include stone artefacts, culturally modified trees and potential archaeological deposits. No archaeological sites were registered within the Project Area; however, two sites (AHIMS #55-6-0041 and AHIMS# 55-6-0042) are located approximately 160m north of the Project Area. Both AHIMS #55-6-0041 and AHIMS #55-6-0042 represent subsurface stone artefact scatters.

The Project Area is characterised as east west tending steep to gently sloping basal slopes leading down to alluvial flats and elevated terraces associated with two unnamed third order drainage lines, one of which transects the western portion of the Project Area paralleling Molkentin Road. This unnamed third order drainage line has three east west tending first order tributaries descending from the steeper landforms to the east and transecting the Project Area. These unnamed third order drainage lines merge to flow into Bowna Creek which is located approximately 2.6 kilometres to the west of the Project Area. According to the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (DECCW, 2010) and archaeological modelling for the local area, landforms associated with watercourses have higher potential to contain Aboriginal objects. The desktop assessment therefore indicated that there are landscapes present within the Project Area that have potential to contain Aboriginal objects and a site inspection by an archaeologist was required. Additionally, any old growth mature native trees within the Project Area have the potential to have been culturally modified.

Field results

A visual inspection of the Project Area was undertaken on 28 February 2022 by a qualified NGH archaeologist. Due to the size of the Project Area the desktop assessment identified sensitive landforms with elevated potential for Aboriginal objects or sites to occur. The visibility varied from 95% within exposure areas to less than 5% in areas of dense cover, averaging <10%. The Project Area was noted to be cleared and significantly disturbed in the south eastern portion of Lot 153 DP753345 where gravel extraction activity has dramatically changed the natural landform in parts. With the exception of the south western portion of Lot 153 DP DP753345 and part of Lot 1 DP785168 in which a residence and associated infrastructure is located and a number of dams throughout the Project Area, the remaining portion of the Project Area, although cleared and subject to agricultural practices, is less disturbed and contains numerous mature native trees.

A total of five sites containing stone artefacts (Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258) were located during the brief targeted pedestrian survey of the Project Area. All five sites were located within 200m of waterways on landforms known to have a high potential to contain Aboriginal objects or sites. Ground surface visibility surrounding these sites outside the exposures in which they were situated was very poor as it was throughout most of the Project Area. The soil profile identified the drainage line paralleling Molkentin Road (Plate 6-10) indicates the presence of sub surface or *in situ* cultural deposits and it is highly likely that other unidentified Aboriginal objects occur within the vicinity of these and across the broader basal slope and flat terraced landforms within the Project Area. The outcomes of the site inspection have determined the presence and moderate to high likelihood of further Aboriginal objects within the Project Area and has identified locations of low, moderate and high archaeological sensitivity (Figure 7-1) to inform future assessment.

Impact assessment conclusion

Both the desktop analysis and site inspection determined that the Project Area contains multiple landforms considered highly likely to contain Aboriginal objects. Despite the time constraints on the field survey and that visibility averaged less than 10% throughout much of surveyed area, multiple Aboriginal sites were located within the Project Area. Given this and the consideration of the levels of ground surface disturbance associated with housing subdivision developments, further assessment in the form is required to fully understand archaeological values and potential of the Project Area.

An Aboriginal Heritage Impact Permit (AHIP) would be required in order to impact the five Aboriginal sites (Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258) and due to the lack of visibility during the site visit, the Project Area may require subsurface testing to establish the true archaeological potential, nature and extent of Aboriginal sites in this area. This would also require undertaking an Aboriginal Cultural Heritage Assessment (ACHA) for the project, including Aboriginal community consultation.

Recommendations

It is recommended

1. The proposed rezoning for the Project Area may proceed, however any ground disturbance works associated with the future development of the alluvial flats, elevated terrace landforms and basal slopes which were determined to be of moderate to high archaeological sensitivity (as demarked in red and orange in Figure 7-1) within the Project Area will require further heritage investigation and assessment. A limited programme of subsurface testing under the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* would be required to be undertaken. This would form part of an Aboriginal Cultural Heritage Assessment (ACHA) and include Aboriginal consultation in accordance with the Requirements.
2. Should the previously recorded Aboriginal sites within the Project Area not be able to be avoided by any future development subsequent to the proposed rezoning of the area, an Aboriginal Heritage Impact Permit (AHIP) would be required to impact these sites. This would require undertaking an Aboriginal Cultural Heritage Assessment (ACHA).

3. Any future development works outside the areas of moderate and high archaeological sensitivity and the locations of the Aboriginal sites Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258 (as demarked in green in Figure 7-1) within the Project Area do not require further assessment and therefore the proposed rezoning and any future development works can proceed with caution in these areas.
4. Any activity proposed outside the current assessment area should also be subject to an Aboriginal heritage assessment

BioPlan reminded that it is an offence under the *NSW National Parks and Wildlife Act 1974* to disturb, damage or destroy and Aboriginal object without a valid Aboriginal Heritage Impact Permit (AHIP).

1. Introduction

NGH Pty Ltd (NGH) was commissioned by BioPlan on behalf of Hurst Earthmoving to undertake an Aboriginal Heritage Due Diligence assessment (Due Diligence) for Aboriginal heritage sites in support of a Rezoning Application to rezone land currently zoned as RU4 - Primary Production Small Lots into R5 Large Lot Residential within Greater Hume Shire Council. The proposed subdivision that will result from the proposed rezone would require assessment under Part 4 of the NSW *Environmental Planning and Assessment Act 1979*.

As the proposal involves the rezoning of agricultural land for residential subdivision that in itself will not harm potential Aboriginal objects or sites, this assessment will evaluate the presence or potential for Aboriginal sites to occur that may be affected by any future development of the Project Area. As a residential subdivision will eventually involve vegetation clearance, ground surface leveling, the construction of houses and installation of associated infrastructure such as roads, driveways, utilities and drainage management, this Due Diligence assessment is undertaken to evaluate whether Aboriginal objects or sites are present, or likely to be present, within the proposed impact area of the future development activity, and if those Aboriginal objects or sites would be harmed by the activity.

1.1 Subject site

The Project Area is currently zoned RU4 - Primary Production Small Lots and it is proposed to rezone the land into R5 - Large Residential Lots.

These parcels of land are identified in Figure 1-1 and Figure 1-2 and described as follows:

- 344 Molkentin Road, Jindera (Lot 5, DP260275);
- 167 Funk Road, Jindera comprising:
    - Lot 22, DP635058;
    - Lot 121, DP753345;
    - Lot 122, DP753345;
    - Lot 153, DP753345.
- 111 Funk Road, Jindera (Lot 1, DP785168).

1.2 Project personnel

The Due Diligence assessment was carried out by qualified archaeologist Jill Taylor of NGH who undertook the field inspection. Heritage Consultant Layne Holloway completed the background research, GIS and writing of this report. Senior Heritage Consultant Jill Taylor reviewed the report for quality assurance purposes and Senior Heritage Consultant Ali Byrne approved the report for distribution.

1.3 Aboriginal consultation

The Due Diligence process does not formally require consultation with Aboriginal community groups. No Aboriginal groups were contacted for this Due Diligence level assessment. The Project Area is within the boundaries of the Albury and District Local Aboriginal Land Council.

1.4 Approach and format of this report

This report has been drafted in keeping with the sequence of steps identified in the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW* (Due Diligence Code) (DECCW, 2010). The Due Diligence Code outlines a five-step approach to determine if an activity is likely to cause harm to an Aboriginal object, as defined by the *NSW National Parks and Wildlife Act 1974* (NPW Act). The steps follow a logical sequence of questions, and the answer to each question determines the need for the next step in the process in order to:

- Identify whether Aboriginal objects are, or are likely to be, present in the Project Area;
- Determine whether or not the proposed activities are likely to harm Aboriginal objects (if present) in the study area; and
- Determine whether an Aboriginal Heritage Impact Permit (AHIP) application is required.

Table 1-1 Due Diligence steps

	Due Diligence steps
Step 1.	Will the activity disturb the ground surface?
Step 2a.	Search the AHIMS database and use any other sources of information of which you are already aware.
Step 2b.	Are activities proposed in areas where landscape features indicate the presence of Aboriginal objects?
Step 3.	Can you avoid harm to the object or disturbance of the landscape feature?
Step 4.	Undertake a desktop assessment and visual inspection. Is it likely that Aboriginal objects will be impacted by the proposed works?
Step 5.	Further investigations and impact assessment.

If the proposed activities are not 'low impact activities' (a defence for which is provided under the NPW Regulation), the considerations result in a determination of whether or not:

- Further approval under the NPW Act is required, in the form of an AHIP; or
- Due Diligence obligations for the protection of Aboriginal objects are discharged by the process under the Code.

For the purposes of the Due Diligence assessment, disturbed land is defined in the Due Diligence Code. Land is disturbed if it has been the subject of a human activity that has changed the land's surface, with the changes remaining clear and observable.

The defence against prosecution offered by following the Due Diligence Code process does not apply to situations where it is known there is an Aboriginal object present. The defence does not authorise harm to Aboriginal objects.

Each section within this report follows the relevant step outlined in the Due Diligence Code (DECCW, 2010). Reference is also made, where relevant, to the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011) and the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010).

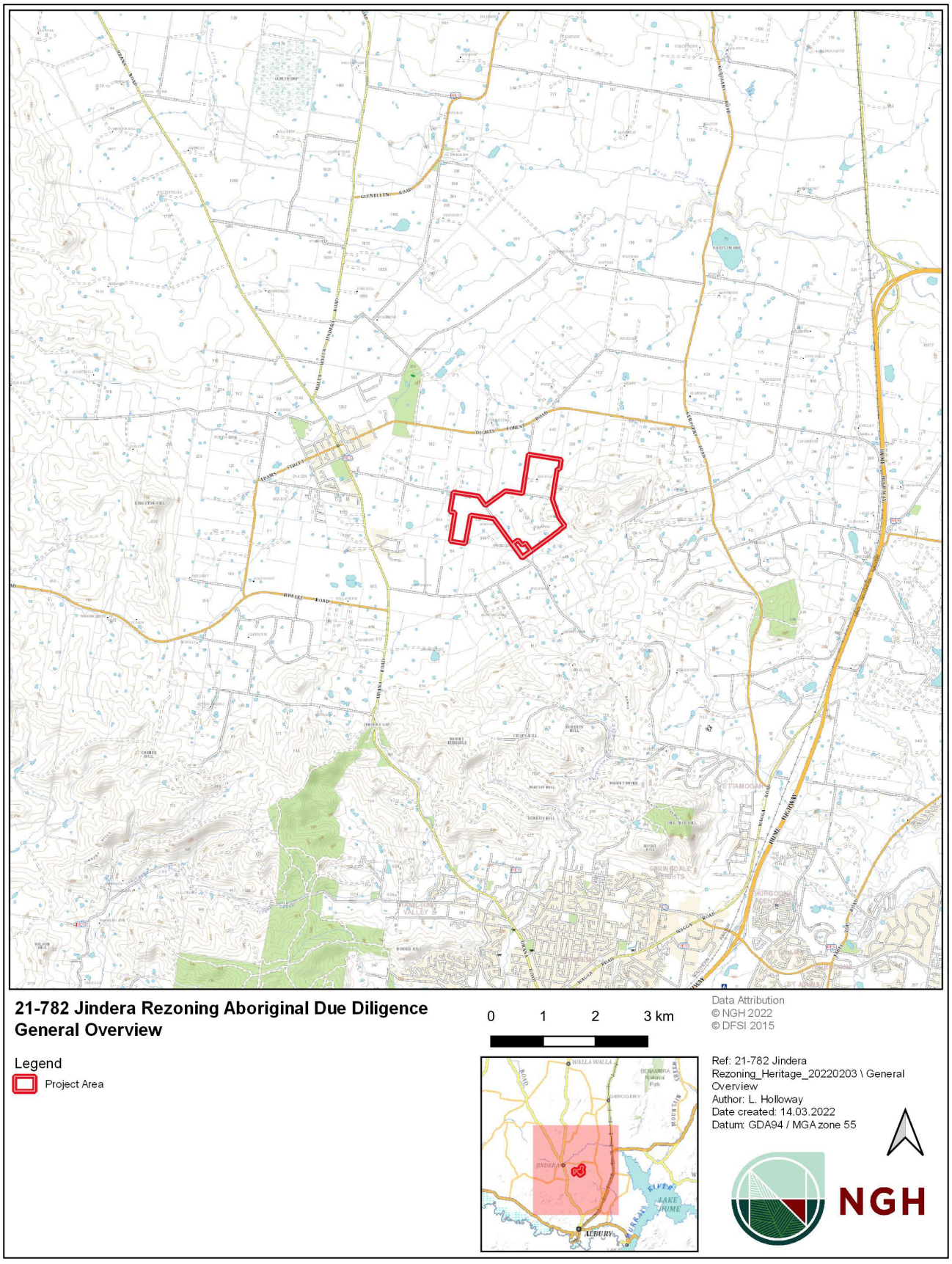

Figure 1-1 General project location

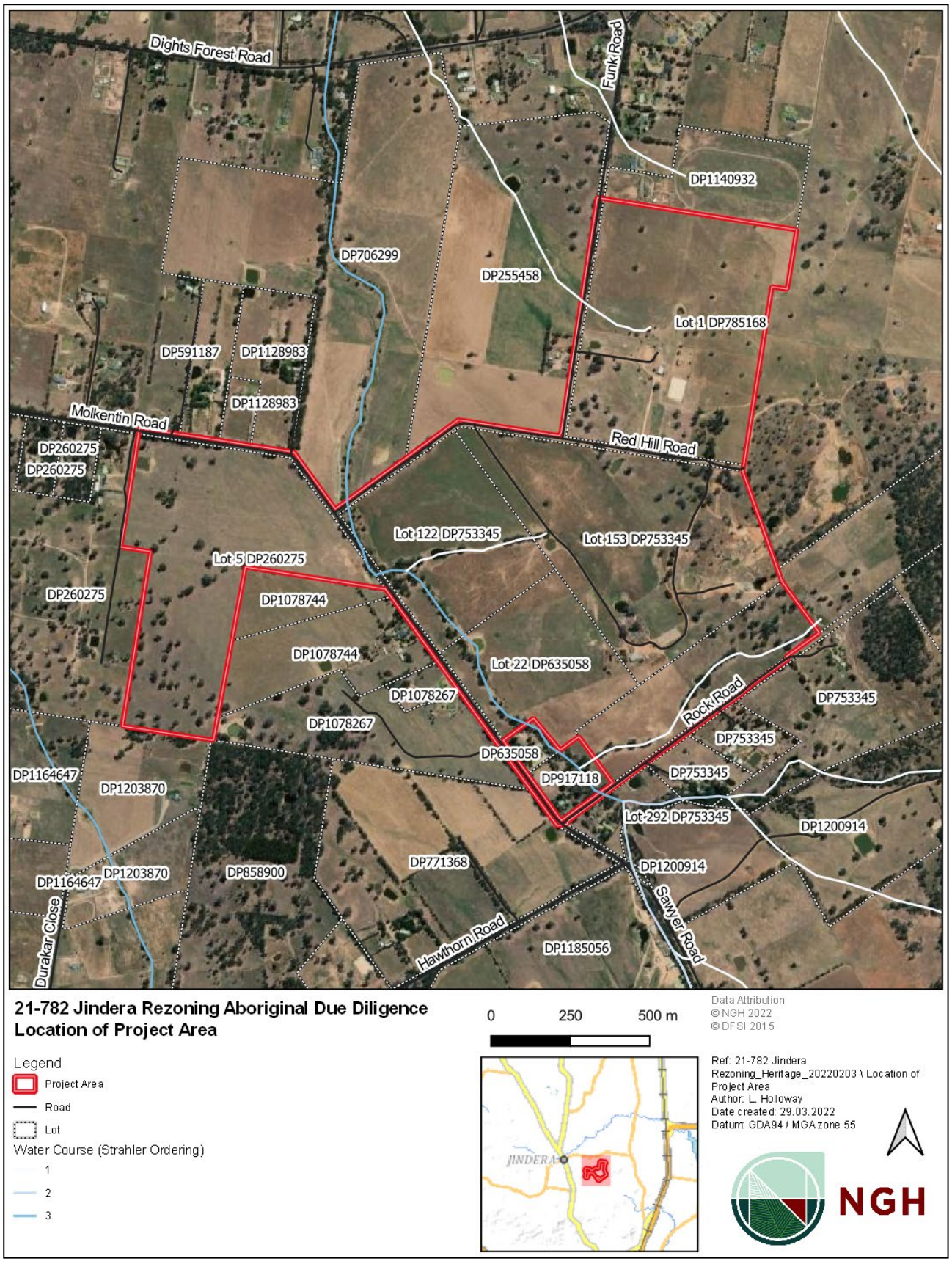

Figure 1-2 Jindera Residential Rezone Project Area

2. Legislation

In NSW, Aboriginal heritage is principally protected by two legislative acts:

- *National Parks and Wildlife Act 1974* (NSW) (NPW Act) and its subordinate legislation, the National Parks and Wildlife Regulation 2019; and
- *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act).

2.1 National Parks and Wildlife Act 1974

Part 6 of the NPW Act concerns Aboriginal objects and places and various sections describe the offences, defences and requirements to harm an Aboriginal object or place. All Aboriginal material receives blanket protection under the NPW Act. The main offences under section 86 of the NPW Act are:

- A person must not harm or desecrate an object that the person knows is an Aboriginal object.
- A person must not harm an Aboriginal object.
- For the purposes of this section, "circumstances of aggravation" are:
    - that the offence was committed in the course of carrying out a commercial activity; or
    - that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.
- A person must not harm or desecrate an Aboriginal place.

An Aboriginal object is defined as:

- Any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with the occupation of that area by persons on non-Aboriginal extraction and includes Aboriginal remains.

Section 87 sets out defences that are available to a person who is prosecuted for a particular harm offence under section 86. For example, it will be a defence in certain circumstances if the person who is being prosecuted can show that:

- the harm or desecration was authorised through an Aboriginal Heritage Impact Permit (AHIP) and conditions of the AHIP were not contravened;
- the person exercised due diligence to determine whether the act/omission constituted the offence would harm an Aboriginal object and reasonably determined no harm would occur;
- the person complied with requirements or a code of practice, as prescribed in in the National Parks and Wildlife Regulation (2019); or
- was a low impact act or omission.

Section 89A of the NPW Act also requires that a person who is aware of an Aboriginal object, must notify the Director-General in a prescribed manner. In effect, this section requires the completion of AHIMS site cards for all sites located during heritage surveys.

2.2 Environmental Planning and Assessment Act 1979

The EP&A Act regulates development in NSW. It sets up a planning structure that requires developers (individuals or companies) to consider impact of the project on the environment and to promote the sustainable manage of built and cultural heritage (which includes Aboriginal cultural heritage). The EP&A Act requires that Aboriginal cultural heritage, and the possible impacts that development may have to Aboriginal heritage be considered, as part of the environmental impact assessment process under the EP&A Act. For most projects requiring assessment under Part 4 and 5 of the EP&A Act, the NPW Act will apply and an AHIP may be required. However, where the project is a "State Significant" project approved under Part 4 of the EP&A Act, the operation of the NPW Act is excluded the Part 4 assessment will involve consideration of impact to Aboriginal cultural heritage.

It also provides for the identification, protection, and management of heritage items through inclusion of these items into schedules off planning instruments, such as Local Environmental Plans (LEPs).

2.3 Greater Hume Shire Local Environmental Plan 2012

The Project Area is located within the Greater Hume Shire Local Government Area. Clause 5.10 of the 2012 LEP requires that development consent be obtained for any proposed activity which will result in impacts to an Aboriginal object or Aboriginal Place. This includes any identified within the LEP itself, or on any other register.

Schedule 5 of the LEP 2012 details the included environmental heritage items covered by the plan. No Aboriginal sites or places listed on Schedule 5 are located within the Project Area.

3. Ground disturbance

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

The proposal will involve a Rezoning Application amending the Greater Hume LEP 2012 to rezone the land from RU4 - Primary Production Small Lots to R5 – Large Lot Residential. An appropriate minimum lot size would be determined through the initial investigations and planning proposal.

If adopted, the proposed LEP amendment would facilitate phase two of the proposed subdivision of the Project Area. Subdivision of the land would be subject to Council approval under a future Development Application and would be subject to provisions under relevant legislation.

The approval of rezoning will not involve any ground disturbance works to the Project Area. The subsequent development of the Project Area for residential housing will involve the following:

- Vegetation clearance;
- Ground surface leveling;
- Construction of residential dwellings and
- Installation of infrastructure such as driveways, utility connections and drainage.

These activities require moderate to significant ground disturbance, such as civil works that may involve excavation and leveling the ground surface, use of heavy machinery and vegetation removal. Any Aboriginal sites within the rezoning application area could therefore be subject to harm by future works. Therefore, this assessment will consider the eventual development of the Project Area if rezoning is successful. As the eventual development will include ground disturbance, the next step in the due diligence process will be completed.

4. Register search and landscape assessment

Step 2a. Search the AHIMS Database and other information sources

A search of relevant heritage registers for Aboriginal sites and places provides an indication of the presence of previously recorded sites. A register search is not conclusive, however, as it requires that an area has been subject to archaeological survey, and information about any sites identified has been submitted for registration. However, as a starting point, the search will indicate whether any sites are known within or adjacent to the investigation area and provide oversight regarding the site types most commonly recorded within the locality. The Aboriginal Heritage Information Management System (AHIMS) provides a database of previously recorded Aboriginal heritage sites. A search provides basic information about any sites previously identified within a search area. The results of the search are valid for 12 months for the purposes of a due diligence level assessment.

On 21 February 2022 a search of the AHIMS database was undertaken over a 14km x 18km search proximity centred on the Project Area, as follows:

- Client Service ID: 661141
- Lat/Long: 36.0265 and146.772
- Lat/Long: 35.8875 and 147.0192.
- Aboriginal objects:
    - 115
- Aboriginal Places:
    - 0

There were 115 Aboriginal sites recorded within this search area and 0 declared Aboriginal Places. Table 4-1 below shows the breakdown of site types. Figure 4-1 and Figure 4-2 show the location of the AHIMS sites in relation to the Project Area.

Table 4-1 Breakdown of previously recorded Aboriginal sites in the region

Site type	Number
Modified Tree (Carved or Scarred)	27
Artefact	85
Artefact and Potential Archaeological Deposit (PAD)	2
Artefact and Modified Tree (Carved or Scarred	1
Total	115

None of the archaeological sites currently recorded on AHIMS are located directly within the Project Area, however, two sites occur within 200m. These sites are summarised in Table 4-2 below and shown in Figure 4-2.

Table 4-2 Sites within 200m of Project Area

Site number	Site name	Site type	Distance to project (m)	Site status on AHIMS
55-6-0041	ABP/NSW 5	Artefact	107m north	Valid
55-6-0042	ABP/NSW 6	Artefact	170m north	Valid

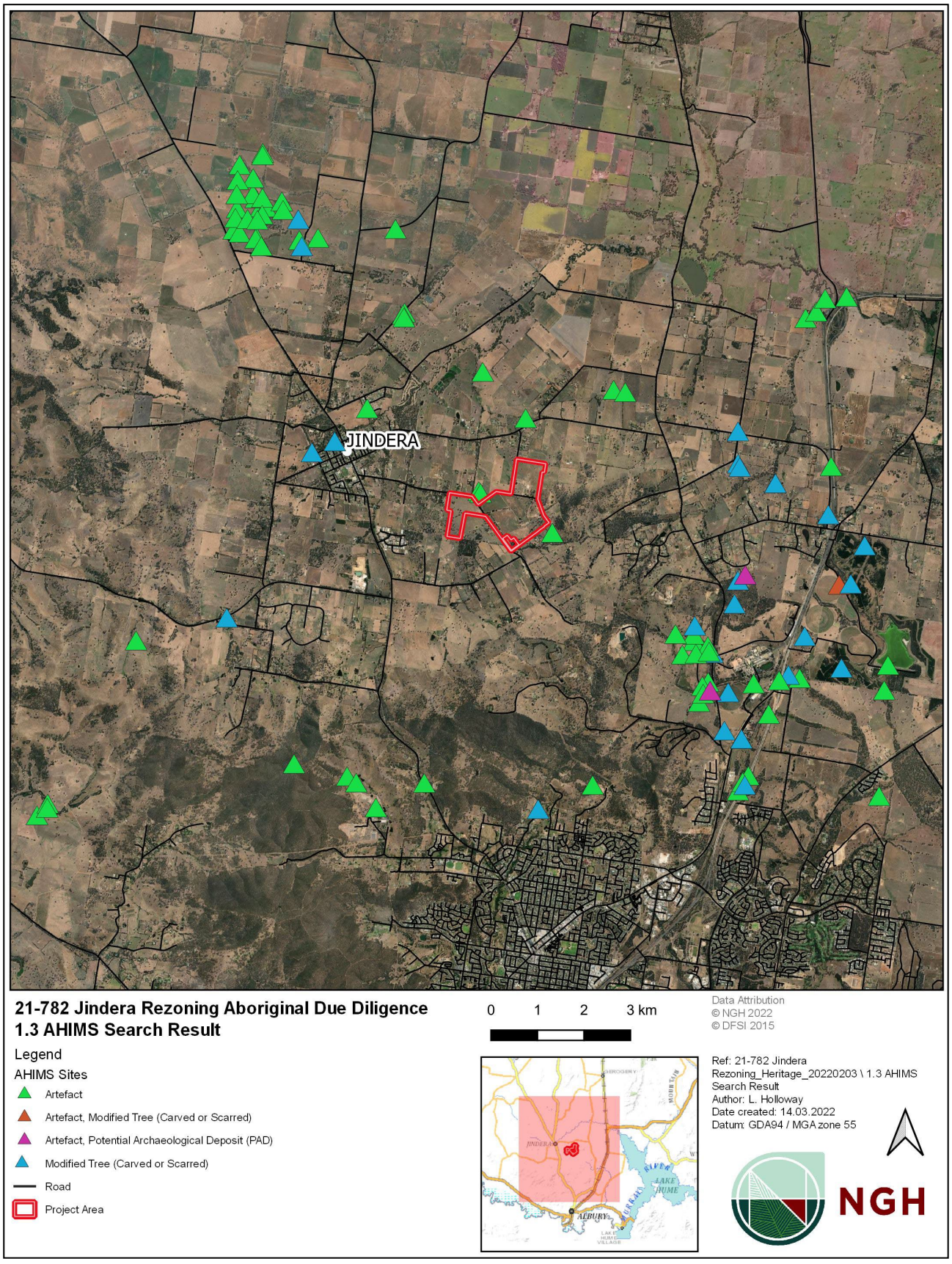

Figure 4-1 AHIMS sites surrounding the Project Area

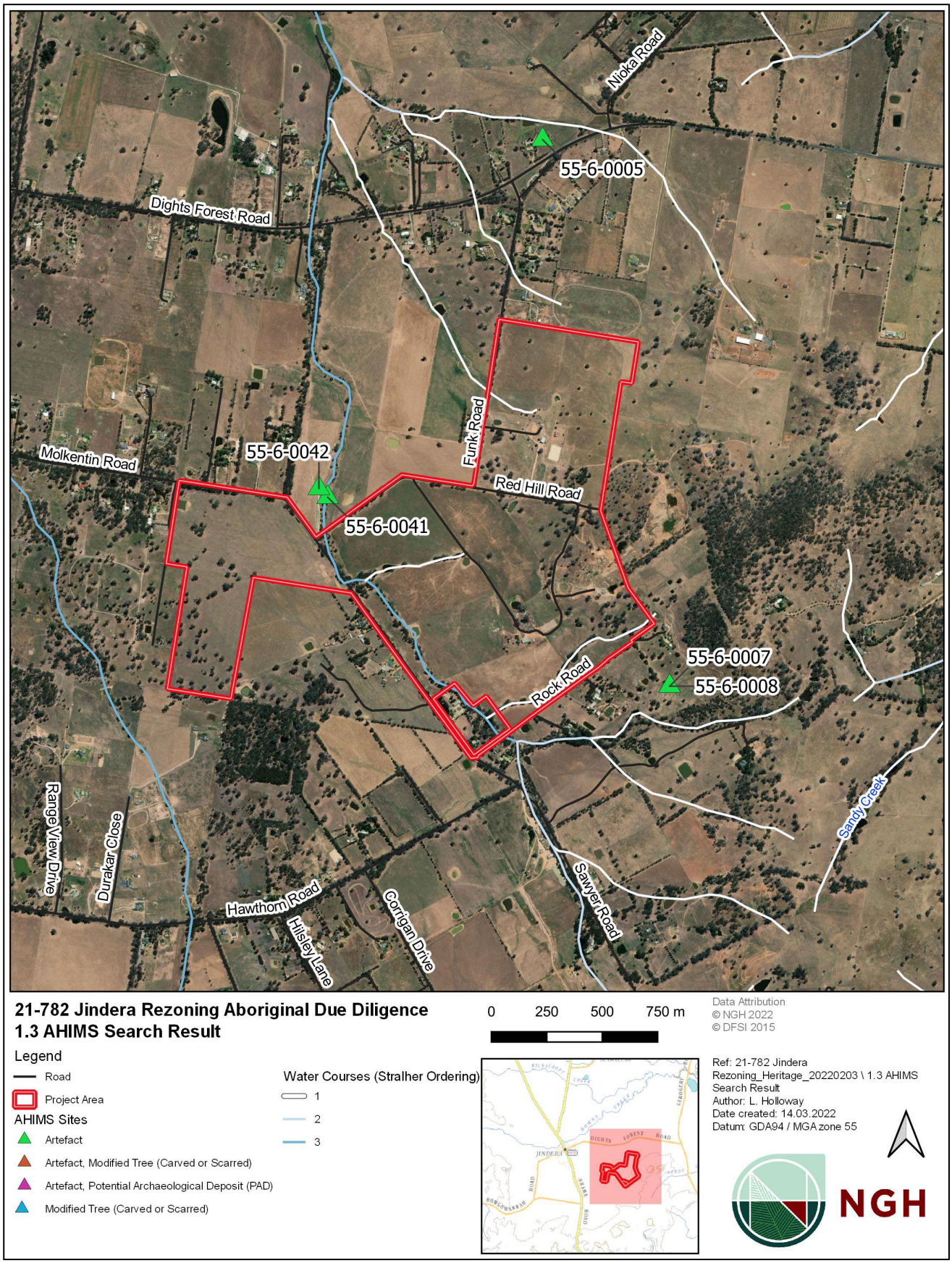

Figure 4-2 AHIMS sites near Project Area

4.1 Archaeological context

In order to establish an understanding of the archaeological context of the Project Area, a brief summary of regional and local archaeological studies is provided below.

4.1.1 Regional context

Aboriginal people have occupied what we now know as the Australian continent for at least 40,000 years and perhaps 60,000 years and beyond (Hiscock 2008). There have been no known dated excavations in the Jindera or Albury area, although the archaeological evidence from Lake Mungo, 425km to the north-west, provides ample evidence of Aboriginal occupation dating back 40,000 years (Mulvaney and Kamminga 1999, Hiscock 2007). The following are summaries of those archaeological survey reports that have been completed in the Jindera-Albury region, these have been primarily driven by development and infrastructure requirements.

Early mapping of tribal boundaries by Tindale (1940; 1974) and subsequent mapping by Horton (1994) identified the Jindera Project Area as within the Wiradjuri language group. It should be noted however that today not all Aboriginal groups agree with the mapped boundaries presented in Tindale and other publications.

There are a number of ethnographic recordings of Aboriginal life in the Riverina region from the 1800s. Most notably, the observations of Beveridge (1883) focused on the prevalence of Aboriginal people around water ways in the region. Early settlers and others who wrote about the Wiradjuri people and customs differentiated between the origin of some groups, referring to people as the Lachlan or Murrumbidgee tribes, or the Levels tribe for those between the two major rivers (Woolrych 1890). The extent of the Wiradjuri group means that there were many different environments that were exploited for natural resources and food. Like everywhere in Australia, Aboriginal people were adept at identifying and utilising resources either on a seasonal basis or all year round.

A survey of the Albury area by Crosby (1978) identified that open camp sites and scarred trees are the most common site types in the wider Albury Region. Crosby noted that due to the limited range of usable stone outcropping in the region it is unlikely that Aboriginal quarries will occur, however, areas where vein quartz occurs should be inspected. Additionally, due to geology and topography of the area and lack of large rock outcrops with shelters suitable for painting or banks suitable for carving it is very unlikely that art sites, grinding grooves or ceremonial areas will be identified. Crosby's (1978) survey of six sites returned seven Aboriginal artefacts consisting of six scarred trees and a large volcanic cobble.

In 1998 Navin and Kamminga undertook a subsurface testing program for the proposed Wodonga to Wagga Wagga Natural Gas pipeline. The previous surveys, carried out between 1995 and 1997, identified a total of 39 Aboriginal sites, four isolated finds and eight areas of potential archaeological deposit (PAD). Four of these sites and seven PADs were to be impacted by the proposed development and were subject to further investigation. All of these PADs contained *in situ* archaeological material and their associated deposits were thought to extend beyond the proposed pipeline easement. Conclusions drawn from the archaeological material and landscape analysis suggested the size of the lithic fragments, in particular the microlith examples, infers a lack of raw material sources in the region. The density of the assemblage indicates that small groups were occupying short-term camps for short periods along creek banks with no direct evidence of longer-term base camps. The assessment results suggest that continuous areas of artefact distribution should be placed around all fluctuating and stable riparian zones. Most of the

artefactual material was identified in subsurface contexts at least 100m away from high order and 40m away from low order stream banks and basin edge depressions.

In 2015 Associates Archaeology and Heritage undertook an Aboriginal Cultural Heritage Assessment for a subdivision development at Drumwood Road, Jindera, located approximately 2km north of the Project Area. The area consisted of a 41ha area on a gentle slope southward of Bowna Creek. Two surface flaked stone artefacts were recovered during the initial survey which prompted the need for further investigation in the area. Test excavation was carried out across the proposed subdivision area with 82 test pits excavated. A total of eight subsurface artefacts were recovered from 20.5 m^2 of excavated material across the Project Area. This is an artefact density of 0.36 artefacts/ m^2. The artefacts recovered were all made from white milky quartz and were located on ridge crest, slope and flat topographic units. The artefact types identified during the survey and testing program were all flakes, flake fragments and angular fragments with no cores recorded. Associates Archaeology suggested that the wide distribution of the eight artefacts across the site was considered to demonstrate that the area was subject to frequent land use by Aboriginal people in the past but was not the site of complex / residential activity. the absence of notable concentrations of artefacts within the Project Area was consistent with the modelling in the area which suggests that complex moderate-high density lithic sites are found on elevated terraces near to water rather than on low lying flats.

NGH (2017) completed an ACHA of Jindera Solar Farm located proximately 10km north west of the Project Area. The study area included 404ha of farmland. Despite poor visibility (10% on average) artefact scatters (n=7) isolated finds (n=15) and PAD's (n=4) were located. Subsurface testing was completed with 52 test pits targeting the four PADs. The testing program targeted raised landforms in proximity to artefact scatters or adjacent to Dead Horse Creek. The testing recovered 80 stone quartz artefacts and indicated discrete low density surface artefact scatters and clusters of very low-density subsurface artefact deposits. One PAD did not locate any artefactual material. The results of this survey and subsurface testing program support the modelling for the region indicating that small groups were occupying short-term camps across the study area with an occupation focus along watercourses and elevated areas in close proximity to a water source.

4.1.2 Local context

In 1980 Barz undertook an archaeological survey for a proposed transmission line from Jindera to Ettamogah. This survey intersected with the north east corner of the current Project Area and paralleled the northern portion before veering to the east. Numerous isolated artefacts were identified during this survey including quartz cores, flakes, a thumbnail scraper and a granite flaked piece although none of these artefacts occurred within the Project Area.

Upcher and Smith (1994) conducted an archaeological assessment for Working Party 1 of the proposed Albury-Wodonga regional centre road bypass routes. The assessment area included an inner route, extending through Jindera Hills, and an outer route, extending parallel to the Hume Highway, and passing through the western corner of the current Project Area. The survey identified seven open artefact scatters and three isolated artefacts. In addition, five PAD areas were recorded in "areas associated with river and creek terraces" (Upcher and Smith 1994, p.22 as cited in Biosis 2008, p.32). All the sites were located in relatively close proximity to natural watercourses, with sites located predominantly on creek banks and, to a lesser extent, creek terraces and flats. Visibility along creek lines was excellent, whereas overall visibility was poor, and this likely affected the ability to identify sites (Upcher and Smith 1994, p.17 as cited in Biosis 2008, p.32). The artefacts were exclusively manufactured from quartz, varieties of which included milky, grey

(smoky), rose, and crystal, and artefact types included flakes, cores, and a thumbnail scraper (as cited in Biosis 2008, p.32).

In 2002, Terraculture completed an Aboriginal Cultural Heritage Assessment and subsurface excavations for the proposed Albury Wodonga Bypass. An initial site survey identified archaeological sensitivity on the Murray River flood plains and on the Jindera plain, hills and ridgelines. Terraculture noted that the occurrence of eroding reef quartz from the exposed hilltop landforms of Jindera affected the outcomes of the initial survey results, therefore all quartz material was re-analysed by a lithic specialist to conclude artefactual material. The site survey located scar trees (n=4) artefact scatters (n=4) and isolated artefact scatters (n=2) along the 26km of proposed road corridor.

Backhoe excavation scrapes were adopted to investigate subsurface archaeological deposits in locations of PADs identified at Sandy Creek, Ringa-a-Rah Lagoon, Moorangury Creek and specifically Midlec property PAD, which is of particular interest to the current assessment, being located 160m north of the Project Area. The excavations located 77 artefacts, one additional isolated find and one hearth across all five areas. Quartz was the dominant lithology (93.49%) however granite, siltstone and volcanic material was also present. Complete flakes represented 36% of the assemblage, cores made up 25% and broken flakes made 35%. The Midlec property PAD is located on the north western border of the current Project Area. The excavation involved four backhoe 50m to 60m scrapes to the depth of 30cm. Two scrapes were conducted on either side of the unnamed dry and heavily eroded creek bed led to the recording of 4 subsurface artefacts within two sites, AHIMS #55-6-0041 and AHIMS#55-6-0042. The methods chosen for this are not often utilised in archaeological practice, as they are not able to provide in depth details beyond the presence and absence of stone tool artefacts. While this assessment confirmed that Aboriginal quartz stone tools are present within the study area, very little detail has been provided regarding morphology such as depth or extent of the landform description of the deposit. Generally speaking, the outcomes of this testing programme support the archaeological modelling for the region, demonstrating landforms associated with a water source are likely to contain Aboriginal quartz stone tools.

4.2 Landscape assessment

Step 2b. Are there undisturbed landscape features present likely to contain Aboriginal objects?

The Due Diligence Code outlines a range of landscape features that have higher potential to contain Aboriginal objects. It is also necessary to consider whether there are landscape features of undisturbed land that may contain Aboriginal objects. These include land that is:

- within 200m of water;
- located within a sand dune system;
- located on a ridge top, ridge line or headland;
- located within 200m below or above a cliff face; or
- within 20m of a cave, rock shelter or cave mouth.

Understanding the landscape context of the Project Area may also assist us to better understand the archaeological modelling of the area and assist to identify local resources which may have been utilised by Aboriginal people. This information can then potentially be used in predicting the nature of Aboriginal occupation across the landscapes within and adjacent to the Project Area.

Factors that are typically used to inform the archaeological potential of landscapes include the presence or absence of resources that would have been utilised by Aboriginal people including water, animal and plant foods, stone and other resources.

The Project Area contains one third order and three first order drainage lines associated with nearby Bowna Creek. Drainage lines are known throughout the region to be of relatively high archaeological sensitivity. Further, previous archaeological studies within the wider region have noted the significant archaeological association with Aboriginal camp site locations presenting artefact scatters within basal slopes, alluvial flats and elevated terrace landforms in association to water. Therefore, the Project Area contains multiple landscape features that are likely to contain Aboriginal objects.

4.2.1 Geology

Understanding the geological character of the local area can assist with understanding what, if any, raw stone materials may have been available for the manufacture and maintenance of stone tools or for use as shelter.

The geology of the Jindera area is dominated by a basal layer of schist from the Upper Ordovician and into the Silurian, characterised by low grade metasediments and sediments of slate, phyllite, greywacke, siltstone, mudstone and shale (Willis, 1974). The Project Area is characterised by the underlying Jindera Granite, a pink to white porphyritic biotite granite that can vary from being medium to coarse grained (Willis, 1974). Possible metasedimentary layers and quartz inclusions in granite features may have provided stone resources for Aboriginal utilisation where occurrences are present on the surface or in eroded stream features.

4.2.2 Topography and hydrology

The Project Area is comprised of a steep east west tending slope descending from a hill crest becoming gentle basal slopes which lead down to the alluvial flats and elevated terraces adjacent to two third order drainage lines, one of which occurs within the Project Area. Three first order drainage lines follow the slope down to the third order drainage line within the Project Area. While these first order drainage lines are ephemeral and flow from farm dams, prior to land disturbance they originated in the steep slopes to the east of the Project Area and may have been utilised by Aboriginal People. Bowna Creek lies approximately 2.6km to the north west of the Project Area and is the end point of the third order drainage line that flows through the Project Area. Bowna Creek flows south into the Hume Dam and Murray River catchments. Waterways provide a resource for food, hydration and travel, therefore landforms associated within 200m provide archaeological sensitivity for open context campsites that may hold Aboriginal objects *in-situ.*

4.2.3 Soils

The formation and nature of soils within the Project Area can provide insight into the types of sites which may be present, in addition to the likelihood for intact archaeological deposits to be present.

Soil landscape mapping identifies the Project Area within the Kindra landscape area (DECCW, 2010). The transferal soil landscape contains Quaternary alluvial sediments of red brown earths, grey clays and deep sandy soils with this region. Soils have formed on recent Quaternary slope wash derived from Ordovician metasediments. Parent materials consist of gravel, sand, silt and clay colluvial deposits and will be present in degrading soils that are often located in areas where sheet and gully erosion occur in cultivated lands and drainage areas. The broad gently sloping basal slopes and elevated terraces within the Project Area are formed on deep colluvium and

provide excellent preservation of subsurface archaeological deposits in undisturbed landscapes where archaeological potential occurs. Further, alluvial sediments provide excellent preservation environments where subsurface archaeological deposits occur. The gully erosion scars within the Project Area provided excellent ground surface exposure revealing a deep partial silty sandy loam soil profile (Plate 6-10).

4.2.4 Flora and fauna resources

The majority of the Project Area has been cleared for agriculture and is currently used for cropping and grazing. Pastures vegetated primarily by exotic flora are heavily grazed by livestock and native groundcover has been lost in certain areas that have been occupied by cattle for long periods of time.

The native vegetation in the landscape surrounding the Project Area is considered to be predominantly grassy woodland comprised of Blakely's Red gum (Eucalyptus blakelyi), River Red Gum (Wiradjuri–Binyal) (*Eucalyptus camaldulensis*), White Box (Wiradjuri–Birri) (*Eucalyptus albens*) and Yellow Box (Wiradjuri–Baagang) (*Eucalyptus melliodora*). These species are still present broadly across the Project Area and concentrated around riparian creek corridors. Eucalypts were utilised by Aboriginal people for several economic and medicinal purposes. The oil-bearing leaves were used to relieve colds, headaches, backaches and fevers. Seeds, bark from young roots, nectar, galls, wild honey and manna from certain species of Eucalypts can be eaten. Gum from eucalypts can be directly applied to sores and abrasions or boiled in water and used as a wash. The wood was used to make tools and other implements such as dishes and bowls. Eucalypt bark is used to make shelters and canoes, it can also be fashioned into fishing lines, nets and baskets. These as well as other bushes, herbs, grasses and forbs and wetland plants within the Project Area would have provided a wide variety of resources for the manufacture of wooden implements, medicine and food, as well as habitats for animals that were also used for food.

Many mature native trees remain within the Project Area, there is a likelihood that scarred trees may be present, as Blakely's Red Gum, and Yellow Box are known to have been favoured species for the extraction of bark for use as canoes, shields, and containers by Aboriginal people in the past.

4.2.5 Historic land use

European settlement of the Riverina area followed relatively rapidly after Hume and Hovell travelled through the area in 1824.The Jindera area has a long history of intensive agricultural and pastoral use. The majority of the area has been utilised for grazing and crop production since European settlement in the mid 1800's. The Project Area is located within the Parish of Jindera, County of Goulburn. Parish maps dating back as far as 1892 provide an indication of the historical land use across the area. The Project Area was occupied from at least 1892, with the 1892 Parish Map showing a combination of private land grants. The area is indicated to be largely utilised for farming purposes (both agricultural and stock farming).

A number of historical developments have disturbed the Project Area overtime, including minor road developments, residential dwellings, dams and utility infrastructure as well as farming and the resultant gully erosion. Historic aerial photography has indicated that the steep slopes of the south-eastern portion of Lot 153 DP753345 within the Project Area have been subject to gravel extraction since the mid-1970s. While this area may have been utilised by Aboriginal people as a high point overlooking the basal slopes and drainage lines, there is limited likelihood that evidence of Aboriginal occupation remains in this area due to the intense nature of the disturbance. With the

exception of the area used for gravel extraction and immediately surrounding the residential area and sheds, the subsurface soil profiles within the remainder of the Project Area are relatively intact and any subsurface archaeological deposits, where present, would likely remain intact and provide a good stratigraphic example of deposition and archaeological processes.

4.3 Aboriginal site prediction

Based upon the initial desktop assessment, using satellite imagery and topographic data, it appears that there is moderate to high potential for Aboriginal objects to occur within the Project Area given its proximity to previous recorded sites and the location of sensitive landscape features such as basal slopes, alluvial flats and elevated terraces in association with drainage lines and tributaries.

Based on the studies discussed above it is possible to suggest that while Aboriginal sites may be expected through all landscapes there does appear to be a pattern of sites that relate to the presence of potential resources for Aboriginal use. In the Jindera area the dominant raw material type is quartz. Sites tend to be concentrated on elevated level ground associated with a water source and are noted to consistently occur on raised terrace landforms in proximity to creek lines (NGH 2017, Border Archaeology 2008; Terraculture 2002, Smith & Upcher 1992). Additionally, the presence of scarred trees on box and river red gums is relatively common and can occur in all landscapes.

Based upon the currently recorded AHIMS sites in the area there is potential for artefact scatters, isolated artefacts and culturally modified trees where old growth native trees remain.

The desktop assessment, therefore, indicates that there are landscapes present within the Project Area that have the potential to contain Aboriginal objects. The nature of the works being undertaken at this site will eventually involve moderate to significant ground disturbance and it is possible that it would impact on Aboriginal heritage objects on the surface and subsurface.

An outline of predicted Aboriginal objects within the activity area is provided in Table 4-3.

Table 4-3 Aboriginal site prediction statements for the Project Area

Site type	Site description	Potential
Artefacts scatters and isolated artefacts	Stone artefact scatter sites can range from high-density concentrations through to isolated finds.	High potential to occur in low to moderate densities.
Potential Archaeological Deposits (PADs)	Potential subsurface deposits of archaeological material.	Potential to occur within Project Area in areas of elevated flat land associated with ephemeral drainage lines.
Modified Trees (Carved or scarred)	Trees that have undergone cultural modification in the process of removing or marking bark for resources or cultural practices.	Moderate potential to occur within the Project Area where there are remnant mature native trees associated with Aboriginal occupation.

5. Impact avoidance

Step 3. Can any AHIMS listed objects, or landscape features be avoided?

Based on the initial desktop study and landform modelling, which identifies areas containing archaeological sensitivity, the Project Area falls within an area of moderate to high archaeological sensitivity (see Figure 7-1). The gentle basal slope running east to west across the Project Area towards two third order drainage lines that lead into Bowna Creek, and the three first order drainage lines that traverse the Project Area and their associated alluvial flats and elevated terraces, will be potentially impacted by the eventual subdivision works and are classified as highly sensitive landforms. Therefore, a visual inspection of the Project Area is warranted. While the rezoning of the area as a whole is unlikely to impact the sites on its own, the exact footprint of future development is currently unknown but assumed to be flexible in nature to some degree.

The desktop assessment alone is sufficient to conclusively define the archaeological potential of the landscape, however a visual inspection is warranted to determine the location of Aboriginal objects or potential archaeological deposits and is therefore the next step in the assessment process.

6. Desktop assessment and visual inspection

Step 4. Does the desktop assessment confirm that there are likely to be Aboriginal objects present or below the ground surface?

The assessment process is primarily a desktop exercise, using available information such as the AHIMS search results and relevant archaeological reports to develop or refine a model of Aboriginal site prediction based on the type of activity proposed and the level of disturbance of the area. A visual inspection is also required where landscape features are present that may contain Aboriginal objects that cannot be avoided by the activity.

6.1 Visual inspection

A visual inspection of the Project Area was undertaken on 28 February 2022 by qualified NGH archaeologist Jill Taylor.

The targeted pedestrian survey prioritised the examination of sensitive landforms such as drainage lines and rock outcropping within the Project Area. The site inspection was undertaken during a wet summer, therefore ground surface visibility was largely impeded by vegetation growth and high grasses. Visibility across the Project Area was generally poor (approximately <10%) with minimal areas of increased visibility (Plate 6-1). Improved areas of ground exposures were observed in areas of eroded gullies and creeks and areas of disturbance such as rabbit warrens, cattle tracks (Plate 6-2), bases of fence posts and gates and electricity poles and a large at the quarry area (Plate 6-9) where excavation had removed and disturbed the ground significantly. Weathered Jindera Granite outcrops were present in the southwest basal slopes of the Project Area (Plate 6-8).

Landscapes within the Project Area were broadly fitting of alluvial flats (Plate 6-1), eroded gullys and creeks (Plate 6-4), elevated terraces (Plate 6-5), basal slopes (Plate 6-6), gently sloping plain (Plate 6-7), elevated rocky outcrops (Plate 6-8) and disturbed landforms (Plate 6-3 and Plate 6-9).

Four sites (Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258) were identified within the elevated terrace and alluvial flat landforms present in Lot 121 DP753345, Lot 22 DP635358, Lot122 DP753345 and Lot 5 DP260275 (Figure 6-1, Figure 6-3, and Figure 6-4). Further details of each site are provided in Section 6.2 below.

Bedrock outcropping was noted across the steeper slopes within Lot 121, DP753345 and Lot 153, DP753345 on the western boundary of the Project Area. The outcropping was inspected for evidence of quarrying or grinding grooves, however, the loose decaying nature and the conglomeration within the aging Jindera Granite was not conducive to either quarrying or grinding. One smaller outcropping in Lot 121, DP753345 occurred on a gentle basal slope overlooking the east west tending first order drainage line paralleling Rock Road and the alluvial flats and elevated terraces associated with the drainage line. One site Jindera SD AFT 01 / AHIMS# 55-6-0255 containing seven quartz artefacts was identified within this outcropping (Figure 6-1 and Figure 6-2, Plate 6-8, Plate 6-13 and Plate 6-14). Visibility was low at the time of survey, and it is thought that this site would extend further than was recorded at the time.

Lot 153 DP753345 contained a large residence with associated sheds, fencing, large built-up equestrian yard and associated utilities (Plate 6-3). The disturbed residential area within Lot 153 DP753345 as demarked in green in Figure 7-1 was deemed highly disturbed and unlikely to contain *in situ* Aboriginal objects or sites. The remainder of Lot 153 DP753345, contained a

number of mature native trees and the relatively less disturbed gently sloping basal slopes and unnamed first order drainage line transecting the property were deemed to hold potential for Aboriginal objects and sites to occur.

A large gravel extraction area located in the western portion of Lot 153, DP753345 provided excellent visibility of the subsurface soil profile. However, the significant levels of ground disturbance as a result of the extraction all but eliminated any potential for Aboriginal objects subsurface archaeological deposits to occur in areas where this activity occurred. This area also contained a large shed and work area and associated utilities. This area was deemed highly disturbed and unlikely to contain *in situ* Aboriginal object or sites.

With the exception of the significant level of disturbance in the western portion of Lot 153, DP753345 which was used as an area for gravel extraction, the Project Area generally contained a moderate level of ground disturbance through past tree clearing, agricultural practices, vehicular tracks, residential buildings and associated infrastructure.

Remnant mature native trees were present throughout the Project Area. The archaeological model for the Jindera region suggests that modified trees of Aboriginal origin are likely to occur. Due to time constraints the mature native trees within the Project Area were not examined at the time of the targeted field survey. However, the presence of mature Blakely's Red Gum and Yellow Box tree species is confirmed within the Project Area (Plate 6-11 and Plate 6-12) and will require further inspection with Aboriginal community members to determine cultural values.

Site photographs below in Plate 6-1 to Plate 6-12 were taken during field work:

6.2 Inspection results

Despite the low ground visibility and observed disturbances, five archaeological sites (Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258) were identified within the Project Area (Figure 6-1, Figure 6-2, Figure 6-3 and Figure 6-4). Three sites (Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259) were identified along the eroded gullies of the third order drainage line that parallels Molkentin Road, one site (Jindera SD AFT 05 / AHIMS# 55-6-0258) was identified at the gate opposite the same drainage line on the western side of Molkentin Road and one site (Jindera SD AFT 01 / AHIMS# 55-6-0255) was located in amongst the rocky outcrop overlooking the alluvial flats and elevated terraces associated with the east west tending first order drainage line paralleling Rock Road. With the exception of Jindera SD AFT 01 / AHIMS# 55-6-0255, all sites were identified in areas of increased visibility.

Plate 6-1: Overview of the Project Area looking north west towards alluvial flats, depicting low visibility and high grass. Photograph taken in Lot 121 DP753345

Plate 6-2: Example of improved visibility due to rabbit warrens and cattle tracks in Lot 121 DP753345.

Plate 6-3: Disturbed equestrian area in Lot 1 DP785168 in the northern portion of Project Area.

Plate 6-4: Eroded gully of the unnamed third order drainage line parallel to Molkentin Road in Lot 22 DP 635058, looking north.

Plate 6-5: Elevated terrace looking north, located on the unnamed third order drainage line parallel to Molkentin Road in Lot 22 DP 635058.

Plate 6-6: Looking south west across Basal Slope in Lot 153 DP753345.

Plate 6-7 : Looking north over gently sloping plain in the west of the Project Area in Lot 1 DP785168.

Plate 6-8: Jindera Granite outcropping in Lot 121 DP753345 in the east of the Project Area.

Plate 6-9:: Looking west over Gravel Pit – distubed landform located in Lot 153 DP753345 in the east of the Project Area.

Plate 6-10: Erosion scar exposing a silty sand soil profile with *in situ* quartz artefacts in Lot 22 DP 635058.

Plate 6-11: Mature reminant native vegetation located in along creeklines. Photorgraph taken in Lot 121 DP753345.

Plate 6-12: Mature reminant native vegetation throughout the Project Area. Photograph taken in Lot 5 DP260275

Jindera SD AFT 01

Jindera SD AFT 01 / AHIMS# 55-6-0255 consists of an artefact scatter in amongst a Jindera Granite outcrop overlooking the east west tending first order drainage line paralleling Rock Road and the alluvial flats and elevated terraces associated with the drainage line (Plate 6-13, Figure 6-1 and Figure 6-2). Seven quartz artefacts including one core, one flake, one distal fragment (Plate 6-14), two broken flakes and two flaked pieces were identified within this outcrop. Visibility was low at the time of survey, and it is thought that this site may extend further than was recorded at the time. Soils were a light brown silty sandy loam with angular gravels from the decomposing granite. Artefact details are listed in Appendix B.

Plate 6-13 View west from Jindera SD AFT 01 / AHIMS# 55-6-0255 overlooking the alluvial flats and terraces associated with the unnamed first order drainage line.

Plate 6-14 A quartz artefact from Jindera SD AFT 01 / AHIMS# 55-6-0255

Jindera SD AFT 02

Jindera SD AFT 02 / AHIMS# 55-6-0256 comprised of a scatter of three quartz artefacts including one flaked tool, one flake and one flaked piece (Plate 6-16 and Appendix B). It was located on an elevated terrace overlooking the unnamed third order drainage line paralleling Molkentin Road (Plate 6-15 and Figure 6-1 and Figure 6-3) The area had been previously disturbed by the construction of an overhead powerline pole and through gully erosion. Soils were silty loam with a deep profile overlying a lighter yellow to reddish sandy clay. Two small quartz artefacts remain *in situ* in the banks of the unnamed drainage line (Plate 6-10).

Plate 6-15 Jindera SD AFT 02 / AHIMS# 55-6-0256 looking north

Plate 6-16 Quartz flake

Jindera SD AFT 03

Jindera SD AFT 03 / AHIMS# 55-6-0257 consists of at least five quartz artefacts including a core, a flaked tool and three flakes (Plate 6-18 and Appendix B). The site is eroding out of the elevated terrace landform in which it is situated (Plate 6-17, Figure 6-1 and Figure 6-3). Multiple artefacts were also located in the vicinity that are likely to have washed down the gully into the bed of the unnamed third order drainage line. Soils were a silty loam with a deep profile overlying a lighter yellow to reddish silty sandy clay Visibility outside the eroded area was limited and it is believed that the site extends beyond what was observable on the day of survey.

Plate 6-17 View south from Jindera SD AFT 03 / AHIMS# 55-6-0257 overlooking gully erosion and elevated terraces

Plate 6-18 Large quartz flake

Jindera SD AFT 04

Jindera SD AFT 04 / AHIMS# 55-6-0259 comprised three quartz artefacts on an elevated terrace on the north and south side of the unnamed third order drainage line paralleling Molkentin Road (Plate 6-19 and Figure 6-1 and Figure 6-4). Soils were orange-brown silty sandy loam with higher clay content. Artefact assemblage included one flake and two distal fragments (Plate 6-20 and Appendix B).

Plate 6-19 Jindera SD AFT 04 / AHIMS# 55-6-0259 looking east

Plate 6-20 Two quartz artefacts

Jindera SD AFT 05

Jindera SD AFT 05 / AHIMS# 55-6-0258 consists of five quartz artefacts. Artefact typology includes one core two broken flakes and two flaked pieces (Plate 6-22 and Appendix B). The site was located at the gateway into Lot 5 DP260275 on the western side of Molkentin Road opposite the unnamed third order drainage line (Plate 6-21, Figure 6-1 and Figure 6-4). It is believed that the artefacts located at this site have been damaged due to vehicles accessing the property from the gate. Soils were a light brown silty loam.

Plate 6-21 View east towards unnamed third order drainage line paralleling Molkentin Road overlooking site Jindera SD AFT 05 / AHIMS# 55-6-0258

Plate 6-22 Quartz artefacts

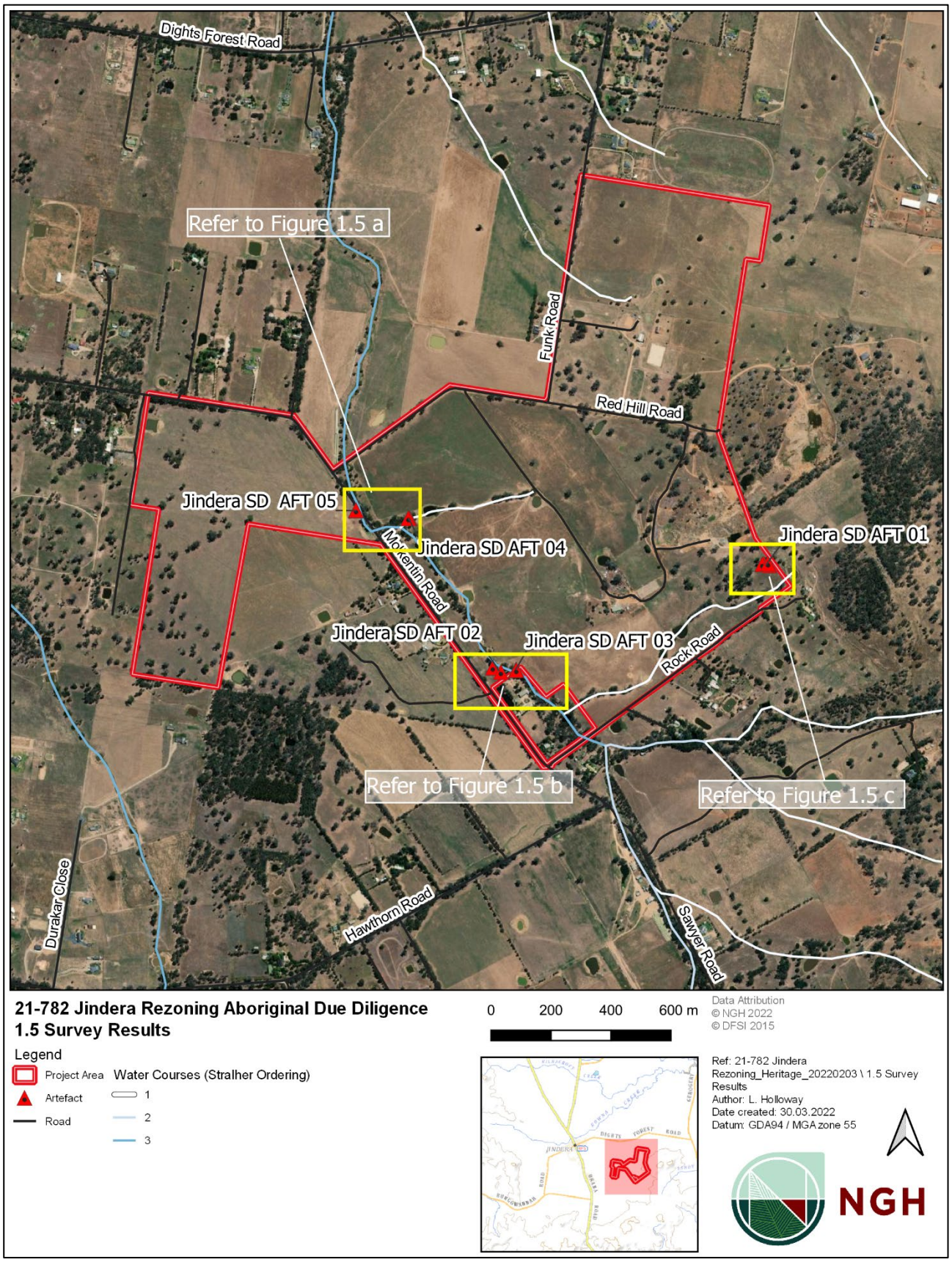

Figure 6-1 Field results

Figure 6-2 Location of Jindera SD AFT 01 / AHIMS# 55-6-0255

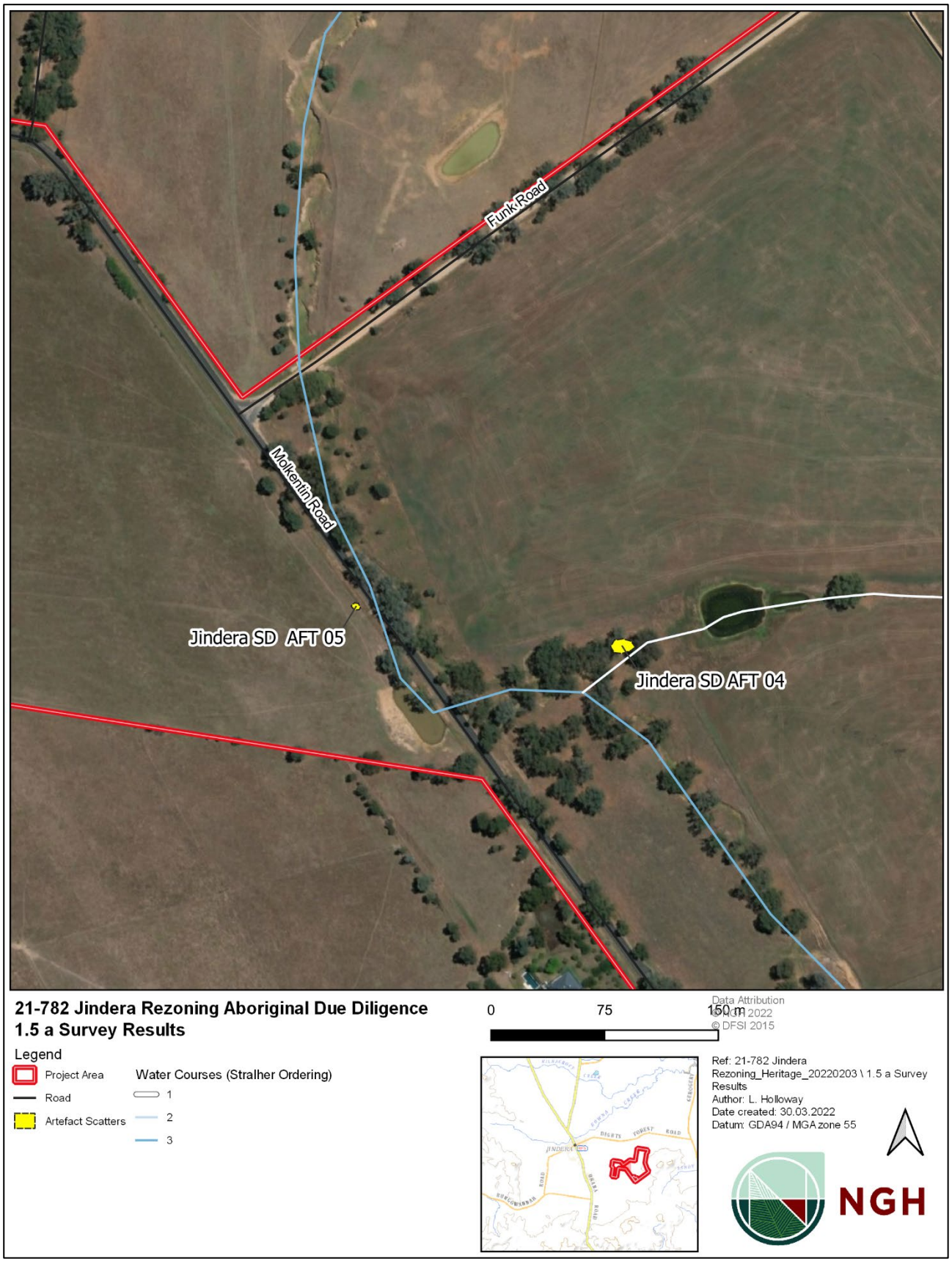

Figure 6-3 Locations of Jindera SF AFT 02 / AHIMS# 55-6-0256 and Jindera SF AFT 03 / AHIMS# 55-6-0257

Figure 6-4 Locations of Jindera SF AFT 04 / AHIMS# 55-6-0259 and Jindera SF AFT 05 / AHIMS# 55-6-0258

6.3 Summary

The site inspection confirmed archaeological potential identified in the background research and predictive model, with the recording of five new artefact scatter sites (Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258) one of which (Jindera SD AFT 02 / AHIMS# 55-6-0256) contained *in situ* quartz artefacts. The artefacts likely relate to the use of the unnamed third order drainage line located parallel to Molkentin Road and the three associated first order tributaries to access water, food and raw materials for tools. The identification of these sites contributes to an understanding of the archaeological context of this region and the utilisation of raw materials in the manufacture and use of stone tools by local Aboriginal people of this region.

The Project Area contains archaeologically sensitive landforms within 200m of an unnamed third order drainage line located parallel to Molkentin Road and three associated first order tributaries. Portions of the Project Area contain moderate to high archaeological potential associated both with the sensitive landforms identified (alluvial flats, elevated terrace landforms, basal slopes) as well as with the identification of the five archaeological sites. Further, known recordings of subsurface artefact sites (ABP/NSW 5 / AHIMS ID# 55-6-0041 and ABP/NSW 6 / AHIMS# 55-6-0042) have occurred within 200m of the Project Area

While no Modified Trees (carved or scarred) were located by the targeted survey effort, the Project Area contains many mature Yellow Box and Blakeley's Red Gum tree species that may be archeologically sensitive (Plate 6-11 and Plate 6-12). Further investigation is required to determine the presence or absence and cultural value of mature trees in the Project Area. Visibility was the main limiting factor for site identification. Dense and high grass cover impeded ground surface visibility within a number of areas. The targeted survey approach limited the comprehensive inspection of all areas of archaeological potential defined by the desktop landscape analysis and predictive model.

It is important to note that historic land use and erosion within the majority of the Project Area has resulted in low to moderate ground disturbance through land clearing, installation of utilities, farm infrastructure and gully erosion. Due to the nature of the archaeological record in this area, this disturbance has likely exposed artefact scatters from *in-situ* deposits. While this disturbance will have moved artefacts, it is unlikely to have significantly compromised the overall character of the archaeological record of the area.

7. Further assessment

Step 5. Is further investigation or impact assessment required?

The Due Diligence Code states that if, after the desktop research and visual inspection is completed, it is evident that harm will occur to Aboriginal objects or heritage places then further and more detailed assessment is required. However, if the research and inspection conclude that the proposed activity is unlikely to harm Aboriginal objects then the activity can proceed with caution.

The field assessment concludes that the area does require further investigation and assessment prior to the completion of any physical works on the site. While the rezoning in itself is delimited to paper and will not have any impact on the Aboriginal Heritage sites identified in this assessment, any future development works following the rezoning may impact these and any currently unidentified sites within the Project Area.

It is possible that sites Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258 may be avoided during any future developments. However, as a large portion of the Project Area has been deemed likely to contain Aboriginal objects or sites that may be harmed during future developments, an Aboriginal Cultural Heritage Assessment (ACHA) for the project, including Aboriginal community consultation would be required to ensure no Aboriginal objects or sites will be impacted.

To further inform future assessment, archaeological potential has been processed into a categorised sensitivity model map provided in Figure 7-1. The outcomes of this model have considered a range of factors that contribute to archaeological potential. These include survey results, landform analysis, consideration of predictive statements and levels of disturbance. Ratings are summarised in Table 7-1 below.

Table 7-1: Archaeological potential classification definitions

Category	Definition
Low (green)	Minimal archaeological potential identified due to previous disturbance. Least risk for constraints. Further assessment requires inclusion in future Aboriginal Cultural heritage Assessment in accordance with assessment recommendations.
Moderate (orange)	Moderate archaeological potential identified due to low disturbance and landscape potential for scarred trees and artefact sites. Areas requires Aboriginal Cultural heritage Assessment in accordance with assessment recommendations and comprehensive archaeological survey effort.
High (red)	High archaeological potential identified due to the presence of undisturbed landscape features and the presence of surface artefact scatters. Likely to contain valuable cultural sites and values. Future development will require Aboriginal Cultural Heritage Assessment in accordance with assessment recommendations, comprehensive archaeological survey effort and subsurface test excavation programme.

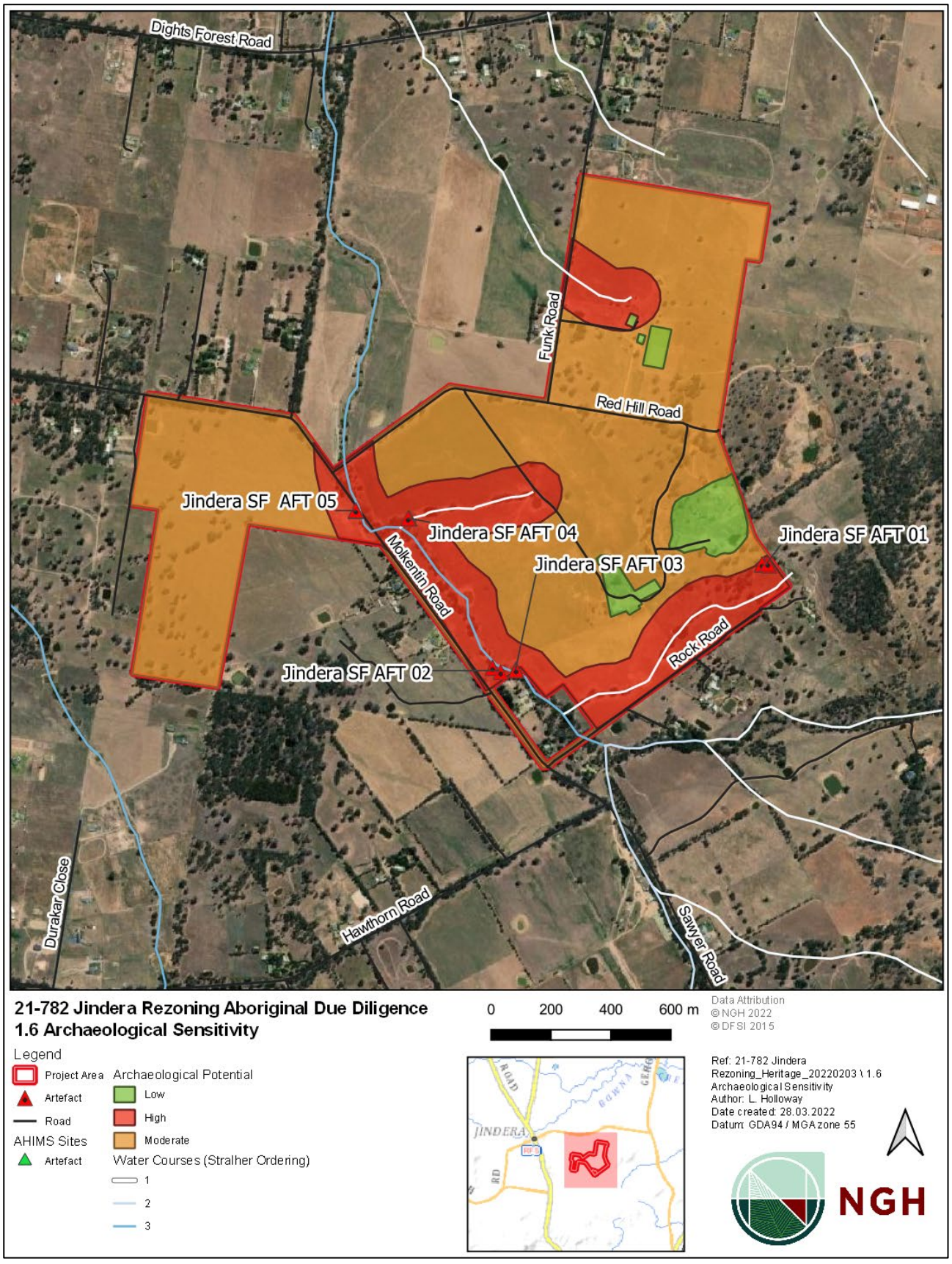

Figure 7-1: Archaeological Sensitivity Modelling

8. Recommendations

The following recommendations are based on a number of considerations including:

- Background Aboriginal heritage research into the area;
- Assessment of Landscape;
- Land use and disturbance assessment;
- Targeted field inspection
- Consideration of the impact of the proposed works; and
- Legislative context for the development proposal.

Based on the desktop assessment of the Project Area, landscapes present, archaeological context and previous level of disturbance, future development within the Project Area will require a detailed Aboriginal heritage assessment. Recommendations for future assessment are as follows:

1. The proposed rezoning for the Project Area may proceed, however any ground disturbance works associated with the future development of the flats, elevated flat landforms and basal slopes which were determined to be of moderate to high archaeological sensitivity (as demarked in red and orange in Figure 7-1) within the Project Area will require further heritage investigation and assessment. A limited programme of subsurface testing under the *Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW* would be required to be undertaken. This would form part of an Aboriginal Cultural Heritage Assessment (ACHA) and include Aboriginal consultation in accordance with the Requirements.
2. Should the previously recorded Aboriginal sites within the Project Area not be able to be avoided by any future development subsequent to the proposed rezoning of the area, an Aboriginal Heritage Impact Permit (AHIP) would be required to impact these sites. This would require undertaking an Aboriginal Cultural Heritage Assessment (ACHA).
3. Any future development works outside the areas of moderate and high archaeological sensitivity and the locations of the Aboriginal sites Jindera SD AFT 01 / AHIMS# 55-6-0255, Jindera SD AFT 02 / AHIMS# 55-6-0256, Jindera SD AFT 03 / AHIMS# 55-6-0257, Jindera SD AFT 04 / AHIMS# 55-6-0259 and Jindera SD AFT 05 / AHIMS# 55-6-0258 (as demarked in green in Figure 7-1) within the Project Area do not require further assessment and therefore the proposed rezoning and any future development works can proceed with caution in these areas.
4. Any activity proposed outside the current assessment area should also be subject to an Aboriginal heritage assessment

BioPlan reminded that it is an offence under the *NSW National Parks and Wildlife Act 1974* to disturb, damage or destroy and Aboriginal object without a valid Aboriginal Heritage Impact Permit (AHIP).

9. References

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Appendix A AHIMS search and site cards

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 21-782

Client Service ID : 661141

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
55-6-0157	Jindera Solar IF 9	GDA	55	487601	6026201	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0155	Jindera Solar IF 7	GDA	55	488116	6026227	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0126	Jindera 488156 duplicate of 55-6-0125	GDA	55	488156	6027395	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0116	Jindera 488995	GDA	55	488995	6025387	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0003	Jindera;	AGD	55	489701	6021192	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	276,363
	Contact	**Recorders**	ASRSYS					**Permits**		
55-6-0107	Nexus AS5	GDA	55	497424	6016897	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Bridget Grinter					**Permits**	4118	
55-6-0108	Nexus AS6	GDA	55	497424	6017034	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Bridget Grinter					**Permits**	4118	
55-6-0106	Nexus AS4	GDA	55	497726	6016789	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Bridget Grinter					**Permits**	4118	
55-6-0091	Sargent Rd 2	GDA	55	498377	6020714	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	**Recorders**	Office of Environment & Heritage					**Permits**		
55-6-0067	mod tree 4	AGD	55	498375	6018203	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact T Russell	**Recorders**	Mr.Graham Moore					**Permits**		
55-6-0068	mod tree 5	AGD	55	498375	6021408	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	**Recorders**	Mr.Graham Moore					**Permits**		
60-3-0019	M12;	AGD	55	500050	6017630	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
60-3-0108	AL01 (Albury)	GDA	55	490588	6013318	Open site	Partially Destroyed	Artefact : 1		101228,101697
	Contact	**Recorders**	Mr.Dominic Brady					**Permits**	3311,3312	
60-3-0092	Albury Wadonga Highway 4 and 5	AGD	55	498446	6013670	Open site	Valid	Artefact : -		
	Contact T Russell	**Recorders**	Parklands - Albury Wodonga					**Permits**		

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 21-782

Client Service ID : 661141

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
60-3-0079	AWH 10 PAD 8	AGD	55	498598	6014004	Open site	Valid	Artefact : 24		99657
	Contact Searle	**Recorders**	Mr.Terence J. Kelly,Mr.Stephen Pollock					**Permits**	2334	
60-4-0002	BP4	AGD	55	500830	6024120	Open site	Partially Destroyed	Artefact : -	Open Camp Site	100575,100576
	Contact	**Recorders**	Unknown Author					**Permits**	2755,2756	
55-6-0034	BP 1 (Howlong)	AGD	55	494400	6021520	Open site	Valid	Artefact : -	Open Camp Site	100576
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0098	Drumwoord Road Test Ex	GDA	55	490400	6021900	Open site	Valid	Artefact : 10		46,103621
	Contact	**Recorders**	Mr.Oliver Brown					**Permits**	3918	
55-6-0114	Jindera 487530	GDA	55	487529	6025742	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0156	Jindera Solar IF 8	GDA	55	487656	6025679	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0123	Jindera 488004	GDA	55	488004	6026417	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0149	Jindera Solar IF 1	GDA	55	488031	6025567	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0154	Jindera Solar IF 6	GDA	55	488225	6026223	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0115	Jindera 488918	GDA	55	488918	6025967	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0064	mungabareena-mm1	GDA	55	497447	6017227	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact Sarah Colley	**Recorders**	Biosis Pty Ltd - Sydney,Mr.Michael Mulvaney,Ms.Meaghan Aitchison,Ms.Meaghan A					**Permits**		
60-3-0054	Nine Mile Hill;Crown Land, South of Claremont;	AGD	55	498300	6017700	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	
	Contact	**Recorders**	Mr.Michael Mulvaney					**Permits**		
55-6-0037	BP 5 (Howlong)	AGD	55	485650	6017300	Open site	Valid	Artefact : -	Open Camp Site	100576
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
60-3-0063	MOORANGURY 1	AGD	55	484980	6015510	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Joanne Bell,M Chamberlain					**Permits**	1417	
60-3-0121	Nexus AS8	GDA	55	497609	6015930	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Bridget Grinter					**Permits**	4118	

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 21-782

Client Service ID : 661141

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
60-3-0007	One Tree Hill;Ettamogah Sanctuary;T/59;	AGD	55	498449	6014793	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	230
	Contact	**Recorders**	ASRSYS					**Permits**		
56-4-0202	mod tree 7	AGD	55	500317	6019619	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	**Recorders**	Mr.Graham Moore					**Permits**		
60-3-0033	M15;	AGD	55	501100	6018950	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0009	Jindera;	AGD	55	494848	6018412	Open site	Valid	Artefact : -	Open Camp Site	54
	Contact	**Recorders**	ASRSYS					**Permits**		
55-6-0042	ABP/NSW 6	AGD	55	492800	6020120	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Joanne Bell					**Permits**		
55-6-0039	scholz 1	AGD	55	487380	6017400	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	**Recorders**	Joanne Bell					**Permits**		
55-6-0159	Jindera Solar IF 11	GDA	55	487659	6027137	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0158	Jindera Solar IF 10	GDA	55	487943	6026509	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0162	Jindera Solar AFT 1	GDA	55	487948	6026853	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0161	Jindera Solar AFT 3	GDA	55	488001	6025549	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0160	Jindera Solar AFT 2	GDA	55	488124	6025390	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0122	Jindera 488179	GDA	55	488149	6026428	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0150	Jindera Solar IF 2	GDA	55	489344	6025566	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0066	mod tree 3	AGD	55	497824	6016639	Open site	Deleted	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	**Recorders**	Mr.Graham Moore					**Permits**		
56-4-0203	ARTC 1	AGD	55	500059	6023978	Open site	Valid	Artefact : 1		100469

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact Searle	**Recorders**	Biosis Pty Ltd - Sydney					**Permits**	2691	
60-3-0160	ROCKWOOD-LANE-AS3	GDA	55	497537	6015586	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Biosis Pty Ltd - Albury - Ashley Edwards,Ms.Meaghan Aitchison					**Permits**		
60-3-0008	One Tree Hill;Ettamogah Sanctuary;TS10;	AGD	55	498449	6014793	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	203,230
	Contact	**Recorders**	ASRSYS					**Permits**		
60-3-0023	M4;	AGD	55	501500	6016390	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
60-3-0027	M8;	AGD	55	501600	6016700	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0006	Jindera;	AGD	55	494358	6021606	Open site	Valid	Artefact : -	Open Camp Site	54
	Contact	**Recorders**	ASRSYS					**Permits**		
55-6-0036	BP 3 (Holwong)	AGD	55	495700	6022300	Open site	Valid	Artefact : -	Open Camp Site	100576
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0069	mod tree 6	AGD	55	499176	6020291	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	**Recorders**	Mr.Graham Moore					**Permits**		
55-6-0153	Jindera Solar IF 5	GDA	55	488565	6026351	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0152	Jindera Solar IF 4	GDA	55	488592	6026169	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0142	Jindera Scarred Tree	GDA	55	489213	6020956	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	**Recorders**	Mr.Kyle Moffitt					**Permits**		
55-6-0073	Sargent Rd - mm7	GDA	55	498413	6020640	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	**Recorders**	Mr.Michael Mulvaney					**Permits**		
61-1-0262	TH-IA1-16	GDA	55	501409	6013564	Open site	Partially Destroyed	Artefact : 1		
	Contact	**Recorders**	Mr.Luke Atkinson,AECOM George Street Sydney					**Permits**	4077	
60-3-0066	ABP/NSW 2	AGD	55	483520	6013310	Open site	Valid	Artefact : 16		
	Contact	**Recorders**	Joanne Bell					**Permits**		
60-3-0154	Nail Can Hill IF 1	GDA	55	488827	6014260	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
60-3-0164	NEXUS ISO 01	GDA	55	497735	6016016	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 21-782

Client Service ID : 661141

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
60-3-0010	One Tree Hill;TS5;	AGD	55	498165	6015795	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	230
	Contact	**Recorders**	ASRSYS					**Permits**		
60-3-0080	AWH 11 PAD 9	AGD	55	499036	6015329	Open site	Valid	Artefact : 23		99657
	Contact Searle	**Recorders**	Mr.Terence J. Kelly,Mr.Stephen Pollock					**Permits**	2334	
60-3-0031	M13;	AGD	55	500550	6018110	Open site	Valid	Artefact : -, Modified Tree (Carved or Scarred) : -	Open Camp Site,Scarred Tree	2380
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0007	Jindera;	AGD	55	494382	6019229	Open site	Valid	Artefact : -	Open Camp Site	54
	Contact	**Recorders**	ASRSYS					**Permits**		
55-6-0035	BP 2 (Howlong)	AGD	55	495950	6022250	Open site	Valid	Artefact : -	Open Camp Site	100576
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0065	MUNGABARINA-MM3	AGD	55	499181	6020291	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact Sarah Colley	**Recorders**	Mr.Stephen Mark Free					**Permits**		
60-3-0029	M10;	AGD	55	499700	6016100	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0151	Jindera Solar IF 3	GDA	55	491009	6025760	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
55-6-0041	ABP/NSW 5	AGD	55	492840	6020080	Open site	Valid	Artefact : 4		
	Contact	**Recorders**	Joanne Bell					**Permits**		
55-6-0004	Jindera;	AGD	55	492885	6022687	Open site	Valid	Artefact : -	Open Camp Site	54,276
	Contact	**Recorders**	ASRSYS					**Permits**		
55-6-0109	Nexus AS7	GDA	55	497030	6017049	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Bridget Grinter					**Permits**	4118	
60-3-0030	M11	AGD	55	499810	6017000	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0040	Ryan 1	AGD	55	499830	6023840	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Joanne Bell					**Permits**	1417	
60-3-0156	Hamilton Valley Artefact 2	GDA	55	489969	6013991	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Ms.Meaghan Aitchison,Jacobs Group (Australia) Pty Ltd - Wangaratta					**Permits**		
60-3-0166	Urana Road AS 1	GDA	55	491628	6013846	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Biosis Pty Ltd - Wollongong,Mrs.Samantha Keats					**Permits**		

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
60-3-0146	Andersons Clay Mine IF1	GDA	55	495249	6013801	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,NGH Heritage - Fyshwick					**Permits**		
60-3-0159	ROCKWOOD-LANE-AS2	GDA	55	497625	6015766	Open site	Valid	Artefact : 1		
	Contact	**Recorders**	Biosis Pty Ltd - Albury - Ashley Edwards,Ms.Meaghan Aitchison					**Permits**		
60-3-0009	One Tree Hill;TS6;	AGD	55	498082	6014972	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	203,230
	Contact	**Recorders**	ASRSYS					**Permits**		
56-4-0230	TT 5 (Table Top Creek - Hume Hwy)	AGD	55	500250	6024262	Open site	Valid	Artefact : 20		100575
	Contact T Russell	**Recorders**	Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd					**Permits**		
56-4-0231	TT 6 (Table Top Creek - Hume Hwy)	AGD	55	500710	6024300	Open site	Valid	Artefact : 4		100575
	Contact T Russell	**Recorders**	Matthew Kelleher,Kelleher Nightingale Consulting Pty Ltd					**Permits**		
55-6-0112	Glenellen SF Survey Unit 2/Locale 3	GDA	55	491203	6023961	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Doctor.Julie Dibden,NSW Archaeology Pty Ltd					**Permits**		
55-6-0129	Jindera 487613	GDA	55	487613	6026809	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0121	Jindera 488172	GDA	55	488140	6026065	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0117	Jindera 488942	GDA	55	488942	6025519	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0103	Nexus AS1	GDA	55	497178	6016606	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Ashley Edwards					**Permits**	4118	
55-6-0104	Nexus AS2	GDA	55	497470	6016626	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Ashley Edwards					**Permits**	4118	
60-3-0021	M2;	AGD	55	501520	6015840	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
60-3-0158	ROCKWOOD-LANE-AS1	GDA	55	497775	6015830	Open site	Valid	Artefact : 1, Potential Archaeological Deposit (PAD) : 1		
	Contact	**Recorders**	Biosis Pty Ltd - Albury - Ashley Edwards,Ms.Meaghan Aitchison					**Permits**		
60-3-0077	AWH 8 PAD 6	AGD	55	498375	6013678	Open site	Valid	Artefact : 15		
	Contact Searle	**Recorders**	Mr.Terence J. Kelly,Mr.Stephen Pollock					**Permits**	2334	
55-6-0005	Jindera;	AGD	55	493809	6021691	Open site	Valid	Artefact : -	Open Camp Site	54
	Contact	**Recorders**	ASRSYS					**Permits**		
60-3-0005	One Tree Hill;TS7;	AGD	55	498711	6015983	Open site	Valid	Artefact : -	Open Camp Site	230
	Contact	**Recorders**	ASRSYS					**Permits**		
55-6-0118	Jindera 487666	GDA	55	487566	6025996	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 21-782

Client Service ID : 661141

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0119	Jindera 487828	GDA	55	487828	6025972	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0242	Ettamogah Rock Shelters	GDA	55	498531	6018323	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	**Recorders**	Ms.Ashley Edwards,Ms.Ashley Edwards,Biosis Pty Ltd - Albury - Ashley Edwards,Bi					**Permits**		
60-3-0057	BP6	AGD	55	483300	6013150	Open site	Valid	Artefact : -	Open Camp Site	100576
	Contact	**Recorders**	James Leslie Smith					**Permits**		
60-3-0067	ABP/NSW 3	AGD	55	483530	6013400	Open site	Valid	Artefact : 15		
	Contact	**Recorders**	Joanne Bell					**Permits**		
60-3-0157	Hamilton Valley Artefact 1	GDA	55	490164	6013854	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Ms.Meaghan Aitchison,Jacobs Group (Australia) Pty Ltd - Wangaratta					**Permits**		
60-3-0113	AL01 (duplicate of 60-3-0108)	GDA	55	490588	6013318	Open site	Valid	Artefact : 1		101228
	Contact	**Recorders**	Biosis Pty Ltd - Sydney,Mr.Dominic Brady					**Permits**		
60-3-0011	One Tree Hill;TS4;	AGD	55	494078	6013285	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	230
	Contact	**Recorders**	ASRSYS					**Permits**		
60-3-0006	One Tree Hill;Ettamogah Sanctuary;T/58;	AGD	55	498449	6014793	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	230
	Contact	**Recorders**	ASRSYS					**Permits**		
60-3-0093	Mitchell Park Scar Tree1	AGD	55	498521	6013801	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact T Russell	**Recorders**	Parklands - Albury Wodonga					**Permits**		
60-3-0032	M14;	AGD	55	500800	6018130	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
60-3-0028	M9;	AGD	55	499460	6016170	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0113	Glenellen SF Survey Unit 2/Locale 2	GDA	55	491171	6023918	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Doctor.Julie Dibden,NSW Archaeology Pty Ltd					**Permits**		
55-6-0111	Glenellen SF Survey Unit 2/Locale 1	GDA	55	491191	6023855	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Doctor.Julie Dibden,NSW Archaeology Pty Ltd					**Permits**		
55-6-0124	Jindera 487595	GDA	55	487595	6026504	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref/PO Number : 21-782

Client Service ID : 661141

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status **	SiteFeatures	SiteTypes	Reports
	Contact	**Recorders**	Mr.Mark Saddler					**Permits**		
55-6-0120	Jindera 487973	GDA	55	488040	6025952	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0125	Jindera 488212 duplicate of 55-6-0126	GDA	55	488150	6027345	Open site	Valid	Artefact : -		
	Contact	**Recorders**	Mr.Matthew Barber,Mr.Matthew Barber,Mr.Mark Saddler,NGH Heritage - Fyshwick					**Permits**		
55-6-0105	Nexus AS3	GDA	55	497753	6016671	Open site	Destroyed	Artefact : 1		103840
	Contact	**Recorders**	Biosis Research (to be deleted),Ms.Ashley Edwards					**Permits**	4118	
55-6-0043	ABP/NSW 4	AGD	55	485430	6016910	Open site	Valid	Artefact : 14		
	Contact	**Recorders**	Joanne Bell					**Permits**		
60-3-0078	AWH 9 PAD 7	AGD	55	498476	6013866	Closed site	Valid	Artefact : 26		
	Contact Searle	**Recorders**	Mr.Terence J. Kelly,Mr.Stephen Pollock					**Permits**	2334	
60-3-0070	AWH 1 PAD 10	GDA	55	499260	6016050	Open site	Valid	Artefact : 5		99657
	Contact Colin Clark	**Recorders**	Mr.Terence J. Kelly					**Permits**	2246,2334	
56-4-0211	TT 1 (Table Top Creek - Hume Hwy)	AGD	55	500378	6020656	Open site	Valid	Artefact : 2		100575
	Contact T Russell	**Recorders**	Kelleher Nightingale Consulting Pty Ltd,Mr.Michael Jackson					**Permits**		
60-3-0020	M1;	AGD	55	500600	6016320	Open site	Valid	Modified Tree (Carved or Scarred) : -	Scarred Tree	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
60-3-0024	M5;	AGD	55	501600	6016380	Open site	Valid	Artefact : -	Open Camp Site	2350
	Contact	**Recorders**	Laura-Jane Smith					**Permits**		
55-6-0008	Jindera;	AGD	55	494382	6019229	Open site	Valid	Artefact : -	Open Camp Site	54
	Contact	**Recorders**	ASRSYS					**Permits**		

**** Site Status**

Valid - The site has been recorded and accepted onto the system as valid

Destroyed - The site has been completely impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There is nothing left of the site on the ground but proponents should proceed with caution.

Partially Destroyed - The site has been only partially impacted or harmed usually as consequence of permit activity but sometimes also after natural events. There might be parts or sections of the original site still present on the ground

Not a site - The site has been originally entered and accepted onto AHIMS as a valid site but after further investigations it was decided it is NOT an aboriginal site. Impact of this type of site does not require permit but Heritage NSW should be notified

Report generated by AHIMS Web Service on 21/02/2022 for Layne Holloway for the following area at Lat, Long From : -36.0265, 146.772 - Lat, Long To : -35.8875, 147.0192. Number of Aboriginal sites and Aboriginal objects found is 115

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 55-6-0255 **Date recorded:** 31-03-2022

Site Location Information

Site name: Jindera SD AFT 01

Easting: 494231 **Northing:** 6019581 **Coordinates must be in GDA (MGA)**

Horizontal Accuracy (m): 5

Zone: 55 **Location method:** Non-Differential GPS

Recorder Information

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

Title	Surname	First name
Mr.	Barber	Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 **E-mail:** matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Steep Hills **Land Use:** Farming Low Intensity

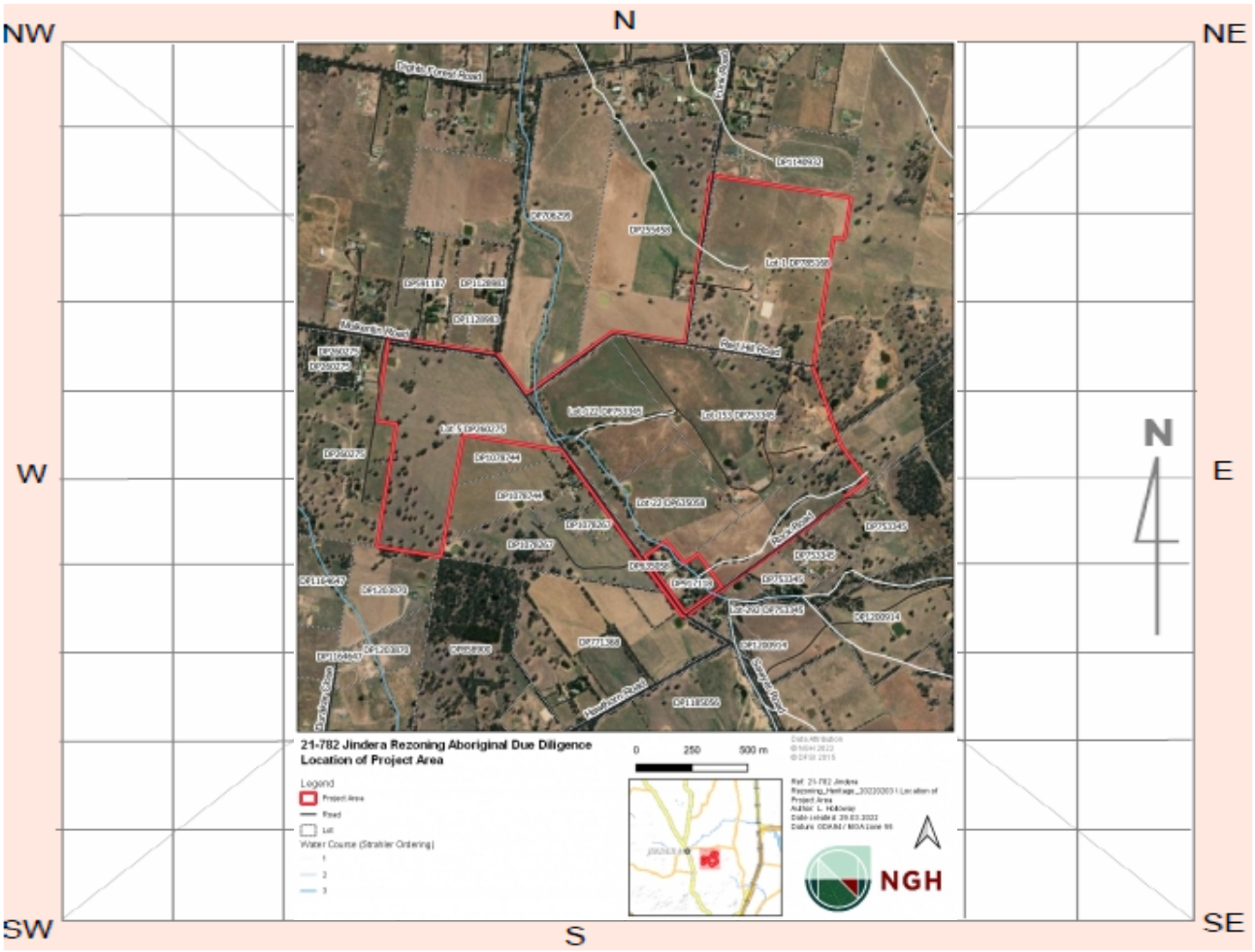
Land Form Unit: Slope **Vegetation:** Isolated clumps of trees

Distance to Water (m): 60 **Primary Report:** Aboriginal Heritage DD Assessment Jindera Residential Rezoning

How to get to the site: On private property to the north of Rock Road, Jindera

Other site information: Site is scattered in amongst a rock outcrop. Visibility was poor at the time of visit. It is expected that the site is larger than what was observed on the day.

Site location map



Site contents information

open/closed site: Open

Site condition: Good

Features:	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
1. Artefact	7	28	25				

Description:

Quartz artefact scatter in a Granite outcrop overlooking the drainage line paralleling Rock Road. Artefacts include 1 Distal Fragment, 1 flake, 2 broken flakes, 1 core and 2 flaked pieces. All artefacts were of good quality crystalline quartz.

Features:	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
2.							

Description:

Features:	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
3.							

Description:

Features:	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
4.							

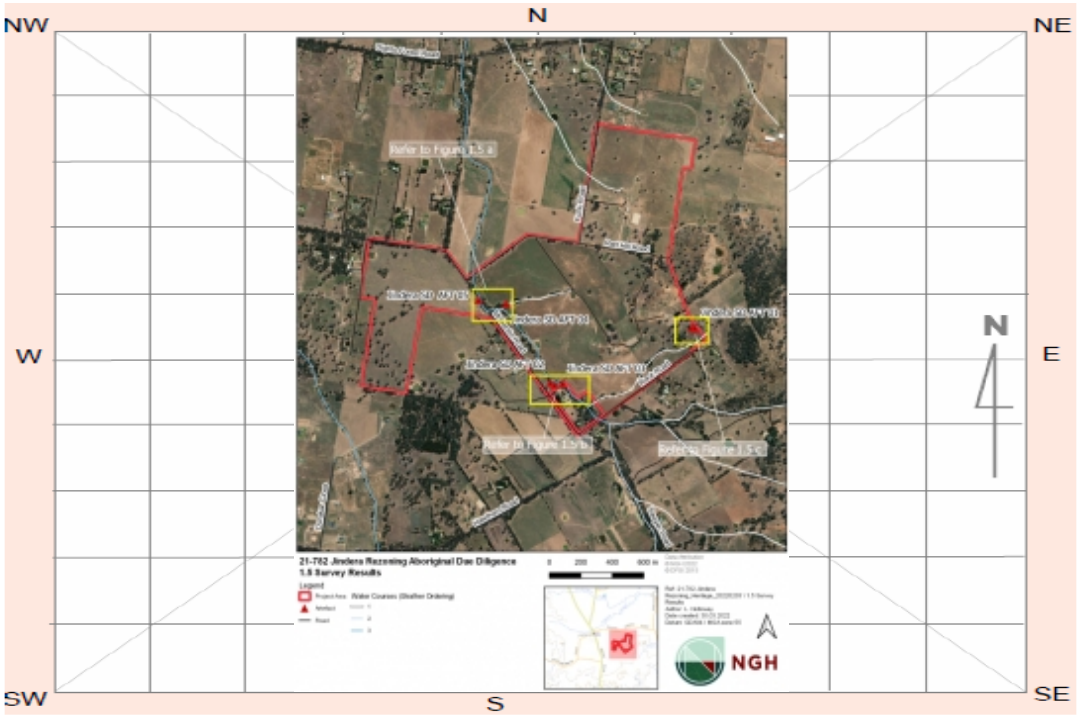
Description:

Features:	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
5.							

Description:

Other Site Info: Site is scattered in amongst a rock outcrop. Visibility was poor at the time of visit. It is expected that the site is larger than what was observed on the day.

Site plan



Site photographs

Description: View East

Description: View west

Description: Quartz artefact

Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender General Location

Why is this site restricted?:

Further information contact

Title **Surname** **First name**

Organisation:

Address:

Phone: **E-mail:**

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 55-6-0256 **Date recorded:** 31-03-2022

Site Location Information

Site name: Jindera SD AFT 02

Easting: 493336 **Northing:** 6019231 **Coordinates must be in GDA (MGA)**

Horizontal Accuracy (m): 5

Zone: 55 **Location method:** Non-Differential GPS

Recorder Information

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

Title	Surname	First name
Mr.	Barber	Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 **E-mail:** matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Plain **Land Use:** Farming Low Intensity

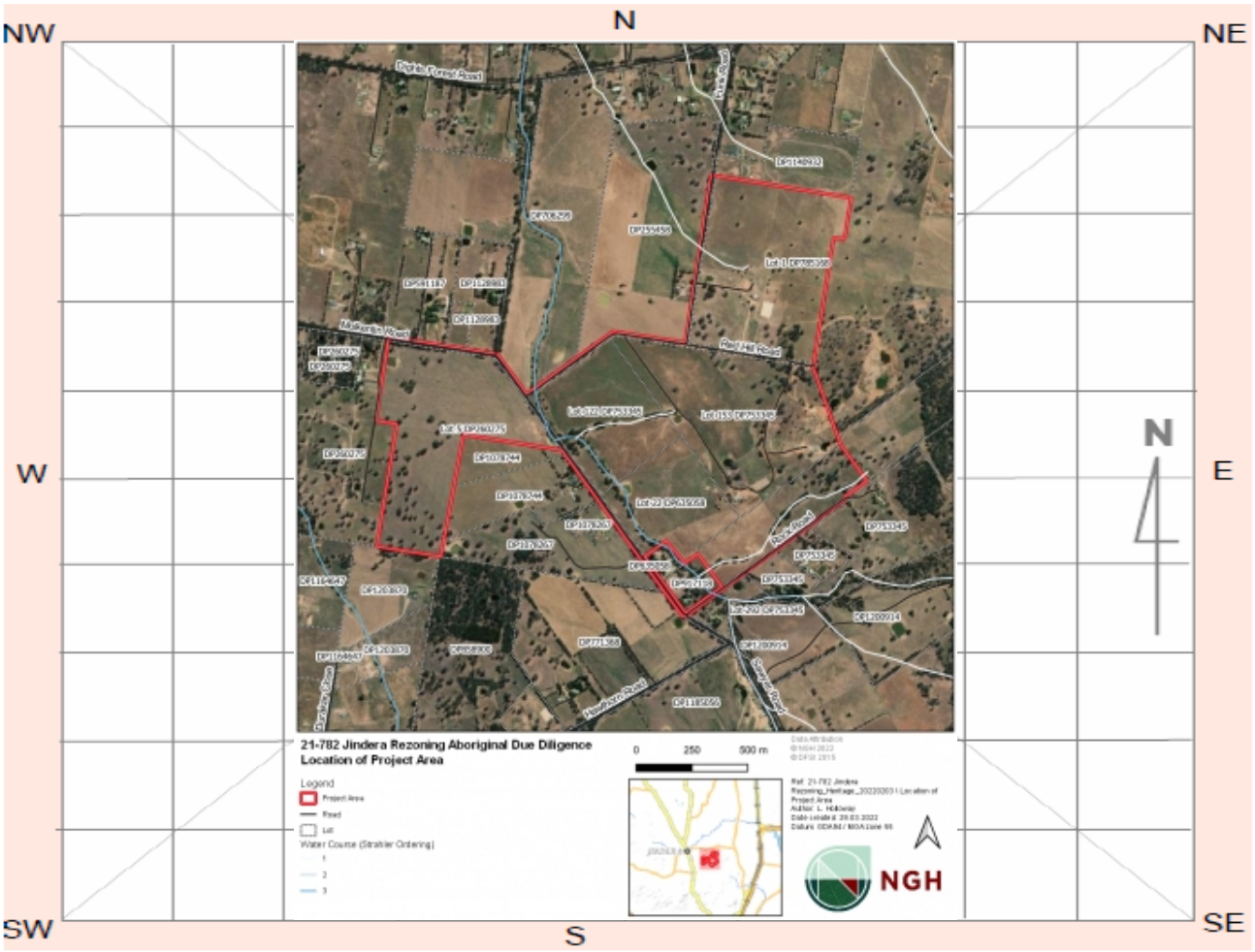
Land Form Unit: Terrace **Vegetation:** Isolated clumps of trees

Distance to Water (m): 0 **Primary Report:** NGH Aboriginal Heritage DD Jindera Residential Rezoning

How to get to the site: On private property to the east of Molkentin Road, Jindera

Other site information: Multiple artefacts eroding out of the creek bed and within the terrace landform. It is expected that the site is larger than what was observed on the day.

Site location map



Site contents information

open/closed site: Open

Site condition: Good

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
1.	Artefact	3	41	13				

Description:

Quartz artefact scatter along the unnamed drainage and an elevated terrace overlooking the unnamed drainage line paralleling Molkentin Rd. Multiple artefacts, including 2 in situ in the creek bed. Artefacts were all quartz and included 1 flaked tool, 1 flake and 1 flaked piece.

Features:

		Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
2.								

Description:

Features:	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
3.							

Description:

Features:	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
4.							

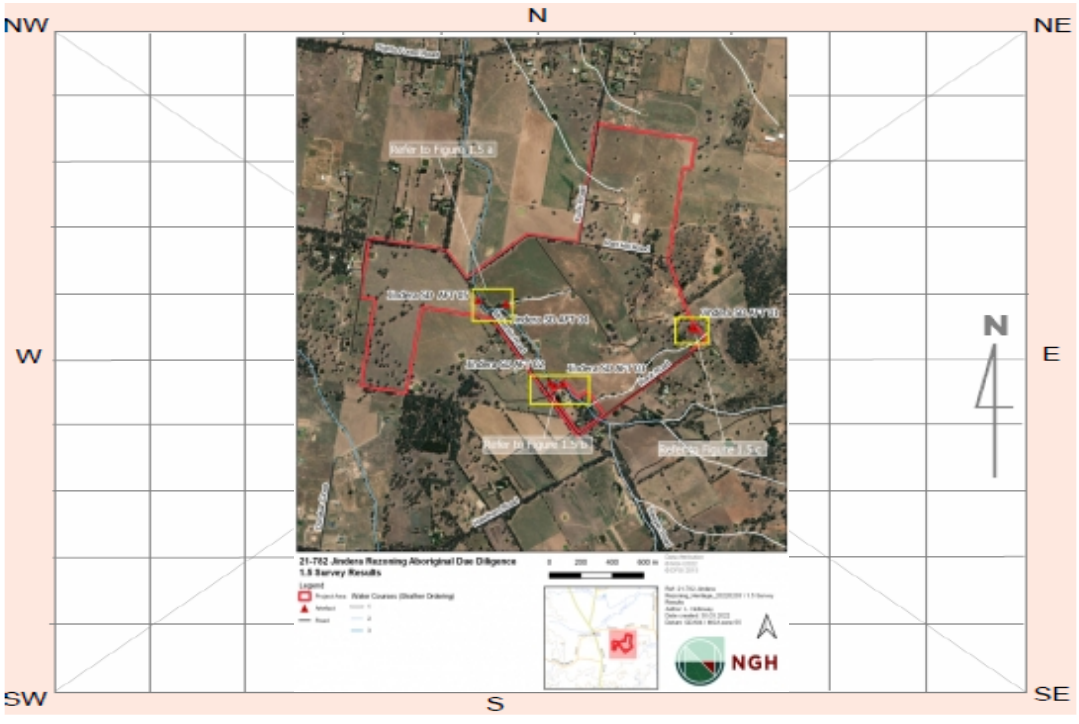
Description:

Features:	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
5.							

Description:

Other Site Info: Multiple artefacts eroding out of the creek bed and within the terrace landform. It is expected that the site is larger than what was observed on the day.

Site plan



Site photographs

Description: View east

Description: View south

Description: Quartz artefacts

Description: In situ artefacts

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender ☐ General ☐ Location ☐

Why is this site restricted?:

Further information contact

Title	Surname	First name

Organisation:

Address:

Phone: **E-mail:**

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 55-6-0257 **Date recorded:** 31-03-2022

Site Location Information

Site name: Jindera SD AFT 03

Easting: 493395 **Northing:** 6019233 **Coordinates must be in GDA (MGA)**

Horizontal Accuracy (m): 5

Zone: 55 **Location method:** Non-Differential GPS

Recorder Information

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

Title	Surname	First name
Mr.	Barber	Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 **E-mail:** matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Plain **Land Use:** Farming Low Intensity

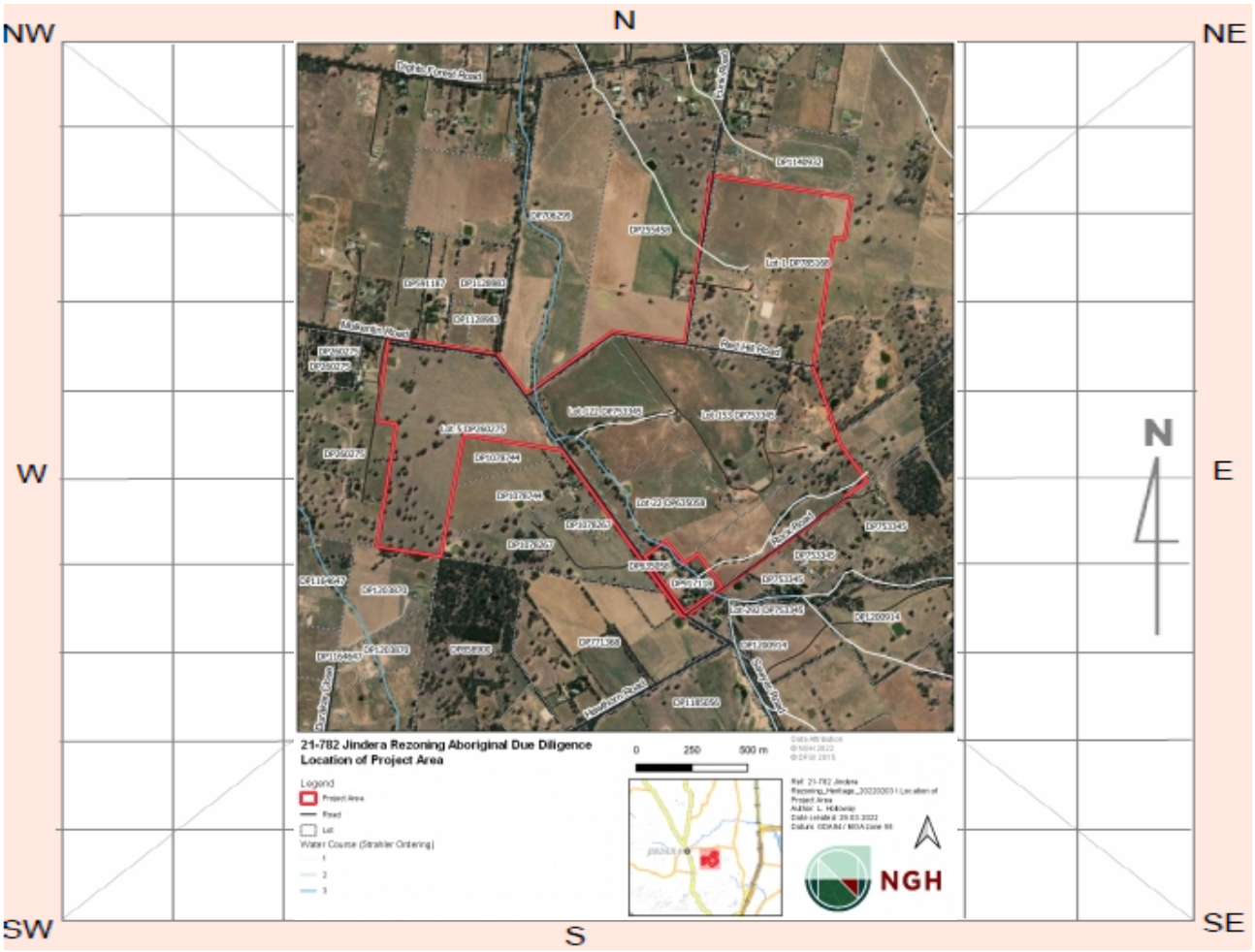
Land Form Unit: Terrace **Vegetation:** Isolated clumps of trees

Distance to Water (m): 0 **Primary Report:** Aboriginal Heritage DD Assessment Jindera Residential Rezoning

How to get to the site: On private property to the east of Molkentin Road, Jindera

Other site information: Multiple artefacts eroding out of the creek bed and within the terrace landform. It is expected that the site is much larger than what was observed on the day as visibility outside the eroding area was poor.

Site location map



Site contents information

open/closed site: Open

Site condition: Good

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
1. Artefact	5	9	5				

Description:

Quartz artefact scatter along the unnamed drainage and an elevated terrace overlooking the unnamed drainage line paralleling Molkentin Rd. Multiple artefacts included 1 flaked tool, 1 core and 3 flakes. Artefacts were eroding out of the creek bed and the elevated terrace landform.

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
2.							

Description:

Features:	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
3.							

Description:

Features:	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
4.							

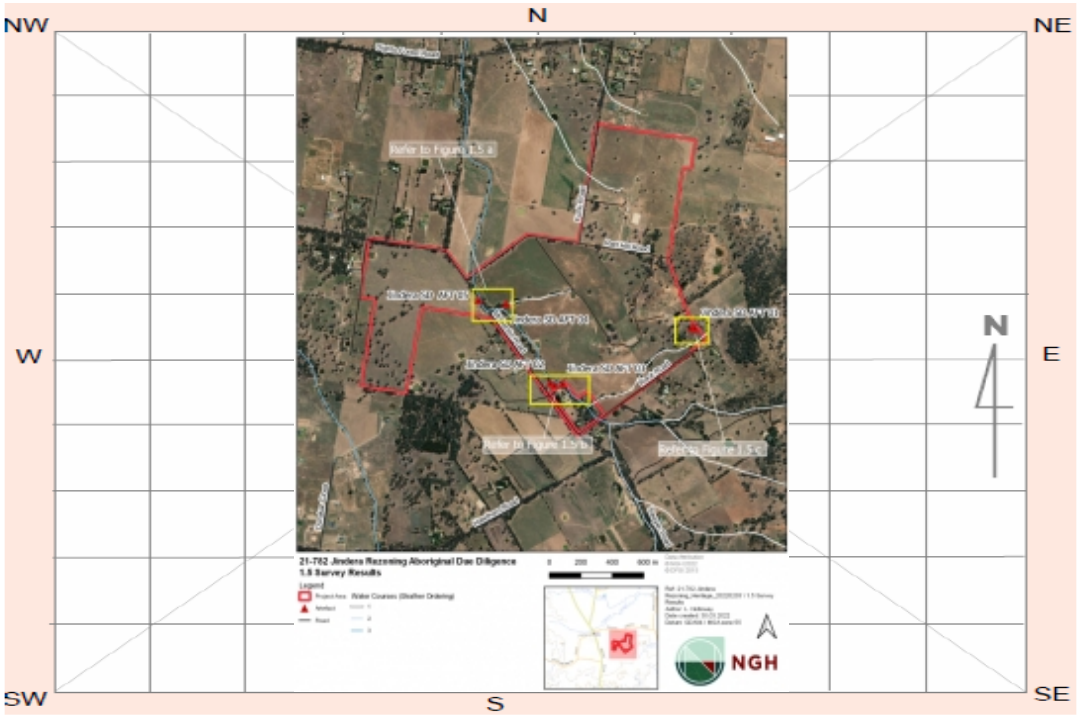
Description:

Features:	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
5.							

Description:

Other Site Info: Multiple artefacts eroding out of the creek bed and within the terrace landform. It is expected that the site is much larger than what was observed on the day as visibility outside the eroding area was poor.

Site plan



Site photographs

Description: View west

Description: View east

Description: Quartz artefacts

Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender General Location

Why is this site restricted?:

Further information contact

Title **Surname** **First name**

Organisation:

Address:

Phone: **E-mail:**

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 55-6-0258 **Date recorded:** 31-03-2022

Site Location Information

Site name: Jindera SD AFT 05

Easting: 492862 **Northing:** 6019763 **Coordinates must be in GDA (MGA)**

Horizontal Accuracy (m): 5

Zone: 55 **Location method:** Non-Differential GPS

Recorder Information

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

Title	Surname	First name
Mr.	Barber	Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 **E-mail:** matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Plain **Land Use:** Farming Low Intensity

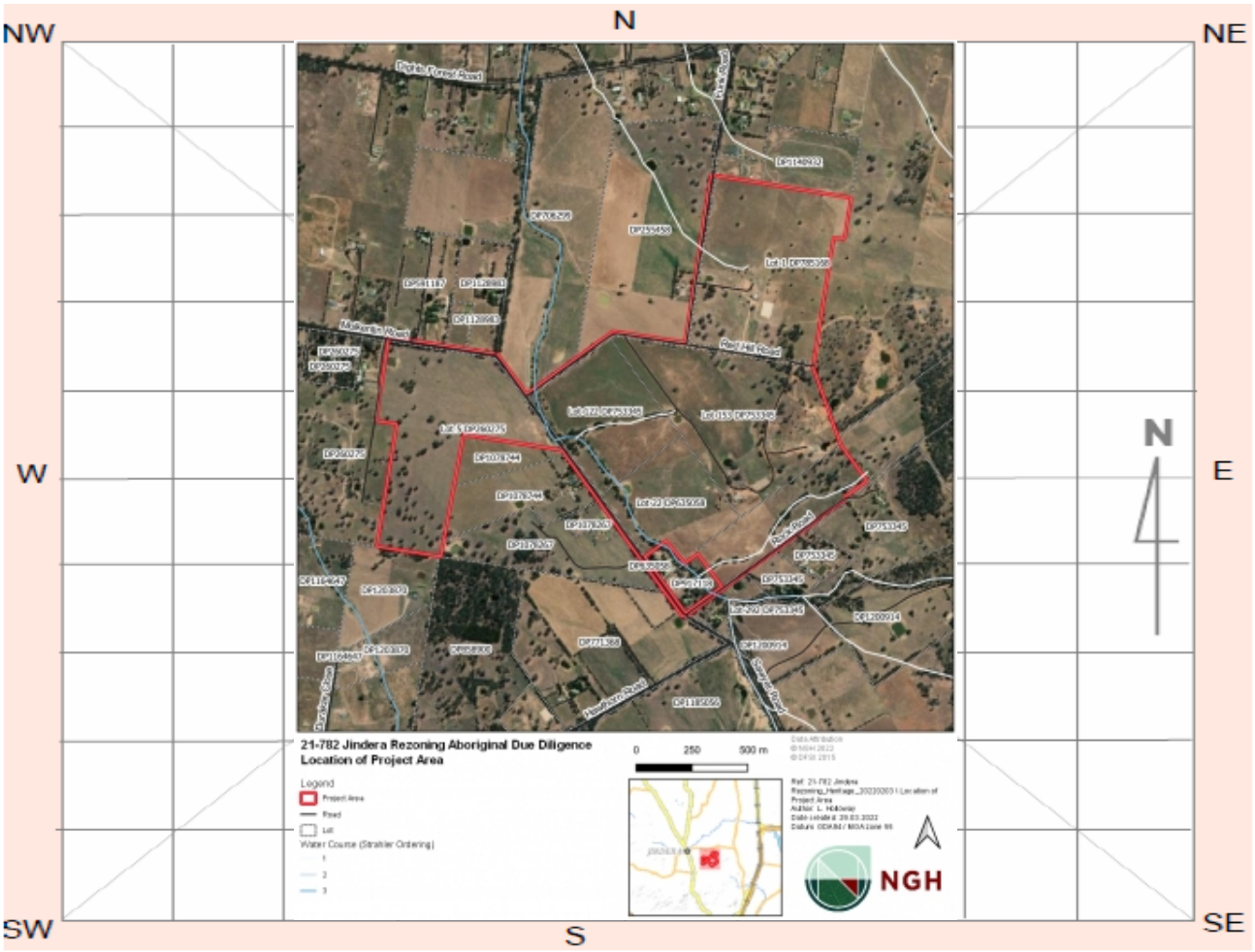
Land Form Unit: Terrace **Vegetation:** Isolated clumps of trees

Distance to Water (m): 0 **Primary Report:** NGH Aboriginal Heritage DD Jindera Residential Rezoning

How to get to the site: On private property to the east of Molkentin Road, Jindera

Other site information: It is expected that the site is much larger than what was observed on the day as visibility outside the exposure area was poor. It is believed that the artefacts located at this site have been damaged due to vehicles accessing the property from the gate.

Site location map



Site contents information

open/closed site: Open

Site condition: Good

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
1. Artefact	5	5	6				

Description:

Quartz artefact scatter at the gate on the west side of Molkentin Rd opposite the unnamed drainage and an elevated terrace paralleling the Rd. Multiple artefacts included 1 core 2 broken flakes and 2 flaked pieces. Artefacts were located in the exposed dirt near the gate.

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
2.							

Description:

Features:	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
3.							

Description:

Features:	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
4.							

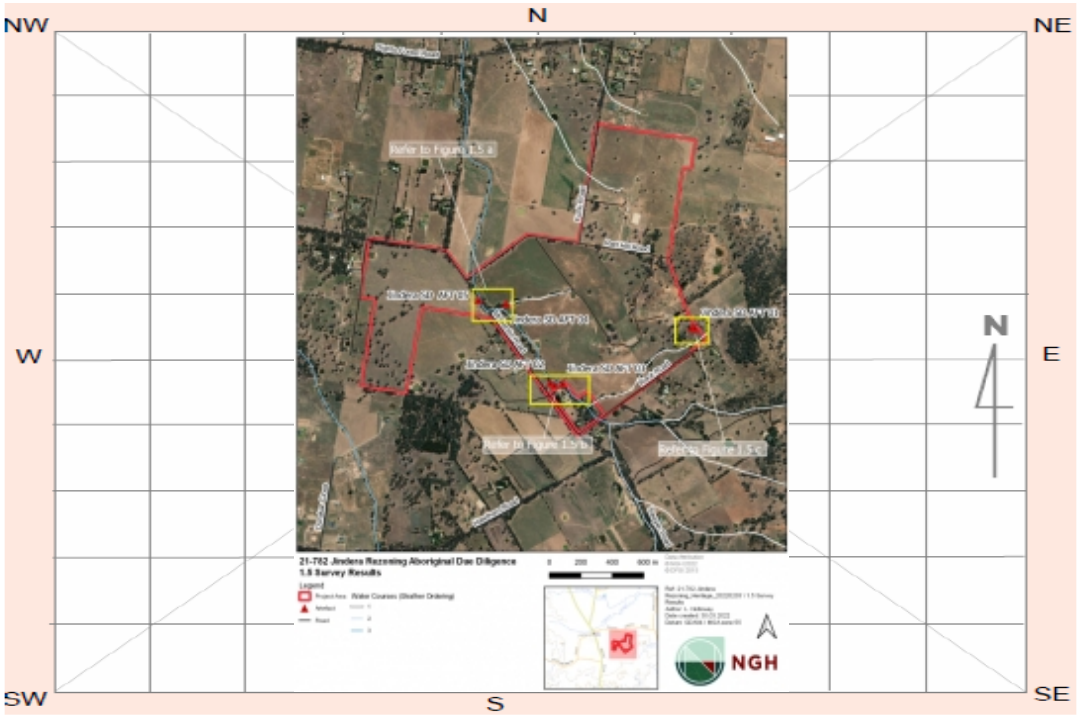
Description:

Features:	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
5.							

Description:

Other Site Info: It is expected that the site is much larger than what was observed on the day as visibility outside the exposure area was poor. It is believed that the artefacts located at this site have been damaged due to vehicles accessing the property from the gate.

Site plan



Site photographs

Description: View west

Description: View south

Description: Quartz artefacts

Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender ☐ General ☐ Location ☐

Why is this site restricted?:

Further information contact

Title **Surname** **First name**

Organisation:

Address:

Phone: **E-mail:**

Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville 2220 NSW

AHIMS site ID: 55-6-0259 **Date recorded:** 31-03-2022

Site Location Information

Site name: Jindera SD AFT 04

Easting: 493037 **Northing:** 6019737 **Coordinates must be in GDA (MGA)**

Horizontal Accuracy (m): 5

Zone: 55 **Location method:** Non-Differential GPS

Recorder Information

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

Title	Surname	First name
Mr.	Barber	Matthew

Organisation: 75

Address: Po Box 62 Fyshwick ACT 2609

Phone: 0407485018 **E-mail:** matthew.b@nghenvironmental.com.au

Site Context Information

Land Form Pattern: Plain **Land Use:** Farming Low Intensity

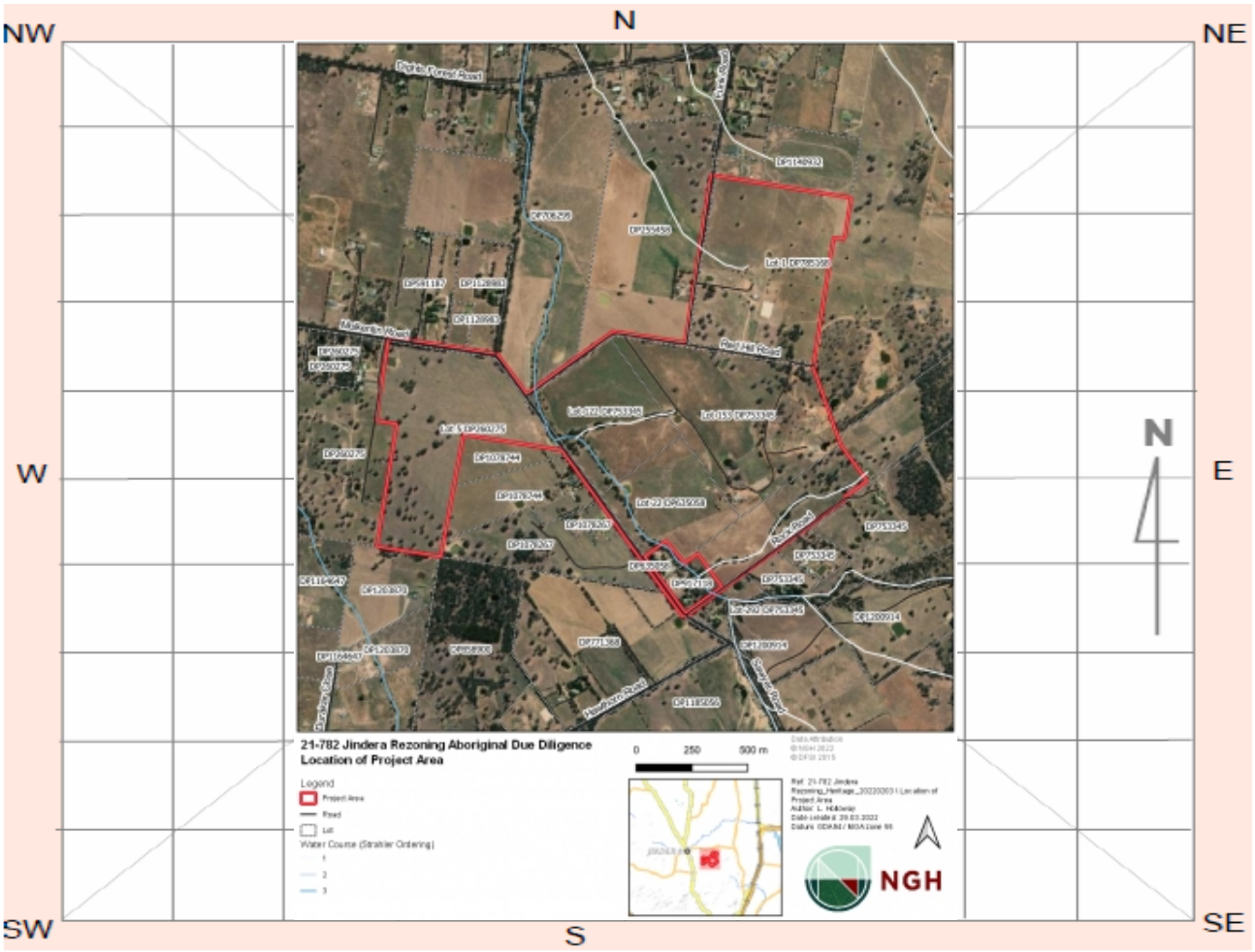
Land Form Unit: Terrace **Vegetation:** Isolated clumps of trees

Distance to Water (m): 0 **Primary Report:** Aboriginal Heritage DD Assessment Jindera Residential Rezoning

How to get to the site: On private property to the east of Molkentin Road, Jindera

Other site information: Multiple artefacts eroding out of the creek bed and within the terrace landform. It is expected that the site is much larger than what was observed on the day as visibility outside the eroding area was poor.

Site location map



Site contents information

open/closed site: Open

Site condition: Good

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
1. Artefact	3	16	10				

Description:

Quartz artefact scatter along the unnamed drainage and an elevated terrace overlooking the unnamed drainage line paralleling Molkentin Rd. Multiple artefacts included 1 flake and 2 distal fragments. Artefacts were eroding out of the creek bed and the elevated terrace landform.

Features:	Number of features	Length of feature(s) extent (m)	Width of feature (s) extent (m)	Scarred Trees: Scar Depth (cm)	Scarred Trees: Regrowth (cm)	Scarred Trees: Scar shape	Scarred Trees: Tree Species
2.							

Description:

Features:	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
3.							

Description:

Features:	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
4.							

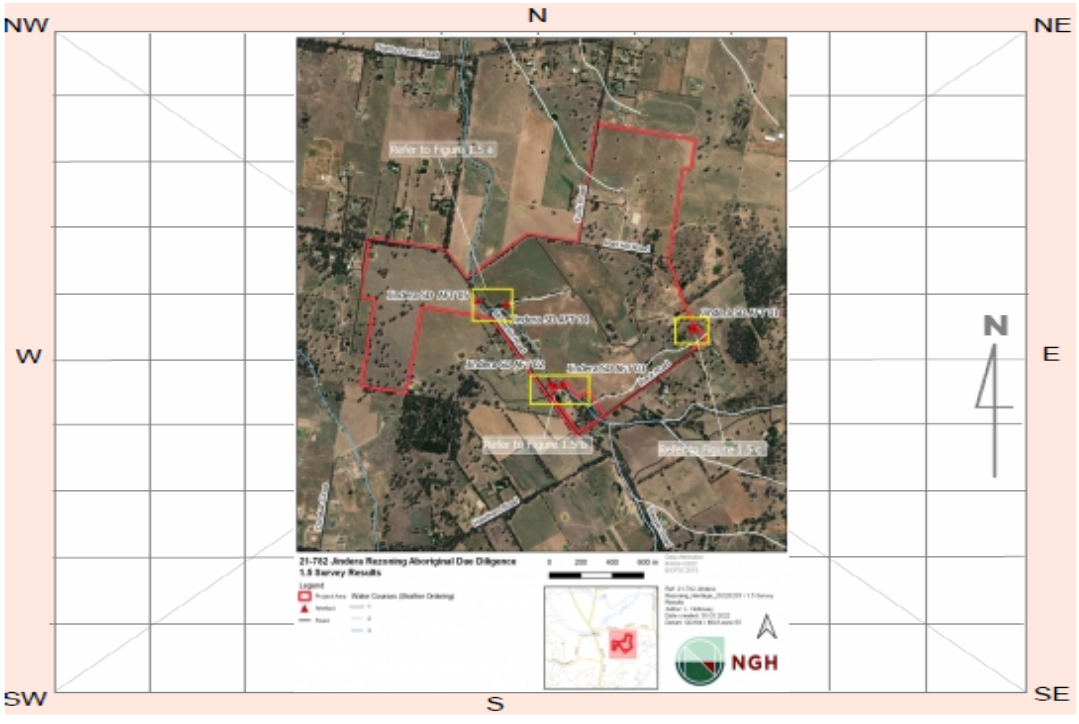
Description:

Features:	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
5.							

Description:

Other Site Info: Multiple artefacts eroding out of the creek bed and within the terrace landform. It is expected that the site is much larger than what was observed on the day as visibility outside the eroding area was poor.

Site plan



Site photographs

Description: View east

Description: View west

Description: Quartz flakes

Description:

Site restrictions

Do you want to Restrict this site?:

Restriction type: Gender General Location

Why is this site restricted?:

Further information contact

Title **Surname** **First name**

Organisation:

Address:

Phone: **E-mail:**

Appendix B Artefact analysis

Artefacts located during the site inspection

Site name	Type	Raw Material	Colour	Size Class
Jindera SF AFT 01	Distal Fragment	Quartz	White clear	<30mm
	Flake	Quartz	White	<40mm
	Broken Flake	Quartz	White clear	<20mm
	Flaked Piece	Quartz	White	<20mm
	Core	Quartz	White	<50mm
	Flaked Piece	Quartz	Clear crystal quartz	<30mm
	Broken Flake	Quartz	White with orange inclusions	<40mm
Jindera SF AFT 02	Flake tool	Quartz	Crystal white	<40mm
	Flaked Piece	Quartz	White	<20mm
	Flake	Quartz	White	<30mm
Jindera SF AFT 03	Flake	Quartz	White	<50mm
	Core	Quartz	White	<40mm
	Flake	Quartz	White	<30mm
	Flake	Quartz	White	<20mm
	Flake tool	Quartz	White	<30mm
Jindera SF AFT 04	Flake	Quartz	White	<30mm
	Distal Fragment	Quartz	White	<30mm
	Distal Fragment	Quartz	White	<30mm
Jindera SF AFT 05	Broken Flake	Quartz	White	<20mm
	Flaked Piece	Quartz	White crystal	<30mm
	Broken Flake	Quartz	White crystal	<30mm
	Flaked Piece	Quartz	White	<20mm
	Flaked Piece	Quartz	White	<40mm