



Hy-Tec Industries Pty Limited

ABN: 90 070 100 702

**Austen Quarry
Stage 2 Extension Project**

**Historical Heritage
Assessment**

Prepared by

Niche Environment and Heritage

September 2014

**Specialist Consultant Studies Compendium
Volume 2, Part 9**

This page has intentionally been left blank



Hy-Tec Industries Pty Limited

ABN: 90 070 100 702

Historical Heritage Assessment

Prepared for: R.W. Corkery & Co. Pty Limited
1st Floor, 12 Dangar Road
PO Box 239
BROOKLYN NSW 2083

Tel: (02) 9985 8511
Fax: (02) 6361 3622
Email: brooklyn@rwcorkery.com

On behalf of: Hy-Tec Industries Pty Limited
Unit 4, Gateway Business Park
63-79 Parramatta Road
SILVERWATER NSW 2128

Tel: (02) 9647 2866
Fax: (02) 9647 2924
Email: darryl.thiedeke@hy-tec.com.au

Prepared by: Niche Environment and Heritage
PO Box 3104
UMINA BEACH NSW 2257
SC Address

Tel: (02) 4307 8183
Fax: (02) 4017 0071
Email: rharrington@niche-eh.com

Ref No: 652/19

September 2014

This Copyright is included for the protection of this document

COPYRIGHT

© Niche Environment and Heritage 2014
and
© Hy-Tec Industries Pty Limited 2014

All intellectual property and copyright reserved.

Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, 1968, no part of this report may be reproduced, transmitted, stored in a retrieval system or adapted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without written permission. Enquiries should be addressed to Ground Doctor Pty Ltd.

CONTENTS

	Page
SUMMARY	9-5
1. INTRODUCTION.....	9-6
2. LOCATION.....	9-6
3. SCOPE.....	9-8
4. PROPOSED WORKS	9-8
4.1 OVERVIEW	9-8
4.2 PROPOSED STAGE 2 EXTRACTION AREA	9-8
4.3 PROPOSED STAGE 2 OVERBURDEN EMPLACEMENT	9-10
5. REGULATORY AND ASSESSMENT FRAMEWORK.....	9-10
5.1 THE NSW ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979	9-10
5.2 THE NSW HERITAGE ACT, 1977.....	9-10
6. REGISTER SEARCHES.....	9-11
6.1 NATIONAL HERITAGE REGISTERS.....	9-11
6.2 STATE HERITAGE REGISTERS	9-12
6.2.1 NSW State Heritage Register.....	9-12
6.2.2 State Heritage and Conservation (S170) Registers	9-12
6.3 LOCAL HERITAGE SCHEDULES.....	9-12
6.3.1 Lithgow City Council Local Environmental Plan (LEP).....	9-12
7. LANDSCAPE CONTEXT.....	9-13
7.1 VEGETATION, SOILS, TOPOGRAPHY AND HYDROLOGY.....	9-13
7.2 APPLICATION TO THE ASSESSMENT	9-13
8. SITE HISTORY	9-15
8.1 EUROPEAN EXPLORATION	9-15
8.2 CROSSING THE MOUNTAINS.....	9-16
8.3 SETTLEMENT IN THE HARTLEY REGION AND WITHIN THE SUBJECT AREA	9-17
8.4 SUMMARY.....	9-27
9. RESULTS OF FIELD SURVEY	9-27
9.1 METHODOLOGY.....	9-27
9.2 RESULTS.....	9-29
10. SIGNIFICANCE ASSESSMENT.....	9-30
10.1 STATEMENT OF SIGNIFICANCE	9-30

CONTENTS

	Page
11. IMPACT ASSESSMENT	9-31
12. CONCLUSIONS AND RECOMMENDATIONS	9-31
13. REFERENCES	9-31

FIGURES

Figure 1: Location of the subject area within a regional context	9-7
Figure 2: Location of the subject area showing the proposed impact area.....	9-9
Figure 3: Soils within the Stage 2 Site.....	9-14
Figure 4: John Maxwells land Grant of 2450 acres.....	9-18
Figure 5: Parish of Lowther Country of Westmoreland. 1893. Showing land owned by John Maxwell	9-18
Figure 6: Parish of Hartley Country of Cook. 1914. Showing land owned by John Maxwell.	9-19
Figure 7: Plan of a portion of land applied for to purchase by John Maxwell.....	9-20
Figure 8: “Plan of a Road from Hartley to Bullock Flats via Bingo”. 1867	9-21
Figure 9: “Plan of the Road from Cox’s River to Hartley and Oberon Road” showing John Maxwell’s 2460 acres, 1880.....	9-23
Figure 10: Parish of Lowther County of Westmoreland. 1940; Subject area is within the Hartley and District Wildlife Refuge No 48	9-25
Figure 11: Part of Liddleton Estate part of Application 9651, 1896.....	9-26
Figure 12: Survey coverage, Proposed Stage 2 Extraction and Overburden Emplacement Areas ..	9-28

PLATES

Plate 1. Extraction Area showing terrain (Niche, 2013)	9-29
Plate 2. Extraction Area showing high ground surface visibility (Niche, 2013)	9-29
Plate 3. Overburden Area, looking towards existing quarry; note poor ground surface visibility (Niche, 2013).....	9-29
Plate 4. Overburden Area, showing terrain, view looking west (Niche, 2013)	9-29

SUMMARY

This report presents the results of an historical (non-Aboriginal) heritage assessment of a proposed extension to the Austen Quarry, located approximately 3.5km south-southwest of the village of Hartley, NSW.

The aim of the assessment was to determine whether any historical heritage items occur within or in close proximity to the extension areas. The assessment involved a consideration of background and contextual information, detailed historical research and a field survey.

Historical research found that the subject area is located within an historical estate known as 'Liddleton', granted to John Maxwell in May 1832. Despite extensive development of the estate, no known buildings were erected within the subject area. Liddleton became part of a wildlife refuge in July 1978 before being purchased by the Hartley Pastoral Company and later being developed as a quarry. There are currently no heritage items listed on local, state or national heritage registers within the subject area.

The field survey confirmed an absence of historical heritage items within the subject area. No areas of archaeological potential were identified. The subject area is therefore not considered to be significant for its historical heritage values and the proposed quarry extension will have no impact on any significant heritage items or their associated values.

No further assessment of historical heritage is required prior to the commencement of extraction within the proposed extension areas at Austen Quarry.

1. INTRODUCTION

Niche Environment and Heritage Pty Ltd (Niche) was commissioned by RW Corkery & Co. Pty Ltd (Corkerys), on behalf of Hy-Tec Industries Pty Limited (Hy-Tec), to produce to prepare an historical (non-Aboriginal) heritage assessment for a proposed extension of Austen Quarry approximately 3.5 km south-southwest of the village of Hartley in NSW. The proposed (Stage 2) quarry extension would increase the quarry extraction area by approximately 16 ha and the overburden emplacement by approximately 6 ha.

It is understood that the project will be classified as a State Significant Development (SSD) (in accordance with Schedule 1(7) of the State Environmental Planning Policy (SEPP) State and Regional Development (2011). As SSD, an Environmental Impact Statement (EIS) is required.

Director General’s Requirements (DGRs) for the EIS were issued on 3 September 2013, including the requirement of the NSW Office of Environment and Heritage. Supplementary DGR’s, including the assessment requirements of the Commonwealth Department of the Environment were received on 29 November 2013. It is noted that the scope for this Historical Heritage Assessment was developed prior to the issue of the DGRs and therefore, to ensure no departure from best practice standards, this assessment has been guided by the *NSW Heritage Manual* (Department of Urban Affairs, 1996) and ‘*Assessing Significance for Historical Archaeological Site and Relics*’ (Department of Planning, 2009) and provides advice on obligations for managing heritage under the *NSW Heritage Act 1977* and the *NSW Environmental Planning and Assessment Act 1979*.

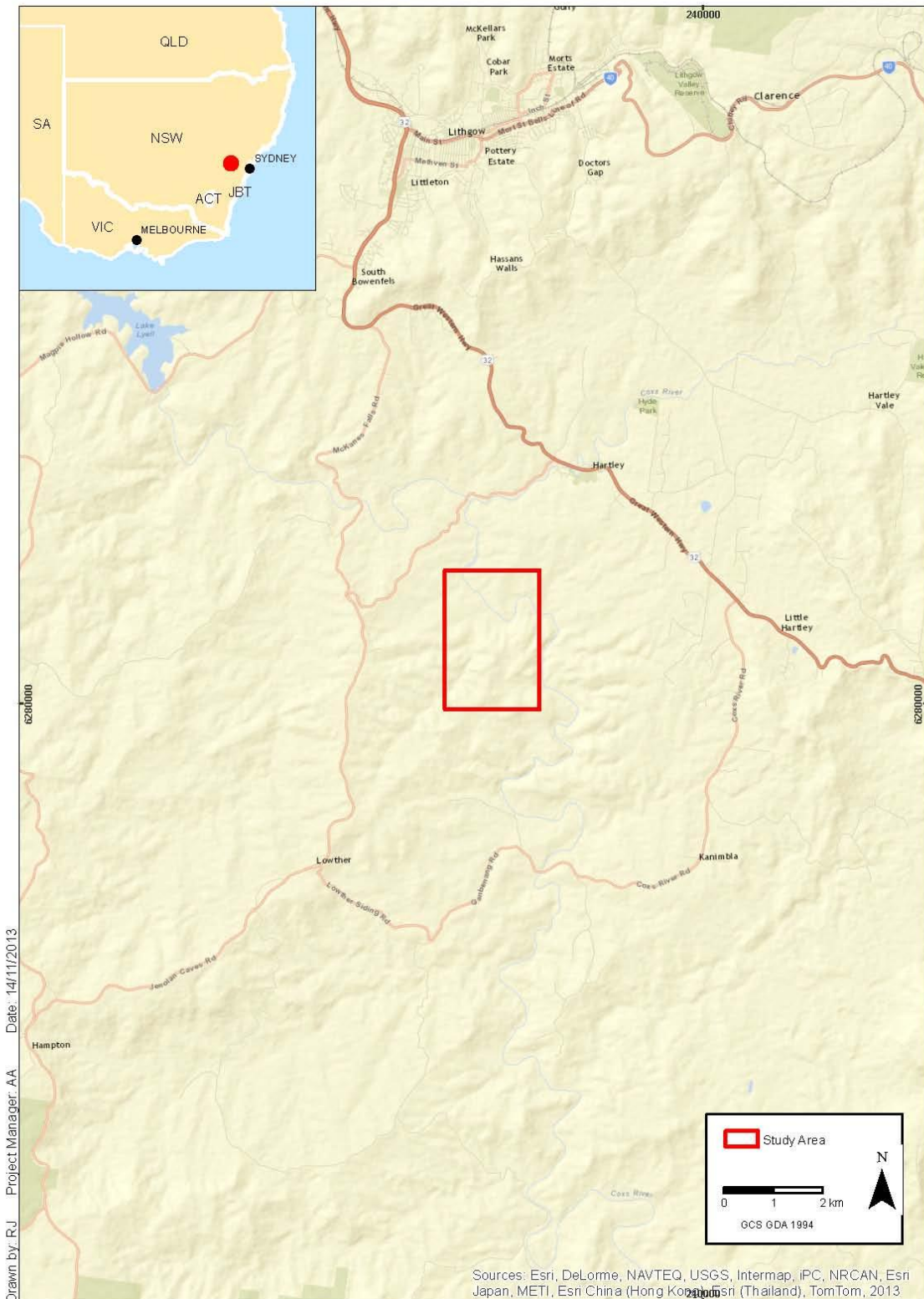
Director Generals Requirement (DGR)	Outcome of Requirement
A historic heritage assessment (including archaeology) including a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items and outline any proposed mitigation and management measures.	There are no historical heritage places within the project area. No statements of heritage impact are required. Measures have been identified to ensure any unexpected finds are managed in accordance with regulatory requirements.

This report has been prepared by Fiona Leslie (Senior Archaeologist, Niche), Amanda Atkinson and Lydia Sivaraman (Archaeologists, Niche) and has been reviewed by Cameron Harvey (Heritage Team Leader, Niche).

2. LOCATION

Austen Quarry (‘the quarry’) is operated by Hy-Tec and is located on rural land which is leased by the Applicant from the Hartley Pastoral Corporation Pty Ltd (HPC) (the ‘subject area’). The subject area is situated approximately 3.5 km south-southwest of the village of Hartley and 10 km south of Lithgow in the Lithgow City Council Local Government Area (LGA) (**Figure 1**). Coxs River adjoins the processing operations of the quarry to the north, and lies approximately 600m from the quarry on the eastern boundary.

Figure 1: Location of the subject area within a regional context (Source: Niche, 2013)



Regional Project Location
 1538 Austen Quarry Heritage Assessment

FIGURE 1

3. SCOPE

The aims of this assessment were to:

- Identify whether historical heritage items occur, or are likely to occur, in the subject area and assess their likely heritage significance; and
- Provide recommendations to minimise and/or mitigate the impact of the proposed development on significant heritage items.

This assessment included the following tasks.

- A desktop review of previous studies and reports relevant to the subject area.
- Historical research, including a review of archival materials at the Mitchell Library, Crown Plans held by NSW Land and Property Information Section, and the National Library of Australia's TROVE digital archives.
- A search of the NSW State Heritage Register (SHR), the NSW State Heritage Inventory (SHI), Local Environmental Plan Heritage Schedules, the World Heritage List, the National Heritage List, the Commonwealth Heritage List and the Register of the National Estate.
- Field survey of the subject area.
- Documentation of the findings.

4. PROPOSED WORKS

4.1 OVERVIEW

The quarry is currently operating under Development Consent No.103/94 (DA 103/94), which approves the despatch of up to 1.1 million tonnes of rhyolite products per year until March 2020.

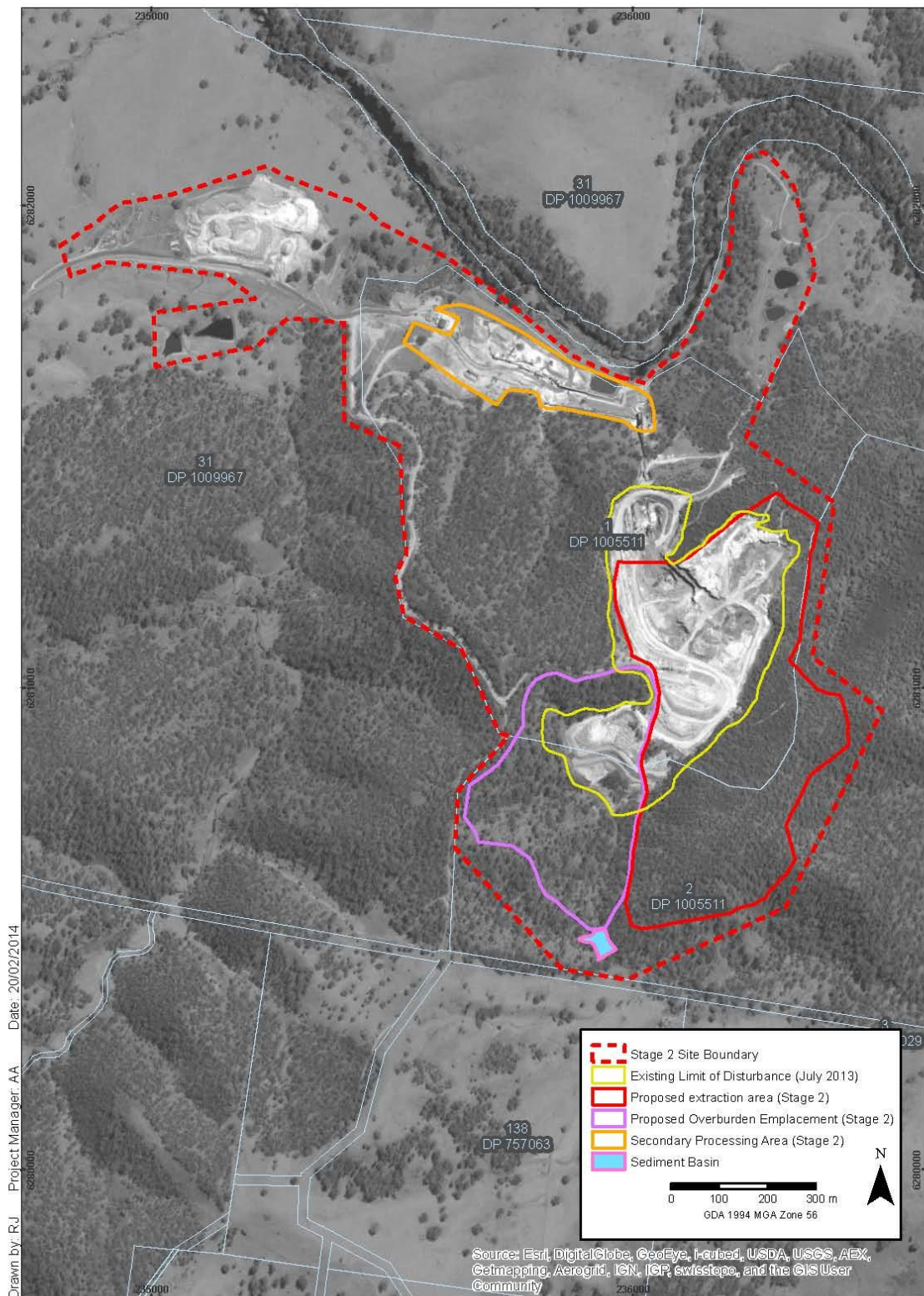
Hy-Tec proposes to extend the extraction area and overburden emplacement of the quarry in order to extend the operational life of the quarry (until 2050).

The Austen Quarry Stage 2 Extension Project ('the Proposal') covers an area of approximately 123ha. The sub-sections below provide descriptions of the relevant component areas and activities for the Project (**Figure 2**).

4.2 PROPOSED STAGE 2 EXTRACTION AREA

The proposed Stage 2 extraction area would incorporate a lateral extension and deepening of the existing Stage 1 extraction area along an adjacent southwest-northwest trending ridge. The northern side of the ridge within in the existing Stage 1 extraction area would remain as a visual barrier to views from the north. The area of the extension covers approximately 16.1 ha and lies immediately to the southeast and east of the Stage 1 extraction area. The combined area of the Stage 1 and Stage 2 extraction areas would be 28.2ha.

**Figure 2: Location of the subject area showing the proposed impact area
 (Source: Niche, 2013 and Corkerys 2014)**



Site Map
 1538 Austen Quarry Heritage Assessment

FIGURE 2

4.3 PROPOSED STAGE 2 OVERBURDEN EMPLACEMENT

The proposed overburden emplacement would laterally extend (6.7 ha) and increase the elevation of the existing Stage 1 overburden emplacement. In total, the overburden emplacement would cover approximately 13.5 ha. The Stage 2 overburden emplacement would continue to in-fill the small valley to the southwest of the Stage 2 extraction area.

5. REGULATORY AND ASSESSMENT FRAMEWORK

5.1 THE NSW ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979

The NSW *Environmental Planning and Assessment Act* 1979 (EP&A Act) establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process and requires that environmental impacts are considered prior to land development; this includes impacts on heritage items and places. The Act also requires that local governments prepare planning instruments [such as Local Environmental Plans] in accordance with the principles of the legislation to provide guidance on the level of environmental assessment required.

Under Part 4, Division 4.1 of the EP&A Act a specific assessment system has been created to consider projects classed as State Significant Development (SSD). A range of development types such as quarries and manufacturing plants as well as warehousing, waste, energy, tourist, education and hospital facilities are considered to be SSD if they are over a certain size or located in a sensitive environmental area. The Minister for Planning and Infrastructure is the consent authority for SSDs and, following the preparation of documentation supporting an application for DGR's, these are normally issued outlining the requirements for detailed environmental assessment in accordance with the relevant State Environmental Planning Policy.

This proposal is classified as an SSD and, as such, an Environmental Impact Statement (EIS) is required to support the application to DP&I.

The DGR's for the project were issued on 3 September 2013. The requirement was as follows:

A historic heritage assessment (including archaeology) including a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items and outline any proposed mitigation and management measures.

This report has been prepared to satisfy this requirement.

5.2 THE NSW HERITAGE ACT, 1977

The NSW *Heritage Act* 1977 (the Act) is a statutory tool designed to conserve environmental heritage in NSW. It is used to regulate development impacts on the state's historical heritage assets. The Act defines a heritage item as 'a place, building, work, relic, moveable object or precinct'.

To assist management of the state's heritage assets, the Act distinguishes between items of Local and State heritage significance.

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

'State heritage significance', in relation to a place, building, work, relic, moveable object or precinct means significance to the State in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item;

To assist with the assessment of the environmental heritage of NSW under the Act, the *NSW Heritage Manual* (1996) provides Heritage Council endorsed guidelines which explain the three steps to manage heritage items in the NSW context. These steps are:

1. Investigate significance;
2. Assess significance; and
3. Manage significance.

The steps apply to all types of heritage, including built, archaeological and landscape places. They apply to any level of significance assessment and are relevant to all projects subject to the EP&A Act, including SSDs.

6. REGISTER SEARCHES

6.1 NATIONAL HERITAGE REGISTERS

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) establishes two registers for listing exceptional natural and cultural places that contribute to Australia's national identity – the National Heritage List (NHL) and the Commonwealth Heritage List (CHL).

The NHL lists places of outstanding heritage significance to Australia. It includes natural, historic and Indigenous places. NHL listed places are protected by Australian Government laws and special agreements with state and territory governments and with Indigenous and private owners. The EPBC Act requires that approval be obtained before any action takes place that could have a significant impact on the national heritage values of a NHL place.

The CHL lists natural, Indigenous and historic heritage places which are either entirely within a Commonwealth area, or outside the Australian jurisdiction and owned or leased by the Commonwealth or a Commonwealth Authority; and which the Minister is satisfied have one or more Commonwealth Heritage values.

The NHL and CHL are searchable via the Australian Heritage Database (AHD) (<http://www.environment.gov.au/heritage/ahdb/>). The AHD contains information about more than 20,000 natural, historic and Indigenous places, including places:

- in the World Heritage List (WHL);
- in the NHL and CHL;
- in the Register of the National Estate (RNE);
- in the List of Overseas Places of Historic Significance to Australia; and
- under consideration, or that may have been considered for, any one of these lists.

There are no management constraints associated with listing on the RNE unless the listed place is owned by a Commonwealth agency.

- A search of the AHD was conducted on 3 June 2013. No items were identified within or adjacent to the subject area.

6.2 STATE HERITAGE REGISTERS

6.2.1 NSW State Heritage Register

The *State Heritage Register* (SHR) lists items that have been assessed as being of State heritage significance to New South Wales. Items appearing on the SHR are granted protection under S.60 of the *Heritage Act, 1977*.

- A search of the SHR was undertaken on 3 June 2013. No heritage items are listed within, or adjacent to, the subject area.

6.2.2 State Heritage and Conservation (S170) Registers

S.170 of the Act requires that State Government Agencies establish and maintain a Heritage Conservation Register for heritage items located on land under their control or ownership. Items listed on a S.170 Register are listed on the State Heritage Inventory (SHI) and bound by the regulations of the Act.

- A search of the SHI was undertaken on 3 June 2013. No heritage items were listed within, or adjacent to, the subject area.

6.3 LOCAL HERITAGE SCHEDULES

6.3.1 Lithgow City Council Local Environmental Plan (LEP)

Each Local Government Area (LGA) is required to create and maintain an LEP that identifies and conserves Aboriginal and Historic heritage items. These items are protected under the *EP&A Act*.

- A search of the Lithgow City Council LEP (1994; draft 2013) was undertaken on 3 June 2013. No heritage items listed on the LEP are located within, or adjacent to, the subject area.

7. LANDSCAPE CONTEXT

7.1 VEGETATION, SOILS, TOPOGRAPHY AND HYDROLOGY

The subject area is comprised of intact woodland located within the Mount Walker Colluvial landscape (**Figure 3**). This soil landscape is associated with steep to very steep hills with narrow rounded crests on Lambie Group metasediments. Slopes are generally greater than 25%, with local relief between 40 m – 200 m. Soils are shallow (<50 cm), well-drained stony Lithosols and Yellow Earths on crests, with moderately deep to deep (80 cm – 200 cm), moderately well drained Red Earths, Yellow Earths and occasional Yellow Podzolic Soils, Leached Loams and Red Podzolic Soils on steep side slopes. Moderately deep to deep (>130 cm) imperfectly drained Soloths/Yellow Podzolic Soils are generally found on lower slopes near drainage lines (King 1994:65).

The geology of the subject area is dominated by igneous (granite, micro-granite, diorite and rhyolite) and metamorphic (quartz hornfels) rock types. Within the subject area, rhyolite is noted to a depth of 80 m. This differs from the typical geology of the Blue Mountains, which is dominated by Triassic sandstones associated with the Narrabeen group and Permians of the Berry Formation (Mills and Wilkinson 1993).

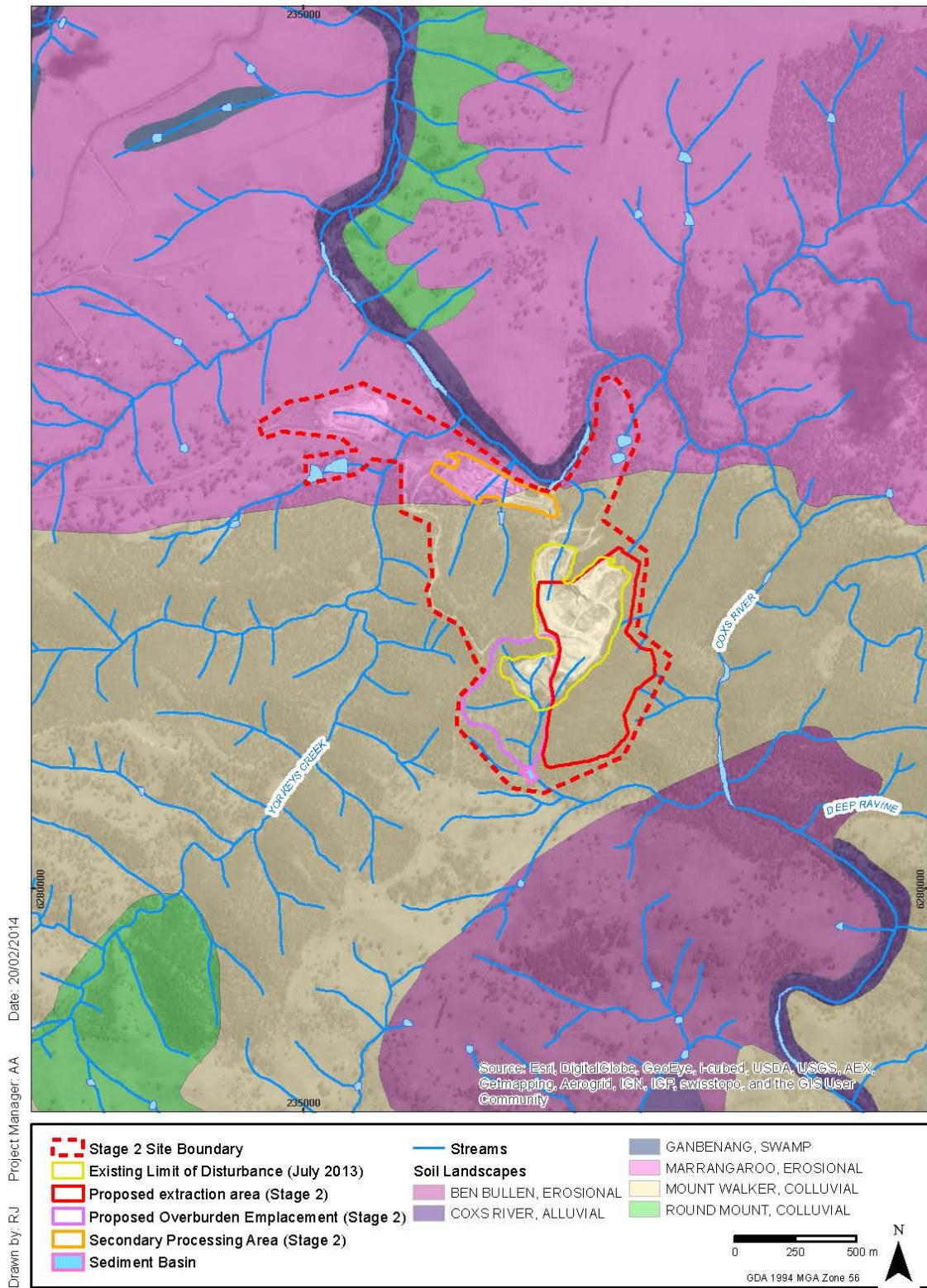
Vegetation within the subject area includes partially cleared open-woodland communities including scribbly gum (*Eucalyptus rossii*), brittle gum (*Eucalyptus mannifera* ssp. *Mannifera*), and red stringybark (*Eucalyptus macrorhyncha* ssp. *macrorhyncha*) generally on upper slopes and more exposed sites and broad-leaved peppermint (*Eucalyptus dives*), apple box (*Eucalyptus bridgesiana*) and yellow box (*Eucalyptus melliodora*) on less exposed lower slopes. Common understory species include blackthorn (*Bursaria spinosa*), broad-leaf hickory (*Acacia falciformis*), guinea flower (*Hibbertia* ssp.), narrow-leaved geebung (*Persoonia linearis*), peach heath (*Lissanthe strigosa*) and prickly starwort (*Stellaria pungens*) (Keith and Benson 1988). Small areas of Mallee Heath Woodland are found on the ridge tops surrounding the Coxs River. These are characterised by a low open woodland or tall shrub land. Sparsely distributed species of Mallee Eucalypts dominate here including scribbly gum (*Eucalyptus rossii*), and narrow leaved mountain mallee (*Eucalyptus apiculata*). Tall shrubs found in these areas include geebung (*Persoonia linearis*) and banksia and species of the Acacia and Casuarina (Brekwooldt 1984: 8).

The majority of open woodland/forest complex has been modified in some way by people. Much woodland would have been cleared for stock grazing or deliberate tree removal for firewood. Such modifications would have occurred initially along the more accessible land such as the river flats and lower slopes. If further land clearance was required for stock grazing or for the timber, land clearance would then have been extended to the mid slopes. The ridge tops surrounding the Coxs River would have been less likely to be cleared due to the difficulty of access of the steep terrain. The rocky outcrops of Rhyolite within the subject area and the shortage of grasses in the understory of the Mallee Heath Woodland would have further made the ridge tops undesirable pastoral lands.

7.2 APPLICATION TO THE ASSESSMENT

Environmental factors such as topography, climate, soils, vegetation, and access to water strongly determine the range of cultural activities undertaken within a given area. In turn this influences the types of archaeological or built heritage sites that may be found in a particular area.

Figure 3: Soils within the Stage 2 Site (Source: Niche, 2013)



Drawn by: RJ
 Project Manager: AA
 Date: 20/02/2014

Soil Landscapes

1538 Austen Quarry Heritage Assessment

FIGURE 3

As the landscape is dominated by steep terrain and characterised by shallow soils, there is low potential for sub-surface historical archaeological deposits. Those areas retaining intact vegetation communities have had little or no human interference and therefore indicate a low potential for historical heritage. Areas most expected to retain intact vegetation communities are the upper slopes and ridge tops due to their steep rocky terrain and their unsuitability as pastoral lands.

Areas that have been subjected to historical land clearing may indicate the subsequent use of such areas for pastoral uses. This may indicate the presence of abandoned structures, culturally modified landforms (i.e. remnant ploughed fields), and infrastructure associated with rural development, including but not limited to old fence lines, roads, tracks, telegraph, telephone or abandoned power lines. Cleared areas are most likely to be found on the River flats and lower slopes where the land is most accessible and water resources are nearby.

8. SITE HISTORY

8.1 EUROPEAN EXPLORATION

The Blue Mountains formed a natural barrier to the expansion of the settlement in Sydney to the west. The first Europeans to utilise the area were explorers, trying to discover routes up gullies and over the steep cliffs, and a few escaped convicts who hid amongst shelters in the area. Kangaroo hunters also set up temporary camps in the area, particularly around Glenbrook Lagoon where kangaroo populations were guaranteed. Notable attempts to cross the sandstone barrier and explore the region include Dawes and Johnston in 1789, Tench and Dawes in the Warragamba area in 1790, Peterson's journey through the Grose Valley in 1793, Hacking's attempt to cross the mountains in 1794, followed by George Bass in 1796. Francis Barallier and botanist, George Caley also made several attempts. Following Caley's difficult journey, exploration activity ceased until after 1805. Governor King became convinced that the Blue Mountains were "so difficult as to be not worthwhile" (King in Karskens 1988:6).

Between 1810 and 1820, however, drought, insect plagues and the deterioration of native grasses on the Cumberland Plain led to a desperate need for pasturage to graze cattle (Karskens 1988:6). In response, wealthy graziers, Gregory Blaxland, Lieutenant William Lawson and 'young' William Charles Wentworth mounted an expedition to cross the Blue Mountains to find suitable grazing land. Unlike previous journeys, the explorers kept to the heights, followed the ridges rather than the valleys. The new method was a success. On May 11, 1813 the three explorers, four other men, four horses and five dogs crossed the Nepean River at Emu Ford and ascended the main ridge between the Grose and Cox's Rivers (now the route of the Great Western Highway between Glenbrook and Mount Victoria). On May 29 they reached Mount York and began their descent into Kanimbla (Hartley) Valley where they found suitable grazing land. In the valley the explorers observed "*forests all around them, sufficient to feed the stock of the colony, in their opinions, for the next thirty years*" (Aston 1988:1). After climbing Mount Blaxland on the 31st May they retraced their steps, arriving back to Blaxland's Farm on South creek on the 6th June.

Soon after this discovery Governor Macquarie sent the Assistant Surveyor at the time, George Evans, to 'confirm and extend' the boundaries of these forests. Evans found good pasture around Bathurst, but made little comment about the Lower Blue Mountains. Macquarie did not officially recognize Blaxland, Lawson and Wentworth's expedition until June 1814, at which time he granted each man one thousand acres of land.

8.2 CROSSING THE MOUNTAINS

In July 1814, Macquarie appointed William Cox as the Superintendent of Works for a road over the Blue Mountains. Cox was born in Dorchester in 1797, joined the NSW Corps as a Lieutenant and was appointed paymaster before leaving England. By 1803, Cox owned 1,380 acres of land, 100 cattle, 2,000 sheep and 4,000 pounds worth of property. After resigning from the Corps in 1807 Cox settled down at his farm at Clarendon near Windsor. By the time Macquarie appointed him as Superintendent of Works, he had considerable road-making experience in the County of Cumberland (Mackness 1965:34).

Cox was given limited provisions and time to complete the road to Bathurst. He was provided with fifty men, only 22 of which were labourers (Karskens 1988:18). Work on the road commenced on the 18th July, 1814. Macquarie instructed Cox to follow the “track laid down on Mr. Evans map” with the road to be “at least 12 feet (3.66 m) wide so as to admit 2 carts or other wheeled carriages to pass each other” (Karskens, 1988:18). Cox’s journal, however, clearly indicates that detailed reconnaissance of Evans’ line had not been completed before work began and that the track was far from clear. Cox followed Evans line along the mountain ridges fairly closely. However, on the plains Cox was forced to locate his own line from Mount York to Cox’s River and Mount Blaxland to Bathurst (Karskens 1988:18).

Despite the difficult terrain and the limited size of the construction gang, Cox completed the road to Bathurst in a record six months. The road was not designed to be easily traversable. Macquarie did not wish to open up the lands to the west as this provided a security risk for escaped convicts and cattle thieves (Karskens 1988: 18). Merely, a cleared track was required to move cattle to new pastures and allow Macquarie to inspect the new land. Macquarie made a tour of the newly built road and the new country in April 1815. In his diary he recorded and named features of the new road, and described the difficulty of the descent into “*The Vale of Clwydd*” (Hartley Vale).

“Mr Cox and his party with incredible labour and perseverance have constructed a very safe carriage Road down the face of this mountain which does him and them infinite honour, - it being a most difficult and most arduous undertaking, and one which most people would have at first view abandoned in despair as being impracticable.

.....The road down the mountain being so extremely steep as to render it hazardous to drive down it in the carriage we had the horse taken out of it and had it brought down by hand..... we pursued our journey in the carriage over a fine plain verdant country of open forest land through a beautiful extensive vale of five miles which I have named “The Vale of Clwydd” after the vale of the same name in Wales. – This vale terminates at a river running south formed by two smaller ones coming from the westward and eastward, and which unite at the distance of five miles from Mount York..” (Mitchell 1815 in Cserhami et al 2002:35).

The Cox's road was constructed down the difficult descent of Mount York and continued through to Glenroy to the foot of Mount Blaxland and finally reached Bathurst. However the descent down Mount York was so treacherous that it could only be attempted during the daylight. Eventually the governor decided that the road was too difficult and a line for a new route was required. The Surveyor General Mitchell worked with his men on a new section of Road at Mount Victoria called Victoria's Pass, the pass was a less steep descent to the valley and was constructed between 1830-1832. The continuation of the new route to Bathurst marked by Mitchell was completed in 1835. The route passed through Hartley and was known as the Great Western Road (Cserhami *et al* 2002:37). Convicts that worked on the road were held in stockades, one of which was at Mount Victoria, the remains of which are evident today (Cserhami *et al* 2002:37). The new road location and consequential increase of traffic and the growing local population led to the development of a small village at Hartley in the late 1830s and 40s (Breckwoldt 1984: 36).

8.3 SETTLEMENT IN THE HARTLEY REGION AND WITHIN THE SUBJECT AREA

Initially "The Vale of Clwydd" was used as grazing land for stock, and a government stockyard station was established at the foot of Mount York soon after Macquarie's tour. In 1816 the stockyard was moved to Glenroy, at the junction of the Lett and Cox's Rivers, the facilities included a yard and stockman's huts (Cserhami *et al* 2002:36). The land was reserved for the government stock until the end of Macquarie's term. The land was subsequently released in "The Vale of Clwydd" in 1823 (Cserhami *et al* 2002:37).

Landowners in the area ran sheep and cattle. John Grant was the first settler in the Hartley area. Grant started running sheep in the Kanimbla Valley by 1821 and had other large flocks near Canowindra by 1828 (Breckwoldt 1984:20).

John Maxwell was one of the earliest settlers in the area. He had been the superintendent of government stock at Bathurst in 1828, but then was transferred to Glenroy stockyards (Paridaens1971) where he received a number of adjoining land grants along the Cox's River. His largest grant was 2450 acres of land, measured specifically as a grant for John Maxwell. The Crown Plan for this grant is dated 30th May 1832 and the Cox's River runs through the middle of the grant (**Figure 4**). Austen Quarry is located within this land grant. Parish plans show that the grant was Portion 27 in the Parish of Lowther and County of Westmoreland and that Maxwell also owned the adjoining land Portion 25. Maxwell owned other land along the Cox's River - Portions 2, 276 and 285 within the Parish of Hartley in the County of Cook – which can also be seen on Parish Plans (**Figure 5, Figure 6**).

Figure 4: John Maxwells land Grant of 2450 acres (Source: LPI 1832. CP22.691)



Figure 5: Parish of Lowther Country of Westmoreland. 1893. Showing land owned by John Maxwell (Source: LPI)



Figure 6: Parish of Hartley Country of Cook. 1914. Showing land owned by John Maxwell.



Maxwell named his estate “Liddleton”. In 1913 a history of Hartley was written for the Royal Australian Historical Society, which noted that in 1932 Maxwell erected a brick building on the “left side of the Cox’s River” (O’Sullivan 1913:13). Presumably the left is the west side of the river, if so the building must have been in either Portion 25 or 27. The Crown Plan for Portion 25 reveals that the land was surveyed and measured as 275 acres of land applied for purchase by John Maxwell, surveyed on August 5th 1837 (Figure 7). As this land was purchased five years after Maxwell received his land grant it is more likely that a house would have been built on the earlier property. However, neither Crown Plans show any structures built on either Portion, probably as they were surveyed prior to Maxwell actually owning them.

The Crown Plans for Portions 25 and 27 show the alignments of later roads marked on them at a later date to the original survey. O’Sullivan (1913:13) wrote of Maxwell’s property “roads connecting the estate with the main one were constructed by gangs of prisoners. And an extensive clearing of the estate was promptly carried out. Cattle and sheep were the chief pastoral industries, but farming and gardening to a limited extent were also fairly developed”. It is further noted that Maxwell had a number of convicts assigned to him, and the relationship between them and Maxwell was amicable (O’Sullivan 1913:13). Possibly the roads marked on the crown plans for Maxwell’s property were the original roads Maxwell had built by his convicts, and were later marked on the plan when they were gazetted as government roads.

Figure 7: Plan of a portion of land applied for to purchase by John Maxwell (Source: LPI 1837. CP363.691)



The Jenolan Caves Road is on the western side of the portion. The Crown Plan of the road was drawn in 1866 and was described as “*Plan of a Road from Hartley to Bullock Flats via Bingo*”. The road was opened as a parish road on the 11th October 1867 (LPI 1866 CP614.1603). The Crown Plan shows the original alignment of the road and an absence of buildings or structures near the road alignment within Maxwell’s land (**Figure 8**). Closer to Cox’s River was another road surveyed on the 8th July 1878 and confirmed in the Government Gazette on the 2nd November 1878. Within Portion 27 the Crown Plan shows a log fence and a split rail fence running alongside of the road and at times obstructing the road, however, there are no buildings surveyed onto the plan within Portions 27 or 25 (**Figure 9**). The road was described as “*Cox’s River to the Hartley and Oberon Road Parish of Lowther County of Westmoreland*”. At the time of the survey the land belonged to Hugh Robinson (LPI 1878 CP1481.1603). The road also appears on all the parish maps held at Land and Property Information. It is likely that this road existed on the property as an access road prior to it being gazetted. It is even possible it was constructed by the original land owner John Maxwell. The road was gazetted as closed on the 18th September 1999 (Parish of Lowther Regional Charting Map). The remnant road may run through the subject area.

In 1854 Maxwell advertised the property for sale. The land described as ‘Liddleton Estate’ comprised of 3100 acres, which must include all of his adjoining portions of land along the Cox’s River including Portion 27 which the subject area is within. The advertisement described how Maxwell came by the land explaining that he was a resident for many years on the Government establishment at Wellington, thus allowing him many opportunities of selecting choice lands, both from personal observation and the experience of others. As a result the land for sale is that land he selected, indicating it was choicest land in the region. The estate was described as:

“a large portion of first-rate cultivation land, which has been divided into small farms, and lots to respectable tenants, whose leases having expired, the present proprietor is serious of selling the property unencumbered. The portion adjoining Hartley is well adapted for suburban lots, and would readily sell, the government land adjoining having realised £3 per acre.”

The Improvements consist of a handsome and commodious cottage, built of bricks and weatherboard, containing two sitting rooms and four bedrooms, butler’s pantry, and other conveniences. It has a beautiful flower garden on one side, and the front looks out into a splendid orchard and vineyard, stocked with the choicest fruit trees of every description.

The kitchen, laundry, and other outbuildings are of the best description, a short distance from the house. There is also an excellent 6-stall stable, recently erected of sawn plank, upon a Stone foundation; it is shingled and paved with cut flags.

There is also a capital brick-built store, about 30 feet by 20 feet, adjoining which is a two-roomed cottage for the overseer, also brick-built, and replete with every convenience. There is also a brick cottage for the servant, situated between the overseer’s residence, and the last-mentioned cottage.

Figure 8: “Plan of a Road from Hartley to Bullock Flats via Bingo”. 1867 (Source: LPI CP 614-1603)

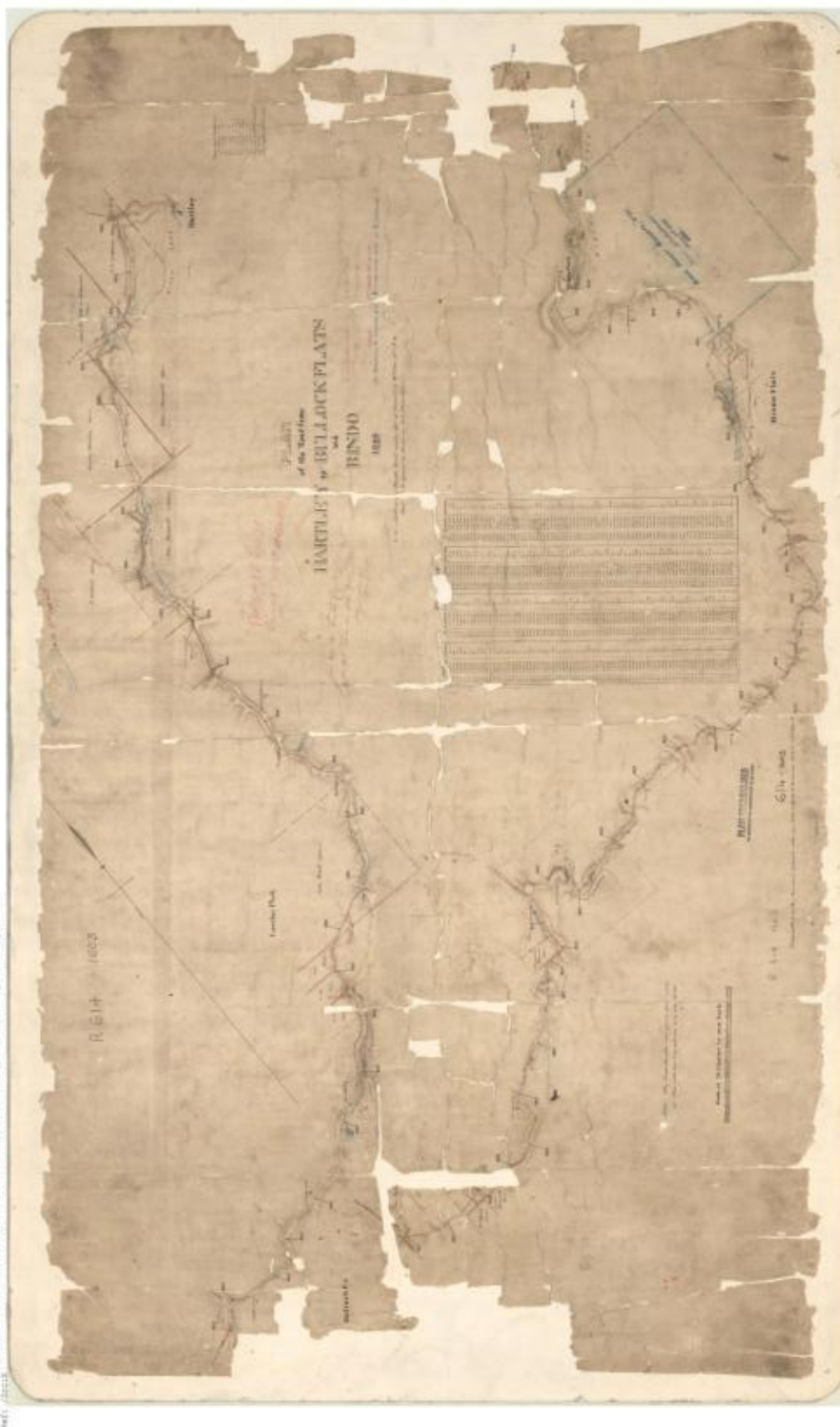
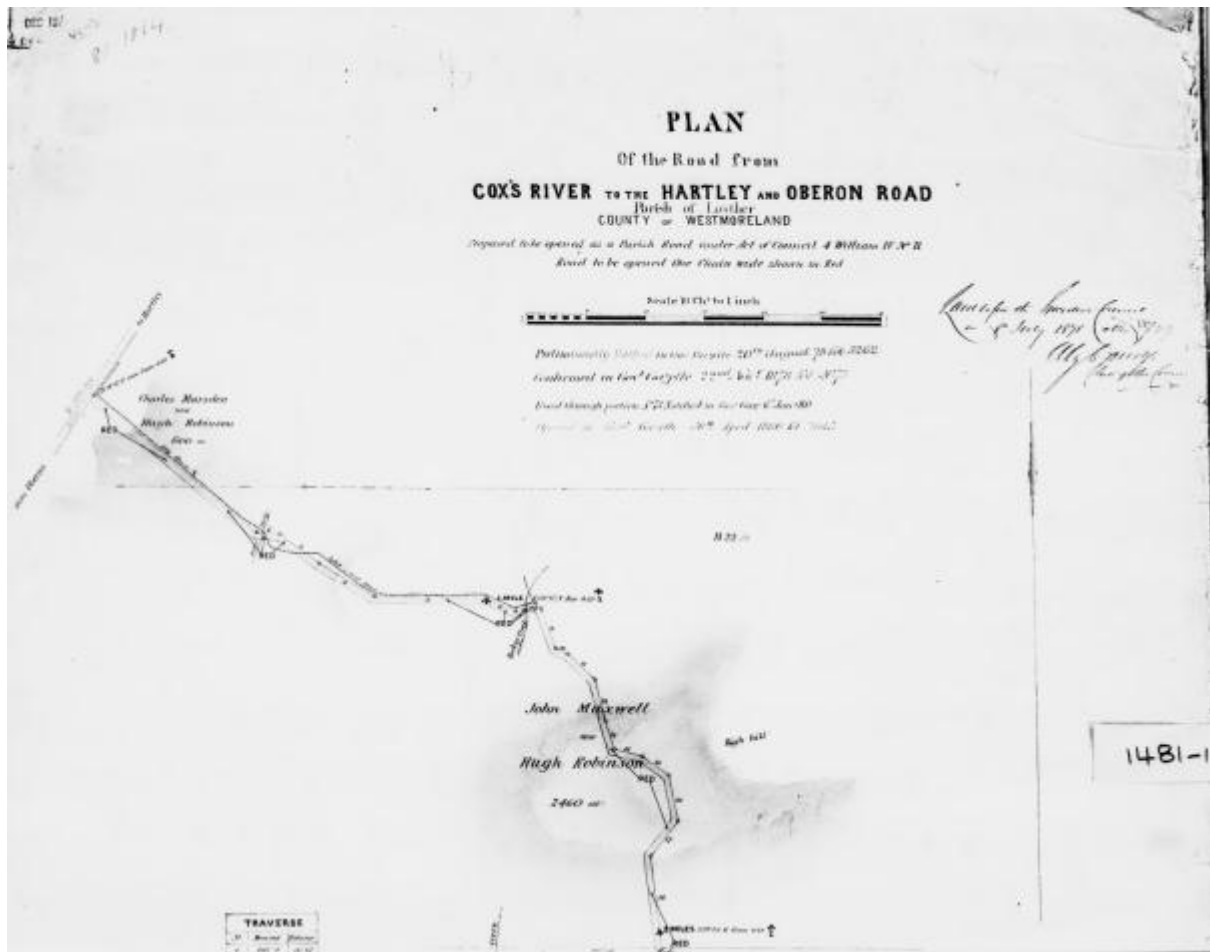


Figure 9: “Plan of the Road from Cox’s River to Hartley and Oberon Road” showing John Maxwell’s 2460 acres, 1880 (Source: LPI 1481-1603 Sheet 2)



There is a capital woolshed, built of brick, sufficiently commodious for a large sheep establishment. Adjoining the woolshed is a boiling-down establishment, built of slabs, shingled, and furnished with brick chimneys.

The stockyards are very commodious; one is situated on a hill about a quarter of a mile from the house, and there four large yards, with drafting pens sufficiently extensive to accommodate upwards of 1000 head. There is also a cultivation paddock near the house, and a horse paddock, and on the property there is a large quantity of substantial fencing.” (SMH Saturday 22 April 1854, p.7).

The property was sold to Gordon and Ross and then on the 4th January 1856 Ross sold his share to Gordon (LPI 1888 PA 9651). On the 12th and 13th May 1857 Gordon sold parts of the property to McCue and Lunn respectively (LPI 1888 PA 9651).

On the 21st of June 1873 Liddleton Estate was again advertised for sale in the Sydney Morning Herald. This time it was described as 2866 acres of freehold land on the Cox's River near Hartley. The smaller size of the property indicated that not all of the portions originally owned by Maxwell were for sale. The improvements on the property were described as:

“12-roomed dwelling-house, store, kitchen, servants' rooms, detached. Also a laundry; large 8-stall stable, with 3-roomed brick cottage adjoining for groom, and hay shed. About 300 acres fenced in and subdivided into paddocks” (SMH Saturday 21 June 1873:11).

Robinson purchased the property in 1874 and on the 29th September 1879 Robinson sold to Stuart (LPI 1888 PA 9651).

In 1880 Mr. Stuart was leaving the colony to live in England and, so again, Liddleton Estate was advertised for sale. The property was described as being 4700 acres of good grassed land with 2300 acres of pre-emptive leases. By 1880 the size of Liddleton Estate had increased in size and was much larger than the original estate of 3100 acres sold by Maxwell in 1854.

The estate included two small and two large cultivation paddocks, securely enclosed with fencing partly made of posts and rails, and posts and 5 wires, the remainder being strong dog-leg. The buildings on the estate were described as:

“veranda cottage, of brick and weatherboard, containing 5 rooms, with detached brick kitchen; also a brick Cottage, of 2 rooms; within a short distance, about 200 yards, is a new veranda dwelling-house, built of sawn slabs, containing 5 rooms, and only, requiring a few pounds outlay to complete it; a brick-cottage of 2 rooms; The herd to be sold with this Estate comprises 400 head....chiefly dairy cattle” (SMH Saturday 3 January 1880:14).

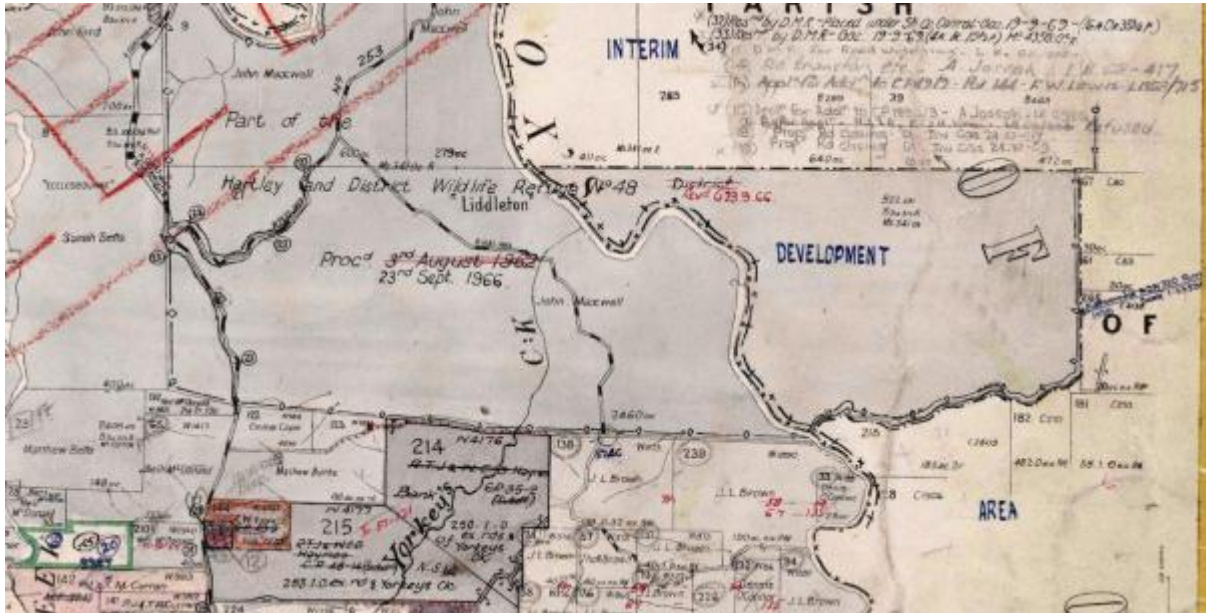
On 11th May 1880 Stuart sold the property to Thompson and on the 31st August 1883 Thompson sold to Graves (LPI 1888 PA 9651).

On the 26th May 1884 the Homestead on Liddleton Estate was destroyed by fire. At the time the owner of the property was Mrs Warden Harry Graves who was residing on the estate for winter. All family and servants escaped the fire (Evening News 28th May 1884:4).

On the 24th August 1884 it was reported that recently discovered silver had drawn attention to Liddleton near Hartley where there are *“underdeveloped lodes”*. The newspaper reported that the ores at Liddleton were rich with galena but due to a lack of knowledge to its value it had been discarded (Australian Town and Country Journal Saturday 9th August 1884: 21).

Portion 27 became part of the Hartley and district wildlife Refuge No 48 proclaimed on the 23rd September 1966 (Parish of Lowther 1940, **Figure 10**). It was revoked on the 28th July 1978 (Parish of Lowther Regional Charting Map).

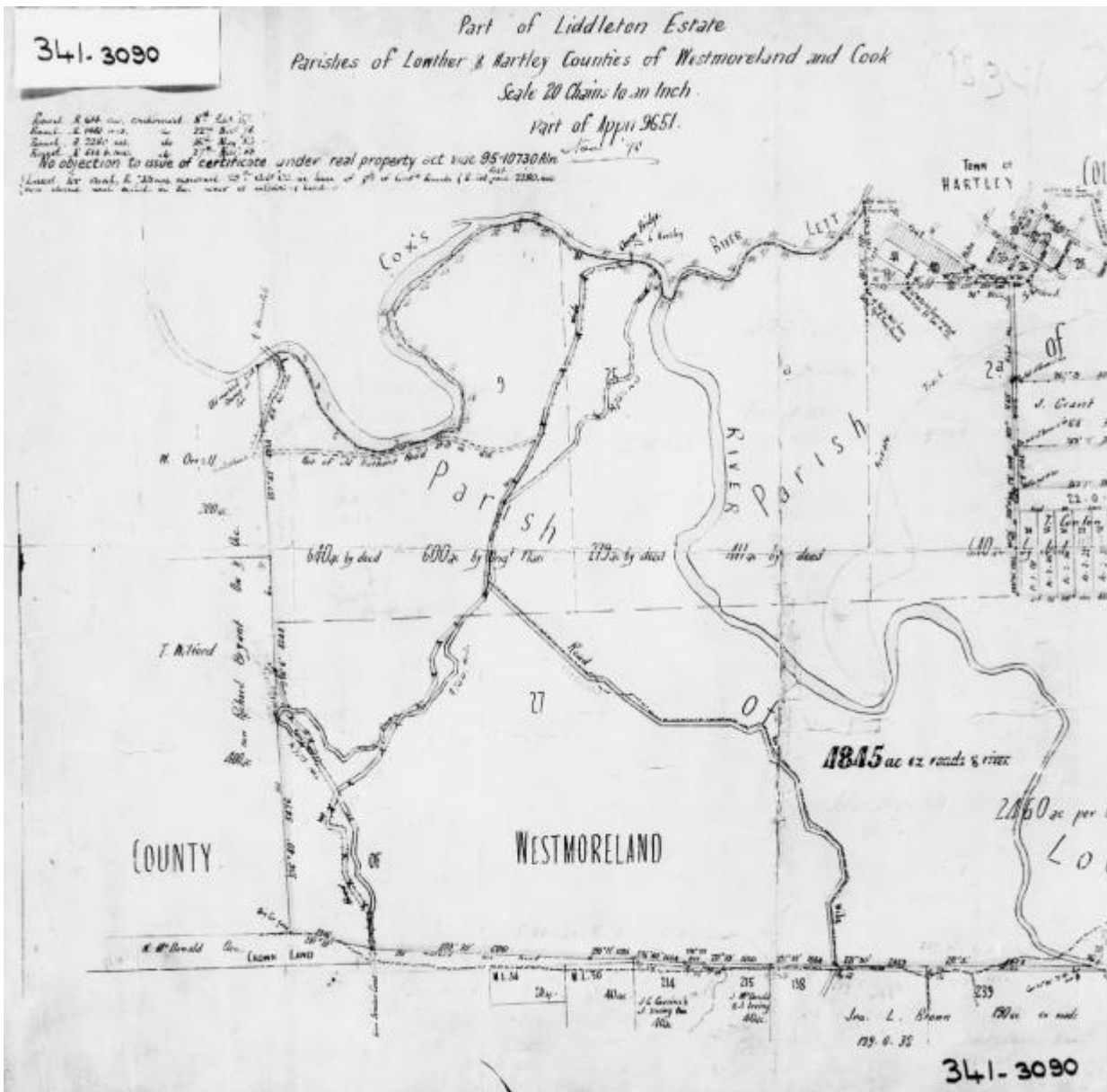
Figure 10: Parish of Lowther County of Westmoreland. 1940; Subject area is within the Hartley and District Wildlife Refuge No 48 (Source: LPI)



From the advertisements for sale of the Liddleton Estate it is apparent that there were many structures on the estate but that the estate also covered a very large tract of land. **Figure 11** is a Crown Plan of the Liddleton Estate, which was made for the primary application of the properties for conversion to Torrens Title. The plan however is of the land and does not portray the structures on it.

On 16th February 1888 Graves sold the property to Wolseley and Caldwell (LPI 1888 PA 9651). Wolseley and Caldwell developed and used the first sheep shearing machine, apparently the first sheep to be sheered by machine were actually sheered on the Liddleton property (Paridaens 1971).

Figure 11: Part of Liddleton Estate part of Application 9651, 1896 (Source: LPI CP341-3090)



In 1904 the property was again advertised for sale. It was described as 5200 acres of Freehold and about 3000 acres of Lease Land in the Valley of Cox:

“fenced into numerous paddocks, highly improved, permanently watered y double frontages, good house, woolshed, drafting yards, everything complete: highly fattening, the sheep, lambs, and cattle commanding top values. Suitable for dairying, wheat, oats, [grape], corn, potatoes’, and other root crops growing prolifically” (SMH 13 August 1904).

8.4 SUMMARY

The subject area was located within an historical estate known as 'Liddleton', granted to John Maxwell in May 1832. Despite extensive development of the estate no known buildings were erected within the subject area. As Maxwell was one of the largest pastoral farmers in the area there is potential, within his estate for ancillary farming outbuildings, early roads and fencing. The subject area is a small portion of the original Liddleton Estate and so the potential of any historical items associated with the Estate is small. The homestead is still used residentially and is located on the lower slopes approximately 1 km north of Austen Quarry in the Coxs Valley. It is likely that outbuildings would have been built close to the homestead for ease of access and early roads would most likely be associated with the homestead. Fences may be found on the river flats and lower slopes along the outer edges of the subject area. Liddleton became part of a wildlife refuge in July 1978 before being purchased by the Hartley Pastoral Company and later being developed as a quarry. Austen Quarry has been in operation since March 1995 when it was issued development consent. There are currently no heritage items listed on local, State or national heritage registers within the subject area.

9. RESULTS OF FIELD SURVEY

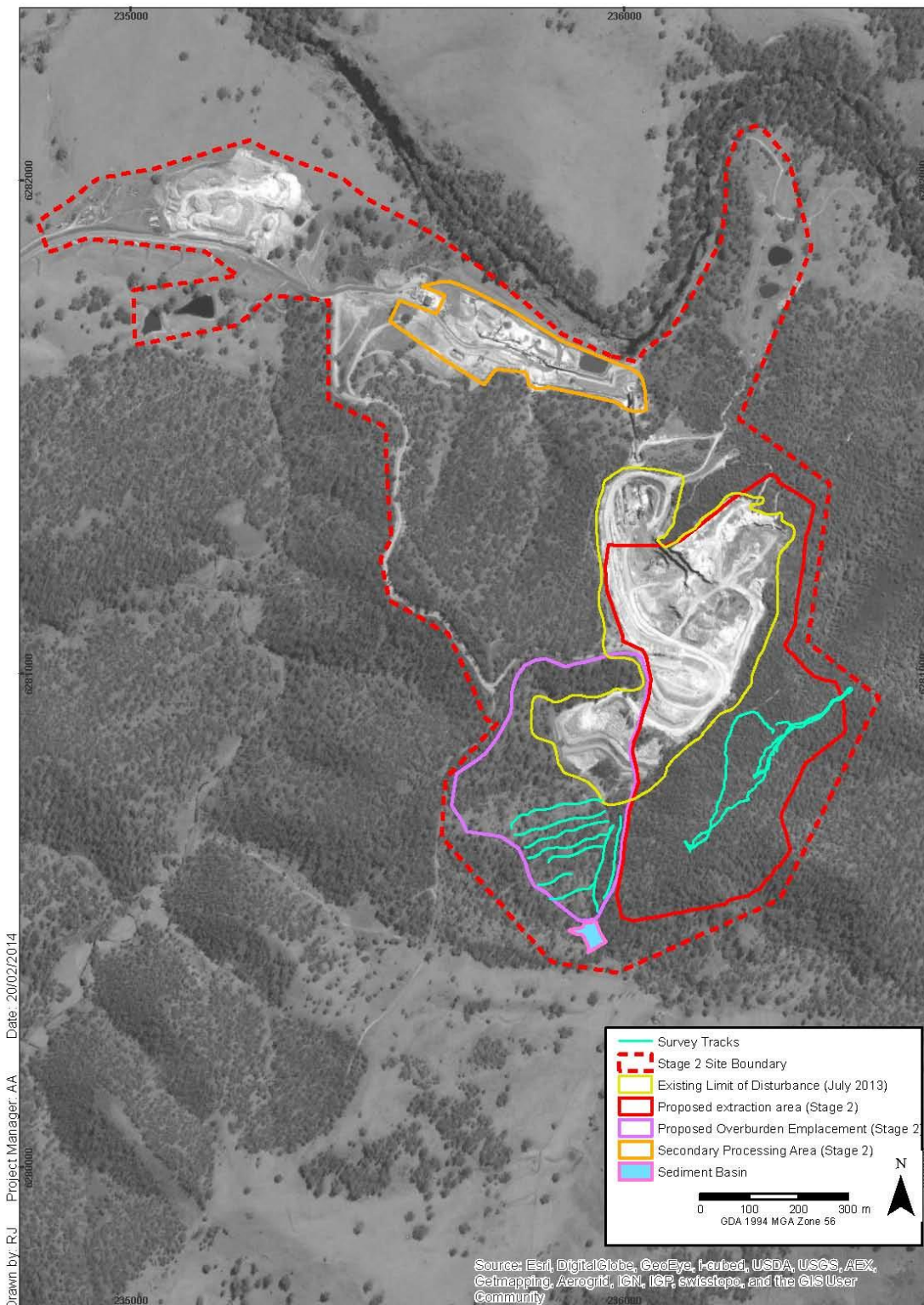
9.1 METHODOLOGY

The field survey for the extension area was conducted on the 27th August 2013. The survey team consisted of: Amanda Atkinson (Archaeologist, Niche) and Lydia Sivaraman (Archaeologist, Niche). Lee Attard (Quarry Manager, Austen Quarry) was present during the field survey and drove the survey team through the Austen Quarry site to points of access within the proposed extraction area.

The overburden emplacement area was surveyed separately on 25th November 2013. The entire impact area was surveyed by Renée Regal (Archaeologist, Niche). Malcolm McDonald (Environmental Manager, Austen Quarry) was also present during the survey.

The Landform background study indicated that some parts of the subject area may be difficult to access and was used to inform the survey methodology. The initial methodology expectation was to traverse in transects a sample of each landform, these being the river banks, the river flats, the lower slopes, the mid slopes and the upper slopes and ridges. Upon arrival at the subject area it became apparent that the steep terrain prevented access to each landform. The survey methodology was changed and became opportunistic whereby only accessible areas were surveyed. The survey team was driven along an access track to a ridge top and the extent of the ridge top was traversed until it became too steep to continue. Although the extent of the survey was short the survey team were assured by Lee Attard (Austen Quarry) that the river banks and the river flats were not part of the subject area, and the ridge line accessed during the survey was the actual site of the proposed quarry extension. A non-differential GPS was used to track the area traversed during the field work and hence the surveyed ridge top and is presented in **Figure 12**.

Figure 12: Survey coverage, Proposed Stage 2 Extraction and Overburden Emplacement Areas (Niche, 2013)



Field Results
 1538 Austen Quarry Heritage Assessment

FIGURE 11

9.2 RESULTS

No historical heritage items were identified during the field surveys, nor were any areas of archaeological potential for historical heritage items identified.

The extension area was characterized by steep slopes and a ridgeline (**Plate 1, Plate 2**). The ridgeline was surveyed extensively in transects however the slopes could not be accessed for safety reasons. The ridgeline surveyed contained mostly intact Mallee Heath Woodland. Species of trees were sparsely distributed and the understory was mostly tall shrubs such as banksia. The woodland floor was littered with leaves, and stones and boulders of outcropping Rhyolite. There was an absence of low lying scrub in the understory and minimal grass resulting in excellent ground surface visibility. The ridgeline had excellent exposure (50%) and visibility (80%) which allowed for a thorough assessment of the landform.

The terrain and flora within the overburden area was much like that encountered during the extraction area survey. Ground surface visibility was very low in contrast to the extraction area and was estimated at being around 5% (**Plate 3, Plate 4**).



Plate 1. Extraction Area showing terrain (Niche, 2013)



Plate 2. Extraction Area showing high ground surface visibility (Niche, 2013)



Plate 3. Overburden Area, looking towards existing quarry; note poor ground surface visibility (Niche, 2013)



Plate 4. Overburden Area, showing terrain, view looking west (Niche, 2013)

10. SIGNIFICANCE ASSESSMENT

The NSW *Heritage Manual* (including the *Assessing Heritage Significance* guideline) prepared by the former NSW Heritage Office and Department of Urban Affairs and Planning, provides the framework for the following assessment and statement of significance. These guidelines incorporate the five aspects of cultural heritage value identified in the *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999* (Burra Charter) into a framework currently accepted by the NSW Heritage Council.

- a) An item is important in the course, or pattern, or NSW's cultural or natural history (or the cultural or natural history of the local area);
- b) An item has strong or special associations with the life or works of a person, or group of persons, of importance in the cultural or natural history of NSW (or the cultural and natural history of the local area);
- c) An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievements in NSW (or the local area);
- d) An item has a strong or special association with a particular community or cultural group in NSW (or the local area) for social, cultural or spiritual reasons;
- e) An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history (or the cultural or natural history of the local area);
- f) An item possess uncommon, rare or endangered aspects of NSW's cultural or natural history (or the cultural or natural history of the local area);
- g) An item is important in demonstrating the principal characteristics of a class of NSW's:
 - i. Cultural or natural places; or
 - ii. Cultural or natural environments;
 - iii. (or a class of the local areas)
 - iv. Cultural or natural places; or
 - v. Cultural or natural environments.

Assessing Significance for Historical Archaeological Sites and 'Relics' (2009) clarifies how the above criteria relate to historical archaeological sites and provides a series of questions for each criterion that assist the assessment of 'relics'. By using this guideline archaeological sites or 'relics' can more easily be assessed on their own right and compared with other sites.

10.1 STATEMENT OF SIGNIFICANCE

No historical heritage items or areas of archaeological potential were identified during the field survey. The subject area is therefore not considered to be significant for its historical heritage values.

11. IMPACT ASSESSMENT

No historical heritage items or areas of archaeological potential were identified during the field survey. The proposed extension of Austen Quarry will therefore have no impact on any significant historical heritage items or their associated values.

12. CONCLUSIONS AND RECOMMENDATIONS

There are no historical heritage constraints to the proposed quarry extension at Austen Quarry. No further assessment of historical heritage is required prior to the commencement of extraction within the proposed quarry expansion area at Austen Quarry.

It is considered highly unlikely that items of historical heritage value would be unexpectedly discovered during the proposed works. If, however, relics were to be discovered impacting works should cease, the location be appropriately secured (e.g. through the installation of protective fencing, flagging with high visibility tape) until further advice is received from a qualified historic heritage expert regarding Hy-Tec's obligations under the NSW *Heritage Act 1977*. Note: the discovery of relics must be reported to the NSW Heritage Council in accordance within Section 146 of the *Heritage Act 1977* and be reported within a reasonable timeframe.

13. REFERENCES

Aston, N. (1988) *Rails, roads & ridges: history of Lapstone Hill-Glenbrook*. For Glenbrook Public School Centenary Committee.

Breckwoldt, R. (1984) *A Heritage Study of Hartley, Kanimbla and Megalong Valleys*. The National Trust of Australia.

Cserhami & Partners P/L Architects (2002) *Hartley Historic Site Conservation Management Plan*. Prepared for the NPWS.

Department of Urban Affairs & Planning (1996) *NSW Heritage Manual*, available online at <http://www.environment.nsw.gov.au/heritage/publications/index.htm>

Department of Planning (2009) *Assessing Significance for Historical Archaeological Sites and 'Relics'*, available online from <http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/listings/assessingheritagesignificance.pdf>

Karskens, G. (1988) *An historical and archaeological study of Victoria Pass, Great Western Highway, Mt Victoria, New South Wales*. Report prepared in association with Robyn Stocks for the Department of Main Roads, Central Mountains Division Lithgow, New South Wales.

Mackanness, G. (editor) (1965) *Fourteen journeys over the Blue Mountains of New South Wales*. Horwitz-Grahame, Sydney.

O'Sullivan, W. D. (1913) *Early History of Hartley. Its Rise and Decline*. The Worker Trade Union Print, Sydney.

Paridaens, I. (1971) *Journey into Historic Hartley*. Arthur Paridaens, Hartley.

Trove

Australian Town and Country Journal Saturday 9th August 1884: 21

Evening News 28th May 1884:4

Sydney Morning Herald. Saturday 22 April 1854 p7.

Sydney Morning Herald. Saturday 21 June 1873 p11.

Sydney Morning Herald. Saturday 3 January 1880. p14.

Sydney Morning Herald. 13 August 1904

Land and Property Information

1888. Primary Application 9651

Parish of Lowther Regional Charting Map

Parish of Lowther Country of Westmoreland. 1893

Parish of Lowther County of Westmoreland. 1940

Parish of Hartley Country of Cook. 1914.

1832. *Numbered as portion 27 in the Parish of Lowther County of Westmoreland.* CP22.691

1837. *Plan of a portion of land applied for to purchase by John Maxwell.* CP363.691

1867. *Plan of a Road from Hartley to Bullock Flats via Bingo.* CP 614-1603

1880. *Plan of the Road from Cox's River to Hartley and Oberon Road" showing John Maxwell's 2460 acres.* CP 1481-1603 Sheet 2.

1896. Part of Liddleton Estate part of Application 9651. CP341-3090.