

Appendix H

A JOINT VENTURE WITH **JCDA**

Historical Heritage Assessment



Mount Pleasant Optimisation Project, NSW

Historical Heritage Assessment and Statement of Heritage Impact

Client: MACH Energy Australia Pty Ltd

Version: FINAL

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Document information

Extent Heritage project no.:	#20190059
Client:	MACH Energy Australia Pty Ltd
Project:	Mount Pleasant Historical Heritage Assessment and Statement of Heritage Impact
Site location:	Muswellbrook, NSW
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Document control

Version	Internal reviewer	Date	Review type
Draft 01	A. Sneddon	12 Dec. 2018	QA Review
Draft 02	J. Heidrich	06 Apr. 2020	Technical
Draft 02	A. Sneddon	20 Apr. 2020	QA Review
Draft 02	W. Cox	21 Apr. 2020	Style / Format
Draft 03	J. Heidrich	18 Jun. 2020	Technical
Draft 03	A. Sneddon	23 Jun. 2020	QA Review
Final	A. Sneddon	11 Dec. 2020	QA Review

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1. Introduction

1.1 Project description and the function of this Historical Heritage Assessment and Statement of Historical Impact

Extent Heritage Pty Ltd (Extent Heritage) has been engaged by MACH Energy Australia Pty Ltd (MACH) to prepare a Historical Heritage Assessment (HHA) and Statement of Heritage Impact (SOHI) for works that may impact non-Aboriginal cultural heritage places at the Mount Pleasant Optimisation Project (hereafter referred to as 'the Project'), in the vicinity of Muswellbrook, New South Wales (NSW).

The Mount Pleasant Operation Development Consent DA 92/97 was granted on 22 December 1999. The Mount Pleasant Operation was also approved under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in 2012 (EPBC 2011/5795).

MACH acquired the Mount Pleasant Operation from Coal and Allied Operations Pty Ltd (Coal & Allied) on 4 August 2016. MACH commenced construction activities at the Mount Pleasant Operation in November 2016 and commenced mining operations in October 2017, in accordance with Development Consent DA 92/97 and EPBC 2011/5795.

MACH Mount Pleasant Operations Pty Ltd manages the Mount Pleasant Operation as agent for and on behalf of the unincorporated Mount Pleasant Joint Venture between MACH (95 per cent [%] owner) and J.C.D. Australia Pty Ltd (5% owner)¹.

The approved Mount Pleasant Operation includes the construction and operation of an open cut coal mine and associated rail spur and product coal loading infrastructure located approximately 3 kilometres (km) north-west of Muswellbrook in the Upper Hunter Valley of NSW (Figures 1–2).

The mine is approved to produce up to 10.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal. Up to approximately 9 trains per day of thermal coal products from the Mount Pleasant Operation are transported by rail to the Port of Newcastle for export, or to domestic customers for use in electricity generation.

In late 2017, MACH commenced operations in the South Pit, located in the south-east corner of the Mount Pleasant Operation Approved Extent of Surface Development. MACH currently has approval to mine in the Approved Extent of Surface Development until December 2026. Beyond 2026, MACH is required to prepare and submit a complete State Significant Development (SSD) application.

Throughout this HHA and SOHI, MACH Mount Pleasant Operations Pty Ltd and the unincorporated Mount Pleasant Joint Venture will be referred to as MACH.



This HHA and SOHI forms part of an Environmental Impact Statement (EIS) that has been prepared to accompany a Development Application (DA) made for the Project in accordance with Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). This DA is to be made on the basis of the Project being SSD.

The proposed works are described in Part 1.3 below.

Extent has been engaged to prepare an HHA and SOHI that:

- Presents a description of the existing historic heritage sites and values within the Project Study Area, including potential archaeological sites, drawing on desktop review of contemporary heritage databases and field surveys.
- Reviews and updates any existing management commitments for known historic heritage sites, considering their significance and current condition.
- Presents a heritage impact assessment for additional development associated with the SSD application. This includes development of recommendations for the mitigation of identified potential adverse heritage impacts arising out of the Project.

This HHA and SOHI has been prepared in accordance with the relevant guidelines issued and endorsed by the NSW Office of Environment and Heritage (OEH) (now Heritage NSW within the Department of Premier and Cabinet). It has also been prepared in accordance with the principles set out in *The Burra Charter: The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (The Burra Charter) (Australia ICOMOS 2013a) and the Secretary's Environmental Assessment Requirements (SEARs) issued by the NSW Department of Planning, Industry and Environment (DPIE) for the Project (see Part 2.1 below).

This HHA and SOHI focuses on 29 historic heritage places located within or near the Project Study Area. All of these heritage places have been previously assessed by Veritas Archaeology & History Service (VAHS 2014) in a report entitled 'Mount Pleasant Historic Heritage Study' (hereafter referred to as the 'VAHS report'), endorsed by the former NSW Department of Planning and Infrastructure.

The VAHS report considered some 55 known and potential heritage places in and around the Study Area and included a range of management recommendations (such as demolition following archival recording and archaeological excavation). Many of these 55 places were ultimately assessed by VAHS as not being heritage places. Some were assessed as being heritage places but have since been removed pursuant to appropriate consents or have had their assessments modified in the light of subsequent additional fieldwork and/or research.

Of the 55 places originally dealt with by the VAHS report in 2014, there are 29 that remain relevant to, and form the focus of, the present EIS:

- MP01 Broomfield
- MP06 Coady's House
- MP13 Humphries



- MP20 Kayuga Coal Mine
- MP22 Smith's Clear Farm
- MP21 Kayuga School
- MP23 Devine's
- MP25 Gall's Farm
- MP26 Page's Farm
- MP27 Thorndale
- MP29 Lynch's
- MP31 Cox's Portion 20
- MP32 Cox's Orchard
- MP36 Hill's
- MP38 Rosebrook
- MP39 Rosebrook Quarry
- MP41 Negoa
- MP42 Fibbins
- MP43 St Andrew's Anglican Church
- MP44 Scarred Tree
- MP45(a-b) Casey: Clenmore and Edgeway
- MP46 Kayuga Recreation Ground
- MP49(a-c) Weidmann's hut, mill and dairy
- MP50 Waitomo House
- MP51 Kayuga Bridge
- MP52 Overdene (Overton)
- MP53 Kayuga Cemetery
- MP54 Portion 71
- MP55 Portion 26



Of the 29 places listed above, six (6) are located outside of the Project Study Area: MP38, MP39, MP41, MP51, MP52 and MP53. Additionally, two places (MP46 and MP50) are located outside of the Mount Pleasant Operation Mining Lease, but still fall within the Project Study Area. These places would not be physically impacted by the proposed works; however, they have been included in this HHA and SOHI because it may be asserted that they form part of a broader 'cultural landscape' that the Project will be a part of, or will potentially impact.

This HHA and SOHI takes a cautious approach and also addresses heritage issues that may relate to the Muswellbrook-Jerrys Plains Landscape Conservation Area (MJP LCA). The MJP LCA is based on a heritage assessment dating to 1985 that was prepared by the National Trust of Australia. It has clearly been overtaken by subsequent events, including the development of the Bengalla Mine north of the Hunter River and overlapping to a small degree with the MJP LCA, and the Mt Arthur Coal Mine to the south of the Hunter River and also partly within the MJP LCA. The National Trust is a non-statutory body and the MJP LCA has no legislative effect and gives rise to no statutory obligations. The MJP LCA is also not referenced in the *Muswellbrook Local Environmental Plan (LEP) 2009* (Muswellbrook Shire Council 2009).

The Project is located adjacent to the MJP LCA, which abuts the south-eastern extent of the Mount Pleasant Operation Mining Lease. Almost all of the Project footprint is located wholly outside of the MJP LCA but overlaps to a small degree with the MJP LCA in two limited and discrete locations (Figure 128). The landscape in these locations has already been modified some years ago by the Bengalla Mine's development. The two limited and discrete locations where the Project extends into the MJP LCA already contain product coal transport and water supply infrastructure previously approved as part of the Mount Pleasant Operation Rail Modification (MOD4), or as contained with the existing Bengalla Mine.

The elements of new visible infrastructure proposed for the Project would therefore all be located outside of the MJP LCA except for two discrete locations where mine infrastructure already exists or is approved. This report therefore references the MJP LCA solely as a useful baseline (although now somewhat dated) against which to assess potential adverse impacts on the wider landscape that the Project will be a part of, or will potentially impact.

1.2 Study Area

The Mount Pleasant Operation is located in the Upper Hunter Valley of NSW, north-west of Muswellbrook within the Muswellbrook Local Government Area (LGA) (Figure 1).

The Study Area consists of an area within the Parish of Ellis in the County of Brisbane, bounded by the Hunter River in the east and south, and Castlerock Road in the west.

Figure 2 below illustrates the boundary of the Mount Pleasant Operation Mining Lease. The approximate locations of the historical heritage places of local and State significance addressed in this HHA and SOHI are also illustrated.

Figure 3 below also illustrates the approximate locations of the historical heritage places of local and State significance addressed in this HHA and SOHI, as well as provides an overview of the land ownership both within and near the Mount Pleasant Operation Mining Lease.



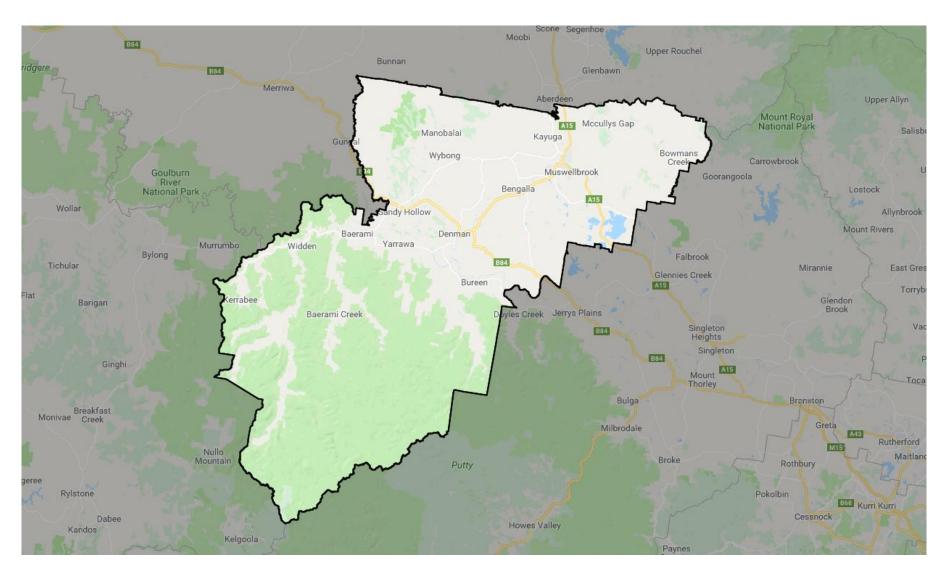


Figure 1. The boundary of the Muswellbrook Local Government Area (LGA), NSW. Map extracted from REMPLAN MapBuilder. Source: Google Maps (2018).



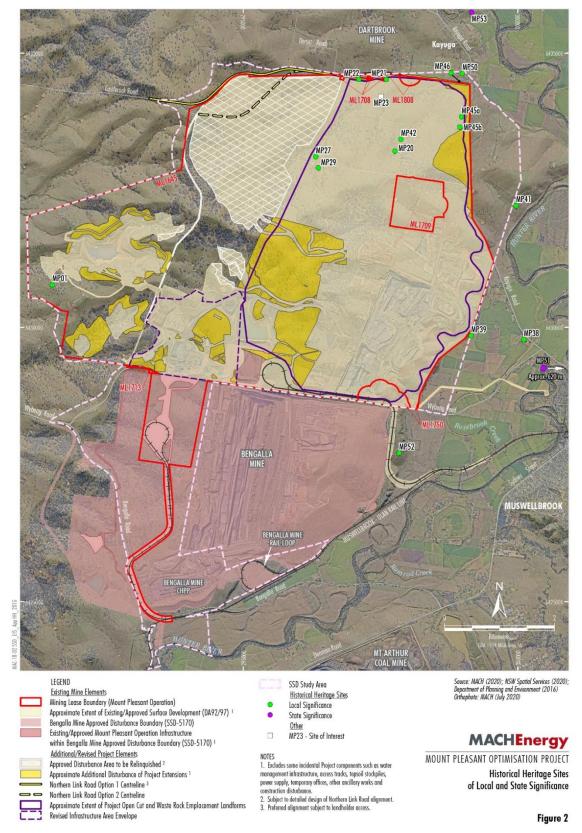


Figure 2. Map illustrating the boundary of the Mount Pleasant Operation Mining Lease, with the approximate locations of the historical heritage places of local (green) and State (purple) significance addressed in this HHA and SOHI.



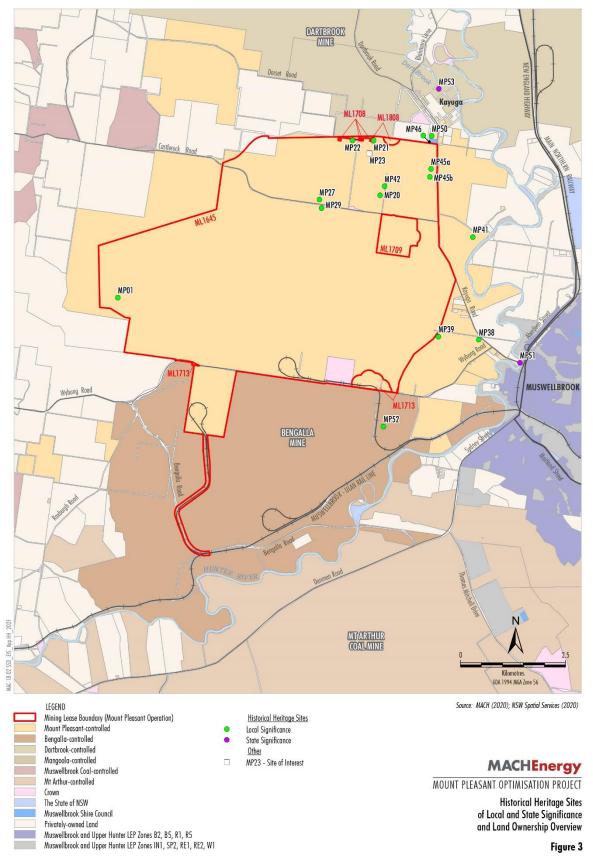


Figure 3. Map illustrating an overview of the land ownership within and near the boundary of the Mount Pleasant Operation Mining Lease, with the approximate locations of the historical heritage places of local (green) and State (purple) significance addressed in this HHA and SOHI.



1.3 Proposed works

The Project would include the following development:

- increased open cut coal extraction within Mount Pleasant Operation Mining Leases by mining of additional coal reserves, including lower coal seams in North Pit;
- staged increase in extraction, handling and processing of ROM coal up to 21 Mtpa (i.e. progressive increase in ROM coal mining rate from 10.5 Mtpa over the Project life);
- staged upgrades to the existing Coal Handling and Preparation Plant (CHPP) and coal handling infrastructure to facilitate the handling and processing of additional coal;
- rail transport of up to approximately 17 Mtpa of product coal to domestic and export customers;
- upgrades to workshops, electricity distribution and other ancillary infrastructure;
- existing infrastructure relocations to facilitate mining extensions (e.g. local roads, powerlines and water pipelines);
- construction and operation of new water management and water storage infrastructure in support of the mine;
- additional reject dewatering facilities to allow co-disposal of fine rejects with waste rock as part of ROM waste rock operations;
- development of an integrated waste rock emplacement landform that incorporates geomorphic drainage design principles for hydrological stability, and varying topographic relief to be more natural in exterior appearance;
- construction and operation of new ancillary infrastructure in support of mining;
- extension to the time limit on mining operations to 22 December 2048;
- an average operational workforce of approximately 600 people, with a peak of approximately 830 people;
- ongoing exploration activities; and
- other associated infrastructure, plant, equipment and activities.



1.4 Previous reports and investigations

As a result of the approvals detailed in Part 1.3 above, a range of historic heritage studies have been undertaken for the Mount Pleasant Operation. Relevantly, VAHS was engaged by Coal & Allied prior to 2004 to conduct work in fulfilment of the now superseded original consent condition relating to European heritage (reproduced as follows):

The applicant shall engage an appropriately qualified person to prepare an oral history of the DA area before local residents are dispersed. This will include an investigation of all buildings and sites within the DA area & the areas that will be affected by the mine. This will be carried out in consultation with a member of Muswellbrook and Upper Hunter Historical Society, who is to be allowed reasonable access to the Applicant's properties for the purpose of assessing European archaeological features. The report shall be made available to the Muswellbrook and Upper Hunter Historical Society, Council and the Director-General.

As part of the approved Modification (2011), the proponent was required to prepare a detailed history of the Mount Pleasant locality. Specifically, Condition 35, Schedule 3 of modified Development Consent DA 92/97 stated:

By the end of December 2013, the Proponent shall prepare a detailed history of the Mount Pleasant locality to the satisfaction of the Director-General. This history must:

- (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
- (b) be prepared in consultation with the OEH, the local history society, local community including former residents as far as is practicable), and Aboriginal stakeholders;
- (c) be prepared in accordance with the relevant Heritage Council of NSW guidelines; and
- (d) include detailed historical research as well as an oral history.

Coal & Allied again engaged VAHS to undertake this additional research and prepare the detailed history in accordance with the relevant Heritage Council of NSW guidelines. Work in fulfilment of this condition was conducted in three parts:

- Compilation of an oral history of the families within the area bounded by Wybong, Kayuga and Dorset Roads, and the Broomfield property.
- Site survey based on the Mount Pleasant EIS and personal records, including surveys, plans
 of sites, photographs and a report.
- Research including an overview of the area, off-site records and collation of surveys and research into a final report on the Parish of Ellis.



The resulting VAHS report included statements of significance for 55 known and potential historic heritage sites, being a variety of site types including known and potential archaeological sites, derelict or demolished homesteads and outbuildings, and extant historic homesteads and outbuildings. Based on these assessments, VAHS developed a series of recommendations for the management of 41 places, in light of the proposed mining activities. The balance of the sites (14) were assessed by VAHS as not meeting the threshold for local heritage significance.

The VAHS report has been the subject of occasional revision and augmentation in light of changing circumstances at the Mount Pleasant Operation, principally by the University of Queensland (UQ) Culture and Heritage Unit and by Extent Heritage. As a result, this HHA and SOHI makes regular reference to the VAHS report, adopting most of the assessments and management recommendations, but sometimes modifying them (for example, where the condition of identified structures has changed, or where additional research or closer inspection has demonstrated that this is warranted).

This HHA and SOHI also reproduces or draws upon the following documents, which contain detailed histories of heritage places within or directly adjacent to the Project Study Area:

- Muswellbrook Shire-Wide Heritage Study: Final Report (EJE Heritage 1996).
- Muswellbrook Shire Council LEP (Muswellbrook Shire Council 2009).
- Hunter Estates: A Comparative Heritage Study of pre-1850s Homestead Complexes in the Hunter Region (Clive Lucas, Stapleton and Partners 2013).
- Mount Pleasant Historic Heritage Study (VAHS 2014).
- Bengalla Mine Historic Heritage Management Plan (AECOM 2015).

1.5 Limitations

This HHA and SOHI relates only to historic (i.e. non-Aboriginal) heritage items, places and/or impacts.

The assessments presented in this HHA and SOHI were prepared on the basis of desktop historical investigations and fieldwork undertaken by Jacqui Pearce, Andrew Sneddon, and Matthew Harris of Extent Heritage between November 2016 and September 2018. During those surveys, the Study Area was traversed on foot and by four-wheel drive, typically relying on existing roads and tracks. At the time, in that it is relevant to assessments of archaeological potential, surface visibility was poor-to-fair.

These surveys did not include a comprehensive assessment of the physical condition of structures at each site. Where possible, the site inspections included the interior of those structures (e.g. of sheds and abandoned residences). Where structures were occupied, the inspection was generally confined to the accessible exterior. Therefore, any assessment of the interior of the structures discussed in this HHA and SOHI is based on information and photographs presented in the VAHS report.



This HHA and SOHI includes a consideration of the known and potential historical archaeological resource. This assessment of archaeological potential within the Study Area has relied on desktop research, as well as observations of visible evidence of potential sub-surface archaeological material made in the field.

The site known as Kayuga Homestead was not assessed as part of this HHA and SOHI as it is located outside of the Study Area on land owned by Dartbrook Mine and would not be directly impacted by the Project. The assessment of any potential visual impacts on Kayuga Homestead is addressed separately in the 'Landscape and Visual Assessment', prepared by Van Pelt Allen Visual Planning and Assessment (2020).

No direct community consultation was carried out in the preparation of this HHA and SOHI. However, comment is sometimes made on the potential 'social significance' (Criterion [d]) of places, having regard to community views expressed in publicly accessible published material.

1.6 Statutory context

1.6.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act establishes an environmental assessment process for nationally and internationally significant natural and cultural heritage places—defined in the EPBC Act as matters of National Environmental Significance. Places on the World Heritage List, National Heritage List and Commonwealth Heritage List are protected by the EPBC Act.

The World, National and Commonwealth Heritage Lists were consulted in the preparation of this HHA and SOHI. No cultural heritage places included on those heritage lists exist within the Study Area.

1.6.2 Environmental Planning and Assessment Act 1979

The EP&A Act provides for the preparation of those planning instruments that govern development within NSW. This includes Regional Environmental Plans and LEPs which are administered by local government and determine land use and the process for assessing DAs (see below on the Muswellbrook LEP). The EP&A Act also establishes the broad frameworks for environmental assessment that underpin this HHA and SOHI.

This HHA and SOHI forms part of an EIS prepared to accompany a DA pursuant to Part 4 of the EP&A Act. The DA relates to proposed 'State Significant Development' as defined by Section 4.36 of the Act and in accordance with *State Environmental Planning Policy (State and Regional Development) 2011.* Section 4.41(1) of the EP&A Act describes the consents that are not required for a SSD approved under Part 4, including those authorisations that would normally be obtained pursuant to the NSW *Heritage Act 1977* (Heritage Act).



1.6.3 NSW Heritage Act 1977

Notwithstanding the above, the Minister may have regard to the Heritage Act, including the objects of the Heritage Act, its definition of 'relics', and the assessment criteria for heritage places within the Heritage Act. The Minister may also choose to seek advice from the Heritage Council.

Section 3 of the Heritage Act states (among other things) that it is an object of the Heritage Act to promote an understanding of the State's heritage and to encourage its conservation.

The Heritage Act defines an archaeological 'relic' to mean 'any deposit, artefact, object or material evidence that (a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and (b) is of State or local heritage significance. The Heritage Act establishes the NSW Heritage Council and the NSW State Heritage Register (SHR) as important mechanisms for achieving its objectives. For development that is not SSD, the Heritage Act applies to certain aspects of local heritage (e.g. the Minister may make an interim heritage order in relation to places of local significance), but it principally applies to conserve places of State significance, especially through inclusion on the SHR.

The potential archaeological resource is discussed in Part 2.3 below.

No items listed on the SHR would be impacted by the Project. There are eight (8) places on the SHR located within the Muswellbrook LGA, seven of them a considerable distance from the Project. The closest of these places, Edinglassie Homestead, is located some 5 km south of the southern mining lease boundary (which follows Wybong Road) and is separated from the main works area by the existing Bengalla Mine. The Project would not impact this site and it is not considered further in this HHA and SOHI.

Section 170 of the Heritage Act requires NSW government agencies to maintain a register of heritage assets under their care and control (a 'Heritage and Conservation Register'). One place listed on a Section 170 Heritage and Conservation Area (i.e. MP51 Kayuga Bridge) would be in the vicinity of the Project.

1.6.4 Muswellbrook Local Environmental Plan 2009

For non-SSD, the Muswellbrook LEP controls development in relation to heritage items within the Muswellbrook LGA. The Project lies within the Muswellbrook LGA. The Muswellbrook LEP includes provisions relating to the conservation of heritage places. With respect to SSD, the Minister may take into consideration the provisions of relevant LEPs but is not bound by them.

Clause 5.10.1 outlines the aims of the Muswellbrook Shire Council in relation to heritage items, these being:

- (a) to conserve the environmental heritage of Muswellbrook;
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views;
- (c) to conserve archaeological sites; and



(d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

The LEP also provides for the conservation of heritage places through the establishment of a list of locally significant places, described in Schedule 5 of the Muswellbrook LEP.

Four places on the Muswellbrook LEP (i.e. MP41 Negoa, MP51 Kayuga Bridge, MP52 Overdene [Overton] and MP53 Kayuga Cemetery) are addressed in this HHA and SOHI.

The LEP also establishes three heritage conservation areas (i.e. Denman Heritage Conservation Area, Muswellbrook Residential Heritage Conservation Area, and Muswellbrook Business Heritage Conservation Area). However, the Project does not overlap with any of these heritage conservation areas and they are not relevant to the proposed activities within the Study Area.

1.6.5 Former Register of the National Estate

In 1997, the Council of Australian Governments determined that heritage conservation should be the responsibility of the level of government best placed to offer the required level of protection. After the introduction of the EPBC Act, new heritage lists were created, which led to the Register of the National Estate (RNE) being phased out.

From 19 February 2012, all references to the RNE were removed from the EPBC Act. The RNE is now maintained on a non-statutory basis as an archive and educational resource.

The existence of an entry for a place in the RNE does not in itself create a requirement to protect the place under Commonwealth law. Nevertheless, information in the Register may be relevant to statutory decisions about protections.

Two places on the former RNE (i.e. MP51 Kayuga Bridge and MP52 Overdene [Overton]) are addressed in this HHA and SOHI.

1.6.6 Register of the National Trust of Australia

The National Trust is a not-for-profit organisation that maintains a register of landscapes, townscapes, buildings, industrial sites, cemeteries and other items or places, which the National Trust determines to have cultural significance.

The listing of a place on the Register of the National Trust of Australia carries with it no legal obligations; however, it is widely recognised as an authoritative statement of the cultural significance of a place.

Three places on the National Trust Register (i.e. MP51 Kayuga Bridge, MP52 Overdene [Overton] and MP53 Kayuga Cemetery) are addressed in this HHA and SOHI.

The MJP LGA is also classified by the National Trust (see Appendix 1).



1.6.7 Register of Significant Buildings (Australian Institute of Architects)

The Australian Institute of Architects (AIA) maintains a Register of twentieth century buildings of significance. This Register carries with it no legal obligations; however, it is recognised as an authoritative statement of the significance of listed buildings.

No places on the Register of Significant Buildings lie in the Study Area or in the vicinity of the Project.

1.6.8 Heritage status

Table 1 provides an overview of the statutory and non-statutory listings for the heritage places assessed in this HHA and SOHI within or near the Project Area.

Table 1. An overview of the heritage listings for the Project Study Area

Register / Listing	Item Listed (Y/N)	Item Name	ltem Number
Statutory Register / Listing			
World Heritage List	N	-	-
National Heritage List	N	-	-
Commonwealth Heritage List	N	-	-
SHR	N	-	-
S170 Heritage and Conservation Register	Y	MP51 Kayuga Bridge	-
	Y	MP41 Negoa	144
Musus Illeraals I ED 2000		MP51 Kayuga Bridge	I102
Muswellbrook LEP 2009		MP52 Overdene (Overton)	I10
		MP53 Kayuga Cemetery	I43
Non-Statutory Register / Listing	'		
Hunter Regional Environmental Plan 1989 (Heritage) ²	Y	Old Kayuga Cemetery 'Negoa' Homestead 'Overdene'	
	Y	MP41 Negoa	R4025
The Netice of Trust Decistor (NCM)		MP52 Overdene (Overton)	R4013
The National Trust Register (NSW)		MP53 Kayuga Cemetery	R3278
		MJP LCA	-
Register of Significant Buildings in NSW (Australian Institute of Architects)	N	-	-
Former RNE	Y	MP51 Kayuga Bridge	15955
I Office IXINC		MP52 Overdene (Overton)	1394

² The *Hunter Regional Environmental Plan 1989 (Heritage)* was repealed on 5 August 2016; however, items listed in this document have been considered for completeness.



1.7 Authorship

The following staff members at Extent Heritage prepared this HHA and SOHI:

- Jessica Heidrich, Heritage Advisor;
- Jacqueline Pearce, Senior Associate; and
- Dr Andrew Sneddon, Director.

1.8 Terminology

The terminology in this HHA and SOHI follows definitions presented in *The Burra Charter* (Australia ICOMOS 2013a). Article 1 provides the following definitions:

Adaptation means changing a *place* to suit the existing *use* or a proposed use.

Compatible use means a *use* which respects the *cultural significance* of a *place*. Such a use involves no, or minimal, impact on cultural significance.

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

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the *place* itself, its *fabric*, setting, *use*, *associations*, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the place including elements, fixtures, contents, and objects.

Maintenance means the continuous protective care of a *place* and its *setting*. Maintenance is to be distinguished from repair which involves *restoration* or *reconstruction*.

Place means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.

Preservation means maintaining a *place* in its existing state and retarding deterioration.

Reconstruction means returning a *place* to a known earlier state and is distinguished from *restoration* by the introduction of new material.

Related place means a place that contributes to the cultural significance of another place.

Restoration means returning a *place* to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.

Setting means the immediate and extended environment of a *place* that is part of or contributes to its *cultural significance* and distinctive character.

Use means the functions of a *place*, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.



2. Methodology

2.1 Approach

This HHA and SOHI is compliant with the SEARs issued by the DPIE for the Project (dated 17 February 2020). Specifically, it follows the requirements for historic heritage impact assessment presented in *Key Issues – Heritage*, which specifies that the EIS must address the:

 identification of historic heritage in the vicinity of the development and an assessment of the likelihood and significance of impacts on heritage items.

This HHA and SOHI has also been prepared in consideration of the comments provided in the relevant agency letters prepared as part of the development of the SEARs issued by the DPIE for the Project.

In addition to the SEARs, this HHA and SOHI has been prepared in accordance with the principles and procedures established in the following documents:

- Assessing Heritage Significance (NSW Heritage Council 2001b).
- Assessing Significance for Historical Archaeological Sites and 'Relics' (NSW Heritage Council 2009).
- Criteria for the Assessment of Excavation Directors (NSW Heritage Council 2019).
- NSW Heritage Manual (NSW Heritage Office and Department of Urban Affairs and Planning 1996).
- Statements of Heritage Impact (NSW Heritage Council 2002).
- The Burra Charter: The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (Australia ICOMOS 2013a).
- The Burra Charter Practice Notes: Understanding and Assessing Cultural Significance, Developing Policy and Preparing Studies and Reports: Contractual and Ethical Issues (Australia ICOMOS 2013b).

As described in Part 1.6 above, searches of the following statutory and non-statutory heritage registers were also undertaken as a background to this HHA and SOHI:

- The World Heritage List, National Heritage List and Commonwealth Heritage List
- The SHR
- Relevant Section 170 Heritage and Conservation Registers
- The Muswellbrook LEP 2009
- The National Trust Register



- The former RNE
- The former Hunter Regional Environmental Plan 1989 (Heritage)
- The AIA Register of Significant 20th Century Buildings.

2.2 Heritage assessment criteria

Assessing the cultural heritage values and significance of a place is crucial to assessing the nature and extent of the potential adverse impacts of a project, and to identifying the appropriate mitigation measures where adverse impacts are identified. In this HHA and SOHI, places and items of interest within, and in the vicinity of, the Project Study Area were assessed against the heritage assessment criteria contained within the NSW guideline document entitled, Assessing Heritage Significance (NSW Heritage Office 2001b).

Specifically, places and items were assessed against the assessment criteria for heritage significance established in the Heritage Act (see Table 2). These criteria are a reflection of the more broadly expressed criteria in Article 1.2 of *The Burra Charter* (Australia ICOMOS 2013a).

Table 2. The assessment criteria for heritage significance in accordance with the NSW Heritage Act 1977

Criterion	Description
Criterion (a)	An item is important in the course, or pattern, of NSW's cultural or natural history.
Criterion (b)	An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.
Criterion (c)	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.
Criterion (d)	An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.
Criterion (e)	An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.
Criterion (f)	An item possesses uncommon, rare or endangered aspects of NSW's cultural or natural history.
Criterion (g)	An item is important in demonstrating the principal characteristics of a class of NSW's cultural or natural places, or cultural or natural environments.

The significance assessments in this HHA and SOHI distinguish between places of State and local significance. Any places that failed to meet the criteria for either State or local significance were assessed in this HHA and SOHI as being 'not a heritage place'. The guideline document, Assessing Heritage Significance (NSW Heritage Council 2001b), states:

- State significance means significance to the people of NSW.
- Local significance means significance within the LGA.

This reflects Section 4A of the Heritage Act, which states that '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.

It then states that '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.

Many of the structures assessed in this HHA and SOHI were in a very poor state of repair. A Practice Note, prepared as an adjunct to *The Burra Charter* (Australia ICOMOS 2013b), entitled Understanding and Assessing Cultural Significance, states:

The physical condition of a place does not generally influence its significance, but will often be a factor in determining policy for the place. Guidance: A place may be in ruinous condition, yet still be significant if its values can be clearly understood. In this case the condition does not influence significance, but will have a bearing on the development of policy for the place.

Some structures were identified that were in such poor condition that substantive refurbishment and repair would be required to make them safe for use or occupation, including replacement of large quantities of failed original fabric. Where this would result in a significant loss of the structure's 'authenticity' or 'integrity', and difficulty in appreciating its heritage values, a lower assessment of significance was favoured in this HHA and SOHI (see Pearson and Sullivan 1995).



The assessments in this HHA and SOHI also appreciate that the fabric of a heritage place may be only part of its significance. Article 1.2 of *The Burra Charter* (Australia ICOMOS 2013a) states:

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

Conservation of the heritage values embodied in some of the places discussed in this HHA and SOHI is dependent on an understanding of, assessment of, and response to, the 'setting'.

A Practice Note prepared as an adjunct to *The Burra Charter* (Australia ICOMOS 2013b) entitled *The Burra Charter Practice Notes: Understanding and Assessing Cultural Significance, Developing Policy and Preparing Studies and Reports: Contractual and Ethical Issues states:*

'Place' in the Burra Charter has a broad meaning, and includes its elements, objects, spaces and views. Place may have tangible and intangible aspects. Guidance: A place should be considered in its wider physical, social or spiritual context. It should not be assessed in isolation. A group of individual places with shared histories, common social associations, or complementary aesthetic characteristics may form a larger 'place' or a serial place. Care is needed in defining the extent of the place and the tangible and intangible elements of the place. Its setting may include views to and from the place, its cultural context and relationships, and links between this place and other places.

2.3 Assessing the potential archaeological resource

This HHA and SOHI also assesses the potential for 'relics' to exist within the Study Area. Archaeological 'relics' are protected by the Heritage Act. Section 4 of the Heritage Act defines a 'relic' as:

any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and
- (b) is of State or local heritage significance.

In addition to the considerations contained in the relics provisions of the Heritage Act, where the potential archaeological resource has been assessed in this HHA and SOHI, regard has been had to the following three fundamental questions:

- Might the site yield data that cannot be obtained from any other source?
- Might the site yield data that cannot be obtained from any other site?
- Might the site yield data that would contribute to addressing substantive research questions?

These questions are drawn from the NSW guideline document entitled *Assessing Significance* for Historical Archaeological Sites and 'Relics' (NSW Heritage Council 2009).



The intactness of the potential archaeological resource was also central to the assessments of archaeological significance provided in this HHA and SOHI, on the grounds that disturbed sites generally have lower potential to yield meaningful data than intact sites.

2.4 Assessing cumulative impacts, including on cultural landscapes

The SEARs issued by the DPIE for the Project (dated 17 February 2020) state (at page 1 of DPIE's general requirements) that an EIS must include:

- an assessment of the likely impacts of the development on the environment, focusing on the key issues identified below, including:
 - a description of the existing environment likely to be affected by the development, using sufficient baseline/background data; and
 - an assessment of the likely impacts for all stages of the development, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plan and industry codes of practice.

Regulation 228 of the *Environmental Planning and Assessment Regulations 2000* states that EISs must include an assessment of 'any cumulative environmental effect with other existing or likely future activities'.

'Cumulative impacts' are not defined by the EP&A Act but the concept has been considered in the NSW Land and Environment Court where it has been stated that:

The word 'cumulative' anticipates a consideration of not just the development the subject of the application, but the development in combination with other development in the locality and the effect that the accumulation of such development and successive development of a similar type, will have on the community or locality (Pain J in *Hastings Point Progress Association Inc v Tweed Shire Council and Ors* [2008] NSWLEC 180).

The United Kingdom (UK) document entitled *Guidelines for Landscape and Visual Impact Assessment* (prepared by the Landscape Institute and Institute of Environmental Management and Assessment 2002:85) also provides useful guidance. It states with respect to cumulative impacts on landscapes:

Cumulative effects can also arise from the intervisibility of a range of developments and/or from the combined effects of individual components of the proposed development occurring in different locations or over a period of time. The separate effects of such individual components or developments may not be significant, but together they may create an unacceptable degree of adverse effects on visual receptors within their combined visual envelopes.

In preparing this HHA and SOHI, regard has also been had to the concept of a 'cultural landscape' especially within the context of possible cumulative impacts.



Cultural landscapes are areas that embody 'the interaction between humankind and its natural environment' (UNESCO 2008:86). The NSW historical themes define cultural landscapes as places that embody 'activities associated with the interactions between humans, human societies and the shaping of their physical surroundings' (NSW Heritage Council 2001a).

In the case of the Muswellbrook region, especially in the vicinity of the Mount Pleasant Operation, there is an 'organically evolved landscape' that developed through the nineteenth and twentieth centuries in response to two main 'social, economic and administrative imperatives' (again citing concepts in UNESCO 2008:86): rural activities and mining. These two activities responded to and modified the natural environment to create a cultural landscape that has existed in the Muswellbrook area for some generations: a mixed mining and farming landscape.

Importantly, the evolution of the cultural landscape at the Project area and the heavily mined areas in its vicinity, has long involved both rural activities and mining activities. The result has been that farming structures and rural activities (cropping, grazing, etc.) have existed cheek-by-jowl with mines for generations, and through that time it has been common for mine sites to form part of the visual setting of historic built heritage places.

The cultural landscape at the Project area and the heavily mined areas in its vicinity (particularly the Bengalla Mine immediately to the south) is not (for example) the same kind of cultural landscape as that captured by the MJP LCA, which retains its predominantly rural character.

These have been relevant considerations to the impact assessments contained in this HHA and SOHI.

2.5 Historical themes

Historical and archival research that had been previously undertaken for the Mount Pleasant Operation was used during preparation of this HHA and SOHI, augmented by additional research as required.

Particular regard was given to the historic 'themes' produced by the former Australian Heritage Commission (2001) and the NSW Heritage Council (2001a) to assist heritage practitioners in the assessment of the significance of historic heritage places. Several of these historic themes are relevant to the heritage places that may be impacted by the Project. These relevant themes are presented below in Table 3 and Table 4, and informed the assessments of cultural heritage significance provided in Part 4 of this HHA and SOHI.

The history of the Muswellbrook area was provided in the previous VAHS 2014 report, prepared for Rio Tinto Coal Australia Pty Ltd (RTCA), through Coal & Allied. The scope of the history contained in the VAHS 2014 report is sufficiently broad to capture the Study Area and the historical themes relevant to the areas that would be potentially impacted by the Project. A summary of this detailed history is provided in Part 3 below.



Table 3. The relevant Australian historical themes applicable to the heritage significance of the heritage sites identified in the vicinity of the Project (Australian Heritage Commission 2001)

Au	stralian Historical Theme	Subthemes
2.	Peopling Australia	2.4 Migrating
		2.5 Promoting settlement
3.	Developing local, regional and national	3.5 Developing primary production
e	economies	3.16 Struggling with remoteness, hardship and failure
		4.1 Planning urban settlements
4.	Building settlements, towns and cities	4.2 Supplying urban services
		4.5 Making settlements to serve rural Australia
5.	Working	5.8 Working on the land
		8.1.1 Playing and watching organised sports
8.	Developing Australia's cultural life	8.5.4 Pursuing common leisure interests
		8.14 Living in the country and rural settlements

Table 4. The relevant NSW historical themes applicable to the heritage significance of the heritage sites identified in the vicinity of the Project (NSW Heritage Council 2001a)

NSW Historical Theme	Notes
Migration	Activities and processes associated with the resettling of people from one place to another (international, interstate, intrastate) and the impacts of such movements.
Agriculture	Activities relating to the cultivation and rearing of plant and animal species, usually for commercial purposes, can include aquaculture.
Pastoralism	Activities associated with the breeding, raising, processing and distribution of livestock for human use.
Towns, Suburbs and Villages	Activities associated with creating, planning and managing urban functions, landscapes and lifestyles in towns, suburbs and villages.
Land tenure	Activities and processes for identifying forms of ownership and occupancy of land and water, both Aboriginal and non-Aboriginal.
Accommodation	Activities associated with the provision of accommodation, and particular types of accommodation.
Domestic life	Activities associated with creating, maintaining, living in and working around houses and institutions.
Mining	Activities associated with the identification, extraction, processing and distribution of mineral ores, precious stones and other such inorganic substances.
Leisure	Activities associated with recreation and relaxation.
Sport	Oval, race course, swimming pool, bowling club, bowling green, trophies, calendar of fixtures, cricket set, yacht pens, tennis court, rugby field, speedway, sporting equipment, bocce court.
Social institutions	Activities and organisational arrangements for the provision of social activities



2.6 Heritage impact assessments

This HHA and SOHI assesses the potential direct heritage impacts of the Project (e.g. ground disturbance impacting archaeological sites), as well as the potential indirect heritage impacts of the Project (e.g. on the setting of heritage places).

This HHA and SOHI applies the principles presented in the NSW Government guideline document entitled *Statements of Heritage Impact* (NSW Heritage Council 2002).

Where the Project would *directly* impact a heritage item, this HHA and SOHI addresses the following questions provided in that document:

- Have all options for retention and adaptive re-use been explored?
- Can all of the significant elements of the heritage item be kept and any new development be located elsewhere on the site?
- Is demolition essential at this time or can it be postponed in case future circumstances make its retention and conservation more feasible?
- Has the advice of a heritage consultant been sought? Have the consultant's recommendations been implemented? If not, why not?

In other cases, this HHA and SOHI considers the following questions in relation to 'new development adjacent to a heritage item':

- How is the impact of the new development on the heritage significance of the item or area to be minimised?
- Why is the new development required to be adjacent to a heritage item?
- How does the curtilage allowed around the heritage item contribute to the retention of its heritage significance?
- How does the new development affect views to, and from, the heritage item? What has been done to minimise negative effects?
- Is the development sited on any known, or potentially significant, archaeological deposits?
 If so, have alternative sites been considered? Why were they rejected?
- Is the new development sympathetic to the heritage item? In what way (e.g. form, siting, proportions, design)?
- Will the additions visually dominate the heritage item? How has this been minimised?
- Will the public, and users of the item, still be able to view and appreciate its significance?



2.7 Fieldwork methodology

This HHA and SOHI was prepared based on the following methodology:

- A desktop investigation of the existing historic heritage sites and values within the Project Study Area, including a desktop review of the 2014 VAHS report.
- Fieldwork undertaken by Jacqueline Pearce, Andrew Sneddon, and Matthew Harris between November 2016 and September 2018.

The sites visited as part of this fieldwork were identified using:

- Desktop review of previous reports, especially the VAHS report.
- Historical and archival research.
- Local knowledge provided by MACH employees.
- Aerial imagery that captured structures currently in use and abandoned derelict structures.
- Photographic records of current structures.

The surveys underpinning this HHA and SOHI involved traversing the Study Area on foot and by four-wheel drive, typically relying on the existing roads and tracks. This included Castlerock Road, Invermein Street, Kayuga Road, Wybong Road, and Bengalla Road (see Figure 2).

This HHA and SOHI also includes an assessment of the potential historical archaeological resource. During the survey, Extent Heritage personnel remained alert to visible evidence of potential sub-surface archaeological material. Long grass and overgrown vegetation restricted surface visibility in some places. The assessment of archaeological potential contained in this HHA and SOHI has therefore relied heavily on desktop research as well as the fieldwork.

In relation to built form, where possible each site visit included a visual inspection of both the interior and exterior of the extant structures (e.g. of homesteads, houses, sheds and abandoned residences), as well as the surrounding garden areas and landscape setting. Where those structures were occupied, the inspection was generally confined to the accessible exterior and any recommendations presented in this HHA and SOHI concerning interiors were based on the images and descriptions contained in the VAHS report. These site inspections did not afford a detailed investigation of all fabric, but an overview of the key elements of the place to assist in determining significance.



3. Historic context

This section provides a summary history of the development of the Hunter Valley Region and the Muswellbrook area. It draws on the VAHS report (2014), augmented by additional historical research undertaken by Extent Heritage.

3.1 The Hunter Region

Between 1820 and 1850, the NSW colony underwent a foundational phase of European settlement, defined by the targeted agricultural development of the Hunter Region (Clive Lucas, Stapleton and Partners 2013; Cox, Tanner and Walker 1978).

The approach to the surveying of the Hunter Region was defined by official attempts to regularise settlement conditions, manage the distribution of land holdings and establish requirements for their cultivation (Dangar 1828). The result was a uniform, grid-like pattern of settlement with little to no consideration of the actual topography – the alluvial plains, river valleys and ridgelines – that characterised the Hunter Region.

By the time the Hunter Region was opened for settlement in 1822, a series of government policies relating to the granting of land were in place. These policies, specifically those recommended in Commissioner John Thomas Bigge's reports (1822-23) and later formally endorsed by Governor Thomas Brisbane (Campbell 1926), supported the standardised division of land. This grid pattern of settlement in turn gave rise to the influx of free settlers and immigrants who arrived in the Hunter Region with a view to obtaining private land holdings and developing them for mixed farming and small-scale pastoral industries (Perry 1963). By the early 1820s, 43% of settlers in the Hunter Valley were free immigrants, twice that of any comparable region in NSW (see Atkinson in Clive Lucas, Stapleton and Partners 2013:16).

The new settlers were men of substantial social standing and wealth, many with interests in rural industry and an awareness of new agricultural methods. These landowners played a vital role in the economic prosperity that came to define the Hunter Region from the early- to mid-19th century: they established large pastoral holdings, tendered the construction of homestead complexes, managed workforces of convict labourers, actively developed successful agricultural industries and fulfilled key judicial or political roles in their communities. In addition, they had a noticeable influence on the broader colonial society of NSW through the formation of associations or organisations aimed at the promotion and management of their particular agricultural industries (Perry 1963).



This development of large-scale pastoralism through the entrepreneurship of individual settlers relied, in part, on the government's introduction of a more effective system of convict management. Following the establishment of a convict settlement at the mouth of the Hunter River in 1804, Commissioner John Thomas Bigge proposed a change to the penal system, where convicts would be assigned to wealthier settlers responsible for their accommodation, work and discipline (Bigge 1822-23; Clive Lucas, Stapleton and Partners 2013:15; VAHS 2013:40). The general principle held that convicts were to be allocated at the ratio of one convict for each 100 acres of land and, in return for the employment of convict labourers as part of their workforces, private landowners had the opportunity to receive substantial land grants (VAHS 2013:40). Although the transportation of convicts ceased in 1840, convict labour played an important part in the early development of the Hunter Region, particularly the establishment of the large rural estates.

3.2 Muswellbrook

The VAHS report (2014:35-37) provides a detailed historic overview of Muswellbrook. In summary:

The early European settlement of Muswellbrook fits within the broader historical pattern of the early regional settlement and industrial development of the Hunter Region. As early as 1823, explorer Allan Cunningham travelled over The Great Dividing Range almost to the present site of Muswellbrook. By 1824, government surveyor Henry Dangar began to survey and map the Hunter Region, setting aside 640 acres for a village that was to become the township of Muswellbrook (Dangar 1828). Muswellbrook was strategically situated in relation to the Hunter River and was on the main track to the Liverpool Plains, which subsequently became the Great Northern Road (present-day New England Highway).

Following Dangar's survey, large grants of land in the area, particularly along the Hunter River, were awarded to wealthy settlers in return for taking convict labourers into their employ. This early period of settlement saw the establishment of a number of large estates in Muswellbrook, including 'Edinglassie', 'Overton', 'Negoa', and 'Bengalla' estates, among others. These wealthy landowners 'dominated the economic and social life of the district' (VAHS 2014:36). By 1841, Muswellbrook had become a thriving town of 215 residents with multiple shops, several hotels and a flour mill. By the mid-nineteenth century, Muswellbrook's population had grown considerably in response to increased trade, the opening of the railway in 1869 and the increased availability of land under *The Crown Lands Acts* of 1861.

Agriculture, pastoralism and coal mining were a feature of early life in the Muswellbrook district. For most of the nineteenth century, wool was initially the dominant industry, followed by cattle and sheep grazing, small-scale agriculture, and the breeding of horses. The fertile nature of the land combined with ease of irrigation and transport to Sydney enabled Muswellbrook's settlers to successfully establish and support a range of agricultural and pastoral industries.



Towards the end of the nineteenth century, the introduction of milking machines and tractors led to the mechanisation of farming, which in turn created a pivotal increase in productivity for these early small-scale farming enterprises. Following the opening of the Kayuga Creamery in 1893, the establishment of large-scale commercial dairying soon provided the economic basis for Muswellbrook. Other creameries and butter factories soon opened at Overton (Blunt's), Muswellbrook and Aberdeen.

Concurrently, the development of Muswellbrook was also defined by the advent of a new, dominant industry: coal mining. As early as 1867, the *Maitland Mercury* reported the opening of a coal mine on the Negoa Estate for the supply of the Muswellbrook blacksmiths (VAHS 2014:46). By the late 1800s, the Weis Brothers were reporting operations of a coal mine at Kayuga on the property of Mr. Elijah Cox, which continued until the early 1930s.

In addition, the Muswellbrook Coal Mine is one of the oldest coal mines in NSW that remains operational (Muswellbrook Shire Council 2015a). Established in 1906 as an underground mine, the Muswellbrook Coal Mine shifted its operations to open cut mining in the mid-1940s.

This combination of a new, dominant industry (i.e. coal mining) and the subdivision of many of the area's larger estates into smaller land holdings suitable for tenant farmers significantly altered Muswellbrook from a small country town to an economically diverse and growing rural/resource extraction centre. Further, it played a significant role in shaping the character of the cultural landscape.



4. Assessments of heritage significance

The following section provides a description and historic overview of the historical heritage places within or in the vicinity of the Project Study Area, as well as an assessment of their heritage significance and level of archaeological potential. A summary of the historical heritage places, as assessed by this HHA and SOHI, is provided in Table 5 below.

The photographs of the historical heritage places presented in this section of the report were taken as part of the fieldwork undertaken by Extent Heritage between November 2016 and September 2018, unless otherwise credited.

The implications of these significance assessments are discussed separately in Part 5 Assessment of heritage impacts and Part 6 Management recommendations.

Table 5. A summary of the heritage significance and archaeological potential of the historical heritage places addressed below in Part 4, as assessed by this HHA and SOHI

Heritage Place	Fulfils Criteria for Heritage Significance [Yes / No]	Relevant Heritage Significance Criteria ³	Assessed Level of Heritage Significance	Assessed Level of Archaeological Potential ⁴
MP01 Broomfield	Yes	(a), (c) and (g)	Local ⁵	Low
MP06 Coady's	No	-	-	Low
MP13 Humphries	No	-	-	Low
MP20 Kayuga Coal Mine	Yes	(a)	Local	Low
MP21 Kayuga School	Yes	(e)	Local	High
MP22 Smith's Clear Farm	Yes	(e)	Local	Low
MP23 Devine's	No	-	-	Low ⁶
MP25 Gall's Farm	No	-	-	Low
MP26 Page's Farm	No	-	-	Low

³ This column refers to the criteria for assessing heritage significance (a) – (g) in accordance with the *Heritage Act 1977* (NSW).

⁴ This column refers to the potential for the site to contain archaeological material that would satisfy the definition of 'relics' under the *Heritage Act 1977* (NSW).

⁵ The assessment of local heritage significance for MP01 Broomfield excludes the stables and coach museum erected c.1965.

It is noted that there is anecdotal data provided by one former owner that there may be child burials associated with the house at MP23 Devine's.



Heritage Place	Fulfils Criteria for Heritage Significance [Yes / No]	Relevant Heritage Significance Criteria ³	Assessed Level of Heritage Significance	Assessed Level of Archaeological Potential ⁴
MP27 Thorndale	Yes	(a), (d) and (e)	Local	Low ⁷
MP29 Lynch's	Yes	(e)	Local	Low
MP31 Cox's Portion 20	No	-	-	Low
MP32 Cox's Orchard	No	-	-	Low
MP36 Hill's	No	-	-	Low
MP38 Rosebrook	Yes	(a), (c), (d), and (e)	Local	Moderate
MP39 Rosebrook Quarry	Yes	(e)	Local	N/A ⁸
MP41 Negoa	Yes	(a), (b), (c), (e) and (f)	Local	Moderate
MP42 Fibbins	Yes	(a) and (e)	Local	Low
MP43 St Andrew's Anglican Church	No	-	-	Low
MP44 Scarred Tree	No	-	-	N/A
MP45(a-b) Casey: Clenmore and Edgeway	Yes	(e)	Local	Low
MP46 Kayuga Recreation Ground	Yes	(a), (b), (c) and (d)	Local	Low
MP49(a-c) Weidmann's	No	-	-	Low
MP50 Waitomo House	Yes	(a), (c) and (g)	Local	Low
MP51 Kayuga Bridge	Yes	(a), (b), (d), (e) and (g)	State	N/A
MP52 Overdene (Overton)	Yes	(a), (b), (c), (d) and (e)	Local	Moderate
MP53 Kayuga Cemetery	Yes	(a), (c), (d) and (f)	State	High

-

It is noted that there is anecdotal data provided by one former owner that there may be child burials associated with MP27 Thorndale.

The quarry (the geological features mined for stone) does not satisfy the definition of a 'relic' under the *Heritage Act 1977* (NSW). Rather, it would be a 'work' under that Act.



Heritage Place	Fulfils Criteria for Heritage Significance [Yes / No]	Relevant Heritage Significance Criteria ³	Assessed Level of Heritage Significance	Assessed Level of Archaeological Potential ⁴		
MP54 Portion 71	No	-	-	Low		
MP55 Portion 26	No	-	-	Low		
Muswellbrook-Jerrys Plains Landscape Conservation Area	This HHA and SOHI uses the National Trust citation (Appendix 1) as a reference document for the purposes of the assessments in this report; however, it has no statutory effect. The Mount Pleasant Operation Mining Lease is located adjacent to, but wholly outside of the MJP LCA. The only elements that would be within the MJP LCA would be in discrete locations within the area of overlap that already exists between the Bengalla Mine and the MJP LCA, the landscape in this location having already been modified some years ago by the Bengalla Mine's development.					
The Cultural Landscape	The Mount Pleasant landscape today is compromised and it reads as a modified and abandoned agricultural landscape, within an established mining setting.					

4.1 MP01 Broomfield

4.1.1 Summary history

The VAHS report (2014:51-52) includes a lengthy history of the Broomfield homestead and ancillary buildings at MP01. In summary:

- 1891: Owner, Mr. J.H. Cox died.
- 1893: Part of the Cox estate purchased by Rev. W.E. White, being named 'Broomfield'.
- 1901: Tenders advertised for construction of a residence at Broomfield.
- 1909: White's son commenced dairying, with dairy structures erected over the next decade.
- 1913: White's estate noted the Broomfield property included a weatherboard cottage, detached kitchen, shed, stables and yard, two wells, two dams, two dairymen cottages with dairy, yards and hay shed at each.
- 1920: Broomfield purchased by Mr. W.C.M. Christian.
- 1965: Broomfield purchased by Mr. M. Peel. Some of the previous structures appear to have been removed but some remain. During Peel's tenure, the large stables and coach house/museum were erected and/or improved.



4.1.2 Description

The VAHS report (2014:54-55) also includes a detailed description of the physical features of the property. In summary, MP01 comprises:

- A large homestead (weatherboard exterior and lathe and plaster interior), constructed in the early twentieth century. After 1965, the main building and detached kitchen were joined together.
- A coach house/museum—this building of round timber, sawn slabs and corrugated iron was erected by Matt Peel c. 1965 to house his rural museum and coaches.
- A shelter, the top part of which is most likely the garage mentioned in a 1947 valuation.
- A shed of timber and corrugated iron—this structure was most likely the harness room and cow bails according to the VAHS report (2014:54) and was erected sometime before the 1913 valuation, which records a shed.
- A small hut with extensions (this would appear to have been the shearer's quarters)—parts
 of this building may be the oldest building on the site.
- Two large stable complexes constructed by Mr. Peel after 1965 utilising round timber and corrugated iron.
- Shearing shed with sheep yards and dip, constructed in 1925.

The UQ Culture and Heritage Unit (UQCHU) carried out a site visit in late 2016 and confirmed the above site description. However, a significant decline in the condition of the structures (especially the house) and the gardens was observed since the VAHS period of fieldwork in 2014. The following observations were made regarding the site's condition in 2016:

- The exterior and interior of the homestead have deteriorated and are generally in a poor condition. The exterior is overgrown with garden vegetation (Figure 4–Figure 7).
- The coach house/museum has also deteriorated and appears to not have been in use for a period of time. Some of the corrugated iron sheets have fallen off and the interior of the structure was filled with debris (Figure 8).
- The timber and corrugated iron shed (and its associated yards) have almost fallen down.
- The small hut, likely the former shearer's quarters, is in a poor state of repair with considerable termite damage evident (Figure 9).
- Both the stable complexes (c. 1965) are in a poor state of repair (Figure 10–Figure 11).
- The sheep yards and dip are in ruins (Figure 12).



4.1.3 Assessment of heritage significance

The VAHS report (2014:76) concludes that the remains and location of the MP01 Broomfield (excluding the 1965 works) is of high local significance for satisfying the following heritage assessment criteria:

Criterion (a): Site shows evidence of significant human activity from erection of hut, harness shed, homestead, garage, dairy farmers' cottages, school, shearing shed, coach house, stables & hayshed.

Criterion (c): Site exemplifies a particular taste and style, especially in the homestead.

Criterion (g): The homestead is a fine example of its type that has retained many of the original features along with attributes typical of a particular way of life.

The VAHS report (2014:76) also assesses MP01 as being significant at the local level for satisfying the following criteria:

Criterion (e): Site provides evidence of past human cultures that is unavailable elsewhere in the district. It also has the potential to yield further substantial scientific information on building methods in the early 1900s.

Criterion (f): Site has potential to provide evidence of a defunct way of life. Detached kitchen, maid's room, large walk-in pantry.

The authors of this HHA and SOHI disagree that the built structures at MP01 might provide evidence of past human cultures 'that is unavailable elsewhere in the district'. The VAHS report itself describes 15 homesteads of the same or slightly earlier date within the Mount Pleasant area alone. Large numbers of other homesteads are clearly visible within the wider landscape and the broader local area.

Similarly, the authors of this HHA and SOHI disagree that the homestead has the potential to 'yield further substantial scientific information on building methods in the early 1900s'. These are well-understood through previous studies of NSW (and other Australian) homesteads and rural vernacular architecture.

The authors of this HHA and SOHI disagree with the use by the VAHS report of Criterion (f) in its heritage assessment. Criterion (f) relates to places that are 'uncommon, rare or endangered', rather than to places that have 'potential to provide evidence' of ways of life. This aspect of the assessment would be better placed against Criteria (a) or (e).

Notwithstanding these differences in emphasis, the authors of this HHA and SOHI agree with the VAHS report's conclusion that the site is of local significance (but not including the large stables and coach house/museum which were erected in 1965).

In addition to the above, the VAHS report does not consider the potential archaeological resource. The VAHS historical research identified the existence of two early twentieth century wells and (at the northern end of Broomfield fronting Castlerock Road) a small schoolhouse that was used intermittently between 1910 and 1912. There is also the potential for isolated artefacts to exist under floors, in refuse dumps, etc.



The UQCHU carried out archaeological investigations at three locations within the Study Area in 2017 (UQCHU 2016, 2017a-b). These excavations demonstrated that the potential for in situ archaeological relics to survive at locations within the study area is generally low due to the shallow overburden and a range of twentieth century farming activities that have disturbed potential archaeological deposits.

Further, with respect to the research potential of the potential archaeological resource, this HHA and SOHI makes the following observations:

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP01 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP01 is relevant to themes concerning 'agriculture', 'pastoralism', 'land tenure', 'accommodation' and 'domestic life'.

In other words, MP01 has the potential, through its archaeology to 'tell the story' of farming and the rural way of life in the local area during its period of use (Criteria [a] and [e] above). However, the ability of the archaeological resource to contribute significantly to substantive research questions is limited.

The kinds of archaeological relics that may survive might illustrate:

- activity areas, but these are discernible from the surviving architecture in any case; and
- a sample of the kinds of domestic and work tools used by the occupants—matters well-understood from other sources (e.g. journals, newspapers, retail catalogues).

However, information relating to these matters would be of narrow, site-specific interest rather than of State, or even wider local, interest. Historical research into this site has already established its broad ownership and development history. Should any of these artefacts exist, they may shed some light on the kinds of activities undertaken at the house and school, including the foods that were eaten, medicines that were taken, toiletries that were used, etc. However, it is unlikely that they would yield data that have not been obtained for rural NSW in this region through other sites and resources.



In other words, in archaeological terms:

- the site is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into homes in rural NSW in the period and local area, the recollections of local informants, historic photographs and other archival material:
- the site is unlikely to contribute knowledge that cannot be obtained from other better preserved and less disturbed sites, including late nineteenth and early twentieth century homes that remain standing in the local area; and
- given the nature of the site, and the above observations, it is unlikely that the potential archaeological resource would make a meaningful contribution to substantive questions relating to Australian history, including questions in relation to the rural farming and living experiences of the residents of the local area.

The site has low potential to contain 'relics' as defined by the Heritage Act.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]).

4.1.4 Summary

MP01 Broomfield is a place of local heritage significance (excluding the large stables and coach house/museum erected in c. 1965).

MP01 Broomfield has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.1.5 Implications

The heritage impacts in relation to MP01 Broomfield are presented in Part 5.1 below.

The management recommendations for MP01 Broomfield are provided in Part 6.1 below.



4.1.6 Figures



Figure 4. View of the homestead known as 'Broomfield' (MP01). Note the homestead's roof form and verandah. Source: UQCHU (2017b:15).



Figure 5. The garden vegetation at MP01, which has overgrown parts of the homestead. Source: UQCHU (2017b:15).





Figure 6. View along the front elevation and verandah of the homestead at MP01. Source: UQCHU (2017b:16).



Figure 7. Interior view of the homestead at MP01, showing the building's deteriorated condition. Source: UQCHU (2017b:16).





Figure 8. The coach house museum at MP01, built by Mr. Peel c. 1965. Source: UQCHU (2017b:17).



Figure 9. A small hut (formerly the shearer's quarters) at MP01. Source: UQCHU (2017b:18).





Figure 10. One of the stable complexes built at MP01 post-1965. Source: UQCHU (2017b:17).



Figure 11. Another stable complex built at MP01 post-1965. Source: UQCHU (2017b:18).





Figure 12. The remains of the concrete sheep dip and timber yards at MP01.

4.2 MP06 Coady's

4.2.1 Summary history

The VAHS report (2014:106-7) provides a detailed history of MP06. In summary:

- 1885: A 'Michael Cody' (sic) purchased land near lower Wybong.
- 1894: His son, John Coady, took up two portions of land adjacent to MP06. At some time following that date, John Coady constructed a house and other buildings on the property.
- 1923: Following the death of John Coady in 1922, the deceased's estate file recorded the land as containing a house and kitchen, yards, bails, dairy, shed, fencing and dam.

4.2.2 Description

The VAHS report (2014:107) describes MP06 as 'very much an archaeological site' with six areas of interest, which are summarised as follows:

Remains of a small house with garden kerbing: A number of piers indicative of the corner of a small dwelling with an area of concrete to the north-east and remains of brick/stone kerbing to the north (Figure 13). It is possible that this is the site of the house built for David Spowart c. 1930.



- Remains of a dairy: a concrete slab with a raised concrete lip and bolts that most likely retained a timber building (Figure 15). In one corner is a concrete block, on which the separator was mounted, and also a drain in the north-east corner.
- Remains of cow bail: a concrete slab with brick and stone sections to the north and south, as well as a small drain in the north-east corner. Also, there are a number of timber posts that indicates this was likely a roofed structure with some open sides (Figure 14).
- Remains of a road/track: an area of levelled ground, which may have been a platform for a building with a dirt floor or part of a road.
- Remains of a building: an area of levelled ground with bed logs set in the ground on the north side and remains of a post at the eastern end of a log.
- Remains of a hut or house: number of piers and some broken glass fragments.

The UQCHU carried out a site visit in late 2016 and confirmed the above site description. In summary, the site displays a mixture of timber piers and posts, footpaths, garden beds, kerbs and other archaeological indicators of the house and related farm buildings.

4.2.3 Assessment of heritage significance

The VAHS report (2014:121) assesses the archaeological remains at MP06 as being of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity.

Criterion (c): The site has the potential to yield substantial scientific and/or archaeological information on building methods and use.

The VAHS report (2014:121) also concludes that:

The site has a number of features that indicate a substantial amount of human activity that could provide important information on ways of life, building methods and utilisation.

This HHA and SOHI concludes that MP06 (being a relatively common form of small-scale dairy facility with house, from the late nineteenth to early twentieth century) is of limited historical significance (Criterion [a]), even at the local level.

The authors of this HHA and SOHI disagree with the use of Criterion (c) by the VAHS report. Criterion (c) states:

An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).



If the site contains archaeological resources, it would be better assessed against Criterion (e) which relates to the situation where:

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).

This HHA and SOHI therefore assesses the potential archaeological resource against Criterion (e) rather than Criterion (c).

In relation to the potential archaeological resource (Criterion [e]), the former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP06 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP06 is relevant to themes concerning 'pastoralism', 'land tenure', 'accommodation' and 'domestic life'.

In other words, MP06 has the potential through its archaeology to 'tell the story' of farming (specifically, dairying) and the rural way of life in the local area during its period of use. However, its ability in that regard will depend on a range of additional factors, especially the taphonomy (site formation processes) that have operated at the site since it was abandoned. Archaeological sites that have been little disturbed have better ability to illustrate past lifeways than disturbed ones.

Also, MP06's ability to contribute significant archaeological data about the local area will depend on the existence or otherwise of other potential sources that can address these same themes.

As noted in Part 2.3 above, the Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (NSW Heritage Council 2009) provides three questions for assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?



In relation to MP06, it is possible that the following kinds of artefacts exist there:

- evidence of dwelling footprints, including 'underfloor deposits';
- floor slabs;
- footpaths and garden beds (kerbing, etc.);
- cesspits and drains;
- garbage pits and dumps; and
- isolated artefacts.

These kinds of archaeological evidence can illustrate:

- Activity areas—but these are discernible from the early survey plans and material visible on the surface in any case.
- A sample of the kinds of domestic and work tools used by the occupants—matters well-understood from other sources (e.g. journals, newspapers, retail catalogues).
- Technologies used in the operation of a dairy—but this is well-understood from other sites and sources.

In other words, the archaeological remains at MP06 have low potential to contribute new knowledge about the settlement of the local area. That potential is limited by:

- levels of disturbance at the site;
- the nature of the site's abandonment (e.g. the buildings appear to have been stripped of recyclable materials on abandonment, leaving little to enter the archaeological record); and
- the existence of other better sites and sources.

In conclusion, MP06 is unlikely to contain 'relics' as defined by the Heritage Act.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]).

The above observations and conclusion have guided the recommendations contained in Part 6.2 below.



4.2.4 Summary

MP06 Coady's fails to meet the criteria for either State or local significance.

MP06 Coady's has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.2.5 Implications

The heritage impacts in relation to MP06 Coady's are presented in Part 5.2 below.

The management recommendations for MP06 Coady's are provided in Part 6.2 below.

4.2.6 Figures



Figure 13. The remains of stone garden kerbing at MP06. Source: UQCHU (2017b:31).





Figure 14. The remains of timber stumps of the former cow bails at MP06. Source: UQCHU (2017b:31).



Figure 15. A concrete floor slab, probably the remains of the former dairy at MP06. Source: UQCHU (2017b:32).



4.3 MP13 Humphries

4.3.1 Summary history

The VAHS report (2014:232-235) includes a detailed history of MP13 Humphries. In summary:

- 1862: Portion 7 and 8 leased by Mr. George Seabrook.
- 1863: The surveyor, Mr. John Neill, produced a map indicating a house and yard.
- 1866: Ownership transferred to Mary Ann Seabrook.
- 1872: Ownership transferred to Harriet Nowland, followed by her daughter, Miss Harriet Farlow Nowland on 8 January 1874.
- 1885: Occupied by Miss Harriet Nowland and records listed a property of 600 acres, 4 horses, 21 cattle and 450 sheep.
- 1904: Edward Higgens & Parkinson advertised the auction of a portion of the estate of Miss H. Nowland.
- 1906: Owner, Miss H. Nowland, died. Edward Higgens, Parkinson & Co. reported that they
 had sold the estate of the late Miss H. Nowland to Thomas Blunt of Overton. The estate
 consisted of 283 acres with a dwelling house, outbuildings, yards, three dams and a well.
- 1907: Mr. Archibald Nowland made claims on the estate of his sister. Portions 7 and 8 transferred to Mr. Thomas Blunt
- 1912: Mr. T. Blunt disposed of his property to Mr. William F. Robey, including Portion 8.
- 1915: Portions 7 and 8 sold by Mr. W.F. Robey to Mr. John M.C. Humphries and Mr. Kenneth W. Humphries, graziers of Muswellbrook.
- 1920: The Humphries split their properties and Mr. K.W. Humphries purchased Portion 7 and Portion 8.

4.3.2 Description

The VAHS report (2014:172) includes a description of MP13, an archaeological site with six visible features. In summary, MP13 comprises:

- Remains of a house: This area includes a number of bricks scattered over the area that may have been the base of a chimney (Figure 16). To the north, there are two places with piers that most likely were tank stands. There is also some concrete with netting from the inside of a corrugated iron tank. Other artefacts include an iron bed frame and a fuel stove. A number of pepper trees are also located to the west.
- Ruins of unknown building: A concrete slab with a spoon drain (Figure 18). The area has been fenced in more recent times with netting.



- Remains of a dairy/milking shed: A concrete slab extended to the east with two drains in the floor. At the western end of the slab are blocks that indicate machinery was previously mounted here.
- Remains of a piggery: This area contains concrete floors and troughs; however, it is highly disturbed.
- A stand built for two tanks constructed from round bush timber and recycled split rails.
- A timber-lined well (Figure 17) and a steam boiler partly buried in the soil.

The authors of this HHA and SOHI agree with the site description provided in the VAHS report.

4.3.3 Assessment of heritage significance

The VAHS report (2014:182) assesses the archaeological remains at MP13 as being of moderate local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity in the development of a mechanised dairy in the early 1900s.

Criterion (b): The site may be associated with a significant person, i.e. Thomas Blunt who was instrumental in introducing mechanisation to the farming industry, developing dairying and butter production on a large scale.

Criterion (e): Site has potential to yield further substantial archaeological information on an early mechanised dairy.

Criterion (f): The site demonstrates a process that is in danger of being lost, i.e. small family-operated dairy.

The VAHS report (2014:182) also concludes:

The site represents an attempt to manage a dairy on non-irrigated land. It has evidence of mechanisation of the milking process and secondary use of skimmed milk. Due to these features, it is of importance to the history of the dairy industry and land use. There is very little evidence as to the accommodation type, size or material and this should be examined further.

This HHA and SOHI does not assess MP13 as being of local significance.

The site (being the highly deteriorated remains of a relatively common form of small-scale dairy facility with house, from the late nineteenth-early twentieth century) is of limited historical significance (Criterion [a]), even at the local level.

The authors of this HHA and SOHI disagree with the VAHS assessment of the site as being significant for its association with Thomas Blunt (Criterion [b]). The history produced by the VAHS report indicates that Mr. Blunt purchased the property in 1906 and sold it on in 1912. The association with Thomas Blunt amounted to no more than six years, at a time when he was principally associated with his main venture at Overton.



The authors of this HHA and SOHI disagree with the use by the VAHS report of Criterion (f) in its heritage assessment above. Criterion (f) relates to places that are 'uncommon, rare or endangered' rather than to places that may 'demonstrate a process'. This aspect of the assessment would be better placed against Criterion (e). In any event, evidence of dairying activity in the region from the late nineteenth and early twentieth centuries is not rare.

With respect to Criterion (e) the research potential of the potential archaeological resource, this HHA and SOHI makes the following observations:

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP13 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP13 is relevant to themes concerning 'pastoralism', 'land tenure', 'accommodation' and 'domestic life'.

In other words, MP13 has the potential, through its archaeology, to 'tell the story' of the mechanisation of dairying and the rural way of life in the local area during its period of use. However, its ability in that regard will depend on a range of additional factors, especially the taphonomy (site formation processes) that have operated at the site since it was abandoned. Archaeological sites that have been little disturbed have better ability to illustrate past lifeways than disturbed ones.

Also, MP13's ability to contribute significant archaeological data about the local area will depend on the existence or otherwise of other potential sources that can address these same themes.

As noted above in Part 2.3 above, the Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (NSW Heritage Council 2009) provides three questions for assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?



In relation to MP13, it is possible that the following kinds of artefacts exist there:

- evidence of dwelling footprints, including 'underfloor deposits' and floor slabs;
- cesspits and drains;
- garbage pits and dumps; and
- isolated artefacts.

These kinds of archaeological evidence can illustrate:

- Activity areas—but these are discernible from the material visible on the surface.
- A sample of the kinds of domestic and work tools used by the occupants—but these are matters well-understood from other sources (e.g. journals, newspapers, catalogues).
- Technologies used in the operation of a dairy—but this is well-understood from other sites and sources in the local area.

In other words, the archaeological remains at MP13 have limited potential to contribute new knowledge about the settlement of the local area. That potential is limited by:

- levels of disturbance at the site:
- the nature of the site's abandonment; and
- the existence of other better-preserved sites and sources.

During site visits to MP13, a disused timber-lined well was observed (Figure 17). The well would not constitute a 'relic' under the Heritage Act, being rather, a 'work' under the legislation. It would require no archaeological excavation.

The remains at MP13 have low potential to satisfy the definition of 'relics' contained in the Heritage Act. Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]).

The above observations have guided the recommendations contained in Part 6.3 below.



4.3.4 Summary

MP13 Humphries fails to meet the criteria for either State or local significance.

MP13 Humphries has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

In relation to the disused timber-lined well at MP13, this HHA and SOHI concludes that the well would not constitute a 'relic' as defined by the Heritage Act, being rather, a 'work' under the Heritage Act. It would require no archaeological excavation.

4.3.5 Implications

The heritage impacts in relation to MP13 Humphries are presented in Part 5.3 below.

The management recommendations for MP13 Humphries are provided in Part 6.3 below.

4.3.6 Figures



Figure 16. View looking north over the remains of the house at MP13. Source: VAHS (2014:177).





Figure 17. The remains of a timber-lined well at MP13. Source: VAHS (2014:181).



Figure 18. View looking west showing the concrete slab remains of an unknown building at MP13. Source: VAHS (2014:178).



4.4 MP20 Kayuga Coal Mine

4.4.1 Summary history

The VAHS report (2014:232-235) includes a detailed history of MP20 Kayuga Coal Mine. In summary:

- 1867: Coal mine opened on the Negoa Estate by Mr. Edgar of Kayuga.
- 1877: Portion 92 comprising land of 40 acres sold to Mr. Elijah Cox.
- 1886: Mr. E. Cox obtained freehold to his land from the Crown.
- 1891: Owner Mr. E. Cox died, leaving an estate including land of 52 acres with house and garden of 100 fruit trees.
- 1892: Mr. W. Weiss started a coal mine at Kayuga on the late Mr. E. Cox's property.
- 1899: Kayuga Coal Mine produced 815 tons of coal in a single year.
- 1901: Mr. E. Cox's widow transferred ownership of the property to their son, Mr. A.E. Cox.
- 1906: Mr. A.E. Cox started to lease the property to the Kayuga Coal Mining Company.
- 1908: Ownership transferred to Messers Blunt & Co.
- 1914: Kayuga Coal Mining Company surrendered lease of property, which included a cottage, hay shed, stables and the Kayuga Coal Pit in full working order (3 shafts).
- 1923: Kayuga Coal Mine employed a peak total of 13 men.
- 1929: Mine operations suspended and Mr. A.J. Cox, miner of Muswellbrook and son of the late Mr. E. Cox, sold Portion 92 and Portion 241 to a Mr. W.D. Quantrill.
- 1930: Work resumed at the mine under the new management of Mr. O'Brien.
- 1945: Mr. W.D. Quantrill sold Portion 92 and Portion 241 to Mr. L.R. Brotherton of Kayuga.
 All buildings and fruit trees on the property had been removed.
- 1954: Mr. W.A. Houlahan, a grazier of Muswellbrook, purchased the property and sold it a year later to Mr. R.N. Wilkins.
- 1958: Mr. P.J. Lonergan purchased Portion 92 and Portion 241 from Mr. A.M. Watt.



4.4.2 Description

The VAHS report (2014:54-55) includes a description of the site of MP20. The site is today an archaeological site with very few standing features and is divided by a gully running approximately south to north. In summary, the VAHS report describes the following features on the east side of the gully running south to north:

- a dam:
- several timber posts mortised for rails;
- remains of a fireplace and broken bricks;
- a concrete block;
- an unknown depression that may be a collapsed mine shaft;
- a number of posts to the west of the depression near another mine shaft; and
- areas of coal fines and ash.

The VAHS report (2014:54-55) also describes the following features on the west side of the gully running south to north:

- a post near the gully, which lines up with standing and fallen posts to the west and east;
- a depression west of the gully that may be a mine shaft;
- an open timber-lined mine shaft;
- remains of shaft with iron wheels;
- areas of coal fines;
- a dam;
- an old trough; and
- a number of pepper trees on both sides of the gully.

The Extent Heritage site visit in September 2018 generally confirmed the site description provided in the VAHS report, but with some changes. There has been a significant decline in the condition of the extant features of the MP20 site since the VAHS period of fieldwork. During the re-inspection of the site in September 2018, the following observations were made regarding the site's current condition:

- The gully that divides the site running south to north was heavily overgrown with vegetation, which may have impacted the following observations (Figure 19).
- The timber posts mortised for rails were not able to be located.



- One of the former timber mine shafts has collapsed, and the associated deep depression has now been fenced off for safety purposes (Figure 20).
- No piers, stumps or other evidence of the former built structures of MP20 (e.g. the stables, workmen's cottage and house) were observed.
- The visible extant features include the remains of timber posts, collapsed timber-lined shaft entrances, exposed coal fines, and broken bricks scattered on either side of the gully.

In any event, the site presents as a disturbed collection of debris from a former coal mine site. The site is not currently physically accessible due to workplace health and safety reasons, a matter reflected in the management recommendations presented in Part 6.4 of this HHA and SOHI.

4.4.3 Assessment of heritage significance

The VAHS 2014 report concludes that the remains and location of the MP20 Kayuga Coal Mine is of high local significance for satisfying the following heritage assessment criteria:

Criterion (a): Site shows evidence of significant human activity associated with very early coal mining in the Upper Hunter Valley.

Criterion (e): Site has potential to yield new or further substantial scientific and/or archaeological information on how the surface activities were managed on a small primitive coal mine.

Criterion (f): Site has the potential to provide information on a human activity that is in danger of being lost as it is the last remains of a small coal mine in the Upper Hunter.

The VAHS 2014 report also concludes that:

The site may contain evidence of early farming practice by Elijah Cox as a carrier and orchardist. The site is exceptional as it retains considerable surface evidence of a small-scale coalmine that could date to the 1860s.

The authors of this HHA and SOHI agree that the site of MP20 is of local significance on historical grounds (Criterion [a]).

This HHA and SOHI considers that the mine should not be assessed against Criterion (f) for its ability to provide information as this would be more appropriately assessed against Criterion (e).

With respect to the site's archaeological potential (Criterion [e]), this HHA and SOHI concludes that there is low potential for in situ 'relics' to survive at the site. However, the mine shafts (constituting 'works' rather than 'relics' under the Heritage Act) do have some ability to provide information about nineteenth century mining in the local area.



With respect to 'evidence of early farming practice by Elijah Cox', the authors of this HHA and SOHI disagree with the VAHS report and conclude that there is low potential for archaeological relics of such activities to survive at the site due to the high levels of disturbance.

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP20 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subtheme of 'Making settlements to serve rural Australia'; and
- Theme 5: Working, including the of 'Working on the land'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP20 is relevant to themes concerning 'mining', 'towns, suburbs and villages', and 'land tenure'.

In other words, MP20 has the potential, through its archaeology, to 'tell the story' of early coal mining and the rural way of life in the local area during its period of use (Criteria [a] and [e]). However, the ability of this site's archaeology (as opposed to the 'works' there - the mine shafts) to contribute significantly to substantive research questions is limited and dependent on a range of additional factors, especially the taphonomy (site formation processes) that have operated at the site since it was abandoned. Archaeological sites that have been little disturbed have better ability to illustrate past lifeways than disturbed ones.

In addition, the ability of MP20's potential 'relics' (as opposed to the 'works' i.e. the mine shafts) to contribute 'new or further substantial scientific and/or archaeological information' is dependent on the existence of other potential sources that can address these same themes. Historical research into this site has already established its broad ownership and history of development.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?



In relation to the potential 'relics' at MP20, it is possible that the following kinds of artefacts may survive there:

- evidence of dwelling footprints of the former house, stables and workmen's cottage identified on a 1919 mine map (see Plan 75 in VAHS 2014:239);
- evidence of mine works and equipment;
- refuse pits or dumps; and
- isolated artefacts.

These kinds of archaeological evidence can illustrate:

- Activity areas in relation to coal mining—however, the best evidence for these activities are visible on the surface or at the mine shafts (which are 'works' rather than 'relics').
- A sample of the kinds of equipment used by the mine workers and/or occupants, as well as
 the technologies used in the operation of a small-scale coal mine—but these are matters
 well-understood from other sources (e.g. newspapers, historic photographs, etc.)
- Possibly, artefacts discarded in the period that the mines on the property were used.
- An indication of the coal mine's size and form.

In other words, the potential archaeological 'relics' at MP20 have some potential to contribute knowledge about the early coal mining activities of the local area, but that potential is likely to be limited by:

- levels of disturbance at the site;
- the nature of the site's abandonment and removal of the former structures; and
- the existence of other better sites and sources.

Further, the better means for addressing these research questions would be to investigate the 'works' (the mine shafts and entrances) rather than the potential 'relics'. This is reflected in the management recommendations in Part 6.4 below.

The potential archaeological 'relics' of MP20, and its 'works', would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is also no reported strong community association with the location (Criterion [d]).

The above observations have guided the recommendations contained in Part 6.4 below.



4.4.4 Summary

MP20 Kayuga Coal Mine is a place of local significance.

MP20 Kayuga Coal Mine has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

In relation to the mine shafts and entrances at MP20, this HHA and SOHI concludes that these would not constitute 'relics' as defined by the Heritage Act, being rather 'works' under the Act.

4.4.5 Implications

The heritage impacts in relation to MP20 Kayuga Coal Mine are presented in Part 5.4 below.

The management recommendations for MP20 Kayuga Coal Mine are provided in Part 6.4 below.

4.4.6 Figures



Figure 19. The overgrown gully that divides the former site of the Kayuga Coal Mine (MP20). Note the visible remnant coal workings.





Figure 20. One of the former timber mine shafts at MP20, which has collapsed.

4.5 MP21 Kayuga School

4.5.1 Summary history

The VAHS report (2014:247-8) includes a detailed history of the Kayuga School. In summary:

- 1866: Portion 27 purchased by George Devine Jnr.
- 1877: Government recommended construction of a school for approximately 35-40 students.
- 1879: School constructed comprising a school building and residence of four rooms.
- 1880: Addition of a shed.
- 1887: Addition of a kitchen.
- 1906: Addition of a new roof.
- Between 1909 and 1911: Tender invited for construction of a verandah; but it is unclear whether this construction occurred.
- 1929: New school constructed in the village.



- 1933: Teacher's residence no longer in use.
- 1938: Tenders invited to remove the school building.

4.5.2 Description

The VAHS report (2014:248) includes a detailed description of the site; however, there is very little remaining to determine the original position of the school and residence. In summary, MP21 comprises:

- The present road is not on the original alignment. The old road made a sharp turn in front of the school and the formation is still clearly visible. This feature can be used to define the northern limit of the school grounds.
- A set of gate posts that were originally the entrance to Portion 12 belonging to William Clayton. There are a number of posts that may define the school yard including two that have been squared, which would have been the entrance off old Dorset Road.
- A circular depression that may have been a well or a pit toilet.
- A depression that may have been the site of the weather shed.
- A large depression that may have been of sufficient size to have been a tennis court.
- Two depressions side by side, which may have been pit toilets.
- A concrete drain that runs across the grounds to a small pit, which has an outlet of earthenware pipe running to the north. North of the drain is a stone area that may have been the base of a chimney. A number of bricks are also lying around in this area.
- An underground tank constructed of recycled brick filled with debris. West of the tank is an area of broken glass and ceramic.
- An iron grate of a stove on the east side of the grounds.
- A number of pepper, ironbark and silky oak trees.

In summary, UQCHU's fieldwork in October 2016 observed that the site of MP21 presents as an archaeological site, characterised by a series of depressions, partly soil-covered remnants of brick walls, circular brick kerbs/wells at ground level, and drains (Figure 21–Figure 22).



4.5.3 Assessment of heritage significance

The VAHS report (2014:261) concludes that the features at MP21 are of high local significance for satisfying the following criteria:

Criterion (a): The site is associated with significant human activity being the site of the Kayuga Public School for over fifty years.

Criterion (b): The site has potential to show evidence of significant human occupation being the residence of the school teacher associated with the Public School.

Criterion (d): It is important for its association with an identifiable group i.e. the small-scale farmers and settlers of the area.

Criterion (e): The site has potential to provide evidence of past human cultures that is unavailable elsewhere. Small country schools with residence for the teacher no longer exist in this area.

Criterion (f): The site shows rare evidence of significant human activity that was important to the community.

The VAHS report (2014:261) also concludes:

Intact archaeological sites of small country schools are becoming rare, especially one that operated on the same location for so long. Site is also unusual in that accommodation was provided for the teacher.

The authors of this HHA and SOHI agree that the features at MP21 are of local significance. However, where the VAHS report provides an assessment justification against five criteria, the significance of the site (as an archaeological site) would be better assessed as meeting Criterion (e) only. This HHA and SOHI agrees with the conclusion that the site has the potential to yield archaeological data of value to reconstructing the form and function of a rural school from 1879 through the early twentieth century.

This difference of emphasis does not impact the management recommendations presented below in Part 6.5.

4.5.4 Summary

MP21 Kayuga School is a place of local heritage significance.

MP21 Kayuga School has high potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.5.5 Implications

The heritage impacts in relation to MP21 Kayuga School are presented in Part 5.5 below.

The management recommendations for MP21 Kayuga School are provided in Part 6.5 below.



4.5.6 Figures



Figure 21. View across the site of the former Kayuga School (MP21), showing its overgrown state. Source: UQCHU (2017b:35).



Figure 22. The remains of circular brick and concrete kerbing at MP21. Source: UQCHU (2017b:36).



4.6 MP22 Smith's Clear Farm

4.6.1 Summary history

The VAHS report (2014:262) includes a history of the site at MP22. In summary:

- 1870: Portion 44 purchased by Mr. Elijah Cox.
- 1877: Mr. Charles Smith purchased Portion 44 from Mr. E. Cox and Portions 237-242.
- 1898: Owner Mr. C. Smith died and 'Clear Farm' passed to his widow, Mrs Jane Smith.
- 1923: Mrs J. Smith subdivided and sold portions of 'Clear Farm' to her daughter, Hannah G. Smith. This consisted of Portions 44, 238, 239, 240, 242 and 29 of the Rosebrook subdivision.
- 1926: Hannah G. Smith purchased Portion 268 of 81 acres from Mr. George G. Gall.
- 1950: Ownership of Portions 44, 238, 239, 240 and 242 transferred to Mr. Errol E. Ireland.
- 1954–1956: Mr. E.E. Ireland subdivided and sold portions of 'Clear Farm' to Mr. James R. Wilkins and Mr. Alan M. Watt, respectively.
- 1958: Mr. Patrick J. Longer an purchased the property from Mr. A.M. Watt.
- 1985: Ownership transferred to Mr. Wayne and Patt Watts.

4.6.2 Description

The VAHS report (2014:262-263) provides the following description in relation to MP22:

- The site contains a homestead (Figure 23–Figure 24; Figure 26–Figure 27) and a number of outbuildings.
- The homestead has been modified considerably since erected, including changes to the brick fireplace and the addition of asbestos cement linings. Originally, it most likely consisted of a living area of four rooms surrounded by verandahs with a kitchen block at the north-west corner of the living area.
- The homestead has been extended to the north utilising corrugated iron; part of this was used as a laundry. The building sits on round piers with a sawn hardwood frame and is clad with wedge-shaped hardwood.
- The north-east corner of the verandah and the areas between the kitchen and living room have both been closed in to create further rooms.
- A small shed (sawn timber frame clad with corrugated iron) is located to the south of the homestead and was likely the former dairy (Figure 25). It has a small verandah on the east side and has a concrete floor.



- Another small shed of slabs is located to the west of the homestead.
- Two other sheds are located to the north of the homestead; both are of later construction.

The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report; however, there has been a significant decline in the condition of the surviving structures at MP22 since the VAHS period of fieldwork.

The homestead and outbuildings (both interior and exterior) were observed to be generally dilapidated and in a very poor state of preservation due to termite damage and wear and tear.

4.6.3 Assessment of heritage significance

The VAHS report (2014:273) concludes that MP22 Smith's Clear Farm is of moderate local significance for satisfying the following criteria:

Criterion (a): The site is associated with significant activity that occurred after the introduction of the Robertson Land Act 1861.

Criterion (e): The site has the potential to yield substantial scientific information about building methods and material for the period when it was erected.

The VAHS report (2014:273) also concludes that:

The building is significant as an example of building style and method that is no longer practiced.

This HHA and SOHI generally agrees that the site of MP22 is of local significance; however, the building's poor condition impacts the management recommendations in Part 6.6 below.

This HHA and SOHI also adopts a different position on the use of the assessment criteria. The VAHS report assesses the house against two criteria:

- Criterion (a): The VAHS report assesses 'the site' as being historically significant relative to the Robertson Land Act 1861 (which allowed for free selection of Crown land). In fact, the house (the main feature of the property) post-dates that legislation by decades and played little, if any, role in the historical movement that emerged from it. There is no evidence that the house made a significant contribution to the local area's cultural history, nor that the activities undertaken there are remarkable. Rather, the site contains the remains of a relatively common form of small-scale dairy facility with house, from the late nineteenth or early twentieth century.
- Criterion (e): This criterion relates to items that will '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'. The remains of the buildings at MP22 are of a type common in the wider local area. The methods used in its construction are well-known and widely published. The building would have little further to contribute in that regard. If MP22 had the potential to yield information, it would be more likely to be from its potential archaeological resource (see the assessment of Criterion [e] below).



With respect to Criterion (e) the research potential of the potential archaeological resource, this HHA and SOHI makes the following observations:

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP22 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subthemes of 'Planning urban settlements', 'Supplying urban services', 'Making settlements to serve rural Australia';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001). MP22 is relevant to themes concerning 'migration', 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

In other words, MP22 has the potential, through its archaeology, to 'tell the story' of the rural way of life in the local area during its period of use. However, its ability in that regard will depend on a range of additional factors, especially the taphonomy (site formation processes) that have operated at the site since it was abandoned. Archaeological sites that have been little disturbed have better ability to illustrate past lifeways than disturbed ones. Also, MP22's ability to contribute significant archaeological data about the local area will depend on the existence or otherwise of other potential sources that can address these same themes.

As noted above in Part 2.3, the Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (NSW Heritage Council 2009) provides three questions for assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In relation to MP22, it is possible that the following kinds of artefacts exist there:

- evidence of 'underfloor deposits';
- garbage pits and dumps; and
- isolated artefacts.



These kinds of archaeological evidence can illustrate:

- activity areas—but these are discernible from the material visible on the surface; and
- a sample of the kinds of domestic and work tools used by the occupants—but these are matters well-understood from other sources (e.g. journals, newspapers, catalogues).

In other words, the archaeological remains at MP22 have limited potential to contribute new knowledge about the settlement of the local area. That potential is limited by:

- levels of disturbance at the site;
- the nature of the site's abandonment; and
- the existence of other better-preserved sites and sources.

The remains at MP22 have low potential to satisfy the definition of 'relics' contained in the Heritage Act.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]).

The above observations have guided the recommendations contained in Part 6.6 below.

4.6.4 Summary

MP22 Smith's Clear Farm is a place of local heritage significance. However, the building's poor condition impacts the management recommendations presented in Part 6.6 below.

MP22 Smith's Clear Farm has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.6.5 Implications

The heritage impacts in relation to MP22 Smith's Clear Farm are presented in Part 5.6 below.

The management recommendations for MP22 Smith's Clear Farm are provided in Part 6.6 below.



4.6.6 Figures



Figure 23. The east elevation of the homestead at MP22 Smith's Clear Farm.



Figure 24. The south elevation of the homestead at MP22.





Figure 25. A timber and corrugated iron shed located at MP22, which was likely the former dairy.



Figure 26. Interior view of the homestead at MP22.





Figure 27. Another interior view of the homestead at MP22.

4.7 MP23 Devine's

4.7.1 Summary history

The VAHS report (2014:274-275) includes a detailed history of the site at MP23. In summary:

- 1866: Mr. George Devine Jnr purchased Portion 27 and his parents erected a house on the 40-acre property. Over the next few years, George Jnr purchased two additional 40-acre lots, Portion 41 and Portion 72.
- 1871: Mr. George Devine Snr died, leaving his estate in Kayuga to his family.
- 1909: George Snr's wife, Mrs Charlotte Devine, died. During her lifetime, the Devine's ran a small store from the house.
- 1932: Valuations of the property described a slab cottage of five (5) rooms and kitchen, two sheds, a dam and fencing. In this year, the Muswellbrook Chronicle reported the sale of the property at auction to a Mr. Patrick V. Casey.
- 1966: Property transferred to Bridget M. Lonergan.
- 1985: Property transferred to Mr. Wayne and Pat Watts.



4.7.2 Description

The VAHS report (2014:275) describes the site of MP23 as an archaeological site with few extant features indicative of its past function. In summary, MP23 comprises:

- an underground tank constructed of brick and lined with plaster;
- five (5) depressions, two of which may be the former locations of pit toilets;
- a raised area, possibly the former site of a tennis court or a building with a dirt floor;
- two (2) piles of broken bricks and stones, which may have been the base of a chimney;
- an artefact scatter of farming bric-a-brac including the remains of a cast iron stove, a plough, a camp oven, bed frames and glass (Figure 28);
- posts and rails;
- mature pepper and pomegranate trees; and
- remains of a track or road running through the site.

Further, the VAHS report (2014:275) states that one of the owners of the property, Pat Watts, believes 'twin children from the Cracknell family were buried to the west of the house'. The history prepared by VAHS does not record that the house was ever owned by a 'Cracknell family', although it is possible that there were tenants of that name.

The Extent Heritage site visit in September 2018 indicated that there has been a decline in the condition of the surviving surface remains at MP23 since the VAHS period of fieldwork.

Only small and scattered quantities of bricks and stones of an uncertain date were visible on the surface (Figure 29). This suggests that the structure that once stood in this location (if there was one) had been demolished in a 'controlled' manner and its bricks deliberately removed for reuse elsewhere. In such circumstances, the potential for archaeological evidence of in situ structural remains is reduced.

No piers or timber stumps that would appear to have formed part of a structure (e.g. slab cottage or shed) were observed at the site. No refuse dumps were observed.

Some timber elements were observed on the surface in September 2018. If these timbers once formed part of a shed, then they survive in such small numbers that it is likely that the rest of the timber structure was also dismantled and its elements re-used elsewhere. In any event, it is not at all clear that the timbers formed part of a shed; they may have formed part of a fence or yards. Therefore, the potential for archaeological evidence of timber structural remains is considerably reduced.

The VAHS report (2014:275) indicates that two depressions existed on the site, which may be the former locations of pit toilets, but at the time of the September 2018 site visit, there was insufficient visible evidence on the surface to reach this conclusion.



The open underground tank (Figure 30), which is of an undetermined age, has been filled with relatively recent debris and fenced off for safety purposes.

No surface evidence of a burial site described anecdotally in the VAHS report (2014:275) to the west of the house was observed.

In any event, the site presents as a collection of debris and disturbed archaeological material from a former farm house site.

4.7.3 Assessment of heritage significance

The VAHS report (2014:292) concludes that MP23 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity, possibly from 1860s to 1930s.

Criterion (b): The site is associated with a group of people (Devine family) who lived on the site for over 60 years and played a major role in the development of the district.

Criterion (e): The site has high potential to yield new or further substantial archaeological information.

The VAHS report (2014:292) also concludes:

It is rare to locate an archaeological site dating from the 1860s that has not been disturbed. Evidence indicates it was a slab building. The site has huge potential to reveal lifestyle and building methods of a small-scale farm under the conditional purchase system.

The authors of this HHA and SOHI generally agree with the assessment of the VAHS report that there is some archaeological potential at Devine's. However, the authors of this HHA and SOHI disagree with the assessment that MP23 has a 'high' or 'huge' potential to yield archaeological information that would constitute a 'relic' under the Heritage Act.

Additionally, although the authors of this HHA and SOHI acknowledge that the property once had a role to play in the local area's history (Criterion [a]) and was associated with an active local family (Criterion [b]), MP23 is today an archaeological site best assessed for its significance by applying Criterion (e) i.e. potential to yield information. Applying Criterion (e), the site would have limited potential to yield scientific information that could be used to address substantive research questions.

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP23 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subtheme of 'Making settlements to serve rural Australia';



- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP23 is relevant to themes concerning, 'agriculture', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

Adopting an optimistic interpretation of the surviving remains at MP23, the kinds of archaeological artefacts that may survive there include:

- evidence of dwelling footprints;
- isolated domestic artefacts;
- refuse pits and dumps, including pit toilets;
- stone floor slabs; and
- a burial site in the vicinity of the house.

In other words, MP23 has the potential, through its archaeology, to 'tell the story' of small-scale farming and the rural way of life in the local area during its period of use in the late nineteenth and early twentieth century (Criterion [e]). However, its ability to contribute significantly to substantive research questions is limited and dependent on a range of additional factors, especially the taphonomy (site formation processes) that have operated at the site since it was abandoned. Archaeological sites that have been little disturbed have better ability to illustrate past lifeways than disturbed ones.

In addition, MP23's ability to contribute 'new or further substantial archaeological information' is dependent on the existence of other potential sources that can address these same themes. Historical research into this site has already established its broad ownership and history of development. Further, the approximate size, configuration and form of the Devine's cottage conformed with that of contemporary houses elsewhere, which are recorded in detail through the oral history project completed by VAHS in 2004 and augmented by the VAHS (2014) report.



The kinds of archaeological evidence described above may assist to provide some chronological indicators for the Devine's early cottage. Should any exist, these 'domestic' artefacts may shed some light on the kinds of activities undertaken on the property; however, it is unlikely that those artefacts would yield 'new or further substantial' data that has not been obtained for rural NSW in the Hunter Valley region through other sites and resources.

In other words, the extant archaeological remains at MP23 have some potential to contribute knowledge about the rural way of life in the local area, but that potential is likely to be limited by levels of disturbance at the site, the removal of the former structures, and the existence of other better sites and resources.

In archaeological terms:

- the site at MP23 is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into rural NSW homes of the period and in the local area, the recollections of local residents, historic photographs and other archival material:
- the site at MP23 is unlikely to contribute knowledge that cannot be obtained from other better-preserved sites, including late nineteenth and early twentieth century homes that remain in the local area; and
- given the above observations, it is unlikely that the site at MP23 would make a meaningful contribution to substantive research questions relating to Australian history, including those relating to the rural way of life in the Muswellbrook area.

The potential archaeological resource at MP23 has low potential to contain 'relics' as defined by the Heritage Act. Further, the underground water tank at the site does not meet the definition of a 'relic' under the Heritage Act.

The potential archaeological remains at MP23 would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]).

However, we note from the anecdotal data provided by one former owner that there may be two child burials on the grounds of the house. Therefore, the recommendations in Part 6.7 below take a cautious approach to the future management of MP23.

4.7.4 Summary

MP23 Devine's fails to meet the criteria for either State or local significance.

MP23 Devine's has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

In relation to the underground water tank, this HHA and SOHI concludes this does not meet the definition of a 'relic' under the Heritage Act.



4.7.5 Implications

The heritage impacts in relation to MP23 Devine's are presented in Part 5.7 below.

The management recommendations for MP23 Devine's are provided in Part 6.7 below.

4.7.6 Figures



Figure 28. An example of the scattered farming bric-a-brac associated with site known as MP23 Devine's.





Figure 29. Some broken bricks and stones at MP23, which may have once been part of a chimney base.



Figure 30. The underground tank at MP23, constructed of brick and lined with plaster.



4.8 MP25 Gall's Farm

4.8.1 Summary history

The VAHS report (2014:299-302) includes a detailed history of the site at MP25. In summary:

- 1867: Portion 36 purchased by Mary Horne, who lived on the property with her husband, Charles A. Horne, until his death in 1877.
- 1878: Advertisement posted for the auction of the late Mary Ann Horne's estate, which described a 200-acre property with a 4-room cottage with shingled roof and verandah, detached kitchen and servant's room, stockyards, milking bails, flower garden and fruit trees. Seventeen head of cattle, 10 head of horses and various farming implements were included in the sale.
- 1879: Second advertisement for auction of the Horne estate, which now described a 213-acre property with no stock or farming implements. The purchaser was Mr. Abraham Clark, a butcher of Muswellbrook.
- 1880: Mr. A. Clark sold Portion 35 of 39 acres to Mr. Henry Dell, a grazier of Muswellbrook.
- 1886: Mr. Robert Gall, a farmer of Kayuga, purchased Portion 35.
- 1986: Owner, Mr. R. Gall, died. At his death, the estate held 407 acres.
- Between 1921 and 1925, the Gall family sold various portions to members of the Lonergan family. The property then passed to Mr. Wayne and Pat Watts, who believe the house on Gall's property was demolished and the material recycled to build the shearing shed at Thorndale.

4.8.2 Description

The VAHS report (2014:302) describes the site of MP25 as an archaeological site with distinct phases of activity. In summary, MP25 comprises:

- Area A: Remains of a dairy consisting of a concrete slab with raised lip and fragmented timber elements. A depressed area is located to the south, as well as a concrete block on which a separator would have been mounted.
- Area B: Remains of a house consisting of several piers and area of collapsed bricks/stones that was likely the base of a chimney. A depressed area to the north indicates the possible direction of the house's extension. The remains of another small building are located to the west of the former house.
- Area C: Remains of former cow bails consisting of a concrete slab and sheep dip, as well as large timber posts mortised for rails.



- Area D: Area of concrete, stones and some timber posts possibly the remains of a piggery.
- Area E: Remains of a large shed (part shearing-hay shed) with a hip roof, a lean-to on the west side, and remains of sheep yards.

The following was also found on the site of MP25:

- a number of broken bricks;
- two grain stripper machines;
- square water tank;
- a mill on a well with remains of a wooden trough;
- remains of gallows for butchering cattle; and
- numerous pepper trees.

The Extent Heritage site visit in September 2018 generally confirmed the site description provided in the VAHS report; however, there has been a decline in the condition of the extant features at MP25 since the VAHS period of fieldwork. In summary:

- the remains of the former dairy (Area A) were not able to be located;
- the surface visibility of the remains of the house (Area B) was significantly impacted by dense vegetation and long grass;
- one wall of the concrete-lined sheep dip (Area C) has collapsed inwards (Figure 31);
- the remains of the cow bails (Area C) and the associated timber posts were further deteriorated since the VAHS period of fieldwork;
- a shed containing one of the grain stripper machines (Area E) has collapsed over the floor, which remains partly supported on timber piers (Figure 32–Figure 33);
- the square water tank was not located but was likely concealed by dense vegetation;
- the windmill has collapsed, and the well has been filled with debris (Figure 34–Figure 35);
 and
- the remains of the gallows for butchering cattle were not observed.



4.8.3 Assessment of heritage significance

The VAHS report (2014:322) concludes that MP25 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity with at least five areas with different functions.

Criterion (d): The site is important for its association with an identifiable group, i.e. early conditional purchase settlers.

Criterion (e): There is the potential to yield new or further archaeological information on the house construction and plan.

Criterion (f): There is the potential to provide evidence of a way of life that has been lost. The site represents a mixed farming operation that would have been almost self-sufficient.

The VAHS report (2014:322) also concludes:

The site is important as it progressed from a small conditional purchase selection to a reasonably prosperous farm. There is sufficient evidence remaining to determine what function each area on the site performed. There is the possibility to gain valuable information from the house site.

Although the authors of this HHA and SOHI acknowledge that the property once had a modest role to play in the local area's history as part of the conditional settler movement (Criteria [a] and [d]), it is today an archaeological site best assessed for its significance by applying Criterion (e) (i.e. potential to yield information). We note that the VAHS report confuses Criteria [e] and [f] in this regard.

Applying Criterion (e), the site at MP25 would have limited potential to yield scientific information that could be used to address substantive research questions.

The former Australian Heritage Commission compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites (2001). MP25 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subthemes of 'Planning urban settlements', 'Supplying urban services', 'Making settlements to serve rural Australia';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.



Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP25 is relevant to themes concerning 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

Adopting an optimistic interpretation of the surviving remains at MP25, the kinds of archaeological artefacts that may survive there include:

- evidence of dwelling footprints or the orientation of activity areas—but these are discernible from visible features (e.g. remnant base of chimney, remnant concrete slabs, windmill, fence posts, etc.);
- isolated domestic artefacts—however, the site has been abandoned for many years and as
 a result, there is a range of farming bric-a-brac scattered across the site that would make it
 difficult to distinguish between in situ artefacts and those brought from elsewhere;
- a sample of the kinds of work tools used by the occupants—but this is generally documented and well-understood for rural inhabitants of this area from other sources (e.g. journals, newspapers, other sites, etc.);
- refuse pits and dumps; and
- the date of use for the structures—but this is generally known from historical research.

The VAHS report describes the remains of the well connected to the now-collapsed windmill within the context of 'archaeology'. The well would not constitute a 'relic' under the Heritage Act. Rather, it would meet the definition of a 'work' under that Act and would be managed as a structure, without the need for excavation permits.

In other words, MP25 has the potential, through its archaeology, to 'tell the story' of mixed farming and the rural way of life in the local area during its period of use (late nineteenth century or early twentieth century). However, this potential would be limited and the archaeology would likely comprise isolated and disturbed artefacts and/or features with limited potential to address substantive research questions about the operation of Gall's Farm within the context of the local area's history.



Historical research into this site has already established its broad ownership and development history. Should any of the above artefacts exist, it is unlikely they would yield information that has not been obtained for rural NSW in this region through other sites and resources. In other words, information would be of narrow, site-specific interest, rather than of State, or even wider local, interest.

In archaeological terms:

- the site at MP25 is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into rural NSW homes of the period and in the local area, the recollections of local residents, historic photographs and other archival material;
- the site at MP25 is unlikely to contribute knowledge that cannot be obtained from other better-preserved sites, including late nineteenth and early twentieth century homes that remain in the local area; and
- given the above observations, it is unlikely that the site at MP25 would make a meaningful
 contribution to substantive research questions relating to Australian history, including those
 relating to the rural way of life in the Muswellbrook area.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). The site has no known association with people of note (Criterion [b]). It is not a good representative example of a class of place in the local area (Criterion [g]).

The above observations have guided the recommendations contained in Part 6.8 below.

4.8.4 Summary

MP25 Gall's Farm fails to meet the criteria for either State or local significance. It is not a heritage place.

MP25 Gall's Farm has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.8.5 Implications

The heritage impacts in relation to MP25 Gall's Farm are presented in Part 5.8 below.

The management recommendations for MP25 Gall's Farm are provided in Part 6.8 below.



4.8.6 Figures



Figure 31. The remains of cow bails at MP25 Gall's Farm, showing the concrete slab and dip (Area C).



Figure 32. The collapsed shed (Area E) at MP25, which was once supported on timber piers.





Figure 33. Detail of the collapsed shed (Area E) at MP25. Note the timber piers.



Figure 34. The collapsed windmill and the remains of the wooden trough at MP25.





Figure 35. The well under the windmill at MP25, which is filled with debris and soil deposits.

4.9 MP26 Page's Farm

4.9.1 Summary history

The VAHS report (2014:323-324) includes a history of the site at MP26. In summary:

- 1866: Portion 21 taken up by Mr. William Page following his arrival in Sydney in the 1850s as an assisted immigrant with his wife, Eliza. A surveyor, Mr. John Neil, recorded a hut and fenced area on Portion 21.
- From 1869 to 1897: Mr. Page appeared in the NSW electoral roll as an owner of freehold land in the Kayuga area.
- 1903: Tender for lease of 'Page's Farm' at Kayuga advertised.
- 1925: Property acquired by Mr. George Gall as part of land sold to him by Bridget Lonergan.
- 1946: Ownership of Portion 21 transferred to Mr. Edward R. Lonergan. The land remained in the Lonergan family until it was acquired by Mr. Wayne and Pat Watts.



4.9.2 Description

The VAHS report (2014:324) identifies the site of MP26 as an archaeological site with few extant surface features indicative of its former house structure and function. In summary, MP26 comprises:

- five (5) pomegranate trees, one (1) citrus tree and one (1) fig tree;
- two (2) areas of stone that may represent the base of fireplaces, along with isolated stones;
- timber remnants that may have been part of a house frame;
- two (2) forked timber posts that may have been part of a fence; and
- an area that may represent the site of yards, sheds and cow bails consisting of mortised posts, forked posts and a small area of stone.

Extent Heritage carried out a site visit in September 2018. Small quantities of stones of an uncertain date were observed; however, visibility was limited by thick grass cover (Figure 36–Figure 37). The presence of these areas of stone suggests that the structure that once stood in this location (if there was one) had been demolished in a 'controlled' manner and its stones deliberately removed for re-use elsewhere. In such circumstances, the potential for archaeological evidence of in situ structural remains is considerably reduced.

No other remains (e.g. stumps or slabs) that appear to have formed part of a structure were observed. No refuse dumps were observed.

The timber elements described above in 2014 by the VAHS report (e.g. forked and mortised posts) were not observed during the September 2018 site inspection. If these timbers once formed part of a shed or yards, then they survive in such small numbers that it is likely that the rest of the timber structure was also dismantled and its elements re-used elsewhere. In any event, it is not at all clear that the timbers formed part of a shed; they may have formed part of a fence or yard. Therefore, the potential for archaeological evidence of timber structural remains is low. Further, three of the five pomegranate trees have been overtaken by box thorn bushes.

4.9.3 Assessment of heritage significance

The VAHS report (2014:331) concludes that MP26 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity from one family over an extended period.

Criterion (d): The site is important for its association with an identifiable group, i.e. early conditional purchase settlers.

Criterion (e): There is the potential to yield new or further archaeological information on the house construction and plan.



Criterion (f): There is the potential to provide evidence of a way of life that has been lost. The site represents a mixed farming operation that would have been almost self-sufficient.

The VAHS report (2014:331) also concludes:

The site is important as it represents the site of one family's development over almost forty years. There is sufficient evidence remaining to determine what function each area on the site performed. There is the possibility to gain valuable information from the house site.

Although the authors of this HHA and SOHI acknowledge that the property once had a modest role to play in the local area's history as part of the conditional settler movement (Criteria [a] and [d]), it is today an archaeological site best assessed for its significance by applying Criterion (e) i.e. potential to yield information. We note that the VAHS report confuses Criteria (e) and (f) in this regard.

Applying Criterion (e), the site would have limited potential to yield scientific information that could be used to address substantive research questions.

The former Australian Heritage Commission compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites (2001). MP26 is relevant to:

- Theme 2: Peopling Australia, including the subthemes of 'Migrating' and 'Promoting settlement':
- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP26 is relevant to themes concerning 'migration', 'agriculture', 'pastoralism', 'land tenure', 'accommodation' and 'domestic life'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics*' (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?



In other words, MP26 has the potential through its archaeology to 'tell the story' of farming and the rural way of life for later nineteenth century settlers in the local area. Adopting an optimistic interpretation of the sparse surviving remains at MP26, the kinds of archaeological material that may survive might illustrate:

- the location, approximate size, and orientation of the footprint of an old hut or house; and
- a sample of the kinds of domestic and/or work tools used by the occupants.

However, in this regard, MP26's ability to contribute significant archaeological data will depend on a range of additional factors, especially the taphonomy (site formation processes) that have operated at the site since it was abandoned and also the existence of other sources or sites.

Given the kinds of disturbance that the site has experienced as a result of twentieth century farming practices and the demolition of the historic buildings, the ability of the archaeological resource to contribute significantly to substantive research questions is limited. Historical research into this site has established its broad ownership and development history, including activity areas. The VAHS report itself describes at least 10 houses of a similar or slightly earlier date within the Mount Pleasant area alone. Large numbers of others are clearly visible within the wider landscape and the broader local area.

Should any of the above archaeological material exist at MP26, information relating to these matters would be of narrow, site-specific interest rather than of State, or wider local interest. Further, it is unlikely that they would yield data that have not been obtained for rural NSW in this region through other sites and resources. The approximate location of the original hut or house (if that is what it was) is known in any event. It would be reasonable to assume that it conformed with the size and configuration of contemporary houses in the local area, which are recorded in greater detail through the oral history project completed by VAHS in 2004 and augmented by the VAHS (2014) report.

In other words, in archaeological terms:

- the site at MP26 is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into rural NSW homes of the period and in the local area, the recollections of local residents, historic photographs and other archival material;
- the site at MP26 is unlikely to contribute knowledge that cannot be obtained from other better-preserved sites, including the remains of late nineteenth and early twentieth century homes of conditional purchase settlers in the local area; and
- given the above observations, it is unlikely that the site at MP26 would make a meaningful
 contribution to substantive research questions relating to Australian history and the rural
 way of life in the Muswellbrook area (e.g. the historic themes described above in Part 2.5).

Therefore, the archaeological remains at the site have low potential to be 'relics' as defined by the Heritage Act.



Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). The site has no known association with people of note (Criterion [b]). It is not a good representative example of a class of place in the local area or beyond (Criterion [g]).

The above observations have guided the recommendations presented in Part 6.9 below.

4.9.4 Summary

MP26 Page's Farm fails to meet the criteria for either State or local significance.

MP26 Page's Farm has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.9.5 Implications

The heritage impacts in relation to MP26 Page's Farm are presented in Part 5.9 below.

The management recommendations for MP26 Page's Farm are provided in Part 6.9 below.

4.9.6 Figures



Figure 36. An overgrown area of stone at MP26 Page's Farm, possibly a former fireplace base.





Figure 37. Another overgrown area of stone at MP26, which may have been a fireplace base.

4.10 MP27 Thorndale

4.10.1 Summary history

The VAHS report (2014:332-334) includes a detailed history of the site at MP27. In summary:

- 1867: Portions 38 and 39 taken up by Mr. Thomas H. Cooper.
- 1868: Surveyor, Mr. John Neil, reported a portion of the land was cultivated and also noted it was well grassed with timber consisting of gum, box and ironbark species.
- 1871: Muswellbrook School of Arts accepted tender for erecting a new building on behalf of Mr. Thomas H. Cooper of Kayuga and building work commenced.
- 1871: The eldest son of Mr. Thomas H. Cooper, Frederick Cooper, married at his parent's residence at the Kayuga property.
- 1884: Ownership of Portions 38 and 39 transferred to Mr. John Lynch.
- 1885: Mr. Lynch listed as living at 'Thorndale' holding 454 acres, seven horses and 12 cattle.
- 1887: Mr. Lynch granted a slaughtering licence.



- 1899: Property transferred from Mr. Lynch to a Mr. Clatworthy. The Muswellbrook Chronicle reported Mr. Clatworthy would continue farming and dairying.
- 1902: Mr. Clatworthy transferred Portions 38 and 39 to Mr. John Lonergan Jnr of Kayuga.
- 1944: Mr. Lonergan retained ownership until it transferred to his son, John Edward, in 1944.
 The property then passed to his nephew, Mr. Des Partridge.

Further, the VAHS report (2014:335) states that one of the owners of the property, Pat Watts, believes the 'Lonergan child was buried in the front garden of Thorndale'.

4.10.2 Description

The VAHS report (2014:334-335) describes the site at MP27 as a farm house with several outbuildings. In summary, MP27 comprises:

- a six-room house constructed by Thomas H. Cooper in the early 1870s. An additional bedroom, kitchen, bathroom and toilet were added at various later stages;
- an underground brick tank at the back of the house;
- a car shed constructed from recycled materials (i.e. timber and corrugated iron);
- a machinery shed constructed from materials recycled from an earlier building;
- a large shearing shed constructed of round bush timber frame and recycled corrugated iron.
 Original catching pens, wool bins and wool press dating to the 1930s are preserved inside;
- remains of a fowl house constructed of timber and corrugated iron;
- remains of cow bails constructed of timber and corrugated iron;
- remains of a timber pig sty;
- remains of stockyards;
- a square timber-lined well with windmill; and
- a hay shed constructed of round timber posts, sawn beams and recycled corrugated iron.

Extent Heritage undertook a site visit in September 2018 and confirmed the site description provided in the VAHS report, which noted the house structure was 'structurally unsound due to neglect' (2014:363). At the time of the September 2018 site visit, the house was in a very poor condition and the collapse of the roof appeared to be imminent due to extensive overgrown vegetation and further termite damage (Figure 38–Figure 39).

The car shed was also in a very poor state of repair due to termite damage, especially the sawn and split slab walls (Figure 40). The machinery shed was relatively intact; however, the sliding doors were becoming detached (Figure 41).



At the time of the September 2018 site visit, the shearing shed (Figure 42) was observed to be relatively intact (containing 1930s paraphernalia that illustrates shearing activities from the earlier twentieth century) and the timber frame in fair condition. However, the north-east corner wall had partly collapsed and there was general dilapidation observed around the external perimeter of the building. In early 2019, however, the shearing shed was severely damaged and collapsed during a storm event (Figure 43–Figure 44) and has since been demolished due to structural instability. The demolition works were undertaken in May 2019 with members of the Denman Heritage Museum in attendance. At this time, some of the remnant paraphernalia of the shearing shed (i.e. the wool press) was recovered and donated to the Denman Heritage Museum. Currently, there are no standing remains of the shearing shed at the site of MP27.

The remains of the cow bails have collapsed (Figure 45). A pile of asbestos (Super Six) roof sheeting was observed, which may be the remnants of a collapsed shed of a later date.

The timber-lined well recorded by VAHS was not located nor inspected.

No surface evidence of a possible burial site in former front garden area of 'Thorndale' described anecdotally in the VAHS report (2014:335) was observed. However, this area was overgrown with vegetation and visibility was almost nil.

4.10.3 Assessment of heritage significance

The VAHS report (2014:363) concludes that MP27 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity from one family over an extended period.

Criterion (d): The site is important for its association with an identifiable group, i.e. early conditional purchase settlers.

Criterion (e): There is the potential to yield new or further archaeological information on the house construction and plan.

Criterion (f): There is the potential to provide evidence of a way of life that has been lost. The site represents a mixed farming operation that would have been almost self-sufficient.

The VAHS report (2014:363) also concludes:

The site is important as it represents the site of one family's development over almost 80 years. There is sufficient evidence remaining to determine what function each area on the site performed. There is the possibility to gain valuable information from the house site.

The authors of this HHA and SOHI generally agree with the assessment of the VAHS report and also concludes that the site of MP27 is of local significance (although the authors of this HHA and SOHI disagree with the use of Criterion [f] by the VAHS report, which appears to have confused it with Criterion [e]).



With respect to the house at MP27, the structure is of local significance, but it is in very poor condition, which has guided the management recommendations contained in this HHA and SOHI. For example, if the house were to be returned to a habitable condition, this would require the wholesale removal and replacement of much of its original fabric. This would include its warped and corroded roof, and the many termite-damaged timber elements (including parts of it frame, floors and walls). The 'conserved' structure would lack 'integrity' and 'authenticity'.

The heritage value of the house at MP27 now rests principally in its ability to tell the story of the local area some generations ago, which has already been partly achieved through the VAHS oral history work (2004), and which can be augmented with the photographic archival recording recommended in Part 6.10 below.

With respect to the shearing shed at MP27, the conservation of this structure following the storm damage in 2019 was not possible, and what remained was demolished for safety reasons. Some of the remnant paraphernalia of the shearing shed has been donated to the Denman Heritage Museum. This has guided the management recommendations contained in Part 6.10 below.

With respect to the site's potential archaeological resource (Criterion [e]), this HHA and SOHI makes the following further observations:

The former Australian Heritage Commission compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites (2001). MP27 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subthemes of 'Planning urban settlements', 'Supplying urban services', 'Making settlements to serve rural Australia';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP27 is relevant to themes concerning 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics*' (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?



Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

Adopting an optimistic interpretation of the potential archaeological resource at MP27, the kinds of archaeological artefacts that may survive include:

- a sample of the kinds of domestic and work tools used by the occupants during its period of use—but these are matters already well-understood for rural inhabitants of this area from other sources (e.g. journals, newspapers, other sites, etc.). In addition, the site has been abandoned for many years and as a result, there is a range of farming bric-a-brac scattered across the site making it difficult to distinguish between in situ artefacts and those brought from elsewhere; and
- refuse pits and dumps.

In other words, in archaeological terms, MP27 has low potential to contain 'relics' as defined by the Heritage Act. However, the authors of this HHA and SOHI note the anecdotal data provided by one former owner, that there may be two child burials on the grounds of the house at MP27. Therefore, the recommendations contained in Part 6.10 below take a cautious approach to the potential archaeological resource, recommending a limited program of test excavation.

The potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). It is not rare or uncommon (Criterion [f]).

4.10.4 Summary

MP27 Thorndale is a place of local heritage significance.

MP27 Thorndale has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act. However, it is noted that there are anecdotal data provided by a one former owner in relation to two possible child burials on the grounds of the house at MP27. Therefore, this HHA and SOHI takes a cautious approach to the potential archaeological resource, recommending a limited program of test excavation (see Part 6.10 below).

4.10.5 Implications

The heritage impacts in relation to on MP27 Thorndale are presented in Part 5.10 below.

The management recommendations for MP27 Thorndale are provided in Part 6.10 below.



4.10.6 Figures



Figure 38. The homestead known as 'Thorndale' (MP27). Note the extent of the overgrown vegetation.



Figure 39. View along the front elevation of the homestead at MP27. Note the dilapidated verandah area.





Figure 40. The car shed and machinery shed at MP27; both are in poor condition.



Figure 41. The doors of the machinery shed at MP27, which have started to detach.





Figure 42. Interior view of shearing shed at MP27 at the time of the Extent Heritage fieldwork in 2018. Note the original timber framing.



Figure 43. The damaged remains of the shearing shed at MP27, taken in early 2019. Source: MACH (2019).





Figure 44. Another view of the damaged remains of the shearing shed at MP27, taken in early 2019. Source: MACH (2019).



Figure 45. The remains of the cow bails at MP27, constructed of timber and corrugated iron.



4.11 MP29 Lynch's

4.11.1 Summary history

The VAHS report (2014:372-373) includes a detailed history of the site at MP29. In summary:

- 1894: Portion 252 and 255 purchased by Florence M. Lynch of Kayuga comprising a total of forty acres.
- 1899: The local Land Board issued a certificate to Florence Lynch indicating the conditions on the condition purchase of these two portions had been fulfilled.
- 1900: The eighty-acre farm was advertised for lease by Mr. John Lynch; the listing described a property divided into three paddocks with a cottage and kitchen.
- 1907: Ownership of Lynch's Farm transferred to Mr. Thomas J. Major, along with Portions 20 and 257.
- 1928: Mr. T. Major sold Portions 20, 252, 255 and 257 to a Mr. Alfred G. Simpson.
- In the 1940s, the property underwent a number of changes in ownership: firstly, to the estate of the late Mr. Henry Simpson in 1944; then to Mr. Ronald D. MacNamara in 1946 and finally, to Mr. Normal L. Devine in 1949.
- Between 1949 and 1983, the property passed to Mr. Hilton L. Devine, who subdivided a small portion in the north-west corner of Portion 252 for his daughter, Mrs Patricia Lawrence.

4.11.2 Description

The VAHS report (2014:372-373) describes the site of MP29 as an archaeological site with a single building.

In summary, MP29 comprises a four-room dwelling constructed in the late 1800s or early 1900s and clad with ironbark weatherboards on a sawn timber frame with timber piers. It appears to be a transitional structure incorporating old and modern construction methods. The internal walls were timber-lined internal walls (T & G cypress pine) and mini orb ceilings featured in two of the rooms (Numbers 1 and 4). A breezeway or small hallway may have originally joined the rear (south) of the building.

The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report, although there have been changes in its physical condition. The house is in a very poor state of preservation (Figure 46–Figure 47; Figure 49). The structure is dilapidated and weathered and the rear (south) wall has collapsed. A modern side addition to the house was also observed; however, the corrugated galvanised iron (CGI) sheeting from this addition was in poor condition and has become detached (Figure 48). Another shed constructed of timber slabs and CGI sheeting was observed in the west paddock of the property (Figure 50).



4.11.3 Assessment of heritage significance

The VAHS report (2014:368) concludes that MP29 is of high local significance for satisfying the following criteria:

Criterion (d): The site is important for its association with an identifiable group i.e. early conditional purchase settlers.

Criterion (e): The site has potential to yield further substantial archaeological information on how the site functioned.

The VAHS report (2014:383) also concludes:

The building provides evidence of transitional building methods utilising round and sawn timber.

The authors of this HHA and SOHI generally agree with the assessment of the VAHS report and also concludes that the site of MP29 is of local significance. However, this HHA and SOHI does not assess the site as being of local significance for its association with 'early conditional purchase settlers' given its date of construction, possibly as late as the twentieth century.

With respect to the structures at MP29, they are in very poor condition, which has guided the management recommendations contained in this HHA and SOHI. For example, if the house were to be returned to anything resembling a habitable condition, this would require the wholesale removal and replacement of most of its original fabric. The 'conserved' structure would lack 'integrity' and 'authenticity'. Therefore, its heritage value now rests principally in its ability to tell the story of the local area some generations ago (Criterion [e]), which has already been partly achieved through the VAHS oral history work (2004), and which can be augmented with the photographic archival recording recommended in Part 6.11 below.

With respect to the potential archaeological resource (Criterion [e]), this HHA and SOHI makes the following observations:

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP29 is relevant to:

- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP29 is relevant to themes concerning 'land tenure', 'accommodation' and 'domestic life'.



As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

Having regard to the above questions, the ability of the potential archaeological resource at MP29 to contribute significantly to substantive research questions is limited. Adopting an optimistic interpretation, the kinds of archaeological artefacts that may survive might illustrate the kinds of building materials and techniques used in the construction of the house, certain activity areas, and the kinds of domestic and work implements used by the occupants and lost or discarded.

However, information relating to these matters would be of narrow, site-specific interest rather than of State, or even wider local interest. Artefacts that might be recovered would be unlikely to yield information beyond that provided through analysing and recording the standing structure and surface debris already observable at the site.

In other words, in archaeological terms:

- the site at MP29 is unlikely to contribute 'further substantial archaeological information' that cannot be (or has not already been) obtained from other sites and resources regarding homes in rural NSW in the same period and local area, or better-preserved sites; and
- given the above observations, the site at MP29 is unlikely to make a contribution to substantive questions relating to Australian history, including questions in relation to the rural farming and living experiences of the residents of the local area.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). The site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). The ruined structure is a modest example of a common type of late nineteenth or early twentieth century domestic building and places of this kind are not rare or endangered in the local area or rural NSW more generally (Criterion [f]).

The above observations have guided the recommendations contained in Part 6.11 below.



4.11.4 Summary

MP29 Lynch's is a place of local heritage significance.

MP29 Lynch's has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.11.5 Implications

The heritage impacts in relation to MP29 Lynch's are presented in Part 5.11 below.

The management recommendations for MP29 Lynch's are provided in Part 6.11 below.

4.11.6 Figures



Figure 46. The single timber dwelling at MP29 Lynch's.





Figure 47. The timber dwelling at MP29, showing the collapsed rear wall now open to elements.



Figure 48. A more recent side addition to dwelling at MP29. Note the poor condition of the CGI sheeting.





Figure 49. Interior view of the timber dwelling at MP29.



Figure 50. Another shed constructed of timber slabs and CGI sheeting west of MP29.



4.12 MP31 Cox's Portion 20

4.12.1 Summary history

The VAHS report (2014:388) includes a detailed history of the site at MP31. In summary:

- 1866: Portion 20 surveyed by Mr. John Neil for a Mr. John W.G. Cox. The resultant map showed a waterhole, sheep yards and hut, as well as a track leading to 'Negoa' (MP41).
- 1887: Mr. John Hobart Cox of Negoa sold Portion 20 to Mr. Thomas Major.
- 1907: Ownership of Portions 252, 255 and 257 also transferred to Mr. T. Major.
- 1928: Mr. Alfred G.R. Simpson purchased Portions 20, 252, 255 and 257.
- In the 1940s, the property underwent a number of changes in ownership: firstly, to the estate of the late Mr. Henry Simpson in 1944; then to Mr. Ronald D. MacNamara in 1946 and finally, to Mr. Norman L. Devine in 1949.
- At some stage post-1949, the property passed to Mr. Hilton L. Devine, the grandson of Mr. Henry Devine Snr.

4.12.2 Description

The VAHS report (2014:388) describes the site of MP31 as an archaeological site with few surface features indicative of an early twentieth century dwelling. In summary, MP31 comprises:

- an area of rough concrete poured over a base of fieldstones—a number of loose fieldstones have also been dumped on top of the concrete surface;
- a concrete slab with broken edges—a number of large fieldstones and various artefacts
 have been dumped here including part of a square iron tank, an iron bed and spring, a
 Beacon fuel stove, a horseshoe and early cast gear;
- timber posts mortised for rails;
- a survey marker No. 78797; and
- a small area of broken glass and ceramics.

The VAHS report (2014:388) also states that during a field inspection in September 2014, a dam was observed consistent with the waterhole area marked on an 1867 surveyor's map of the property. However, no evidence of the dam, hut or sheep yards identified on the 1867 surveyor's map was observed during the Extent Heritage site visit in September 2018.

The Extent Heritage site visit in September 2018 generally confirmed the above site description (Figure 51–Figure 54), but there has been a change in the condition of some features. Only one of the timber posts mortised for rails were still upright; the rest have fallen on the ground. Stockyards and a collapsed loading ramp, both of a more recent date, were observed.



4.12.3 Assessment of heritage significance

The VAHS report (2014:394) concludes that MP31 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity although it has been highly disturbed.

Criterion (e): The site has potential to yield further substantial archaeological information especially if the location of the 1867 hut site could be located.

The VAHS report (2014:394) also concludes:

The site is significant that there was a hut and sheep yards on this site by 1867, which could date to the convict era of Cox's station.

Although the authors of this HHA and SOHI acknowledge that the property once had a role to play in the local area's history from an early date (Criterion [a]), it is today an archaeological site best assessed for its significance by applying Criterion (e) i.e. potential to yield information.

Applying Criterion (e), the site would have limited potential to yield scientific information that could be used to address substantive research questions.

Importantly, the surface indications of sub-surface archaeology at MP31 do not date to the time of Neil's 1867 survey, which recorded a hut on the property. No evidence of the form or location of the earliest 1867 structure (i.e. no bricks, timber or brick piers, depressions indicating dwelling footprints, etc.) are visible. Today, only a few surface features are visible (e.g. stockyards, loading ramp and two rough concrete slabs with fieldstones). All of these features likely date to the twentieth century. There is therefore low potential for archaeological remains of a small 1860s hut that was deliberately demolished to survive at the site.

Neil's 1867 survey map also recorded the location of a dam. This feature appears to have since been filled in by natural soil accumulation. Its general location is known from the early survey and further archaeological investigation would yield few useful scientific data.

Adopting an optimistic interpretation of the potential archaeological resource at MP31, which dates to more recent times, the kinds of archaeological artefacts that may survive there include:

- the date and location of the former structures—but this is generally understood from existing historical research;
- a sample of the kinds of domestic and work tools used by the occupants during its period of use—but these matters are already well-understood for rural inhabitants of this area from other sources (e.g. journals, newspapers, other sites, etc.). In addition, the site has been abandoned for many years and as a result, there is a range of farming bric-a-brac scattered across the site, making it difficult to distinguish between in situ artefacts and those brought from elsewhere; and
- refuse pits and dumps.



The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP31 is relevant to:

Theme 5: Working, including the subtheme of 'Working on the land'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP31 is relevant to themes concerning 'agriculture', 'pastoralism', and 'land tenure'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In other words, in archaeological terms,

- The site at MP31 is unlikely to yield scientific data that cannot be (or has not already been)
 obtained from other sites and resources regarding homes in rural NSW in the same period
 and local area, or better-preserved sites.
- Given the above observations, the site at MP31 is unlikely to make a contribution to substantive questions relating to Australian history, including questions in relation to the rural farming and living experiences of the residents of the local area.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). The site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). Places of this kind are not rare or endangered in the local area or rural NSW more generally, and are unremarkable examples of their type (Criteria [f] and [g]). The above observations have guided the recommendations contained in Part 6.12 below.

4.12.4 Summary

MP31 Cox's Portion fails to meet the criteria for either State or local significance.

MP31 Cox's Portion has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.12.5 Implications

The heritage impacts in relation to MP31 Cox's Portion 20 are presented in Part 5.12 below.

The management recommendations for MP31 Cox's Portion 20 are provided in Part 6.12 below.



4.12.6 Figures



Figure 51. A concrete slab area located at the site known as Cox's Portion (MP31). Note the slab's broken edges and the number of large fieldstones and various artefacts dumped on top.



Figure 52. Another area of rough concrete poured over a base of fieldstones at MP31. Note the number of loose fieldstones dumped on top of the concrete surface.





Figure 53. A single timber post at MP31, which has been mortised for rails.



Figure 54. The stockyards and loading ramp at MP31; both are of a more recent date.



4.13 MP32 Cox's Orchard

4.13.1 Summary history

The VAHS report (2014:420-421) includes a detailed history of the site at MP32. In summary:

- 1894: Portion 251 (40-acre block) purchased by Mr. Arthur J. Cox, son of Mr. and Mrs Elijah
 Cox of Kayuga. The property was named 'Mountain View' or 'Mount View'.
- 1908: The Muswellbrook Chronicle reported Mr. A.J. Cox had over 1000 fruit trees growing in an orchard on his property.
- 1920: Mr. A.J. Cox sold the land back to the Crown, after which it was purchased by Mr. Frederick J. Wade who continued to operate the orchard as part of his café in Bridge Street.
- 1922: Orchard sold to Mr. Dundas D'Arcy Simpson.
- 1926: Mr. Simpson forfeited his purchase and ownership of the land subsequently passed to Mr. Frances E.H. Ross.
- 1930: Ownership transferred to Mr. David Spowart of Muswellbrook.
- 1934: Land sold to Mr. Alexander J. Gardner; however, Mr. Gardener died the following year and left his wife, Ethel, as the sole beneficiary of his estate.
- 1935: Death notices listed the following improvements on the property: a weatherboard cottage of six rooms, pantry and bathroom (all lined and ceiled with cypress), an iron shed, dairy, cow bails and yards, two sheds, a pig sty, a fowl house and a windmill on a well.
- Post-1935: The property was sold to Mr. Albert Dengate and subsequently, to Mr. Hilton Devine who re-named the property 'Boxfield'.

4.13.2 Description

The VAHS report (2014:396-397) provides a detailed description of the site of MP32. In summary, MP32 comprises:

- a small house mounted on round timber piers with a hipped roof and a verandah on the north and east sides. A skillion-roofed extension is located to the rear (south) of the house;
- a small orchard of a more recent date located to the west of the house's driveway;
- an area of glass and ceramic artefacts located on the driveway;
- a shed with a concrete floor that extends up the walls (approximately 25 cm height), which may have been a dairy or cool room;



- a collapsed well, a water tank, a brick trough, parts of a fuel stove and a bed frame are located in the gully to the west of the house;
- a number of mature fruit trees; and
- remains of a pig sty and stockyards.

The Extent Heritage site visit in September 2018 confirmed aspects of the site description provided in the VAHS report (Figure 55–Figure 57). The following observations were made regarding the site's current condition:

- Both interior and exterior elements of the house have been modified in the c. 1970s. The interior walls have been lined with fibrous sheeting and artificial timber sheeting.
- Several of the features identified in the VAHS report were no longer evident, including the
 mature fruit trees, the small orchard, the collapsed well and the area of glass and ceramic
 artefacts originally located on the driveway.

4.13.3 Assessment of heritage significance

The VAHS report (2014:407) concludes that MP32 is of moderate local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity with remains of orchard, dairy and house.

Criterion (b): The site is associated with a significant event i.e. the establishment of a major orchard in this district.

Criterion (e): The site has potential to yield further archaeological information on house construction and materials.

The VAHS report (2014:407) also concludes:

Little remains of the original orchard apart from a house and shed. The shed has been nominated as a dairy. It may have been a cool room or packing shed. This orchard was most likely the second largest in the Muswellbrook district apart from Baerami orangery. For this reason, it is a significant part of the local history.

The authors of this HHA and SOHI disagree with the assessment of the VAHS report. MP32 fails to make the threshold for local heritage significance and is not a heritage place. The original, early twentieth century structure that exists at the property was significantly altered in the 1970s, on both the interior and exterior. Much of its original fabric has been modified, or removed and replaced. In heritage terms, the building lacks 'integrity' and 'authenticity'.



The property played an unremarkable part in the local area's early twentieth century history (Criterion [a]). It is not associated with a person or group of importance to the local area (Criterion [b]). It does not display aesthetic or technical achievement (Criterion [c]). There is no evidence that the local community values it (Criterion [d]). Places of this type are neither rare nor uncommon in the local area, and it is an unremarkable example of its type (Criteria [f] and [g]).

With respect to the potential archaeological resource, and applying Criterion (e), the site would have limited potential to yield scientific information that could be used to address substantive research questions. In relation to Criterion (e), this HHA and SOHI makes the following further observations:

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics*' (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In archaeological terms:

- the site at MP32 is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into rural NSW homes and orchards of the period and in the local area, the recollections of local residents, historic photographs and other archival material (including the oral history program completed by VAHS in 2004);
- the site at MP32 is unlikely to contribute knowledge that cannot be obtained from other sites, including early twentieth-century homes that remain in the local area; and
- given the above observations, it is unlikely that the site at MP32 would make a meaningful
 contribution to substantive research questions relating to Australian history, including those
 relating to the rural way of life in the Muswellbrook area.



4.13.4 Summary

MP32 Cox's Orchard fails to meet the criteria for either State or local significance. It is not a heritage place.

MP32 Cox's Orchard has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.13.5 Implications

The heritage impacts of the Project on MP32 Cox's Orchard are presented in Part 5.13 below.

The management recommendations for MP32 Cox's Orchard are provided in Part 6.13 below.

4.13.6 Figures



Figure 55. The house at the site known as Cox's Orchard (MP32), which was originally mounted on round timber piers. This house was modified, both externally and internally, in the 1970s.





Figure 56. An example of the c. 1970s interior modifications to the house at MP32.



Figure 57. The remains of pig sty and stockyards at MP32.



4.14 MP36 Hill's

4.14.1 Summary history

The VAHS report (2014:420-421) includes a detailed history of the site at MP36. In summary:

- 1871: Portion 93 purchased by Mr. William Hill comprising 78 acres, 3 roods.
- 1873: Mr. Hill purchased an additional 40 acres (Portion 147).
- 1885: Survey listed Mr. Hill as holding 80 acres with four horses, 11 cattle and two pigs.
- 1896: Owner, Mr. W. Hill, died and left Portion 93 as part of his estate to his widow, Ann Hill.
- From 1914 to 1943, the Hill's Farm formed part of the estate of Mr. John Hill, who also held Portions 90, 253, 254, 256 and 262 for a total of 120 acres.
- 1943: Owner, Mr. J. Hill, died and Mr. James Lonergan purchased Portion 90. The remaining portions were sold to Mr. Norman and Hilton Devine.

4.14.2 Description

The VAHS report (2014:421-422) describes the site of MP36 as an archaeological site with several features indicative of a small farming enterprise. The site appears to have had a number of buildings reconstructed over a period utilising material recycled from earlier structures; all are generally in a poor state of preservation. In summary, MP36 comprises:

- Site A: Shed constructed of round timber with split slab timber walls and floor. This shed is mounted on timber piers and earthfast posts, and has a corrugated iron roof. Adjacent are five (5) timber posts that may be the remains of another shed with a lean-to. The remains of a small corrugated iron tank are located nearby, which may have been part of a forge or a blacksmith's shop. This area also contains scattered timber and iron.
- Site B: Collapsed building constructed of slabs with a round timber frame, split battens, a gable roof and a collapsed lean-to. This may have been the site of a kitchen. A number of bricks are also present, which may represent the former location of a chimney.
- Site C: Small shed constructed of slabs with a round timber frame, split battens, a dirt floor and a gable roof of corrugated iron.
- Site D: Collapsed remains of a two-room dwelling with a verandah or lean-to on one side. This structure appears to have had a sawn timber frame mounted on round timber bearers on piers. A fireplace may have existed at the south-west end of the structure. It may have been the site of a former living area.
- Site E: Concrete slab with collapsed timber posts, which may have been cow bails.



- Site F: Collapsed structure of round and split timber, which may have been a holding pen. Isolated bricks are also present in this area.
- Site G: Concrete slab with a standing timber post, which may have been a dairy.
- Remains of a timber-lined well with a square water tank dumped in the shaft.

Extent Heritage visited the site in September 2018 (Figure 58–Figure 61). The following observations were made regarding the site's current condition:

- The shed (Site A) has collapsed; however, the timber piers were still standing.
- The remains of the former living area (Site D) were not observed.
- The concrete slabs (Sites E and G) were overgrown with vegetation and not visible.
- The small shed (Site C) was observed to be in state of imminent collapse.
- The remaining outbuildings were dilapidated and in a partial or imminent state of collapse.

4.14.3 Assessment of heritage significance

The VAHS report (2014:436) concludes that MP36 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity during a historical phase i.e. settlers under the conditional purchase scheme.

Criterion (d): The site is important for its association with an identifiable group i.e. conditional purchase settlers.

Criterion (e): The site has the potential to yield further substantial archaeological information.

Criterion (f): The site provides evidence of a defunct way of life.

The VAHS report (2014:436) also concludes:

This site provides a rare opportunity to record a way of life that is defunct, that is providing a house and outbuildings with a minimum outlay of capital. The site may reveal how at least two generations of the same family utilised the resources available. The site could provide information on how material from earlier buildings was recycled yet retaining earlier building methods.

Although the authors of this HHA and SOHI acknowledge that the property once had a very modest role to play in the local area's history as part of the conditional settler movement (Criteria [a] and [d]), it is today an archaeological site best assessed for its significance by applying Criterion (e) i.e. potential to yield information. We note that the VAHS report confuses Criteria [e] and [f] in this regard; see above. MP36 fails to meet the criteria for local significance under Criteria (a) and (d).



Applying Criterion (e), the site has low potential to yield scientific information that could be used to address substantive research questions, both through its ruinous structures and through its potential archaeological resource. In relation to Criterion (e), this HHA and SOHI makes the following further observations:

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP36 is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subthemes of 'Planning urban settlements', 'Supplying urban services', 'Making settlements to serve rural Australia';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP36 is relevant to themes concerning 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In archaeological terms, and through its ruinous structures, the site at MP36 has low potential to 'tell the story' of the settlement and rural way of life in the local area. Adopting an optimistic interpretation of the scattered and dilapidated remains, the kinds of archaeological relics that may survive might illustrate:

- activity areas—but these are discernible from the visible remaining structures and/or features (e.g. remains of dairy, timber piers, remains of sheds, concrete slabs and posts);
- construction methods used for the original farm buildings—but these are unremarkable and well-understood; and
- a sample of the kinds of domestic and work tools used by the occupants—but these are matters documented and well-understood for rural inhabitants of this area from other sources (e.g. journals, newspapers, other better-preserved sites).



In terms of the scattered ruins and potential archaeology at MP36:

- the site at MP36 is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into rural NSW homes and orchards of the period and in the local area, the recollections of local residents, historic photographs and other archival material (including the oral history program completed by VAHS in 2004);
- the site at MP36 is unlikely to contribute knowledge that cannot be obtained from other better-preserved sites, including early twentieth-century homes in the local area; and
- given the above observations, it is unlikely that the site at MP36 would make a meaningful contribution to substantive research questions relating to Australian history, including those relating to the rural way of life in the Muswellbrook area.

The site has low potential to contain archaeological remains that would constitute 'relics' as defined under the Heritage Act. Further, the site does not satisfy the criteria for aesthetic or technical significance (Criterion [c]). The site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). The surviving structures are not rare or uncommon in the local area or rural NSW more generally (Criterion [f]), nor are they a good representative example of places of this kind (Criterion [g]).

4.14.4 Summary

MP36 Hill's fails to meet the criteria for either State or local significance. It is not a heritage place.

MP36 Hill's has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.14.5 Implications

The heritage impacts in relation to MP36 Hill's are presented in Part 5.14 below.

The management recommendations for MP36 Hill's are provided in Part 6.14 below.



4.14.6 Figures



Figure 58. The remains of a dwelling (Site D) at MP36 Hill's. Note the remains of the timber foundations.



Figure 59. The collapsed remains of a slab building (Site B) at MP36.



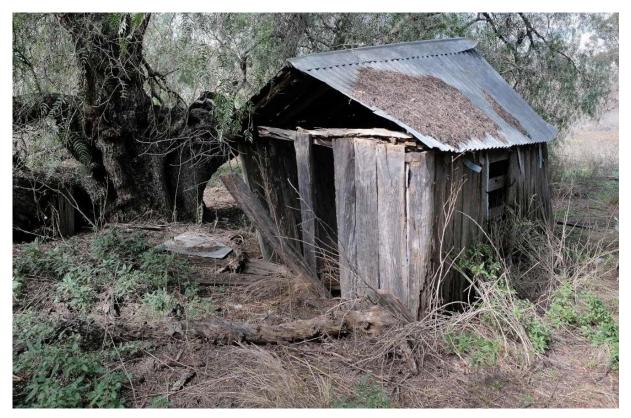


Figure 60. A shed constructed of timber slabs with corrugated iron roof (Site C) at MP36.



Figure 61. The collapsed remains of the shed (Site A) at MP36. Note the timber piers.



4.15 MP38 Rosebrook

4.15.1 Summary history

The VAHS report (2014:457-459) includes a detailed history of the site at MP38. In summary:

- 1825: Sir Thomas Brisbane granted Mr. William Cox of Hobartville the right to purchase 1280 acres.
- 1838: Mr. Cox of Hobartville registered a claim for deeds to 2560 acres near Muswellbrook (Portion 3).
- 1846: Portions 3 and 4 were divided between Mr. Cox's three sons: William, John Hobart and Sloper. The eldest son, William Jnr, received the southern portion of 1375 acres, which became 'Rosebrook'.
- 1858: William Cox Jnr sold 224 acres to Mr. John Whitford, a grazier of Coonabarabran.
 The land was known at this time as 'William Cox's Flat'.
- 1859: Tender advertised by Mr. Whitford for the erection of three miles of fence.
- 1862: Tender advertised by Mr. Whitford for a man well accustomed to farm work and a young boy capable of driving bullocks.
- 1864: Richardson & Wrench received instruction from Mr. Whitford to advertise the 'Rosebrook' farm of 230 acres at Muswellbrook. The advertisement described a well-built family residence of nine rooms with a front verandah and balcony, as well as a large basement used as a cellar and dairy. The house was built of cut stone with a slate roof. Other improvements on the farm included a four-stall stable and coach house, a large barn, stockyards, cow bails and an orchard. One portion of land contained a large quarry of building stone. However, the sale was not successful.
- 1865: Mr. Whitford re-advertised the 'Rosebrook' farm for sale or for a five-year lease. The purchaser, Mr. John F. Doyle Jnr, lived at the property until his death in 1880.
- 1889: Edward Higgens & Co advertised the auction of 'Rosebrook' to be subdivided and sold in small lots of 30 to 100 acres. The advertisement described an eight-room homestead built of stone with a kitchen, storeroom, bathroom, stables, coach house, cart shed, milking yards, orchard, vineyard and garden.
- Between 1894 and 1896, the trustees of the Rosebrook estate instructed various sales of the unsold portions in smaller subdivided lots.
- 1900: The Rosebrook Creamery opened.
- 1920: Mr. Richard T. Hall purchased the homestead portion of 'Rosebrook' consisting 133 acres and subsequently transferred Lots 1-2 to his wife, Mrs A.L. Hall.



- 1947: Owner, Mrs. A.L. Hall, died and left 'Rosebrook' to her two sons, Edward and Noel Hall in equal shares. At this time, 'Rosebrook' consisted of a sandstone homestead with a skillion extension of weatherboard and stone. Three of the ground floor rooms had Wunderlich ceilings. The outbuildings included four sheds, stables, cow bails, dairy, engine room and three wells.
- 1948: The estate of the late Mrs. A.L. Hall sold to Mr. Frances H. Blake, who added 467 acres to the homestead block following the additional purchase of the Richardson estate in 1949.
- The 'Rosebrook' property was owned by the Blake family until 2013-2014 when it was purchased by RTCA.

4.15.2 Description

The VAHS report (2014:460) identifies MP38 as a farm site with the modified remains of an early homestead. In summary, MP38 comprises:

- a two-storey sandstone homestead constructed c. 1850s;
- a narrow, steep-roofed lean-to that originally existed on the west side of the house; a servery window originally existed between this lean-to and the main ground floor room;
- a cellar with external access is located at the south end of the house and is mentioned in 1861 as being used as a dairy or cool room. The initials 'J.W.' and the date '1858' are inscribed in the stone lintel of the cellar;
- a billiard room originally extended from the south end of the house over the cellar entrance;
 and
- in the 1940s, the property included a large coach house built of timber slabs and the main house featured an outside pit toilet and bathroom.

The VAHS report also notes that the house at MP38 has a number of intrusive elements as a result of more recent modifications. This includes the addition of steel balcony posts, an external steel fire escape and a concrete verandah floor; the painting of the original sandstone exterior walls; and the replacement of the original slate roof with modern roofing materials.

The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report (Figure 62–Figure 65). The following observations were made regarding the site's current condition:

- The c. 1850s cut sandstone homestead is still in fair condition and retains some original elements (e.g. servery window, timber French doors).
- The building has been subject to successive modifications unsympathetic to its original character, but these modifications appear to be reversible (Figure 63–Figure 64). The rear additions to the main building are ad-hoc and of a recent date; they are not of historical significance (Figure 63).



 The existing outbuildings are of a more recent date and are not of particular historical significance, having replaced the original outbuildings dating to the late nineteenth century since demolished.

4.15.3 Assessment of heritage significance

The VAHS report (2014:471) concludes that MP38 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity i.e. early homestead of an affluent landowner.

Criterion (d): The property is important for its association with a number of identifiable groups, early horse racing, polo, dairying and polocrosse.

Criterion (e): The site has the potential to yield further archaeological information on how the site operated and construction methods in the mid-19th century.

The VAHS report (2014:471) also concludes:

The site is significant for its association with local horse racing, polo, start of the dairy industry and development of polocrosse. It also has significance due to the potential to provide further information on lifestyle building use. Buildings of the 1850s era are rare in the Muswellbrook district.

The authors of this HHA and SOHI agree with the assessment of the VAHS report, but augments it with the observation that the site at MP38 also meets the threshold for local significance for satisfying Criterion (c) through its distinctive (although somewhat compromised) colonial Georgian aesthetic, and for satisfying Criterion (f), as homes of this early date which include such evocative evidence of mid-nineteenth century activities are uncommon.

In relation to Criterion (e), the authors of this HHA and SOHI generally agree with the VAHS assessment that the site of MP38 has the potential to 'yield further archaeological information on how the site operated and construction methods in the mid-19th century'. The original sandstone section of the 'Rosebrook' homestead dates to the mid-nineteenth century (c. 1850s), a key period in the settlement and development of the Muswellbrook area. Further, it has functioned as a rural homestead for over a century, including during the convict era. Therefore, a cautious approach to the potential for archaeological relics to exist at MP38, or of their potential significance, is warranted.

The kinds of artefacts ('relics' as defined by the Heritage Act) that might survive at the site include:

- foundation trenches, posts and piers indicating the footprint of previous buildings (i.e. the original ancillary farm buildings since demolished);
- rubbish pits and/or deposits that present as concentrations of fragmentary artefacts;



- isolated historical artefacts;
- water pipes and other services; and
- wells—given the early date for the Rosebrook homestead, there is some potential for evidence early water-getting infrastructure to survive at the site. These would likely have been located within walking distance of the main residence and may have been timber-lined or built of stone. In any event, it is possible that they have since been filled in by the accumulation of soil deposits. Under the Heritage Act, wells qualify as 'works' to be managed much like above-ground built structures. However, any artefacts located inside a well may constitute 'relics' under the Heritage Act.

In other words, works causing ground disturbance under and around the homestead at MP38 may disturb or damage sub-surface material that would constitute 'relics' under the Heritage Act.

4.15.4 Summary

MP38 Rosebrook is a place of local heritage significance.

MP38 Rosebrook has moderate potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act. Works causing ground disturbance under and around the homestead at MP38 may disturb or damage sub-surface material that would constitute 'relics' under the Heritage Act.

In relation to any wells that may survive at MP38, this HHA and SOHI concludes that these would not constitute 'relics' as defined by the Heritage Act, being rather 'works' under the Heritage Act. However, any artefacts located inside a well may constitute 'relics' under the Heritage Act.

4.15.5 Implications

The heritage impacts in relation to MP38 Rosebrook are presented in Part 5.15 below.

The management recommendations for MP38 Rosebrook are provided in Part 6.15 below.



4.15.6 Figures



Figure 62. The front elevation of the homestead known as 'Rosebrook' (MP38).



Figure 63. The south elevation of the homestead at MP38, illustrating the c. 1850s sandstone section. Note the external steel fire escape and the painted exterior walls; both are intrusive modifications.





Figure 64. The modern brick addition to the rear of the homestead at MP38.



Figure 65. The cellar of the homestead at MP38 Rosebrook, showing the initials 'J.W.' and the date '1858' inscribed in the lintel. Source: VAHS (2014:466).



4.16 MP39 Rosebrook Quarry

4.16.1 Summary history

The VAHS report (2014:472) includes a history of the quarry at MP39. In summary:

- 1825: Sir Thomas Brisbane granted Mr. William Cox of Hobartville the right to purchase 1280 acres.
- 1838: Mr. W Cox of Hobartville registered a claim for deeds to 2560 acres near Muswellbrook (Portion 3).
- 1846: Portions 3 and 4 were divided between Mr. W. Cox's three sons: William, John Hobart and Sloper. The eldest son, William Jnr, received the southern portion of 1375 acres, which became 'Rosebrook'.
- 1858: William Cox Jnr sold 224 acres to Mr. John Whitford, a grazier of Coonabarabran.
 The land was known at this time as William Cox's Flat.
- 1859: Tender advertised by Mr. Whitford for the erection of three miles of fence.
- 1862: Tender advertised by Mr. Whitford for a man well accustomed to farm work and a young boy capable of driving bullocks.
- 1864: Richardson & Wrench received instruction from Mr. Whitford to advertise the 'Rosebrook' farm of 230 acres at Muswellbrook. The advertisement described a well-built family residence of nine rooms with a front verandah and balcony, as well as a large basement used as a cellar and dairy. The house was built of cut stone with a slate roof. Other improvements on the farm included a four-stall stable and coach house, a large barn, stockyards, cow bails and an orchard. One portion of land contained a large quarry of building stone.

In summary, the land on which the quarry exists was the subject of a land grant as early as 1825. The first and only reference to a quarry is found in an auction advertisement from 1864. Presumably, it functioned at some time in the intervening years, and possibly for a period afterwards.

4.16.2 Description

The VAHS report (2014:473) provides the following description of MP39:

- The site is located west of MP38 Rosebrook Homestead where the valley floor meets a steep slope.
- The stone has been tested for 200-300 metres (m) along the ridgeline in a north–south direction.



- Several areas have had stone removed and very few large blocks of quarried stone remain.
- Several areas of rubble, much of which has been covered by soil eroding down the slope.

The authors of this HHA and SOHI agree with the description provided in the VAHS report (Figure 66–Figure 67).

4.16.3 Assessment of heritage significance

The VAHS report (2014:481) assesses MP39 Rosebrook Quarry as being of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity and historical phase.

Criterion (c): The site shows technical achievement in the quarrying of building stone.

Criterion (f): The site provides evidence of a defunct process in the Muswellbrook district.

The VAHS report also concludes (2014:481):

The site provides evidence of very early quarrying for building material and perhaps headstones. The site appears to have only been used for a short period and the importance of the site may increase with further research.

The authors of this HHA and SOHI agree that the site of MP39 is of local significance, but differs with respect to the criteria used by the VAHS report to assess it:

- Criterion (a) relates to items that are important in the course, or pattern, of the cultural or natural history of the State or local area. The VAHS report itself notes that it could find only one reference to the quarry in its research (2014:473). It was clearly a small operation and was apparently superseded by other more active quarries by the 1860s. The VAHS report itself notes that (2014:473): 'A number of articles in the Muswellbrook Chronicle mention quarries at Grasstree, Halls, Dartbrook, Bengalla, St Helier's and Muswellbrook Common, but nothing about Rosebrook'.
- Criterion (c) relates to items that are important in demonstrating a high degree of technical achievement. The Rosebrook Quarry dates to sometime before 1864. If it is as old as the first land grant in 1825, this would be a very early date after settlement, but in any case, the act of manual quarrying on a small land holding was neither a novel or innovative activity in colonial Australia or elsewhere requiring 'a high degree of technical achievement'.
- Criterion (f) relates to items that possess uncommon, rare or endangered aspects of the State's or local area's cultural history. The VAHS assessment above is inconsistent with its own observation that (2014:473): 'A number of articles in the Muswellbrook Chronicle mention quarries at Grasstree, Halls, Dartbrook, Bengalla, St Helier's and Muswellbrook Common, but nothing about Rosebrook'.



Instead, this HHA and SOHI assesses the Rosebrook Quarry as being of local significance for satisfying Criterion (e) i.e. the quarry has potential to yield information that will contribute to an understanding of the local area's cultural history.

For example:

- Are there indications within the physical structure of the quarry that might help date it?
- Were explosives used to extract rock? If not, what techniques were used?
- Is it possible to calculate how much rock was removed from the quarry, and therefore, how much it contributed to the buildings in the local area?
- Is the geology traceable? In other words, is it possible to identify rock from Rosebrook in extant buildings elsewhere? If so, can this help to date it?

This assessment against Criterion (e) shifts the focus of the management recommendations to the research questions that the quarry might address (see Part 6.16 below).

Relevantly, the quarry (the geological features mined for stone) does not satisfy the definition of a 'relic' under the Heritage Act. Rather, it would be a 'work' under the Heritage Act.

4.16.4 Summary

MP39 Rosebrook Quarry is a place of local heritage significance. The quarry (the geological features mined for stone) does not satisfy the definition of a 'relic' as defined by the Heritage Act. Rather, it would be a 'work' under the Heritage Act.

4.16.5 Implications

The heritage impacts in relation to MP39 Rosebrook Quarry are presented in Part 5.16 below.

The management recommendations for MP39 Rosebrook Quarry are provided in Part 6.16 below.



4.16.6 Figures



Figure 66. View looking north-west across MP39 Rosebrook Quarry. Source: VAHS (2014:477).



Figure 67. A rocky outcrop comprising the quarry face at MP39. Source: UQCHU (2017b:39).



4.17 MP41 Negoa

4.17.1 Summary history

The VAHS report (2014:494-501) provides a detailed history of MP41 Negoa. In summary:

- Between 1823 and 1825, William Cox of Clarendon, together with his son and namesake William Cox of Hobartville, formed the Negoa Estate, comprising a total area of 8000 acres.
- 1825: Sir Thomas Brisbane authorised William Cox of Clarendon and his son, William Cox of Hobartville, grants to purchase 2560 acres and 1280 acres.
- 1828: The Census recorded 21 persons as living on the property, including shepherds, shearers, stockmen, ploughmen, carpenters, bullock drivers and servants. Of these 21 persons, a proportion were convict labourers assigned to William Cox of Hobartville.
- 1837: William Cox of Hobartville is recorded as having been assigned 19 convicts following his father's death, registered a claim to acquire deeds to Portions 3 and 4 of the estate.
- 1845: Tender advertised for the construction of a new brick building at Negoa. William Cox (Hobartville) divided Portion 3 and Portion 4 between his three sons: William Jr., John Hobart and Sloper.
- For most of the last half of the 19th century, Negoa was subsequently owned and inhabited by John Hobart Cox, the second son of William Cox of Hobartville and grandson of William Cox of Clarendon. During this period, a two-storey sandstone extension to the main homestead was constructed.
- 1864: John Hobart Cox attempted to lease the 'Negoa' property and after this failed, converted the land title to Real Property Act title.
- 1889: The 1889 Real Property Act title application included an aerial plan of the property's assets and identified the homestead, a separate house, two outbuildings, stables, a shed and cultivated garden.
- 1891: Owner, Mr. J.H. Cox, died and the 'Negoa' estate was subdivided. Surviving members
 of the Cox family retained the portion encompassing the homestead complex, while the
 remainder of the estate was subdivided to be sold in lots.
- 1950s: The original homestead underwent a number of improvements and additions.



4.17.2 Description

The VAHS report (2014:502-504) provides a detailed physical description of the extant structures at MP41 Negoa. In summary, MP41 comprises:

- A brick homestead c. 1845 with a c. 1860 sandstone addition to the west and a c. 1950s brick addition to the east and north.
- The brick homestead is a single-storied, three-room structure laid out in an L shape and constructed of bricks with a corrugated metal hipped roof. There is a two-roomed cellar underneath the building accessible from the north, but that entrance has been built over. To its south is the two-storied rectilinear sandstone structure with a corrugated metal hipped roof, which has two rooms to the ground and two to the first floor.
- Both the structures demonstrate influences of colonial Georgian and Victorian Georgian styles with symmetrical facades of exposed brick and sandstone.
- The 1950s addition is a single-storied structure with a corrugated metal skillion roof, and its eastern part served as the kitchen, and its northern part included a bathroom, a toilet, and a smaller room - possibly a study.
- There are three outbuildings on the site a servant's quarters building, a timber shed and a smaller shed. The servant's quarters are a brick-with-timber addition rectilinear structure, to the north of the main homestead (see Figure 72). It consists of a toilet and room to the brick part of the building, with a timber and glass addition to its east which appears to have served as a conservatory.

The Extent Heritage site inspection in 2017 confirmed the description presented in the VAHS report (Figure 68–Figure 75). The following observations were made regarding the site's current condition:

- The 1845 brick section of the homestead is in generally fair condition (Figure 70). However, the brickwork of the external walls requires re-pointing in places, and the rainwater goods require attention (gutters, downpipes and flashing) to avoid further deterioration.
- The cracking observable in the sandstone building to its west and the cellars will both require inspection by a structural engineer to ascertain if any stabilisation works are required.
- The windows and timber shutters are in fair to poor condition and require maintenance.
- The brick and concrete verandah paving are in poor condition.
- Erosion, cracking and weathering of sandstone blocks is observable.



- Original stone paving on the sandstone building is in poor condition and needs to be redone (Figure 75).
- The 'servant quarters' is of variable condition: the timber and corrugated section is in poor condition, but the brick section is in fair condition, although the brickwork requires repointing. The roof is in a very poor condition and is not weatherproof (Figure 72).
- The timber shed to the north-east of the main homestead residence is constructed of recycled materials and has a limited use-life. In places, the timbers are rotten and the roof is in a state of disrepair (Figure 71).
- While the interiors of the c. 1845 brick section are in fair-to-good condition, the c. 1860s sandstone section is in a relatively poor condition due to cracking caused by subsidence (Figure 74).
- Many of the internal walls have been clad with plasterboard panels and contemporary wallpaper.
- Timber panelled ceilings are present in the brick and sandstone sections (Figure 73).

4.17.3 Assessment of heritage significance

There are two previous Statements of Significance for the site known as 'Negoa'.

The VAHS report (2014:525) concludes that 'Negoa' is of high local significance for satisfying the following assessment criteria:

Criterion (a): The site shows evidence of significant human activity and a series of historical phases, i.e. early settlement, convicts and expansion of pastoralist activities.

Criterion (b): The site is associated with a significant family over several generations, i.e. Cox family.

Criterion (e): The site has potential to yield further substantial scientific and archaeological information on the development of Negoa and utilisation of convicts.

The VAHS report (2014:525) also concludes:

The site is highly significant on a local level for the evidence it can provide on early settlement, convicts and the development of a station. The property is one of the earliest in this part of the Hunter Valley and has a long association with the Cox family; this in its self is very significant. The site is also very significant for the information it could provide on building methods and how they were utilised.



In addition, the EJE Heritage report (1996:2) on the Muswellbrook Shire wide heritage study similarly concludes:

Historically, the buildings are of regional significance for being associated with the earliest establishment of the Upper Hunter by one of the colony's most esteemed citizens and for its part in the development of the Merino wool industry. Socially, the buildings are also of regional significance for their association with the activities of an eminent family over a half-century period. Scientifically, the buildings are of regional significance for their potential to reveal information which could contribute to an understanding of the development of Merino wool growing and of the mid and late 19th century lifestyles of one of the colony's early eminent families.

The authors of this HHA and SOHI generally agree with both of these previous assessments and concludes that 'Negoa' is a heritage place of high local significance. Additionally, this HHA and SOHI considers that 'Negoa' is likely to also be significant for satisfying the following criteria not included in the VAHS assessment:

- Criterion (c): Whilst it has been subject to a number of additions and modifications since the 1850's, Negoa still reads as a structurally intact example of a colonial Victorian Georgian homestead of brick and sandstone when viewed from outside. Particularly on its southern and western elevations, it retains its distinctive mid-nineteenth century aesthetic.
- Criterion (f): 'Negoa' is a good representative example of an early nineteenth century rural homestead and is one of nine rural homesteads in the Muswellbrook LGA recorded as having been established pre-1850.

The original Negoa homestead was constructed with a south-facing aspect. As a result, the ancillary buildings are to the north (rear). The southern elevation was the original main entry and this elevation remains relatively intact, although now missing its original skillion-roofed veranda. Views to and from this southern elevation therefore make an important contribution to the place's significance. The western elevation of the sandstone building also makes an important contribution to the place's significance. It is typical of the period and style being a generally unadorned stone façade with symmetrically placed doors. This building is now also missing its original veranda. Nonetheless, views to and from this western elevation make an important contribution to the overall significance of the structure.

Similarly, views to the sandstone building from the north-west capture the servant's quarters. This view is important as it allows the former site layout and hierarchy of buildings to be read and understood. Views to and from the north and east are of lesser significance in a contributory sense, as these aspects of the homestead have been compromised by post-1950s brick alterations and additions. Further, the north part of the site has a high tolerance for change as it has always functioned as a work area and was always intended to be the 'rear' and less public part of the site. In summary, the long views to the southern elevation of the brick/stone buildings and to the main façade (western) of the stone building make an important contribution to the significance of the site. Further, views to the homestead from the north-west make an important contribution to the site's overall significance.



With respect to the potential archaeological resource (Criterion [e]), this HHA and SOHI makes the following further observations:

The former Australian Heritage Commission (2001) compiled a number of Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP41 is relevant to:

- Theme 2: Peopling Australia, including the subthemes of 'Migrating' and 'Promoting settlement';
- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subthemes of 'Planning urban settlements', 'Supplying urban services', 'Making settlements to serve rural Australia';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP41 is relevant to themes concerning 'migration', 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) also provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In archaeological terms, MP41 has the potential, through its archaeology, to 'tell the story' of farming and the rural way of life in the local area during the early nineteenth century - an early and important phase in the local area's settlement.

The potential archaeological resource from the convict-era at Negoa would be a valuable resource that augments the written record for the settlement of Muswellbrook. It would have the potential to contribute data about activities at the site and the wider area that cannot be gathered from other resources. Similarly, although there are other sites from the convict-era in the Hunter region, they remain relatively rare and are even more rare at the local level around Muswellbrook.



Thus, 'Negoa' has the potential to contribute knowledge about the Muswellbrook region in the convict-era that is currently represented by a small number of other sites. This knowledge could contribute to understandings of the history of the Muswellbrook area during the convict-era including the living and working conditions of the convict workforce, their diet and recreational activities.

In relation to the potential historical archaeological resource from the *post-convict* era, this would generally be of a lower level of significance. The second half of the nineteenth century in the Hunter Region is better represented in historical sources than the convict-era and it is possible to reconstruct past lifeways by reference to existing archival resources (e.g. historic newspapers, station journals, diaries and historic photographs). Similarly, there is a higher representation of sites from this period that together give a good picture of life in the area between c.1860 and 1900.

The kinds of research questions that the later relics might address would be those relating to the location, approximate size, and orientation of the footprint of demolished buildings. These questions would contribute data on the kinds of domestic, recreational and work activities of the occupants. Therefore, archaeological relics from this period at 'Negoa' (c.1860-1900) would be of some significance, but of lower significance to those from the convict-era. Where such deposits exist but have been disturbed, they would be of lesser significance.

In summary:

- Artefacts from the convict-era and the post-convict era (to Federation) are likely to be 'relics' as defined by the Heritage Act.
- Artefacts from the twentieth century to World War II (WWII) are unlikely to be 'relics' as
 defined by the Heritage Act but may be if in a particularly undisturbed state.
- Artefacts post-WWII have low potential to constitute 'relics' as defined by the Heritage Act.

4.17.4 Summary

MP41 Negoa is a place of local heritage significance.

In relation to the potential archaeological resource at MP41 Negoa:

- Artefacts from the convict-era and the post-convict era (to Federation) are likely to be 'relics' as defined by the Heritage Act.
- Artefacts from the twentieth century to WWII are unlikely to be 'relics' as defined by the Heritage Act but may be if in a particularly undisturbed state.
- Artefacts post-WWII have low potential to constitute 'relics' as defined by the Heritage Act.



4.17.5 Implications

The heritage impacts in relation to MP41 Negoa are presented in Part 5.17 below.

The management recommendations for MP41 Negoa are provided in Part 6.17 below.

4.17.6 Figures



Figure 68. The c. 1860 sandstone section of the homestead and the servant's quarters at MP41 Negoa.





Figure 69. The western elevation of the c. 1860s sandstone section at MP41. Note the holes in the sandstone where the verandah was originally mounted. The servant's quarters are visible to the left and the c. 1845 brick section along the southern elevation is visible to the right.



Figure 70. The southern elevation of the homestead at MP41. Note the Flemish bond brickwork of the c. 1845 section.





Figure 71. The timber outbuilding at MP41, constructed from recycled timber material.



Figure 72. The servant's quarters at MP41, showing the separate brick and timber sections.





Figure 73. Interior view of the c. 1845 section of the homestead at MP41.

Note the timber panelled ceiling and contemporary wallpaper.



Figure 74. Interior view of the homestead at MP41, showing structural cracking in c. 1860s internal walls.





Figure 75. The failed stone paving on west and north elevations of the c. 1860s sandstone section of the homestead at MP41.

4.18 MP42 Fibbins

4.18.1 Summary history

The VAHS report (2014:526) includes a history of the site at MP42. In summary:

- 1912: Mr. Elijah Cox sold Portion 184 consisting of 24 acres to Mr. Alfred H. Fibbins.
 A house was most likely erected on the property following this sale.
- 1944: Owner, Mr. A.H. Fibbins, died and left Ethel M. Quantrill as the sole executrix of his will.
- Ethel advertised Portion 184 for auction the following year and included the description of a property with a comfortable cottage of seven rooms, a verandah, two sheds and a dam.
- 1947: Ownership transferred from the estate of the late Mr. A.H. Fibbins to Mr. William T. Hill. The property then passed to Mr. Pat Lonergan and following that, to Mr. Wayne and Pat Watts.



4.18.2 Description

The VAHS report (2014:526-527) identifies MP42 as a farm site with the remains of a house and ancillary structures. In summary, MP42 comprises:

- A four-room house with a central hall and verandah to the front and rear. It is constructed of a sawn timber frame clad with hardwood weatherboards and mounted on timber piers. The roof is of round timber construction with sawn battens. The front room on the north side contains an open fireplace. The front and rear doors are panelled timber with fan lights.
- A single detached room adjacent to the rear verandah (north-west corner). The building's south wall is clad with sawn slabs; the remaining walls are clad with weatherboards. The south end has a gable roof; the north end has a hipped roof. One window in the west wall has been fitted to fill the space formerly occupied by a chimney.
- A stand-alone chimney located a short distance from the rear of the main house.
- A small building to the west of the house utilised as a toilet.
- A concrete slab to the north of the stand-alone chimney, which may have been a dairy.
- A large shed to the north-west of the house constructed of round timber with sawn roof battens. The roof consists of a gabled part and a lean-to part; both of corrugated iron.
- A number of piers to the west of the concrete slab possibly indicative of a former shed.

The Extent Heritage site visit in September of 2018 confirmed the site description provided in the VAHS report (Figure 76–Figure 81). During this re-inspection of the site, the following observations were made:

- The main house is relatively intact and retains many original features characteristic of rural properties in the local area; however, it has been abandoned for many years and is becoming dilapidated. There is some evidence of termite damage and the house is now overgrown by vegetation, particularly along the front verandah.
- The detached building appears to be a later re-build (c. 1930s) of an earlier structure.
- The brick chimney to the rear of the house was still standing.
- Remains of timber bed logs on ground at the rear verandah were dilapidated.
- Several modern ancillary structures (i.e. a fernery and nursey) were observed.
- The condition of the large shed to the north-west of the house has declined since the VAHS period of fieldwork.



4.18.3 Assessment of heritage significance

The VAHS report (2014:544) concludes that MP42 is of moderate local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity. There are the remains of a number of buildings on this site.

Criterion (c): The site shows technical innovation and achievement. There is evidence that the house was built to a limited budget, but tried to incorporate the latest fashion i.e. larger framed windows. The house is also a transition from an early construction using bush timber to a modern building utilising sawn material.

Criterion (e): The site has potential to provide further substantial archaeological information about the utilisation of space. For example: How did the separate room and chimney function with the remaining four rooms?

The VAHS report (2014:544) also concludes:

This site is significant as it has the potential to provide new information regarding the transition in construction methods. There is also the potential to gain information on how the site functioned with possible separate living and sleeping sections.

The authors of this HHA and SOHI generally agree with the assessment of the VAHS report and also concludes that the site of MP42 is of local significance. However, this HHA and SOHI does not assess the site as satisfying Criterion (c). The built form at MP42, dating to the post-Federation era, does not display technical innovation or achievement. It is an unremarkable rural house, typical of the period and locality, that made use of available materials without employing any particularly innovative construction techniques.

With respect to the house at MP42, the structure is of local significance but it is in very poor condition, which has guided the management recommendations contained in this HHA and SOHI. For example, if the house were to be returned to a habitable condition, this would require the wholesale removal and replacement of much of its original fabric. This would include its warped and corroded roof, and the many damaged timber elements (including parts of its frame, floors and walls). The 'conserved' structure would lack 'integrity' and 'authenticity'. Its heritage value now rests principally in its ability to tell the story of the local area some generations ago, which has already been partly achieved through the VAHS oral history work (2004), and which can be augmented with the photographic archival recording recommended in Section 6 below.

With respect to the potential archaeological resource, as noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?



Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In terms of the potential subsurface archaeology, the site at MP42 has low potential to 'tell the story' of the local area. Adopting an optimistic interpretation, the kinds of archaeological relics that may survive might illustrate:

- activity areas—but these are discernible from the visible remaining structures and/or features (e.g. timber piers, remains of sheds, concrete slabs and posts);
- construction methods—but these are unremarkable and well-understood; and
- a sample of the kinds of domestic and work tools used by the occupants but these are matters documented and well-understood for rural inhabitants of this area from other sources (e.g. journals, newspapers, other better-preserved sites).

Therefore, the potential archaeology at MP42:

- is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into rural NSW homes of the period and in the local area, the recollections of local residents, historic photographs and other archival material (including the oral history program completed by VAHS in 2004);
- is unlikely to contribute knowledge that cannot be obtained from other better-preserved sites, including early twentieth century homes that remain in the local area; and
- given the above observations, it is unlikely that the site at MP42 would make a meaningful contribution to substantive research questions relating to Australian history, including those relating to the rural way of life in the Muswellbrook area.

The site has low potential to contain archaeological remains that would constitute 'relics' as defined under the Heritage Act.

Further, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). The surviving structures are not rare or uncommon in the local area or rural NSW more generally (Criterion [f]), nor are they a good representative example of places of this kind (Criterion [g]).

4.18.4 Summary

MP42 Fibbins is a place of local heritage significance.

MP42 Fibbins has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.



4.18.5 Implications

The heritage impacts in relation to MP42 Fibbins are presented in Part 5.18 below.

The management recommendations for MP42 Fibbins are provided in Part 6.18 below.

4.18.6 Figures



Figure 76. View looking east showing the rear of the main house at MP42 Fibbins.





Figure 77. Interior view of the timber room detached from the main house at MP42.



Figure 78. View along front verandah of the main house at MP42. Note the remnant decorative in-fill.





Figure 79. The timber room detached from the main house at MP42.



Figure 80. View capturing the relationship between the chimney, detached room and house at MP42.





Figure 81. The stand-alone brick chimney located to rear of main house at MP42.

4.19 MP43 St Andrew's Anglican Church

4.19.1 Summary history

The VAHS report (2014:545-546) includes a history of the site at MP43. In summary:

- 1866: Mr. George Devine Jnr purchased Portion 27 consisting of 40 acres.
- 1882: Deed transferred to Rev. William Edwards White, the rector of Muswellbrook, for the construction of an Anglican Church at Kayuga. It is believed to have been built between 1881 and 1885.
- 1885: The Bishop of Newcastle delivered an address at St Andrew's at Kayuga.
- 1889: Tenders for construction of a road allowing easier access to the Anglican Church.
- 1898: Rev. White transferred the land to the Diocese of Newcastle.
- Throughout the early 1900s, the Muswellbrook Chronicle reports multiple community weddings and funerals taking place at St Andrew's.



- 1916: Kayuga parishioners raised funds to refurbish the church, including painting the interior, fitting a new ceiling and purchasing a new organ.
- 1922: Community event held to raise funds for church repairs.
- 1936: The Muswellbrook Chronicle reported the removal of the bell from St Andrew's Church to St Mark's at Aberdeen, following the demolition of St Andrew's.

4.19.2 Description

The VAHS report (2014:546) identifies MP43 as an archaeological site. Apart from several pepper trees, there are no visible features to indicate the former location of the church.

The Extent Heritage site visit confirmed this site description provided in the VAHS report. There was no evidence indicative of any built structures and the site presents as an open, grassy field with isolated pepper trees (Figure 82).

4.19.3 Assessment of heritage significance

The VAHS report (2014:549) concludes that MP43 is of moderate local significance for satisfying the following criteria:

Criterion (d): The site is important for its association with an identifiable group in the early Kayuga community i.e. people of the Anglican faith.

Criterion (f): The site has the potential to provide evidence of a defunct way of life, the erection of small country churches to service a rural community.

The VAHS report (2014:549) also concludes:

The church served the Anglican community for a period of approximately 40 years. The site is significant due to its potential to provide information on the physical size of the church along with construction material.

The authors of this HHA and SOHI disagree with the assessment of the VAHS report. MP43 fails to meet the threshold for local significance and is not a heritage place.

Criterion (d) requires a 'strong or special association' with a community group, not simply any association. There is no evidence to suggest that former parishioners (if any are still alive) still value the vacant space where the church once stood (recalling that it was demolished at the instigation of the church itself).

Further, the authors of this HHA and SOHI disagree with the use of Criterion (f) by the VAHS report. VAHS appears to have confused Criterion (f) with Criterion (e). If the site has any significance, it would be for its archaeological potential i.e. 'potential to yield information' under Criterion (e). However, this report concludes that there is low potential for archaeological remains to survive at the site that would satisfy the definition of 'relics' under the Heritage Act.



During both the 2013-14 and September 2018 periods of fieldwork, there were no above-ground remains to indicate the presence of an earlier structure (e.g. piers, stumps or other structural material surviving from a church building). This suggests that the historic structure that archival documents record as having existed on this property was demolished in a 'controlled' manner and its structural elements were deliberately removed for recycling/re-use elsewhere. In such circumstances, the potential for archaeological evidence of structural remains is considerably reduced.

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

Adopting an optimistic interpretation of MP43, the kinds of archaeological artefacts that may survive there include:

- evidence of post/stump holes (e.g. the former church); and
- isolated artefacts.

Therefore, the potential archaeology at MP43:

- is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research, the recollections of local residents, historic photographs and other archival material (including the oral history program completed by VAHS in 2004);
- is unlikely to contribute knowledge that cannot be obtained from other better-preserved sites; and
- given the above observations, it is unlikely that the site at MP43 would make a meaningful contribution to substantive research questions relating to Australian history, including those relating to the rural way of life in the Muswellbrook area.

4.19.4 Summary

MP43 St Andrew's Anglican Church fails to meet the criteria for either State or local significance.

MP43 St Andrew's Anglican Church has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.



4.19.5 Implications

The heritage impacts in relation to MP43 St Andrew's Anglican Church are presented in Part 5.19 below.

The management recommendations for MP43 St Andrew's Anglican Church are provided in Part 6.19 below.

4.19.6 Figures



Figure 82. View east over the former site of St Andrew's Anglican Church (MP43).

4.20 MP44 Scarred Tree

4.20.1 Summary history

The VAHS report (2014:550) provides the following history in relation to MP44:

- The tree is located near the south-west corner of Portion 93 and the north-west corner of Portion 147.
- Portion 93 was taken up as a conditional purchase from the Crown by William Hill in 1871 and Portion 147 by him in 1873. The tree may have been marked in that period by the Government Surveyor to indicate the corner of each portion.
- The Coal Creek Road and later named Castlerock Road was surveyed in 1880. The surveyor noted on his plan that 'reference trees at nearly all angles'. There was an angle in the original road at this point.



A notation on the above map states that the road was notified in the Government Gazette 15 August 1882 and the opening of the road was notified in the Government Gazette 15 December 1885.

4.20.2 Description

The VAHS report (2014:550) provides the following description of MP44:

Scar is on the west side of large grey box. There is heavy regrowth over the scar indicating that it has been there for some time.

The rapid regrowth over the scar observed in only a two to three-year period (Figure 83–Figure 84) suggests that the scar probably dates to a very recent time, rather than to a surveyor's blaze of over 100 years ago. Australian native trees can be scarred by a range of causes including branch tear, lightning strike and pest activity (see, for example, Long 2005).

4.20.3 Assessment of heritage significance

The VAHS report (2014:553) assessed the tree at MP44 as being of high local significance for satisfying the following criteria:

Criterion (d): The site is important for its association with an identifiable group i.e. early conditional purchase settlers and surveyors.

Criterion (f): The site provides evidence of a defunct custom i.e. the use of trees as survey markers.

The VAHS report (2014:553) also concludes:

This site is significant as early survey marked trees are becoming rare in this area due to fires, termites and the age of the trees.

The authors of this HHA and SOHI disagree with the VAHS report's assessment. Even if the scar on the tree has been correctly identified as a surveyor's blaze (which it almost certainly has not), the authors of this HHA and SOHI disagree that the tree is of high local significance.

In relation to Criterion (d), the tree dates to after 1871, possibly to 1880, if correctly identified; however, this is a relatively late period of settlement in the local area and bears only tangential association with early conditional purchase settlers and surveyors. Further, the latter is only a very broadly defined 'community or cultural group'.

In relation to Criterion (f), the site does provide evidence of a defunct custom i.e. the use of trees as survey markers (if correctly identified). However, the tree as it currently exists is a poor example of a surveyor's blaze. The typical surveyor's arrow and annotations are completely illegible and the scar will soon be entirely closed over in any event. The above observations have guided the recommendations presented in Part 6.20 below.



4.20.4 Summary

MP44 Scarred Tree fails to meet the criteria for either State or local significance. It is not a heritage place.

MP44 Scarred Tree does not satisfy the definition of 'relics' as defined by the Heritage Act.

4.20.5 Implications

The heritage impacts in relation to MP44 Scarred Tree are presented in Part 5.20 below.

The management recommendations for MP44 Scarred Tree are provided in Part 6.20 below.

4.20.6 Figures





Figure 83. Two views of the scarred tree (MP44) at the time of the VAHS fieldwork in 2014. Note the scar is badly weathered and in the process of being closed over by regrowth. Source: VAHS (2014:552).





Figure 84. The scarred tree (MP44) in October 2016. Note the visible scar regrowth by this time, compared to the tree in 2014. Source: UQCHU (2016).

4.21 MP45(a) and (b) Casey: Clenmore and Edgeway

4.21.1 Summary history

The VAHS report (2014:554-556) includes a history of the site at MP45(a). In summary:

- Prior to 1880, Portion 177 was purchased by Mr. Joseph R. Ridge.
- 1880: Auctioneer Mr. James Hutchinson announced the sale of the insolvent estate of Mr. Ridge, including the land comprising Portion 177.
- Between 1911 and 1913, the Muswellbrook Chronicle reported Mr. Michael Casey as the owner of Portion 177.
- 1930: Owner, Mr. M. Casey, died and the property continued as his late estate for many years and expanded to include Portions 15, 16, 26, 35, 43 and 71. The deceased estate file described a weatherboard cottage of four rooms with a detached kitchen, storeroom, two sheds, a timber storehouse, a dairy, yards and three bails.
- The Casey family retained ownership until the 2013-14 sale of the property to RTCA.

The VAHS report (2014:573) includes a history of the site at MP45(b). In summary:

- Prior to 1892, Portion 182 consisting of 50 acres was freehold land held by Mr. John H. Cox.
- 1892: Owner, Mr. J.H. Cox, died and the land was transferred from his estate to his son, Mr. Charles H. Cox.



- 1897: Mr. Harris and Mr. Francis Clark, butchers of Muswellbrook, purchased Portion 182.
- 1898: Ownership transferred to Mr. M. Campbell and Mr. J.W. Humphries.
- Between 1898 and 1909, Mr. Edward Casey of Kayuga purchased the property. Following his death in 1909, Portion 182 featured a four-room cottage with a kitchen, yards, cow bails, dairy and cart shed. The entirety of the estate of the late Mr. E. Casey passed to his widow and seven children.
- Between 1920 and 1922, ownership of the property transferred to Mr. Thomas Casey. At some stage, the 'Edgeway' property passed to the children of Thomas's brother, Michael Casey, who lived at Clenmore.

4.21.2 Description

The VAHS report (2014:556) describes MP45(a) as a farm site with a homestead and various ancillary farm structures. In summary, MP45(a) comprises:

- House A: The original homestead consisted of four rooms with a central hall, verandahs and a detached two-room kitchen block to the west. At various stages, the living area and kitchen were joined, the verandahs enclosed and extra rooms added. The original building was clad with ship-lapped, wedge-shaped weatherboards and gabled at both ends. Three of the four rooms have fireplaces. The two front rooms featured French doors leading onto the verandah. The kitchen retains its original Dover stove. There may have been a walkway between the living area and the kitchen; however, this no longer exists.
- Dairy B: A shed of timber and corrugated iron construction with a concrete floor, most likely used as a dairy.
- Shed C: Small timber shed clad with corrugated iron mounted on timber piers
- Shed D: Small timber shed clad with weatherboards similar to main house and mounted on timber piers (clad with sheet iron and metal caps).
- Hay Shed E: A large shed constructed of round bush timber and clad with corrugated iron.
 A lean-to section is incorporated on the south end.
- Toilet F: Small timber building formerly used as an outdoor toilet.
- Shed G: Timber framed shed clad with corrugated iron.
- Shed H: Timber framed shed clad with corrugated iron, most likely used to house vehicles.
- Shed I: Machinery shed open to one side with a timber frame and clad with corrugated iron.
- Dairy J: A brick and corrugated iron dairy building of more recent construction, featuring cow bails and milk vats.



The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report (Figure 85–Figure 91). The homestead and outbuildings retain some of the typical characteristics of rural properties in the local area; however, there has been a significant decline in the condition of the site since the VAHS period of fieldwork. The following observations were made regarding the current condition of MP45(a):

- The homestead is in poor condition due to termite damage. In some areas, roof material has begun to collapse into the internal rooms (Figure 89). Parts of the floor are unsafe.
- The rear section of the hay shed roof has either collapsed or been removed, exposing the timber internal structure to the elements.
- The timber outbuildings are generally deteriorated due to termite damage (Figure 90).
- The brick dairy is relatively intact being a more recent construction (Figure 91).

In relation to MP45(b), the VAHS report (2014:573-574) describes a farm site with a homestead and various ancillary structures (Figure 97).

In summary, MP45(b) comprises:

- a four-room house with an attached kitchen and a verandah on three sides. The house frame and roof are constructed of sawn timber and mounted timber piers. Two brick chimneys served the kitchen and two fireplaces, respectively;
- two rainwater tanks mounted on round brick stands;
- remains of a car shed constructed of round sawn timber and clad with corrugated iron;
- remains of a cart shed constructed of round sawn timber and clad with corrugated iron (part
 of this shed may have had a timber floor with a slab wall; the latter has collapsed);
- remains of a pig sty constructed of slab timber, located west of the cart shed;
- remains of a concrete slab floor, which may have been the site of cow bails;
- remains of stockyards constructed using mortised posts and rails; and
- a small concrete slab with a timber post used for mounting a separator, which may have been a dairy.

The Extent Heritage site visit in September 2018 established that there has been a decline in the condition of MP45(b) since the VAHS period of fieldwork (Figure 92–Figure 96):

- The main house known as 'Edgeway' has collapsed or been demolished due to structural instability. The site now presents as a large debris pile of timber and brick material used in the construction of the house (i.e. doors, windows, framing) (Figure 92–Figure 93).
- A number of glass domestic artefacts (i.e. jars and bottles) were visible in the house ruins.



- The original brick chimney and one of the brick water tank stands (Figure 94) were still standing.
- The timber piers that once supported part of the house are still visible (Figure 95).
- The various outbuildings are significantly deteriorated.
- The remains of the former dairy (i.e. a concrete slab with a single post) were still evident (Figure 96).

4.21.3 Assessment of heritage significance

The VAHS report (2014:572) concludes that MP45(a) is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity i.e. many of the structures still exist though in poor condition. The house shows evidence of how it evolved with the need to create more living area.

Criterion (c): The site shows technical innovation with the utilisation of bush timber to construct farm buildings.

Criterion (d): The site is important for its association with an identifiable group i.e. small-scale farmers with dry land dairy.

Criterion (e): The site, especially the house, has potential to yield further substantial archaeological information on construction methods.

Criterion (f): The site provides evidence of a defunct way of life i.e. small-scale dairy where the family were semi-subsistent.

The VAHS report (2014:572) also concludes:

The site is highly significant due to most of the structures on the site are still intact and it is possible see how the farm operated. The house could be significant due to the potential to provide further information on construction methods especially if it is from the period of ownership by Joseph Ridge.

With respect to MP45(a), although the authors of this HHA and SOHI acknowledge that the property once had a modest role to play in the local area's history, the built form dates to the early twentieth century and later and its historical significance is limited, even at the local level (Criterion [a]).

Similarly, this HHA and SOHI does not assess MP45(a) as satisfying Criterion (c). The built form at MP45(a), dating to the post-Federation era, does not display technical innovation or achievement. It is an unremarkable rural house, typical of the period and locality, that made use of available materials, without employing any particularly innovative construction techniques.



Further, Criterion (d) requires not just 'an association' with 'a particularly community of cultural group'; it requires a 'strong or special association' with such a group (under the NSW Government guidelines). This has not been demonstrated for MP45(a).

The authors of this HHA and SOHI disagree with the use of Criterion (f) by the VAHS 2014 report. Criterion (f) relates to places that are 'uncommon, rare or endangered', rather than to places that have potential to 'provide evidence of a defunct way of life'. This aspect of the assessment would be more appropriately made against Criterion (e).

MP45(a) also has no association with prominent individuals or groups (Criterion [b]). Modest farm houses of the early twentieth century are not uncommon in the area (Criterion [f]) and the deteriorated and modified structure is not a good representative example of its type (Criterion [g]).

This HHA and SOHI therefore assesses MP45(a) as being of some significance, possibly at the local level, for its ability to 'tell the story' of the agricultural development of the area. It has the potential to yield information about a period of local history (Criterion [e]).

With respect to the house at MP45(a), the structure is in very poor condition, which has guided the management recommendations contained in this HHA and SOHI. For example, if the house were to be returned to a habitable condition, this would require the wholesale removal and replacement of most of its original fabric. This would include its warped and corroded roof, and the many termite-damaged timber elements (including many parts of its frame, floors and walls). The 'conserved' structure would lack 'integrity' and 'authenticity'.

The heritage value of MP45(a) now rests principally in its ability to tell the story of the local area some generations ago, which has already been partly achieved through the VAHS oral history work (2004), and which can be augmented with the photographic archival recording recommended in Part 6.21 below.

The potential archaeological resource at MP45(a) is discussed separately below.

With respect to the building at MP45(b), very little of it survives (i.e. the chimney and some timber piers). Prior to the collapse or demolition of MP45(b), the VAHS report (2014:587) assessed it is a place of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity i.e. many of the structures still exist though in poor condition.

Criterion (c): The site shows technical innovation with the utilisation of bush timber to construct farm buildings.

Criterion (d): The site is important for its association with an identifiable group i.e. small-scale farmers with dry land dairy.

Criterion (e): The site, especially the house, has potential to yield further substantial archaeological information on construction methods.



Criterion (f): The site provides evidence of a defunct way of life i.e. small-scale dairy where the family were semi-subsistent.

Given that the house no longer remains, the significance of MP45(b) now rests in its ability to yield information (Criterion [e]). It is now an archaeological site.

With respect to the potential archaeological resource (Criterion [e]) at both MP45(a) and MP45(b), this HHA and SOHI makes the following observations:

As noted above in Part 2.3, the NSW Heritage Council's guideline document entitled *Assessing Significance for Historical Archaeological Sites and 'Relics'* (2009) provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

As noted above in Part 2.5, the former Australian Heritage Commission (2001) and the NSW Heritage Council (2001a) have similarly compiled a number of historical themes to guide practitioners in the assessment of historic heritage sites. In summary, MP45(a) and 45(b) are relevant to themes concerning 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

In broad terms, the sites at MP45(a) and MP45(b) have some potential, through their archaeology, to 'tell the story' of the rural way of life and the operation of small-scale dairy farms in the local area during their period of use. Adopting an optimistic interpretation, it is possible that the following kinds of artefacts may exist at MP45(a) and MP45(b):

- activity areas—but most of these are presently visible from the surviving structures;
- a sample of the kinds of domestic and work tools used by the occupants, including technologies used in the operation of a dairy—but these are matters well-understood from other archival resources (e.g. historical photographs, recollections from local informants, newspapers, other better-preserved sites); and
- garbage pits and dumps.

However, such artefacts, if they exist, would have limited ability to yield information that would contribute significantly to substantive research questions and/or to an understanding of the local area's history. Historical research into this site has already established its broad ownership and development history. Should any of these artefacts exist, they may shed some light on the kinds of activities undertaken at the farm, but it is unlikely that they would yield data that has not been already obtained for this region through other sites and resources, including the oral history work undertaken by VAHS in 2004.



The kinds of research questions that might be addressed by MP45(a) and MP45(b) are limited and narrowly site-specific, rather than of even 'local significance' e.g. What kinds of foods were consumed here? What kinds of work was undertaken there? Where were certain activities undertaken? For the most part, these questions can be better addressed through an analysis and archival recording of the extant structures at the site.

In other words, in archaeological terms, the potential archaeological resource at MP45(a) and MP45(b) has limited ability to yield data that:

- cannot be gained from other sources—for example, the utilisation of bush timber for constructing rural buildings and the rural way of life on small-scale dairy farms is already documented and well-understood for the local area from the recollections of local informants, historic photographs and other archival material;
- cannot be gained from other better-preserved sites, many of which include small-scale rural enterprises from the early twentieth century; and
- would address substantive research questions relating to Australian history, including questions in relation to the rural dairy farming and living experiences of the residents of the local area.

Further, the potential archaeological remains of the sites would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). The sites have no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). The surviving structures are a modest example of a common type of rural domestic building and places of this kind are not rare or uncommon in the local area or rural NSW more generally (Criterion [f]).

MP45(a) and MP45(b) have low potential to contain archaeological remains that would constitute 'relics' as defined under the Heritage Act.

4.21.4 Summary

The buildings at the site known as MP45(a-b) are places of local heritage significance.

The site known as MP45(a-b) has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.21.5 Implications

The heritage impacts in relation to MP45(a-b) Casey: Clenmore and Edgeway are presented in Part 5.21 below.

The management recommendations MP45(a-b) Casey: Clenmore and Edgeway are provided in Part 6.21 below.



4.21.6 Figures



Figure 85. The north elevation of the house known as 'Clenmore' at MP45(a).



Figure 86. The buildings known as Sheds C and D at MP45(a).





Figure 87. The west elevation of the house at MP45(a).



Figure 88. View along the front verandah of the house at MP45(a).





Figure 89. Interior view of the house at MP45(a), illustrating the poor state of preservation. Note the termite damage and the partial collapse of the roof material.



Figure 90. The hay shed at MP45(a). Note the very poor condition of the timber frame and roof.





Figure 91. The dairy at MP45(a) constructed in more recent times of brick and corrugated iron.



Figure 92. The collapsed remains of the house known as 'Edgeway' at MP45(b). Note that at the time this photograph was taken (2018), the brick chimney and one of the brick water tank stands were still standing.





Figure 93. The site known as MP45(b) presents as a large debris pile of timber and brick material used in the construction of the house.



Figure 94. The remains of one of the brick water tank stands at MP45(b).





Figure 95. Some of the timber piers that once supported the house at MP45(b).



Figure 96. The remains of the former dairy (i.e. a concrete slab with a single post) at MP45(b).





Figure 97. A photograph of the former house known as 'Edgeway' during the VAHS period of fieldwork in 2014. Source: VAHS (2014:577).

4.22 MP46 Kayuga Recreation Ground

4.22.1 Summary history

The VAHS report (2014:589-590) includes a history of the site known as MP46. In summary:

- 1880: Land nominated for use of public and surveyor notified.
- 1895: 3 acres 2 roods and 35 perches were set aside by the Crown for public recreation.
- 1901: C. Devine called tenders for erection of additions to the cricket shed at the Kayuga Recreation Grounds.
- 1909: Mr Michael Casey and Mr. James Joseph Lonergan appointed as trustees of the recreation ground at Kayuga in lieu of Mr. J. Gall (deceased) and Mr. John Lonergan (removed).
- 1910: C. Devine, secretary to the trustees, called for tenders for painting the pavilion, outbuildings and fence at Kayuga Recreation Ground, as well as improvements to the pavilion.
- 1911: the Muswellbrook Chronicle (10 June 1911) published a brief article on the recreation ground at Kayuga, referring to the hall as 'the People's Hall'. In the same year, the Government Gazette published the regulations for the management of the recreation ground at Kayuga.



- 1919: At a meeting of residents, a unanimous decision was taken to make a substantial addition to the local recreation hall, which was too small to meet the requirements in the shape of socials, bazaars, etc. After consent of the trustees had been obtained, tenders were called and accepted for an extension of 20 feet. At the time, the hall may have been clad with corrugated iron and the original entrance door on the western side was relocated to the eastern side with double door fittings.
- 1920: Addition of an ant bed cricket pitch.
- In 1932, when Mr. George Devine died, his obituary stated that he had been a trustee of the Kayuga Recreation Ground for over 30 years.
- Between 1932 and the 1970s: Tennis and cricket were continued to be played at the grounds for a number of years, but it is not known when these activities ceased. Mr. Jim Lonergan reported that the hall ceased to be used in the 1970s.

The exact date for the erection of the hall at the Kayuga Recreation Ground is unknown, but it may have been c.1910 when tenders were called for painting. The other possibility is it was erected soon after the land was gazetted in 1895 and by 1910 needed another coat of paint (VAHS 2014:590); however, this is unconfirmed.

4.22.2 Description

The VAHS report (2014:590-603) describes the site of MP46 as a timber hall structure located on the former recreation ground at Kayuga (Figure 98–Figure 104). In summary, MP46 comprises:

- A main hall, sawn timber frame and clad with sawn timber, with gabled ends. The northern end retains its timber cladding; at the time of the VAHS fieldwork in 2014, there was visible damage to the southern gable in-fill. A large door is located on the western side, which would have been the former main entrance.
- A lean-to section at the northern end, which appears to have been part of the original hall.
 The two rooms contain a small kitchen and a cloakroom.
- A southern extension (c.1919), built utilising 150 x 150 mm posts squared with adze or broad-axe. At this time, the hall may have been clad with corrugated iron and the original western entrance was relocated to the eastern side with double doors fitted.
- A timber ticket window fitted in the south-east corner of the hall.
- A lean-to located on the eastern side at the southern end of the hall, which may have been erected at the same time as the southern extension in 1919. This lean-to would have allowed people to purchase their ticket and enter the hall while under shelter.
- A septic toilet to the west of the hall.



There is no indication where the tennis court or cricket pitch was located. There is a single ventilator in the roof and electric power had been connected to the hall at some stage, as lights are still in position along with insulators on the northern gable.

The authors of this HHA and SOHI agree with the site description provided in the VAHS report, although it is likely that the structure has been reclad and reroofed at least once since the 1919 work identified by the VAHS report.

It is also noted that there has been a general decline in the condition of the site since the VAHS period of fieldwork in 2014. The following observations were made regarding the current condition of MP46 (Figure 105–Figure 106):

- The main hall building is relatively intact and retains many original features, such as the kitchen and cloakrooms comprising the lean-to section at the northern end, the cloakroom signage, the timber flooring, and the timber roof framing.
- However, the building has been abandoned for many years, potentially since the 1970s, and is becoming dilapidated. The building itself has a lean and the corrugated metal sheeting on the western side of the hall has collapsed further. In some areas, there are holes in the timber flooring and there is general debris scattered inside the building.
- The structure is not weatherproof and further damage to the corrugated metal fabric of the southern gable in-fill is visible.
- The lean-to section and the timber gable in-fill at the northern end of the hall are retained.
- The windows on the eastern side of the hall have been boarded up.
- The remains of the septic toilet were still standing at the west of the hall, surrounded by thick grass cover.

4.22.3 Assessment of heritage significance

The VAHS report (2014:604) concludes that MP46 is of high local significance for satisfying the following criteria:

Criterion (a): The hall shows evidence of significant human activity over an extended period.

Criterion (b): The hall is associated with a group of people that no longer exist i.e. small area subsistence farmers.

Criterion (c): The hall is aesthetically distinctive being the last cultural building in the village of Kayuga.

Criterion (d): The hall is important to a community's sense of place. So many of the community's activities took place here.



The VAHS report (2014:604) also concludes:

The hall is highly significant on a local level to the history of Kayuga village and district. It is a reminder of a way of life that does not exist anymore.

Generally, the authors of this HHA and SOHI agree that MP46 is of local significance, placing the greatest emphasis on its historical significance. No evidence of its social significance was obtained through desktop research but the authors of this HHA and SOHI agree that is possible.

With respect to the potential archaeological resource at the site (Criterion [e]), this HHA and SOHI makes the following observations:

As noted above in Part 2.5, the former Australian Heritage Commission (2001) and the NSW Heritage Council (2001a) have similarly compiled a number of historical themes to guide practitioners in the assessment of historic heritage sites. In summary, MP46 is relevant to themes concerning 'towns, suburbs and villages', 'land tenure', 'leisure', 'sport', and 'social institutions'.

Also, as noted above in Part 2.3, the NSW Heritage Council's guideline document entitled Assessing Significance for Historical Archaeological Sites and 'Relics' (2009) provides three questions when assessing the significance of a historic archaeological site:

- Can the site contribute knowledge that no other resource can?
- Can the site contribute knowledge that no other site can?
- Is this knowledge relevant to general questions about human history or other substantive questions relating to Australian history, or does it contribute to other major research questions?

In broad terms, the site at MP46 has some potential, through its archaeology, to 'tell the story' of the rural way of life in the local area during their period of use. Adopting an optimistic interpretation, it is possible that the following kinds of artefacts may exist at MP46:

- activity areas—but most of these are presently visible from the surviving structures;
- a sample of the kinds of equipment used by the users of the hall—but these are matters
 well-understood from other archival resources (e.g. historical photographs, recollections
 from local informants, newspapers, other better-preserved sites); and
- isolated artefacts associated with the use of the hall—but the site has been abandoned for many years and as a result, there is a range of bric-a-brac scattered inside the hall and across the site that would make it difficult to distinguish between in situ artefacts and those brought from elsewhere.



Such artefacts, if they exist, would have limited ability to yield information that would contribute significantly to substantive research questions and/or to an understanding of the local area's history. Historical research into this site has already established its broad ownership and development history. Should any of these artefacts exist, they may shed some light on the kinds of activities undertaken at the former recreation ground, but is unlikely that they would yield data that has not been already obtained for this region through other sites and resources, including the oral history work undertaken by VAHS in 2004.

This criterion (Criterion [e]) relates to items that will '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'. The extant building at MP46 is of a type common in the wider local area and the methods used in its construction are well-known and widely published. The building would therefore have little further to contribute in that regard. The kinds of research questions that might be addressed by MP46 are limited and narrowly site-specific, rather than of even 'local significance' (e.g. What kinds of foods were consumed here? What kinds of events were held there? Where were certain activities undertaken?).

In other words, the potential archaeological resource at MP46 has limited ability to yield data that:

- cannot be gained from other sources—for example, the utilisation of bush timber for constructing rural buildings and the rural way of life is already documented and well-understood for the local area from the recollections of local informants, historic photographs and other archival material;
- cannot be gained from other better-preserved sites, many of which include small-scale rural community buildings from the early twentieth century that are in better condition and still in use; and
- would address substantive research questions relating to Australian history as opposed to matters of interest to a small number of local residents.

In other words, the archaeological remains at MP46 have low potential to contribute new knowledge about the settlement of the local area. That potential is limited by:

- the nature of the site's abandonment; and
- the existence of other better sites and sources.

The surviving structure is an unremarkable example of a common type of rural building (Criterion [g]). Places of this kind are not rare or uncommon in the local area or rural NSW more generally (Criterion [f]).



4.22.4 Summary

The building at the site known as MP46 is a place of local heritage significance.

The site known as MP46 has low potential to contain artefacts that would satisfy the definition of 'relics' under the Heritage Act.

4.22.5 Implications

The heritage impacts in relation to MP46 Kayuga Recreation Ground are presented in Part 5.22 below.

The management recommendations for MP46 Kayuga Recreation Ground are provided in Part 6.22 below.

4.22.6 Figures



Figure 98. View of the former hall at the Kayuga Recreation Ground (MP46) in the 1990s, prior to the VAHS period of fieldwork in 2014. Note the power pole at the north end of the hall, and the water tank and two windows on the east side. Source: VAHS (2014:594).





Figure 99. View of the eastern side of the hall at the Kayuga Recreation Ground (MP46), as it appeared during the VAHS period of fieldwork in 2014. Note the water tank and the power pole have been removed, the boarded-up windows on the eastern side, the visible damage to the gable in-fill at the southern end, and the rusted condition of the corrugated iron roof sheeting. Source: VAHS (2014:594).



Figure 100. View of the west side of the hall at the Kayuga Recreation Ground (MP46), as it appeared during the VAHS period of fieldwork in 2014. The former kitchen/cloakroom lean-to is visible on the left. Source: VAHS (2014:595).





Figure 101. View south-west of the hall at the Kayuga Recreation Ground (MP46), as it appeared during the VAHS period of fieldwork in 2014. Source: VAHS (2014:595).



Figure 102. View of the southern end of the hall at MP46, looking north-east from Dorset Road. Source: VAHS (2014:602).





Figure 103. Interior view showing the timber frame and roof structure of the north-east end of the hall at the Kayuga Recreation Ground (MP46), during the VAHS period of fieldwork in 2014. Source: VAHS (2014:600).



Figure 104. Interior view showing the former kitchen and cloakroom areas as they appeared during the VAHS period of fieldwork in 2014, located in the lean to attached to the northern end of the hall. Source: VAHS (2014:598).





Figure 105. View south-west of the hall at the Kayuga Recreation Ground (MP46), as it appeared in June 2020. Source: MACH (2020).



Figure 106. View of the west side of the hall at the Kayuga Recreation Ground (MP46), as it appeared in June 2020. Source: MACH (2020).



4.23 MP49(a-c) Weidmann's

4.23.1 Summary history

The VAHS report (2014:627-638) includes a detailed history of the three sites comprising MP49(a-c). In summary:

- 1825: The original land grant for the area provided to Mr. William Cox.
- 1846: Cox divided his land between family members for rural agricultural uses.
- 1889: Land subjected to further subdivision and sale of lots.
- Between 1894 and 1896, the subdivided lots were sold for use as small rural holdings.
- 1892: Mr. Albert Weidmann, a butcher of Muswellbrook, purchased Lot 13.
- 1921: Weidmann continued buying land in vicinity of MP49 and established a small dairy.

4.23.2 Description

The VAHS report (2014:628-629) describes the site of MP49(a-c) as an archaeological site with three discrete locations: the site of a hut, of a mill and of ruins of unknown derivation. Timber stumps, scatters of bricks, dumps containing old farm machinery, and partly buried wall stumps and wells are also visible. In summary, MP49(a-c) comprises:

- Remains of a hut: This area mainly consists of the base of a chimney constructed using lime-based mortar, with remnants of plaster on the ground with brick imprints. To the north-west is a circular concrete block that may have been a tank stand. Further north is a post and row of rocks, which may have been a garden border, and a number of scattered artefacts (e.g. separators, bed frame, stove, windmill head, etc.). To the south-west is a small pile of broken concrete and another block of concrete that may have been the base of a toilet. Also, there are two depressions of unknown function to the north and north-east. To the south-east is a pile of very early concrete (pre-crushed stone) and part of a slab.
- Remains of a mill: This area is located to the north of the hut site and consists of a timber-lined well with a windmill, two old engines and a large concrete block.
- Ruins of unknown derivation: An area of scattered artefacts and features including a one-metre square slab of concrete, a piece of dressed sandstone, handmade bricks, two other concrete pieces (one with a round hole) and part of a drain constructed of brick with a thin layer of mortar.

The authors of this HHA and SOHI agree with the site description provided in the VAHS report and also concludes that it is not clear what precise historical period the remains belong to. However, the bricks, fragments of concrete and other artefacts are consistent with Weidmann's occupation (Figure 107–Figure 110) i.e. the late nineteenth century or early twentieth century.



4.23.3 Assessment of heritage significance

The VAHS report (2014:638) concludes that MP49(a-c) is of moderate local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity i.e. house, dairy and early mill.

Criterion (e): The site has the potential to yield further archaeological information on when the structures were erected and how they functioned.

The VAHS report (2014:638) also concludes:

The site is significant as it appears to have been constructed at the start of the dairy industry in the Muswellbrook area. The site has potential to add further information to the understanding of how small-scale dairies operated.

MP49(a-c) played a modest role in the history of the local area, being a small part of the dairy industry (Criterion [a]). However, the site is now an archaeological site with a surface scatter of bricks and concrete from the later nineteenth or early twentieth century. Its significance, if it were to have any, is best assessed against Criterion (e), for its potential to yield archaeological data.

The former Australian Heritage Commission (2001) compiled Australian historical themes to guide practitioners in the assessment of historic heritage sites. MP49(a-c) is relevant to:

- Theme 3: Developing local, regional and national economies, including the subthemes of 'Developing primary production', 'Struggling with remoteness, hardship and failure';
- Theme 4: Building settlements, towns and cities, including the subthemes of 'Planning urban settlements', 'Supplying urban services', 'Making settlements to serve rural Australia';
- Theme 5: Working, including the subtheme of 'Working on the land'; and
- Theme 8: Developing Australia's cultural life, including the subtheme of 'Living in the country and rural settlements'.

Similarly, the NSW Heritage Council has prepared the 'New South Wales Historical Themes' (2001a). MP49(a-c) is relevant to themes concerning 'agriculture', 'pastoralism', 'towns, suburbs and villages', 'land tenure', 'accommodation' and 'domestic life'.

In other words, MP49(a-c) has some potential, through its archaeology, to 'tell the story' of dairying and the rural way of life in the local area during its period of use. However, the ability of the archaeological resource to contribute significantly to substantive research questions in this regard is limited. The kinds of archaeological remains that may survive might illustrate:

 activity areas—but these are discernible from visible features at the site (base of chimney of the house, windmill, fence posts, etc.);



- a sample of the kinds of domestic and work tools used by the occupants—but these are matters that are documented and well-understood for rural inhabitants of this area from other sources (e.g. journals, newspapers, retail catalogues);
- the location and size of the house—but these are discernible from the visible features; and
- the date of use for the structures—but this is generally known from historical research.

Further, the site has been used as a rubbish dump for several years. As a result, there is a range of farming bric-a-brac scattered across large areas which would make it difficult to distinguish in situ artefacts from those brought in from elsewhere.

These matters make MP49(a-c) different from contemporary and functionally similar sites where the archaeological remains are clearly in better condition, and much less disturbed by more recent activities. At MP49(a-c), the disturbed archaeological features would be of narrow, site-specific interest rather than of State, or even wider local, interest. Historical research into this site has already established its broad ownership and development history.

In other words, in archaeological terms:

- the site at MP49(a-c) is unlikely to contribute knowledge that cannot be (and has not already been) obtained from other resources including previous research into homes and dairies in rural NSW in the period and local area, the recollections of local informants, historic photographs and other archival material (including the oral history work of VAHS in 2004);
- the site at MP49(a-c) is unlikely to contribute knowledge that cannot be obtained from other better preserved and less disturbed sites, including late nineteenth and early twentieth century homes with work sheds that remain standing in the local area; and
- given the nature of the site at MP49(a-c), and the above observations, it is unlikely that the potential archaeological resource would make a meaningful contribution to substantive questions relating to Australian history, including questions in relation to the rural farming and living experiences of the residents of the local area.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]) or a good representative example of its type (Criterion [g]).

4.23.4 Summary

MP49(a-c) Weidmann's fails to meet the criteria for either State or local significance.

MP49(a-c) Weidmann's has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.



4.23.5 Implications

The heritage impacts in relation to MP49(a-c) Weidmann's are presented in Part 5.23 below.

The management recommendations for MP49(a-c) Weidmann's are provided in Part 6.23 below.

4.23.6 Figures



Figure 107. Some of the scattered artefacts associated with the site known as Weidmann's MP49(a-c). Source: VAHS (2014:634).





Figure 108. The concrete slab to the south-east of the chimney at MP49(a-c). Source: VAHS (2014:635).



Figure 109. View west over MP49(a-c) showing a chimney base and a post. Source: VAHS (2014:633).





Figure 110. The remains of a concrete slab and drain at MP49(a-c). Source: VAHS (2014:637).

4.24 MP50 Waitomo

4.24.1 Summary history

The VAHS report (2014:639) includes a history of the surviving features at MP50. In summary:

- Prior to 1916, Mr. Donald Macintyre and Mr. George King separately purchased several land allotments in Section 28.
- 1916: Mr. King, a carpenter of Kayuga, sold his allotments to Mr. Donald Cracknell.
- 1922: Mr. Cracknell, a labourer of Kayuga, sold his allotments to Mr. Patrick V. Lonergan.
 On stylistic grounds, the existing house on the site at MP50 can be dated to the Interwar period, probably c. 1922 when the property was purchased by Mr. Lonergan.
- 1963: Owner, Mr. P. Lonergan, died and his estate included Allotments 3 to 6, Section 28 in Kayuga. The property passed to his only child, Ursula P. Turner and included a weatherboard cottage with an iron roof and four rooms, a kitchen and office, and verandahs.



4.24.2 Description

The VAHS report (2014:639) identifies MP50 as a site with a house and ancillary structures. In summary, MP50 comprises:

- A four-bedroom house constructed of a sawn timber frame, mounted in timber piers and clad with a 'modern' style weatherboard. The house has a verandah on three sides, accessed via French doors (Figure 111–Figure 112).
- The interior incorporates a number of decorative features including coloured glass door, timber fretwork, plaster moulding in the ceilings (Figure 113), a broad high hall, and a bay window with a gabled roofline and sash windows.
- A number of sheds are located to the west of the house, all dating to the post-war period.
- A large car shed located to the west of the main house features a gabled roof at one end and is clad in corrugated iron. This shed has been constructed of recycled materials; the timber posts and bed logs feature mortises from previous use.

The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report. The following observations were made regarding the site's current condition:

- The house and outbuildings are in fair condition but require maintenance.
- The front gate bearing the property's name 'Waitomo' has been relocated.

4.24.3 Assessment of heritage significance

The VAHS report (2014:647) concludes that MP50 is of moderate local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity although apart from the house and car shed the rest of the sheds at the site are of much later construction.

Criterion (f): The site demonstrates designs and techniques which are of interest to the evolution of housing within the study area.

The VAHS report (2014:647) also concludes:

The site is significant due to the evidence of human activity and the evolution of building styles and methods in the Kayuga area. It shows evidence of a better economic situation.

The authors of this HHA and SOHI agrees that the house at MP50 is of local significance for its historical values (Criterion [a]). The house is a good representative example of its type (Criterion [g]), but it is not rare or uncommon (Criterion [f]). The VAHS report might also be augmented with the observation that the structure meets the threshold for aesthetic significance at the local level (Criterion [c]). These changes in emphasis between the VAHS report and this HHA and SOHI, in the use of the assessment criteria, do not change the management recommendations below.



With respect to the potential archaeological resource at the site (Criterion [e]), 'Waitomo' was constructed in the early 1920s, a period that is well-represented by other sites and sources in both the local area and wider region.

Works causing ground disturbance under and around the house are unlikely to disturb or damage sub-surface material that would satisfy the definition of a 'relic' under the Heritage Act.

4.24.4 Summary

MP50 Waitomo is a place of local heritage significance.

MP50 Waitomo has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.24.5 Implications

The heritage impacts in relation to MP50 Waitomo are presented in Part 5.24 below.

The management recommendations for MP50 Waitomo are provided in Part 6.24 below.

4.24.6 Figures



Figure 111. View along the verandah of the 'Waitomo' homestead (MP50). Note the bay window.





Figure 112. View looking west of the homestead at MP50 during the VAHS period of fieldwork in 2014. Source: VAHS (2014:642).



Figure 113. An example of the decorative plaster ceiling mouldings inside the homestead at MP50. Source: VAHS (2014:644).



4.25 MP51 Kayuga Bridge

4.25.1 Summary history and description

The VAHS report (2014:648) includes a concise history and description of the Kayuga Bridge (MP51). In summary, MP51 comprises:

- a two-span, single lane continuous steel and iron lattice truss bridge, supported on three piers and covered with timber decking;
- the bridge's two main spans, each approximately 39 m in length with a total of nine approach spans and an overall length of 162 m; and
- the roadway carried on cross girders covered with a timber deck.

Completed in 1881, Kayuga Bridge is the second oldest lattice bridge in NSW and was designed by engineer, John McDonald. This particular class of bridges (i.e. iron lattice) is one of the significant structures of the colonial period and was only confined to a short period between 1881 to 1893.

The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report (Figure 114–Figure 115). The Kayuga Bridge is currently being maintained by NSW Roads and Maritime Services and is still used by some vehicular traffic.

4.25.2 Assessment of heritage significance

There are two previous Statements of Significance for MP51 Kayuga Bridge.

The VAHS report (2014:651) concludes that MP51 is of 'exceptional State significance' for satisfying the following criteria:

Criterion (c): The site shows creative and technical achievement.

Criterion (d): The site is important for its association with an identifiable group i.e. settlers on the west bank of the Hunter River.

Criterion (g): It is an excellent example of its type.

The VAHS report (2014:651) also concludes:

The bridge is significant as it represents the needs of early settlers for a safe and reliable river crossing. It also associated with an early bridge designer, John A McDonald. The bridge has high technical significance due to its integrity and condition while demonstrating aspects of technology, design and style in bridge design.



The Kayuga Bridge is also assessed as being of State significance under Section 170 of the Heritage Act. The citation prepared for listing of this heritage item on the NSW State Agency Heritage Register is reproduced below:

Criterion (a): The Bridge has high historical significance as it is on a main road. It is a large bridge with long spans over a major river, indicative of the then burgeoning road network. It has historic associative value based on its ability to represent the endeavours of local settlers, with their need for safe and reliable access across the Hunter River. It is associated with bridge designer John McDonald. It significantly helped open up the Hunter Valley Region of NSW.

Criterion (c): Aesthetically, the bridge with its long lattice trusses and decorative piers designed with pairs of braced metal cylinders with elliptical openings present an imposing yet attractive reminder of the past. It has strong aesthetic lines and enhances the aesthetics of its environment. As such, the Bridge has aesthetic significance.

Criterion (d): Because of their numbers, the complete set of lattice truss bridges gain high social significance. As well as having significance to the local community, the construction of this major Bridge has contributed significantly to the development of the Hunter Valley region of NSW.

Criterion (e): The Bridge has high technical significance because of its integrity and good condition, which contribute to its ability to demonstrate aspects of technology, design and style in bridge construction. Collectively, the bridges are good examples of the variety in lattice truss construction from 1874 to 1893.

Criterion (g): One of an excellent representative group of this type of bridge.

The S170 citation also concludes:

The iron lattice truss Bridge over the Hunter River has significance because: (a) it has been an important item of infrastructure in the history of NSW for over 120 years; (b) it was a technically sophisticated bridge structure for its time; (c) it has strong aesthetic lines and enhances the aesthetics of the environment; (d) it contributed significantly to the social and commercial development of the Hunter Valley region of NSW; and (e) it is an excellent representative example of this type of bridge.

The authors of this HHA and SOHI generally agree with the above assessment of MP51 provided in the VAHS report, but adopts the Statement of Significance prepared for the listing of Kayuga Bridge under Section 170 of the Heritage Act.

4.25.3 Summary

MP51 Kayuga Bridge is a place of State significance.

4.25.4 Implications

The heritage impacts in relation to MP51 Kayuga Bridge are presented in Part 5.25 below.

The management recommendations for MP51 Kayuga Bridge are provided in Part 6.25 below.



4.25.5 Figures



Figure 114. View of the Kayuga Bridge (MP51) capturing the historic iron lattice truss design.



Figure 115. Detail of the iron lattice truss and supports of the Kayuga Bridge (MP51).



4.26 MP52 Overdene (Overton)

4.26.1 Summary history

The following historical overview of MP52 Overdene (Overton) is adapted from the AECOM and Hansen Bailey (2015) Conservation Management Plan (CMP) for Overdene Homestead, which was adapted from Turner (1996). This is supplemented by the historical research presented in the VAHS report (2014:652). In summary:

- 1825: Captain Francis Allman founded Overdene/Overton (then known as 'Kelso Place') on Portion 9, which formed part of 2560 acres of rich riverfront land.
- 1833: The majority of Allman's grant at Overdene/Overton sold to Mr. John K. McDougall, who took up residence at the property in a timber house in an unknown location on the property. Allman retained ownership of 640 acres, leading to two properties named 'Overton' existing side by side.
- 1858: Ownership of Portion 9 transferred to Mr. Henry Nowland, a significant figure in the early history of the Hunter Valley.
- 1863: Owner, Mr. H. Nowland, died and left the Overton estate to his wife, Harriet. Under her tenure, the sandstone cottage that remains on the property was erected.
- 1869: Mr. John Eisley was in the process of erecting a country residence for Mrs. H. Nowland on the Overton estate. However, the building accidently caught fire and the timber kitchen section was destroyed, leaving only the stone walls of the main building standing.
- 1873: Property transferred from the Nowland family to Mr. Thomas Blunt, who focused on using the estate for the breeding of draught horses and the irrigation of Lucerne crops. During this time, Blunt used the sandstone cottage as a manager's residence.
- 1903: Mr. Thomas Blunt and his son established a number of industries on the property including a small creamery and butter factory, a piggery and a dairy.
- 1912: Mr. Thomas Blunt sold the Overton estate to Mr. Willian F. Robey. At this time, Mr. Robey started subdividing the estate's 5538 acres and selling it in smaller parcels of land. The riverfront sections of the estate were divided into 10 to 200 acre lots, with only the section containing the butter factory and cottage remaining with the Blunt family.
- Post-1912, the Scholes family purchased the homestead portion of the Overton estate (now known as 'Overdene') and it remained in their possession until 1959. The homestead was described as an old stone building of five rooms.
- Occupation of the sandstone homestead continued until 1872, when the Tibbey family moved into an adjacent residence. After 1959, the Overton estate was further subdivided.



The modern buildings on the site MP52 were all erected after the subdivision sale in 1959. Today, the Overdene Homestead portion is owned by the Bengalla Mine.

In summary, the most prominent period for the Overton estate was during Blunt's tenure, when it was an example of the rich agricultural potential of the Upper Hunter in the late nineteenth and early twentieth century. During this period, the estate featured the sandstone homestead that remains, several dairies, a piggery, a coal mine, an orchard, grape vines, a creamery and butter factory, irrigation pumping stations, and several outbuildings including managers' cottages, a woolshed, hay shed, stables, loose-boxes for stock, and yards.

4.26.2 Description

The VAHS report (2014:652-653) describes MP52 as the site of a nineteenth century sandstone homestead known as 'Overdene' (Overton), constructed in the c. 1860s under the tenure of Mrs. Harriet Nowland. The CMP prepared by AECOM and Hanson Bailey (2015:20-28) provides a further detailed physical description.

In summary, MP52 comprises a five-room homestead with a central hall, constructed of sandstone with brick chimneys. The hallway has a brick archway separating the front and rear rooms. The internal walls are brick with a plastered surface and some evidence of the use of wallpaper. Stone of varying quality and thickness is used throughout the building with some evidence of tuck-pointing of the mortar joints at the front of the building. The roof is now of corrugated iron, but originally was of shingles; some of the shingles still exist under the corrugated iron roofing. The external doorways and windows feature well cut and dressed sandstone lintels; the internal doorways feature a timber lintel with an arch in the brickwork. The two front rooms facing east feature twin sets of French doors along with a fireplace. A verandah originally extended around all sides, but now only the east and south sides retain evidence of the verandah's footings. A kitchen block was originally located to the west of the house.

The Extent Heritage site visit in September 2018 confirmed this site description provided in the AECOM CMP (2015) and the VAHS report (Figure 116–Figure 121). The following observations were made regarding the site's current condition:

- Since the VAHS period of fieldwork, the Overdene Homestead has undergone a program of conservation to stabilise the physical fabric according to the provisions of the CMP prepared by AECOM and Hansen Bailey in 2015.
- The homestead appears to be in fair condition and relatively intact.
- The building has been made safe and weatherproof, which included the erection of a security fence around its perimeter and metal coverings to board over the doorways.
- The original tin roof has been replaced.
- The original lath and plaster ceilings have been replaced with Masonite sheeting.
- The other buildings observed on the site are of recent construction (post-1959) and are not of heritage significance.



None of the original outbuildings remain at MP52, and it is difficult to discern the original layout of the estate from the surviving features at the site due to the estate's more recent history of systematic subdivision and gradual abandonment. Sections of the orchard and hobby-racing track are still extant. The butter factory, piggery and associated pipes, troughs and dams survive as ruins. Relevant to this HHA and SOHI, the Overdene Homestead (referred to as 'MP52') remains, but is currently boarded and fenced off to inhibit further dilapidation.

4.26.3 Assessment of heritage significance

There are two previous Statements of Significance for MP52 Overdene Homestead.

The VAHS report (2014:666) concludes that MP52 is of high local significance for satisfying the following criteria:

Criterion (a): The site shows evidence of significant human activity i.e. present building and extensions to the west.

Criterion (b): The site is associated with a significant group of people i.e. Nowland family who were original settlers in Muswellbrook, plus the Blunt family who were railway engineers and early developers of irrigation and the dairy industry.

Criterion (e): The site has potential to yield new and further archaeological information especially to the west of the present building.

The VAHS report (2014:666) also concludes:

Although the estate was taken up by Francis Allman in 1825, the present building dates from late 1860s. It is significant for its association with two families, Nowland and Blunt. It is also significant for the evidence it could provide on how a rural estate functioned along with construction methods for a better-quality rural building.

In addition, AECOM and Hansen Bailey (2015) undertook a heritage significance assessment of Overdene Homestead and concluded that this site satisfies Criteria (a)–(e). This HHA and SOHI adopts the Statement of Significance prepared as part of the 2015 CMP, which has been adapted and presented as follows:

Overdene Homestead is assessed as a place of local historical significance. The site is listed on the Muswellbrook LEP and on the non-statutory register of heritage places maintained by the National Trust.

Criterion (a): Overdene is of local historical significance through its demonstration of the pattern and course of settlement in the Muswellbrook area. The property was one of the earliest in the area, and was owned by many prominent families including the McDougalls, Nowlands and Blunts. Overdene also demonstrates the impacts of both the Closer Settlement Act, and the development of the Muswellbrook-Merriwa railway that divided the property in 1915.



Criterion (b): Overdene is associated with several prominent families and individuals from the Muswellbrook area, including Francis Allman, John McDougall and especially George Blunt and his family. The Blunt family managed Overton during its most productive period, and were involved in innovative methods of irrigation, cropping, animal breeding, coal mining, railway construction and the processing of dairy goods, all of which have been central to the subsequent development of the Hunter Valley.

Criterion (c): Overdene is of aesthetic significance as a well-proportioned Colonial Georgian style cottage constructed of locally quarried sandstone. The cottage has had few alterations since construction, and has retained its readability as a Georgian cottage. The house also occupies a prominent position in the landscape and is visible from Muswellbrook and the approach along Wybong Road.

Criterion (d): Overdene is likely to meet the threshold for local significance under criterion for having a strong association with the Muswellbrook rural farming community (although no community consultation was undertaken for this HHA and SOHI to confirm this).

Criterion (e): The built form at Overdene has the potential to yield information that could shed new light on domestic arrangements and the construction of early (i.e. nineteenth century) homesteads in the region.

With respect to Criterion (e), this HHA and SOHI makes the following further observations:

- The AECOM CMP (2015:28) identifies areas of high potential for in situ sub-surface archaeological evidence immediately surrounding the homestead. The authors of this HHA and SOHI agree with that assessment.
- Both the AECOM report (2015:28) and the Extent Heritage site visit in September 2018 confirm that there is no evidence of former structures visible to the rear of the house where the kitchen may have been located. Further, while historical records indicate the existence of various outbuildings around the house, no documentary or surface evidence has been sighted that would indicate their location.
- Therefore, site at MP52 may contain archaeological material that constitutes a 'relic' within the meaning contained within the Heritage Act.

The above observations have guided the recommendations contained in Part 6.26 below. Providing these management recommendations are observed, these areas of archaeological potential would not be adversely impacted by the proposed mine works.

4.26.4 Summary

MP52 Overdene (Overton) is a place of local significance.

MP52 Overdene (Overton) has moderate potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.



4.26.5 Implications

The heritage impacts in relation to MP52 Overdene (Overton) are presented in Part 5.26 below.

The management recommendations for MP52 Overdene (Overton) are provided in Part 6.26 below.

4.26.6 Figures



Figure 116. The west elevation (rear) of the homestead building at MP52 Overdene (Overton). Note the security fence and metal coverings boarding up the original doorway and windows, both additions since the VAHS period of fieldwork in 2014.





Figure 117. The south elevation of the homestead building at MP52. Note the contrast between the sandstone of the main structure and the chimney brickwork.



Figure 118. View of the east and north elevations of the homestead at MP52. Note the brick chimneys.





Figure 119. Detail of the homestead's sandstone exterior walls and chimney brickwork at MP52.



Figure 120. Interior view capturing the original roof structure of the homestead (MP52).





Figure 121. The interior of one of the rooms of the homestead at MP52. Note the brick fireplace.

4.27 MP53 Kayuga Cemetery

4.27.1 Summary history and description

The VAHS report (2014:639-646) includes a history and physical description of the surviving features at MP53 (Figure 122). In summary:

- Kayuga Cemetery is the oldest cemetery in the Upper Hunter, first set aside by Archdeacon Scott in 1828 with the first known burial in 1831.
- The cemetery remained in use up until at least 1956 and during that time, has seen three periods of use: the convict period (1831-1842), Scottish settlers and labourers, and conditional purchase settlers and labourers (post-1861).
- The cemetery is located on a low ridge above the Dartbrook and Hunter Rivers, and adjacent to 'Riverview Homestead'.
- All of the remaining headstones face south.



4.27.2 Assessment of heritage significance

The VAHS report (2014:673) concludes that MP53 is a place of State significance for satisfying the following criteria:

Criterion (a): The site is associated with three significant historical phases; convicts, Scottish settlers and conditional purchase settlers.

Criterion (c): The headstones show technical achievement and exemplify a particular style i.e. use of footstones with headstones.

Criterion (d): The site is important to a community's sense of place and is identifiable with three groups.

Criterion (f): The cemetery is the only example of its type in the Upper Hunter.

The VAHS report (2014:673) also concludes:

The Kayuga Cemetery is highly significant. It is the oldest in the Upper Hunter and the only one where serving convicts have their graves marked with impressive headstones. This cemetery has the potential to provide us with a much better understanding of convicts and their value to the community. There is also value in studying the burial patterns of the settlers and the role a small country cemetery played in the community.

The authors of this HHA and SOHI generally agree with the assessment provided in the VAHS report and assesses the Kayuga Cemetery as a place of State significance.

4.27.3 Summary

MP53 Kayuga Cemetery is a place of State significance.

MP53 Kayuga Cemetery has high potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.27.4 Implications

The heritage impacts in relation to MP53 Kayuga Cemetery are presented in Part 5.27 below.

The management recommendations for MP53 Kayuga Cemetery are provided in Part 6.27 below.



4.27.5 Figures



Figure 122. View looking north-east across the site known as the Kayuga Cemetery (MP53). Source: VAHS (2014:672).



4.28 MP54 Portion 71

4.28.1 Summary history

The VAHS report (2014:674) includes a history of the surviving features at MP54. In summary:

- 1869: Mr. John Weller selected Portion 71 consisting of 40 acres.
- 1870: Surveyor, Mr. John Neil, indicated there was a house or hut in the north-east corner of Portion 71 and commented that there was no permanent water source.
- 1872: Mr. Weller forfeited his claim and Portion 71 was advertised for auction.
- 1873: Mr. Aaron Upward, a school teacher of Kayuga, took up the selection of Portion 71 and lived there until 1876.
- 1907: Ownership of Portion 71 transferred to Mr. Michael Casey and following his death, the property passed to the Casey family.

4.28.2 Description

The VAHS report (2014:674) identifies MP54 as an archaeological site with very few extant surface features. In summary, MP54 comprises:

- a large number of white iris plants covering an area approximately 70 m x 80 m; and
- an eroded cattle pad containing several ceramic artefacts and a base of a glass bottle.

The Extent Heritage site visit in September 2018 confirmed the above description provided in the VAHS 2014 report (Figure 123–Figure 124).

4.28.3 Assessment of heritage significance

The VAHS report (2014:679) concludes that MP54 is of high local significance for satisfying the following criteria:

Criterion (e): The site has the potential to yield further substantial archaeological information on building methods on early conditional purchases.

The VAHS report (2014:679) also concludes:

The site is significant as it was one of the early conditional purchases in the area and was owned by a carpenter. The site may have been disturbed by dry land farming and could provide information on how disturbing such a practice would be to an archaeological site.

The authors of this HHA and SOHI agree that a house was likely erected on the site of Portion 71 during the mid-to-late nineteenth century. However, the authors of this HHA and SOHI disagree that the site (as it exists in its present form) is of 'high local significance' and further, takes a different view of the potential archaeological resource (Criterion [e]).



With respect to the potential archaeological resource, this HHA and SOHI makes the following further observations:

MP54 has the potential, through its archaeology, to 'tell the story' of farming and the rural way of life as one of the early conditional purchases in the local area. However, given its disturbed state and the small quantity of surviving original fabric (i.e. a few isolated and fragmented ceramic/glass artefacts on the surface), the ability of the site's archaeological resource to contribute significantly to substantive research questions is limited.

MP54 dates to a period (e.g. late nineteenth to early twentieth century) that is already well-documented in the history of the Muswellbrook area. Although archaeological material might exist relative to the original house (e.g. dwelling footprints, isolated finds, etc.), it is unlikely that such material would yield data relevant to substantive research questions (e.g. relating to the historic themes described in Part 2.5) or contribute little (if anything) that could not be obtained from other historical sources or less disturbed sites (Criterion [e]).

These matters make MP54 different from other contemporary and functionally similar sites where the archaeological remains are clearly in better condition, and much less disturbed by more recent activities.

In summary, the site at MP54 presents as an open field with no evidence of any structures (e.g. no piers, stumps, or other structural material). Rather, the visible archaeological material is limited to a few isolated and scattered glass and ceramic fragments on the surface.

Therefore, the archaeological remains associated with MP54 do not meet the threshold for local significance as defined in Section 4A of the Heritage Act, and do not meet the threshold of a 'relic' as defined by the Heritage Act.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]).

The above observations have guided the recommendations contained in Part 6.28 below.

4.28.4 Summary

MP54 Portion 71 fails to meet the criteria for either State or local significance. It is not a heritage place.

MP54 Portion 71 has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.28.5 Implications

The heritage impacts of the Project on MP54 Portion 71 are presented in Part 5.28 below.

The management recommendations for MP54 Portion 71 are provided in Part 6.28 below.



4.28.6 Figures



Figure 123. View west across the site known as MP54 Portion 71, showing the area of iris plants.



Figure 124. One of the fragmented ceramic artefacts located on the surface at MP54.



4.29 MP55 Portion 26

4.29.1 Summary history

The VAHS report (2014:680) includes a history of the surviving features at MP55. In summary:

- 1866: Portion 26 purchased by Mr. Edward Edgar.
- 1867: Surveyor, Mr. John Neil, indicated there was a house in the north-east corner of Portion 26 and some of the land had been fenced. He also commented there was no permanent water source.
- 1882: Auctioneer Mr. James Hutchinson advertised the sale of an 80-acre farm at Kayuga, which had recently been the property of Mr. E. Edgar. The property had been divided into a 40-acre paddock, a 15-acre cleared paddock, 20 acres of cultivation and a 5-acre orchard. The advertisement described a four-room house with a galvanised iron roof and verandah, a large shed, storeroom, dairy, four dams, stockyards, a pig sty, an orchard, and a fowl house.
- 1884: Ownership of Portion 26 transferred to Mr. Thomas Cook.
- 1907: Ownership of Portion 26 transferred to Mr. Michael Casey and following his death, the property passed to the Casey family.

4.29.2 Description

The VAHS report (2014:680) identifies MP55 as an archaeological site with no evidence of any built structures (e.g. no piers, stumps or other structural material). The only observable evidence is a single broken brick (Figure 125–Figure 127).

The Extent Heritage site visit in September 2018 confirmed the site description provided in the VAHS report. The single brick described above was located within an open field covered by thick grass. Surface visibility at the time of site visit was limited by this thick grass cover across the entire site.

With the exception of this isolated artefact, there was nothing observable to indicate the presence of an earlier structure (e.g. a house) in the same location. This suggests that the historic structure that archival documents record as having existed somewhere on this property was demolished in a 'controlled' manner and its bricks and other structural elements were deliberately removed for recycling/re-use elsewhere. In such circumstances, the potential for archaeological evidence of structural remains is considerably reduced.

Further, a collapsed well, windmill, trough and tank of a more recent date are located nearby. The presence of this farming bric-a-brac would make it difficult to distinguish in situ artefacts from those brought in from elsewhere at a later date (Figure 127).



4.29.3 Assessment of heritage significance

The VAHS report (2014:684) concludes that MP55 is of high local significance for satisfying the following criteria:

Criterion (e): The site has the potential to yield further substantial archaeological information on building methods on early conditional purchases.

The VAHS report (2014:684) also concludes:

The site is significant as it was one of the early conditional purchases in the area. The site may have been disturbed by dry land farming and could provide information on how disturbing such a practice would be to an archaeological site.

The authors of this HHA and SOHI agree that if this site is a heritage place, it will be for its archaeological resource i.e. its ability 'to yield information that will contribute to' historical research (Criterion [e]). However, with respect to the potential archaeological resource, this HHA and SOHI makes the following further observations:

MP55 has some potential, through its archaeology, to 'tell the story' of farming and the rural way of life as one of the early conditional purchases in the local area. However, given its disturbed state and the small quantity of visible original fabric (i.e. a single brick), the ability of the site's archaeological resource to contribute significantly to substantive research questions (e.g. relating to the historic themes described in Part 2.5) is limited.

MP55 dates to a period (i.e. late nineteenth to early twentieth century) that is already well-documented in the history of the Muswellbrook area. Although archaeological material might exist relative to the original house (e.g. dwelling footprints, isolated finds, etc.), it is unlikely that such material would yield data relevant to substantive research questions or contribute little (if anything) that could not be obtained from other historical sources or less disturbed sites.

These matters make MP55 different from other contemporary and functionally similar sites where the archaeological remains are clearly in better condition, and much less disturbed by more recent activities.

In summary, the site at MP55 presents as an open field with thick grass cover and no evidence of any structures (with the exception of a single broken brick). In its present form, the site of MP55 has low potential to contribute to an understanding of the area's local history and low potential to contain archaeological material that would satisfy the definition of a 'relic' under the Heritage Act.

Further, the potential archaeological remains of the site would not satisfy the criteria for aesthetic or technical significance (Criterion [c]). In archaeological terms, the site has no known association with people of note (Criterion [b]). There is no reported strong community association with the location (Criterion [d]). It is not rare or uncommon (Criterion [f]) or representative of a type (Criterion [g]).



4.29.4 Summary

MP55 Portion 26 fails to meet the criteria for either State or local significance. It is not a heritage place.

MP55 Portion 26 has low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

4.29.5 Implications

The heritage impacts in relation to MP55 Portion 26 are presented in Part 5.29 below.

The management recommendations for MP55 Portion 26 are provided in Part 6.29 below.

4.29.6 Figures



Figure 125. View across the open grassed area that comprises the site known as MP55 Portion 26.

Note the corrugated iron water tank in the background, which is of a more recent date.





Figure 126. The only observable evidence at MP55: a single broken brick.



Figure 127. A collapsed windmill, trough and tank located near MP55, all of a more recent date.



4.30 Potential impacts on the cultural landscape

4.30.1 Muswellbrook-Jerrys Plains Landscape Conservation Area

The MJP LCA is identified in a non-statutory document prepared by the National Trust in 1985. It covers an area of 67,447 hectares to the south and south-east of the Project (Appendix 1). The area commences along the Hunter River not far south of Muswellbrook and includes the long sweep of valley floor extending to the south-west for approximately 25 km to the town of Denman at the junction of the Goulburn River. The area continues for 25 km in a south-east direction along the Hunter Valley to Jerrys Plains Ridge. The citation notes the prominence of the 'flat alluvial flood plain contained on each side by low rolling hills' and 'extensive views of the river flats, the enclosing hills and distant ranges'. The National Trust citation emphasises that its 'high scenic and cultural qualities' should be recognised in future open cut mining operations and rehabilitation programmes (Appendix 1).

The MJP LCA heritage assessment and description has clearly been overtaken by subsequent events. These include the development of the Bengalla Mine north of the Hunter River (and overlapping to a small degree with the MJP LCA), and the Mt Arthur Coal Mine to the south of the Hunter River and also partly within the MJP LCA.

As noted in Part 1.1 above, the Project is located adjacent to the MJP LCA, which abuts the south-eastern extent of the Mount Pleasant Operation Mining Lease. Almost all of the Project footprint is located wholly outside of the MJP LCA but overlaps to a small degree with the MJP LCA in two limited and discrete locations. These discrete locations of overlap (see Figure 2 above and Figure 128 below) are as follows:

- A narrow area south of Wybong Road that runs south adjacent to the eastern boundary of the Bengalla Mine and then bends around to the east to follow the alignment of the Muswellbrook-Ulan Rail Line. This area comprises the product coal transport and water supply infrastructure previously approved for the Project as part of MOD4 (i.e. rail load-out facility, rail loop, rail spur, water supply pump station and associated infrastructure).
- A scour protection south-west of Bengalla Road located within the extent of the Bengalla Mine. The remainder of this scour protection runs north from this location within the extent of the Bengalla Mine and is associated with a discharge dam. This scour protection and the associated discharge dam comprises existing and approved Mount Pleasant Operation infrastructure within the Bengalla Mine Disturbance Boundary (Figure 2).

In other words, the elements of new visible infrastructure proposed for the Project would all be located outside of the MJP LCA except for two discrete locations where mine infrastructure already exists or is approved (within Bengalla Mine or the MOD4 Project approval). The specific and wider landscape in these locations has also been significantly modified and the Project would not impact the MJP LCA as a cultural landscape.



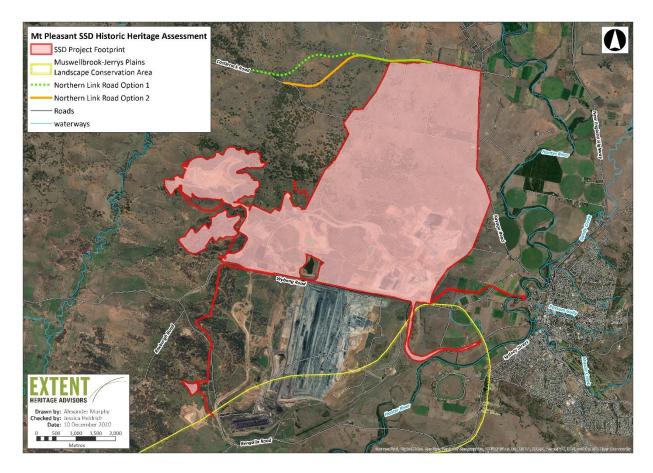


Figure 128. A map of the Project footprint in relation to the MJP LCA (yellow line), showing the small areas of overlap: south of Wybong Road adjacent to the eastern boundary of the Bengalla Mine and south-west of Bengalla Road to the west of Bengalla Mine.

This HHA and SOHI therefore references the National Trust's MJP LCA description and assessment solely as a useful baseline (although now somewhat dated) against which to assess potential adverse impacts on the wider landscape that the Project will be a part of, or will potentially impact. In fact, today, the Study Area and its immediate surrounds are characterised by a mix of land uses and a range of activities, each one represented by a variety of infrastructure and built form. The land has been cleared for some 100–150 years and the remnants of past pastoral and agricultural activities are visible in the landscape. However, they sit in close proximity to mining operations and mine infrastructure that have been part of the wider landscape for decades. Resource extraction activities have long formed a part of the wider setting in the areas to the north and west of the MJP LCA.

In any event, the cultural landscape as described by the MJP LCA is outdated and inapplicable to the Study Area.



4.31 The relevant cultural landscape

Cultural landscapes are areas that embody 'the interaction between humankind and its natural environment' (UNESCO 2008: 86). The NSW historical themes define cultural landscapes as places that embody 'activities associated with the interactions between humans, human societies and the shaping of their physical surroundings' (NSW Heritage Council 2001a).

In the case of the wider Muswellbrook region, and the Mount Pleasant area in particular, there is an 'organically evolved landscape' that developed through the nineteenth and twentieth centuries in response to two main 'social, economic and administrative imperatives' (citing concepts in UNESCO 2008:86): rural activities and mining. The latter of these two activities (mining) is often overlooked in assessments of cultural landscapes, notwithstanding the long history of mining in the Muswellbrook area. These two activities responded to and modified the natural environment to create a cultural landscape that has existed in the Muswellbrook area for some generations: a mixed mining and farming landscape.

The Mount Pleasant landscape today reads as a modified and abandoned agricultural landscape, with low hills and gullies cleared of their trees to accommodate the farming and pastoral activities of over 150 years. There are expansive views, some of which capture historic fence lines and farm buildings.

However, the landscape has not been the location of pastoral/agricultural activities for many years, and most of the homesteads and farm buildings that survive are in poor condition due to natural wear and tear that has occurred since they were abandoned. Therefore, where farm structures are visible in the landscape, they occur mostly as 'picturesque ruins' with a limited life. In some cases, they are clearly in a dangerous condition and if they do not collapse due to natural causes, they will need to be demolished for safety reasons.

The Mount Pleasant cultural landscape can be contrasted with, for example, the 1985 description of the MJP LCA reproduced in Part 4.30.1 above. In its heritage assessment of the MJP LCA, the National Trust focused on the landscape conservation area as a still functioning rural/agricultural landscape 35 years ago.

By contrast, the heritage places described in this HHA and SOHI and located in the Mount Pleasant area are discerned within a cultural landscape that has also been formed by decades of mining operations. In visiting these sites, the viewer passes through and past mining operations. The agricultural structures sit cheek-by-jowl with mines and mine infrastructure that have been part of the wider landscape for many years. The farm structures, therefore, have long been read against a mining backdrop.

These matters have informed the conclusions and recommendations contained in this HHA and SOHI, including those with respect to cumulative impacts.



5. Assessment of heritage impacts

5.1 MP01 Broomfield

MP01 Broomfield is a place of local heritage significance. It is located within the boundary of the Mount Pleasant Operation Mining Lease but outside of the Project disturbance footprint (see Figure 2 above). Therefore, MP01 would not be physically impacted by the proposed mine works.

If the disturbance or demolition of MP01 becomes necessary due to the modification of the Project infrastructure footprint as a result of detailed design, this would constitute an adverse heritage impact. However, the site has been abandoned for many years and the extant structures are in poor condition due to natural wear and tear. Its conservation and re-occupation are not viable. The site's significance now principally resides in its ability to tell the story of the local area.

Therefore, the potential adverse heritage impacts occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.1 below.

5.2 MP06 Coady's

MP06 Coady's would be physically impacted by the proposed mine works. However, MP06 fails to meet the threshold for either State or local significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP06 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.3 MP13 Humphries

MP13 Humphries would be physically impacted by the proposed mine works. However, MP13 fails to meet the threshold for either State or local significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP13 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.4 MP20 Kayuga Coal Mine

MP20 Kayuga Coal Mine is a place of local heritage significance for its historical values. In addition, the extant shafts and entrances have the potential to yield useful research data (although they would be considered 'works', not 'relics', under the Heritage Act).

The site would be disturbed or destroyed by the Project. This would constitute an adverse heritage impact. However, the significance of the site of MP20 rests principally in its ability to yield research data.



This data would be obtained, and the site's significance largely realised, by observing the recommendations contained in Part 6.4 below.

5.5 MP21 Kayuga School

MP21 Kayuga School is an archaeological site of local heritage significance. The site is located within the boundary of the Mount Pleasant Operation Mining Lease and would be disturbed or destroyed by the Project.

The features at MP21 have high potential to constitute 'relics' as defined by the Heritage Act. Therefore, the disturbance or destruction of MP21 as part of the proposed mine works would constitute an adverse heritage impact. However, the significance of the site rests principally in its ability to yield research data.

These data would therefore be obtained, and the site's significance largely realised, by observing the recommendations contained in Part 6.5 below.

5.6 MP22 Smith's Clear Farm

MP22 Smith's Clear Farm is a place of local heritage significance. The site would be physically impacted by the proposed mine works. The disturbance or demolition of MP22 would constitute a minor adverse heritage impact. The site has been abandoned for many years and the extant structures are in poor condition due to natural wear and tear. Its conservation and re-occupation are not viable. The site's significance now principally resides in its ability to tell the story of the local area.

Therefore, the adverse heritage impacts occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.6 below.

5.7 MP23 Devine's

MP23 Devine's would be physically impacted by the proposed mine works. However, MP23 fails to meet the threshold for either State or local significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

There are unsupported anecdotal data that there may be child burials at this site. Therefore, the potential adverse heritage impacts occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.7 below. A cautious approach to the potential archaeological resource at MP23 has been taken in Part 6.7.

5.8 MP25 Gall's Farm

MP25 Gall's Farm would be physically impacted by the proposed mine works. However, MP25 fails to meet the threshold for either State or local significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP25 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.



5.9 MP26 Page's Farm

MP26 Page's Farm would be physically impacted by the proposed mine works. However, MP26 fails to meet the threshold for either State or local significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP26 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.10 MP27 Thorndale

MP27 Thorndale is a place of local heritage significance. It would be physically impacted by the Project, which would necessitate its demolition.

The disturbance or demolition of the house at MP27 would constitute an adverse heritage impact. However, the house has been abandoned for many years and the extant structure is in poor condition due to natural wear and tear. Its conservation and re-occupation are not viable. The house's significance now principally resides in its ability to tell the story of the local area. Therefore, the adverse heritage impacts on the house occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.10 below. As noted above in Part 4.10, the shearing shed at MP27 was damaged in a storm event in 2019 and subsequently demolished.

There are unsupported anecdotal data that there may be child burials at the house site. However, the site has been assessed as having low potential to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act. A cautious approach to the potential archaeological resource has been taken in Part 6.10 below.

5.11 MP29 Lynch's

MP29 Lynch's is a place of local heritage significance. The site would be physically impacted by the proposed mine works.

The disturbance or demolition of MP29 would constitute a minor adverse heritage impact. The site has been abandoned for many years and the extant structure is in poor condition due to natural wear and tear. Its conservation and re-occupation are not viable. The site's significance now principally resides in its ability to tell the story of the local area.

Therefore, the adverse heritage impacts occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.11 below.

5.12 MP31 Cox's Portion 20

MP31 Cox's Portion would be physically impacted by the proposed mine works. However, MP31 fails to meet the threshold for either State or local significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.



If MP31 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.13 MP32 Cox's Orchard

MP32 Cox's Orchard fails to make the threshold for local heritage significance and is not a heritage place. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP32 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.14 MP36 Hill's

MP36 Hill's fails to make the threshold for local heritage significance and is not a heritage place. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP36 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.15 MP38 Rosebrook

MP38 Rosebrook is a place of local significance. However, the homestead is not located within the boundary of the Mount Pleasant Operation Mining Lease; it is approximately 1.5 km east of the eastern boundary of the Mount Pleasant Operation Mining Lease. It would not be directly impacted by the Project.

In visual terms, MP38 is located approximately 550 m from the western bank of the Hunter River and has an east-facing outlook towards the Hunter River and away from the Mount Pleasant Operation. This vista would not be impacted by the Project. The homestead is also well-screened by mature tree plantings, particularly when viewed from the east and north-east. Insofar as mine infrastructure and works may be discernible from the homestead (some 1.5 km distant), this vegetation would screen the Mount Pleasant Operation from view when facing west towards it. In any event, the increased elevation and extent of the mining landform, when appropriately vegetated, would read as a rise in the distance not out of character with the present landscape.

There would be no adverse impacts in relation to the use of the homestead. MP38 Rosebrook is located on private land and could continue to be used as a residence or other accommodation if the Project proceeds. It is understood that there is a current lease agreement between MACH and the existing tenant in effect until 2031.

There would be no impacts on MP38 in terms of potential indirect impacts to the physical fabric (e.g. through vibration) or auditory setting. All blasting activities for the Project would be designed and managed to limit ground vibration to 10 millimetres per second (mm/s) at historic heritage sites in accordance with the approved Blast Management Plan (BMP) (MACH 2019).



As the Project progresses to the north-west of the Mount Pleasant Operation Mining Lease, blasting activities would move further away from MP38. This would further minimise any potential blasting related impacts on MP38. Given all blasting activities would be carried out to meet the prescribed blasting criteria in the BMP, the Project would have no adverse impact on MP38 as a result of blasting.

In summary, MP38 Rosebrook would not be adversely impacted by the proposed mine operations provided the recommendations in Part 6.15 below are observed.

5.16 MP39 Rosebrook Quarry

MP39 Rosebrook Quarry is a place of local significance. Its significance principally rests in its ability to yield research data (Criterion [e]), although the site would comprise a 'work' (rather than a 'relic') under the Heritage Act.

MP39 would not be physically impacted by the proposed mine works, as it is located outside of the Mount Pleasant Operation Mining Lease and the Project disturbance footprint. Therefore, no specific management recommendations are provided in Part 6.16 below.

5.17 MP41 Negoa

MP41 Negoa is a place of local heritage significance for satisfying a range of criteria. However, it is located outside the Mount Pleasant Operation Mining Lease and would not be directly impacted by the Project.

There is moderate potential for MP41 to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

In terms of potential indirect impacts, there would be no adverse impacts in relation to the use of the residence. MP41 is located on private land and could continue to be used as a residence or other accommodation should the Project proceed.

There would be no impacts on MP41 in terms of potential indirect impacts to the physical fabric (e.g. through vibration) or auditory setting. All blasting activities for the Project would be designed and managed to limit ground vibration to 10 mm/s at MP41, in accordance with the approved BMP (MACH 2019).

MP41 would be located approximately 800 m east of the eastern boundary of the Mount Pleasant Operation Mining Lease. As noted in Part 4.17 above, Negoa is significant for, among other values, its aesthetic values. Two views in particular have been identified as being highly significant: views to/from its southern elevation (its main façade) and views to/from its long western elevation. These views would not be significantly impacted by the proposed Project. Views towards Negoa would be largely unchanged. Views outwards from Negoa would capture an increase in elevation and extent of the mining landform but when vegetated it would read as a natural rise in the distance not out of character with the present landscape.

In summary, MP41 would not be adversely impacted by the proposed mine operations provided the recommendations in Part 6.17 below are observed.



5.18 MP42 Fibbins

MP42 Fibbins is a place of local significance. It is located within the boundary of the Mount Pleasant Operation Mining Lease and would be disturbed or destroyed by the Project.

The disturbance or demolition of the house at MP42 would constitute an adverse heritage impact. However, the house has been abandoned for many years and the extant structure is in poor condition due to natural wear and tear. Its conservation and re-occupation are not viable. The house's significance now principally resides in its ability to tell the story of the local area.

As noted in Part 4.18 above, there is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

Therefore, the adverse heritage impacts on the house occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.18 below.

5.19 MP43 St Andrew's Anglican Church

MP43 St Andrew's Anglican Church fails to make the threshold for local heritage significance and is not a heritage place. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP43 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.20 MP44 Scarred Tree

In the VAHS report, MP44 Scarred Tree has been incorrectly identified as a historic survey blaze.

MP44 fails to make the threshold for local heritage significance and is not a heritage place. Even if this conclusion is incorrect, and MP44 is a survey mark, it has almost completely closed over due to regrowth. If MP44 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.21 MP45(a-b) Casey: Clenmore and Edgeway

MP45(a-b) Casey: Clenmore and Edgeway would be physically impacted by the proposed mine works.

The extant structure at MP45(a), and what remains of MP45(b), have some significance for their ability to provide data about the history of the local area. Their demolition as part of the Project would constitute a minor adverse heritage impact. Both sites have been abandoned for many years and the extant structures are in poor condition due to natural wear and tear, and in the case of MP45(b), collapse. Their conservation and re-occupation are not viable.



As noted in Part 4.21 above, there is low potential for these sites to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act. There would be no adverse archaeological impacts as a result of the Project.

The sites' significance now principally resides in their ability to tell the story of the local area. Therefore, the adverse heritage impacts on the sites of MP45(a) and MP45(b) occasioned by the Project would be mitigated by observing the recommendations presented in Part 6.21 below, regarding archival recording.

5.22 MP46 Kayuga Recreation Ground

MP46 Kayuga Recreation Ground is a place of local heritage significance. It is located approximately 30 m north of the northern boundary of the Mount Pleasant Operation Mining Lease on Muswellbrook Shire Council owned land, and would not be directly impacted by the Project (e.g. through demolition).

As noted in Part 4.22 above, there is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

All blasting activities for the Project would be designed and managed to limit ground vibration to 10 mm/s at MP46, in accordance with the approved BMP (MACH 2019). Provided the management recommendations presented in Part 6.22 below are implemented, the Project would have no adverse impact on MP46 as a result of blasting.

In terms of potential indirect impacts, there would be no change in relation to the 'use' of the structure surviving at MP46. It is currently unoccupied.

If the disturbance or demolition of MP46 becomes necessary due to the modification of the Project infrastructure footprint as a result of detailed design, this would constitute an adverse heritage impact that would be mitigated by observing the recommendations presented in Part 6.22 below. The site has been abandoned for many years and the extant structure is in poor condition due to natural wear and tear. The site's significance therefore now principally resides in its ability to tell the story of the local area, which can be realised through photographic archival recording.

5.23 MP49(a-c) Weidmann's

MP49(a-c) Weidmann's would be physically impacted by the proposed mine works. However, MP49(a-c) fails to meet the threshold for local heritage significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP49(a-c) is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.



5.24 MP50 Waitomo

MP50 Waitomo is a place of local heritage significance. It is located c. 250 m north-east of the northern boundary of the Mount Pleasant Operation Mining Lease and would not be directly impacted by the Project (e.g. through demolition).

All blasting activities for the Project would be designed and managed to limit ground vibration to 10 mm/s at MP50, in accordance with the approved BMP (MACH 2019). Provided the management recommendations presented in Part 6.24 below are implemented, the Project would have no adverse impact on MP50 as a result of blasting.

MP50 would be retained in situ. There would be some adverse impacts in terms of its setting, and limitations on its future re-use having regard to air quality and acoustic impacts.

If a decision is made to demolish MP50, this would be an adverse heritage impact that would be mitigated by observing the recommendations for photographic archival recording presented in Part 6.24 below.

5.25 MP51 Kayuga Bridge

MP51 Kayuga Bridge is listed in the Muswellbrook LEP as a place of local significance and is assessed in a Section 170 Heritage and Conservation Register as a place of State heritage significance. It would not be directly impacted by the Project.

In terms of potential indirect impacts to the physical fabric of MP51, MACH observes an ongoing commitment (through previous development consent) to ensure that all mine-related vehicles do not use or access Kayuga Bridge.

If the Project proceeds, consistent with this existing commitment, all mine-related access and traffic would be via the central portion of Wybong Road, travelling south around the Bengalla Mine to access the Mount Pleasant Operation. No through access would be allowed from the eastern section (via Kayuga Road) and all vehicles would avoid accessing Muswellbrook via the Kayuga Bridge. As a result, there would be no indirect impacts on Kayuga Bridge caused by increased traffic or use.

There would be no indirect impacts on Kayuga Bridge as a result of vibration. The BMP (MACH 2019) prescribes ground vibration at residences on privately owned land and historic heritage sites to be no more than 10 mm/s. As MP51 is located further away from the proposed Project disturbance area than the private receivers located to the east of the Mount Pleasant Operation Mining Lease, the blast criteria would also be met at MP51.



5.26 MP52 Overdene (Overton)

MP52 Overdene (Overton) is a place of local significance (built form and archaeology).

A CMP prepared by AECOM (2015) established a heritage curtilage for the Overdene Homestead that includes the homestead itself and a small area to its west defined as being of archaeological potential. This HHA and SOHI has adopted that assessment. The Muswellbrook LEP listing captures the heritage curtilage identified by the AECOM report, but also includes large tracts of vacant land around it (being the full extent of the former property).

The heritage curtilage of Overdene Homestead (as identified by both AECOM and the Muswellbrook LEP) falls outside the boundary of the Mount Pleasant Operation Mining Lease. The homestead building is approximately 700 m south of the southern boundary of the Mount Pleasant Operation Mining Lease. It would not be directly impacted by the Project and would be retained and conserved in situ consistent with the existing CMP for the site.

In terms of potential indirect impacts, there would be no change in relation to the 'use' of the structure. It is currently unoccupied and fenced off for safety reasons. However, if a decision were made to convert the structure to future uses (e.g. office accommodation), the Project would not impact the ability to do so.

There would be no indirect impacts to the physical fabric of MP52 (e.g. through vibration), or to its auditory setting associated with the Project.

All blasting activities for the Project would be designed and managed to limit ground vibration to 10 mm/s at historic heritage sites in accordance with the approved BMP (MACH 2019). As the Project progresses to the north-west of the Mount Pleasant Operation Mining Lease, blasting activities would move further away from MP52. This would further minimise any potential blasting related impacts on MP52. Given all blasting activities would be carried out to meet the prescribed blasting criteria in the BMP (MACH 2019), the Project would have no adverse impact on MP52 as a result of blasting.

MP52 presently sits in a compromised setting. It has views of mine waste emplacements created over many years of past and present mine activities by Bengalla Mine. Most of the support buildings that once formed part of the wider farm complex no longer exist. Insofar as elements of the Project may be visible from MP52 (at a distance of several hundred metres), these would not significantly diminish its already compromised visual setting. There would be an increase in the extent and elevation of the mining landform in the distance, but when appropriately vegetated this will read as a natural rise not out of character with the existing landscape. The dominant views out of the property to the east would not be impacted.

In summary, provided the management recommendations presented in Part 6.26 below are observed, the proposed mine works would have no adverse heritage impact on MP52.



5.27 MP53 Kayuga Cemetery

MP53 Kayuga Cemetery is a place of State heritage significance. However, it is not located within the boundary of the Mount Pleasant Operation Mining Lease and would not be directly impacted by the Project.

The BMP (MACH 2019) prescribes ground vibration at residences on privately owned land and historic heritage sites to be no more than 10 mm/s. As MP53 is located further away from the proposed Project disturbance area than the private receivers located to the east of the Mount Pleasant Operation Mining Lease, the blast criteria would also be met at MP53. Therefore, the Project would have no adverse impact on MP53 as a result of blasting.

Provided the management recommendations presented in Part 6.27 below are observed, the Project would not have an adverse heritage impact on MP53.

5.28 MP54 Portion 71

MP54 Portion 71 would be physically impacted by the proposed mine works. However, MP54 fails to make the threshold for local heritage significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP54 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.29 MP55 Portion 26

MP55 Portion 26 would be physically impacted by the proposed mine works. However, MP55 fails to make the threshold for local heritage significance. There is low potential for the site to contain artefacts that would satisfy the definition of 'relics' as defined by the Heritage Act.

If MP55 is disturbed or destroyed by the Project, this would not constitute an adverse heritage impact.

5.30 Muswellbrook-Jerrys Plains Landscape Conservation Area

The MJP LCA is identified in a non-statutory document prepared by the National Trust in 1985. The MJP LCA heritage assessment and description have clearly been overtaken by subsequent events. These include the development of the Bengalla Mine north of the Hunter River (and overlapping to a small degree with the MJP LCA), and the Mt Arthur Coal Mine to the south of the Hunter River and also partly within the MJP LCA.

As noted in Part 1.1 and 4.30 above, the Mount Pleasant Operation Mining Lease is located adjacent to the MJP LCA, which generally lies to the Project's south but abuts the south-eastern extent of the Mount Pleasant Operation Mining Lease.



Almost all of the Project footprint is located wholly outside of the MJP LCA and the only elements of the Project that would be within the MJP LCA would be in two limited and discrete locations where mine infrastructure already exists or is approved (within Bengalla Mine or the MOD4 Project approval) (see Figure 2 and Figure 128 above). The landscape in these locations has already been significantly modified some years ago by the Bengalla Mine's development. In other words, the Project would not impact the MJP LCA as a cultural landscape.

The configuration of the boundary of the MJP LCA reflects the local topography, generally following elevated ridgelines and the alignment of several major tributaries, including the Hunter River. As a result, most views from within the MJP LCA looking north and north-east towards the Project area are already limited by the rising topography. As a result, the new above-ground infrastructure proposed by the Project (which would be wholly outside the MJP LCA) would have low visibility from within the LCA. This is confirmed by the Landscape and Visual Impact Assessment prepared for the Project which concluded that the above-ground infrastructure would not be visible from most places within the MJP LCA due to intervening topography.

In any event, insofar as new mine infrastructure resulting from the Project might be visible from some locations on the northern boundary of the MJP LCA, this would be consistent with the landscape that has existed in this area for decades i.e. a rural landscape set against a mining landscape.

Therefore, the Project would result in no significant direct or indirect adverse heritage impacts in relation to the MJP LCA.

5.31 Cumulative impacts and the cultural landscape

In recent years, the activities related to the Mount Pleasant Operation have resulted in the following outcomes in relation to heritage places:

- The potential archaeological resource identified by the VAHS 2014 report at MP10 ('Scrivens') and MP12 ('Bollibon-Nowlands') was investigated by archaeologists pursuant to appropriate consents. No 'relics' (as defined by the Heritage Act) were identified. The results of the archaeological investigation were presented in publicly accessible reports (UQCHU 2016).
- The remains of a ruined lime kiln of nineteenth century date (MP11 'Seabrooks') were archaeologically investigated pursuant to appropriate consents. The results of the archaeological investigation were presented in a publicly accessible report (UQCHU 2016).
- A Federation-era rural dwelling (MP37 'Berrywood') was demolished after it had been the subject of a comprehensive photographic archival record. A copy of the report has been provided to the Muswellbrook Library (UQCHU 2017a).

No archaeological 'relics' (as defined by the Heritage Act) have been impacted by the Mount Pleasant Operation works to date.



The Project would result in the demolition of six homesteads of local significance (as well as 'MP37 - Berrywood' above, which has already been demolished). Additionally, a range of places that were not assessed to be heritage places by the VAHS 2014 report, but which added to the general character of the area, have been removed (such as mid-twentieth century farm houses, old fences, derelict windmills, and the like).

The demolition of the additional places of local significance would remove the homesteads from the Mount Pleasant cultural landscape, and the cumulative effect would be to convert the modified rural landscape, north of the existing Bengalla Mine, into a purely mining landscape. This would be an adverse heritage impact that can be mitigated by appropriate management responses (see Part 6.31 below).

As noted in Part 4.30 above, the present landscape within the Project Study Area reads as a modified agricultural landscape, with low hills and gullies cleared of their trees to accommodate the farming and pastoral activities of over 150 years. There are expansive views, some of which capture historic fence lines and farm buildings. However, it is not a pristine rural landscape. The landscape has been subject to an ongoing agricultural use through leases to local farmers, however a few of the remaining homesteads and farm buildings are in poor condition due to natural wear and tear that has occurred due to limited or no use of some buildings. Therefore, where farm structures are visible in the landscape, they occur mostly as 'picturesque ruins' with a limited life. In some cases, they are clearly in a dangerous condition and if they do not collapse due to natural causes, they will need to be demolished for safety reasons. Further, the agricultural structures sit cheek-by-jowl with mines and mine infrastructure that have been part of the wider landscape for many years. The farm structures, therefore, have long been read against a mining backdrop.

In other words, the 'cultural landscape' that would be impacted by the Project is a compromised one, and many of the features that combine to make it a cultural landscape are in such poor condition that they will deteriorate significantly (even with conservation work) through natural wear and tear over the next 5-10 years. They will soon reach a point where they will cease to be part of the cultural landscape by natural causes whether the Project proceeds or not.

Therefore, the Project would have the positive effect of recording those structures prior to their disappearance, through photographic archival recording. This outcome would be a major mitigative measure in relation to the adverse heritage impacts identified by this HHA and SOHI. It would be supported by the archaeological excavations recommended by this HHA and SOHI. It would also be mitigated by the heritage interpretation measures recommended in Part 6 below.



6. Management recommendations

6.1 MP01 Broomfield

The VAHS report (2014:76) concludes that:

The complex is highly significant on a local level. The complex should be retained and basic maintenance carried out to halt deterioration. The homestead needs to be cleaned, repaired where needed and leased to a suitable tenant. The gardens around the homestead require attention and any original plantings need to be retained. There should be monitoring of demolition if structures are to be removed.

This conclusion is somewhat internally inconsistent, requiring in situ conservation but also contemplating demolition (subject to monitoring). This HHA and SOHI concludes that the management recommendations for MP01 should be clarified and re-cast as follows:

- The preferred management response is to retain the pre-1965 structures at MP01 in situ, making the structures safe and weather-proof.
- It is desirable that the pre-1965 structures be restored and used where practicable as a residence with ancillary farm buildings. However, there is low demand for this at present. It would be appropriate for them to remain unoccupied provided the structures are made safe and weatherproof.
- Notwithstanding the above conclusion, it is appropriate for the structures at MP01 to be demolished provided those structures (those dating to pre-1965) are archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.
- All blasting activities in the vicinity of MP01 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).
- Should unanticipated ground disturbance become necessary in the vicinity of MP01, such
 works could proceed without the need for further inputs from an archaeologist.



6.2 MP06 Coady's

The VAHS report (2014:121) recommends:

Test excavations to be conducted to try to evaluate the potential and scope of the site. There may be a need for full excavation of some areas.

This HHA and SOHI has reassessed MP06 as having low potential to contain 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP06, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.3 MP13 Humphries

The VAHS report (2014:182) concludes that MP13 should be managed as follows:

The house area should be test excavated to see if there is potential for further archaeological information. The area of the features 2 to 4 should be monitored during demolition to gather any further information on usage. Feature 5, boiler should be removed and offered to some organisation like the Denman Heritage Village. Boiler should be photographed after being excavated.

This HHA and SOHI has reassessed the site as having low potential to contain 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP13, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.4 MP20 Kayuga Coal Mine

The VAHS report (2014:246) concludes that the significance of MP20 Kayuga Coal Mine should be managed as follows:

Test excavation to determine extent and location of features on 1919 mine map. Those features are the house, stables and workmen's house. This could lead to a full excavation of some features.

Like the VAHS report, this HHA and SOHI has also assessed MP20 as having the potential to yield data about the history of the local area. This HHA and SOHI recasts and augments the recommendations of the VAHS report as follows:

It is appropriate for the remains of MP20 to be disturbed or destroyed, provided the site is first investigated by a qualified archaeologist. The focus of those archaeological investigations would be the external areas of the former mine (i.e. the areas in the vicinity of the openings/entrances to the mine shafts), not the deep underground mine shafts and tunnels (for health and safety reasons).



- Subject to confirmation by a qualified assessor that it is safe, it would be appropriate for the above archaeological investigations to be undertaken using a combination of machine excavation and manual excavation. The investigations should be undertaken observing standard archaeological recording methodologies, including the use of appropriate recording forms, measured drawings, survey, and photography.
- For those areas identified as unsafe to undertake the above archaeological investigations, it is appropriate for works to proceed at the site of MP20, where those works cause ground disturbance, without the need for further inputs from an archaeologist.
- Within 12 months of the conclusion of the investigations, the archaeologist should produce a report that presents the data that have been generated, including analysis of any artefacts. Additionally, the report should address (at a minimum) the following research questions:
 - What is the location of the mine shafts/entrances at the mine?
 - How were they accessed and what evidence is there for how coal was removed from the mines and transported away for processing?
 - How were the shafts/entrances constructed?
 - Is there any evidence of the tools and equipment used by the miners who worked within the mines?
 - Is there any evidence of on-site processing?

6.5 MP21 Kayuga School

The VAHS report (2014:261) recommends:

If there is a possibility that the site will not be disturbed by mining, then it should be preserved undisturbed i.e. in situ conservation. If the site will be disturbed, then test excavating should be conducted to determine the extent of the site and if warranted followed by full excavation.

This HHA and SOHI has also assessed MP21 as having the potential to yield data about the history of the local area. This HHA and SOHI recasts and augments the recommendations of the VAHS report as follows:

- It is appropriate for the remains of MP21 to be disturbed or destroyed, after they have been investigated by a qualified archaeologist.
- It would be appropriate for the above archaeological excavations to be undertaken using a combination of machine excavation and manual excavation.
- The investigations should be undertaken observing standard archaeological recording methodologies, including the use of appropriate recording forms, measured drawings, survey, and photography.



- Within 12 months of the conclusion of the investigations, the archaeologist should produce a report that presents the data that have been generated, including analysis of any artefacts. Additionally, the report should address (at a minimum) the following research questions:
 - What does the archaeology tell us about the layout and extent of the school and its grounds?
 - What evidence is there for the domestic quarters?
 - How was the school constructed, and using what materials?
 - What evidence is there for the kinds of activities that were undertaken at the site?
 - Is there evidence of 'making do' at what was an under-resourced rural school?

6.6 MP22 Smith's Clear Farm

The VAHS report (2014:273) concludes that MP22 Smith's Clear Farm should be managed as follows:

The building is in very poor condition due to extensive damage by termites. It would not be possible to restore or relocate the building. When required the building should be demolished. The demolition should be monitored to extract further information on building methods and material.

The authors of this HHA and SOHI generally agree with these management recommendations for MP22, but modifies them to the following:

- It is appropriate for the structures at MP22 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.
- Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage professional.
- It is appropriate for works to proceed at the site of MP22, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.



6.7 MP23 Devine's

The VAHS report (2014:292) concludes that MP23 Devine's should be managed as follows:

Site: Test excavation to locate the house and sheds followed by full excavation of area.

Burial: Requires further investigation.

This HHA and SOHI has reassessed the potential archaeological resource at MP23. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act. However, there are unsupported anecdotal data that there may be child burials at this site, and this warrants a cautious approach although no evidence of child burials was found through desktop research. Therefore, the following actions are recommended:

- Prior to the site being disturbed it should be investigated by a qualified archaeologist with experience in the identification of rural burials outside of dedicated/consecrated cemeteries. These archaeological investigations should focus on the garden areas around the homestead where anecdotal data suggest that there may be child burials. It would be appropriate for these investigations to be undertaken by a machine excavator, with a flat-edged bucket, monitored by the qualified archaeologist. Grass cover and soil deposits should be removed in shallow scrapes ('spits' of c. 100 mm) until natural deposits are exposed.
- If these archaeological investigations do not indicate the possible location of a grave or graves, it is appropriate for works to proceed at the site of MP23, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.
- However, if these archaeological investigations do indicate the possible location of a grave or graves, excavation should cease immediately. They should proceed again only after observing the requirements of the NSW Department of Health in relation to the *Public Health Act 1991* and the *Coroners Act 2009*. The attending archaeologist should also observe the principles and processes expressed in the NSW government guideline document entitled *Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977* (NSW Heritage Office 1998).

6.8 MP25 Gall's Farm

The VAHS report (2014:322) recommended that MP25 should be managed as follows:

Test excavations to be conducted on the house site with possible expansion to full excavation.

This HHA and SOHI has reassessed the potential archaeological resource at MP25. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP25, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.



6.9 MP26 Page's Farm

The VAHS report (2014:331) recommends that MP26 should be managed as follows:

Test excavations to be conducted on the house and shed sites with possible expansion to full excavation.

This HHA and SOHI has reassessed the potential archaeological resource at MP26. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP26, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.10 MP27 Thorndale

The VAHS report (2014:363) recommends that MP27 should be managed as follows:

House: This building is structurally unsound due to neglect. It may be demolished, but the demolition should be monitored to obtain further information on building methods.

Buildings: The Denman Heritage Village should be approached to see if they could utilise any of the material, especially the shearing shed, which is in reasonable condition.

Burial: This requires further research.

With respect to the house at MP27: it is appropriate for the structure to be demolished provided it is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: *How to Prepare Archival Records of Heritage Items* (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and *Photographic Recording of Heritage Items Using Film or Digital Capture* (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, augmented with illustrative drawings, rather than full measured drawings.

With respect to the shearing shed at MP27 as noted above in Part 4.10, the shed was damaged in a storm event in 2019 and subsequently demolished but elements of its interior were salvaged by the Denman Heritage Museum. In relation to the potential archaeological resource, it would be generally appropriate for works to proceed at the site of the shearing shed, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

With respect to the potential archaeological resource, this HHA and SOHI has concluded that MP27 has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act. Therefore, it is generally appropriate for works to proceed at the site of MP27, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.



However, there are unsupported anecdotal data that there may be child burials at this site, and this warrants a cautious approach. Therefore, the following actions are recommended:

- Prior to the site being disturbed it should be investigated by a qualified archaeologist with experience in the identification of rural burials outside of dedicated/consecrated cemeteries. These archaeological investigations should focus on the garden areas around the homestead where anecdotal data suggest that there may be child burials. It would be appropriate for these archaeological investigations to be undertaken by a machine excavator, with a flat-edged bucket, monitored by the qualified archaeologist. Grass cover and soil deposits should be removed in shallow scrapes ('spits' of c. 100 mm) until natural deposits have been exposed.
- If these archaeological investigations do not indicate the possible location of a grave or graves, it is generally appropriate for works to proceed at the site of MP27, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.
- However, if these archaeological investigations do indicate the possible location of a grave or graves, excavation should cease immediately. They should proceed again only after observing the requirements of the NSW Department of Health in relation to the *Public Health Act 1991* and the *Coroners Act 2009*. The attending archaeologist should also observe the principles and processes expressed in the NSW government guideline document entitled *Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977*.

6.11 MP29 Lynch's

The VAHS report (2014:383) recommends that MP29 should be managed as follows:

Monitor the demolition of the building to gain further evidence of construction methods.

Conduct test excavation at the rear of the structure to try to determine what had been erected there. This would provide better evidence of how the building functioned.

This HHA and SOHI generally agrees with the VAHS report's recommendations in relation to the structure, but has reassessed the potential archaeological resource at MP29. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act. Therefore, this HHA and SOHI recasts the management recommendations as follows:

It is appropriate for the structure at MP29 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.



- Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage professional.
- It is appropriate for works to proceed at the site of MP29, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.12 MP31 Cox's Portion 20

The VAHS report (2014:394) recommends that MP31 should be managed as follows:

Test excavations to be conducted to attempt to locate the hut marked on Neil's 1867 map. If successful, then a full excavation would be warranted.

This HHA and SOHI has reassessed the potential archaeological resource at MP31. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP31, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.13 MP32 Cox's Orchard

The VAHS report (2014:407) recommends that MP32 should be managed as follows:

The house and shed require further examination before demolition. This examination should look at determining the age of the house and construction methods. The shed should be examined to try and determine its function.

This HHA and SOHI has reassessed the highly modified structure at MP32 as failing to reach the threshold for local significance. MP32 is not a heritage place.

It is appropriate for the Project to proceed, where those works would result in the demolition of the house at MP32, without the need for further inputs from a heritage professional.

It is appropriate for the Project to proceed, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.14 MP36 Hill's

The VAHS report (2014:436) recommends that MP36 should be managed as follows:

An in-depth study of the remaining structural evidence be undertaken in an attempt to provide a better chronological development of the site.

The 'kitchen' area of Site B needs to be carefully dismantled to recover as much information as possible reconstruction methods and possible date of construction.

There may develop a need for some test excavation to determine the extent and use of some building sites.



This HHA and SOHI has reassessed the site in the light of the highly ruinous condition of the structural remains at MP36 and their potential to recover information that is not obtainable from other sites and sources. It has assessed those ruined structures as being of lower significance than the VAHS report did, with limited research potential. MP36 is better envisaged and managed as an archaeological site. However, this HHA and SOHI has concluded that the site has low potential to contain material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed, where those works would result in the demolition of the ruinous structures at MP36, without the need for further inputs from a heritage professional. Also, it is appropriate for the Project to proceed, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.15 MP38 Rosebrook

The VAHS report (2014:471) recommends that MP38 should be managed as follows:

The homestead should be retained and maintained. Any major earthworks around the homestead should be monitored for further evidence of how the site functioned.

The authors of this HHA and SOHI generally agree with these management recommendations but recasts and augments them as follows:

- The homestead and its landscaped gardens should be retained in situ.
- The ongoing conservation of the homestead and the landscaped gardens at MP38 Rosebrook (including any maintenance works) is to be guided by the preparation of a CMP for the site, applying the principles in the guideline documents entitled: Conservation Management Plan (CMP) Assessment Checklist (NSW Heritage Council 2003); Guidelines on Conservation Management Plans and Other Management Documents (NSW Heritage Branch, undated); and The Conservation Plan: A Guide to the Preparation of Conservation Plans for the Places of European Cultural Significance (The Conservation Plan) (Kerr 2000).
- There should be no significant ground disturbance within the grounds of the homestead without further archaeological analysis being undertaken (and, possibly, the preparation of an application for an excavation permit, made pursuant to Section 139 of the Heritage Act), with the exception of general garden maintenance, excavation within existing garden beds, and ground disturbance within areas previously disturbed by excavation (e.g. for driveways, sewage pipes and utilities, tree planting).
- Where practicable, it would be appropriate for the homestead to be used during the construction and operation of the proposed mine works, as long as that use involves minimal physical intervention in original/early fabric.
- Alternatively, it would be appropriate at this time to maintain 'Rosebrook' in an unoccupied state provided the structure is subject to a regular maintenance regime and maintained in a safe and weather-proof state.



- The existing outbuildings at MP38 are of little or no heritage significance, being of a relatively recent date and having replaced the now-demolished mid-nineteenth century outbuildings.
 These structures may be retained, but ideally would be removed when resources allow.
- All blasting activities in the vicinity of MP38 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).

6.16 MP39 Rosebrook Quarry

The VAHS report (2014:481) recommends that MP39 should be managed as follows:

The site appears to be in an area that will not be impacted by future mining activities hence it should be protected and preserved.

As noted in Part 5.16 above, MP39 is located outside of the Mount Pleasant Operation Mining Lease and the Project disturbance footprint. It would not be physically impacted by the proposed mine works.

Therefore, no specific management recommendations are recommended by this HHA and SOHI for MP39.

6.17 MP41 Negoa

The ongoing conservation of Negoa requires an appropriate and sympathetic use that involves minimal physical intervention in original/early fabric and no alteration of the original/early floor plan. The ongoing use of the 1845 brick residence and the sandstone structure is preferable to leaving the buildings vacant and unused. It would therefore be appropriate for the homestead to be used during the construction and operation of the proposed mine works. Appropriate uses might include periodic uses i.e. temporary office accommodation or as a venue for meetings.

The VAHS report (2014:525) recommends that MP41 should be managed as follows:

A Conservation Management Plan needs to be developed for the property and the maintenance recommendation in the plan be carried out promptly. The buildings are in urgent need of maintenance. No ground disturbance activities should take place unless there is a suitably qualified person in attendance. The areas on the 1889 plan of the area should be checked for any sign of archaeological evidence.

The authors of this HHA and SOHI generally agree with the above recommendations but re-states and clarifies them as follows:

- Conserve and retain 'Negoa' in situ.
- If it is not already the case, make the structures safe and weather proofed. Maintain them in that condition.
- Any artefacts located within the grounds of the Negoa complex would likely constitute 'relics' within the meaning of the Heritage Act. Carry out no ground disturbance in these locations without first consulting an archaeologist. The CMP (refer below) prepared for MP41 Negoa must include a consideration of the potential archaeological resource.



- Update and finalise the draft CMP prepared by Extent Heritage (2018) to reflect the ongoing maintenance works that have been undertaken since the completion of that draft. Conserve MP41 Negoa in accordance with the finalised CMP. The finalised CMP should be prepared applying the principles contained in the guideline documents entitled: Conservation Management Plan (CMP) Assessment Checklist (NSW Heritage Council 2003); Guidelines on Conservation Management Plans and Other Management Documents (NSW Heritage Branch undated); and The Conservation Plan (Kerr 2000).
- Upon updating and finalising the CMP, continue to manage the site in accordance with its provisions.
- All blasting activities in the vicinity of MP41 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).

6.18 MP42 Fibbins

The VAHS report (2014:544) recommends that MP42 should be managed as follows:

The remaining structures are badly damaged by termites and lack of maintenance therefore conservation is not an option. There should be test excavations to try to determine what the lone chimney served. Demolition may proceed, but it should be monitored to gain further information on construction methods.

This HHA and SOHI recasts the management recommendations as follows:

- It is appropriate for the structure at MP42 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.
- Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage professional.

This HHA and SOHI has reassessed the potential archaeological resource at MP42. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP42, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.



6.19 MP43 St Andrew's Anglican Church

The VAHS report (2014:549) recommends that MP43 should be managed as follows:

Test excavation to try to determine the exact location of the church. Full excavation to determine the size of the church.

This HHA and SOHI reassesses MP43 as failing to make the threshold for local significance. Also, it has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for works to proceed at the site of MP43, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.20 MP44 Scarred Tree

The VAHS report (2014:553) concludes that MP44 should be managed as follows:

Tree should be retained in its original position.

This HHA and SOHI has identified this tree as a naturally scarred tree, and unlikely to be a surveyor's blaze. It fails to make the threshold for local significance.

It would be appropriate for this site to be disturbed or destroyed without the further involvement of a heritage professional. Its significance does not warrant its retention in situ.

6.21 MP45(a) and (b) Casey: Clenmore and Edgeway

The VAHS report (2014:572) concludes that MP45(a) should be managed as follows:

The site may be demolished but should be monitored to gain further information on construction methods. Preservation is not an option due to termite damage and lack of maintenance.

The VAHS report (2014:588) concludes that MP45(b) should be managed as follows:

The site may be demolished but should be monitored to gain further information on construction methods. Preservation is not an option due to termite damage and lack of maintenance.

This HHA and SOHI recasts the management recommendations as follows:

It is appropriate for the structure at MP45(a), and what is left at MP45(b), to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.



- Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage professional.
- It is appropriate for works to proceed at the site of MP45(a) and (b), where those works might cause ground disturbance, without the need for further input from an archaeologist.

6.22 MP46 Kayuga Recreation Ground

The VAHS report (2014:604) concludes that MP46 should be managed as follows:

No action. The site has been recorded.

The recording described by the VAHS report did not constitute photographic archival recording. This HHA and SOHI therefore recasts the management recommendations as follows:

- Seek to retain MP46 in situ, noting that the responsibility for the conservation and management of the Kayuga Recreation Ground rests with the relevant owner, Muswellbrook Shire Council.
- All blasting activities in the vicinity of MP46 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).

However, if the disturbance or demolition of MP46 becomes necessary due to the modification of the Project infrastructure footprint as a result of detailed design:

- It is appropriate for the structure at MP46 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.
- It is appropriate for works to proceed at the site of MP46, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.23 MP49(a-c) Weidmann's

The VAHS report (2014:638) recommends that MP49(a-c) should be managed as follows:

Test excavations of the hut and dairy sites. Engines at mill to be offered to Denman Heritage Village.

This HHA and SOHI has reassessed the potential archaeological resource at MP49. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.



It is appropriate for the Project to proceed at the site of MP49, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

The engines visible at the mill site should be offered to local historical groups (e.g. the Denman Heritage Village). If they decline to take them, it would be appropriate to dispose of them.

6.24 MP50 Waitomo House

The VAHS report (2014:647) concludes that MP50 should be managed as follows:

That the house be maintained and utilised.

The authors of this HHA and SOHI agree that the in situ conservation of MP50 is the ideal outcome. In that circumstance, the following recommendations should apply:

- The house should be retained in situ and conserved within an appropriate setting.
- It would be appropriate to maintain the house in an unoccupied state provided the structure is subject to a regular maintenance regime, and maintained in a safe and weather-proof state.
- A heritage professional should be consulted in relation to any proposed alterations and additions to the house.
- All blasting activities in the vicinity of MP50 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).

However, if that is not possible:

- It is appropriate for the structure at MP50 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.
- It is appropriate for works to proceed at the site of MP50, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.25 MP51 Kayuga Bridge

The VAHS report (2014:651) concludes that the significance of MP51 Kayuga Bridge should be managed as follows:

Outside scope of this report, but it should be monitored to ensure continual maintenance.

This HHA and SOHI augments the above recommendation with the following:



- The management of the Kayuga Bridge is to remain the responsibility of NSW Roads and Maritime Services (i.e. not MACH).
- MACH should continue to observe its existing commitment, through existing conditions of consent, relating to restricting the use of the Kayuga Bridge.
- Consistent with existing commitments: all mine-related access and traffic would be via the central portion of Wybong Road, travelling south around Bengalla Mine to access the Mount Pleasant Operation; no through access is permitted from the eastern section (via Kayuga Road); all vehicles are to avoid accessing Muswellbrook via Kayuga Bridge. No further management recommendations are required.
- All blasting activities in the vicinity of MP51 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).

6.26 MP52 Overdene (Overton)

The VAHS report (2014:666) recommends that MP52 should be managed as follows:

The building should be maintained utilising the guidelines in a Conservation Management Plan. No earthworks should take place in the area around the building unless a suitably qualified archaeologist is present to monitor the works.

The authors of this HHA and SOHI agree with these management recommendations, but updates and recasts them as follows:

 Overdene Homestead (MP52) should be maintained and conserved in situ, consistent with the recommendations contained in the existing CMP prepared by AECOM in 2015. It is noted that Overdene is located on Bengalla Mine land.

6.27 MP53 Kayuga Cemetery

The VAHS report (2014:673) recommends that MP53 should be managed as follows:

Continued maintenance and preservation.

The authors of this HHA and SOHI agree with this recommendation but makes the observation that responsibility for the cemetery's conservation rests with the relevant owner, which is not MACH, and therefore management of this site within the context of the EIS is not the responsibility of MACH.

All blasting activities in the vicinity of MP53 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).

6.28 MP54 Portion 71

The VAHS report (2014:679) recommends that MP54 should be managed as follows:

If the area is to be disturbed, an effort should be made to locate where the house was. This would require test excavations and possibly a full excavation of the house site.



This HHA and SOHI has reassessed the potential archaeological resource at MP54. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP54, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.29 MP55 Portion 26

The VAHS report (2014:684) recommends that MP55 should be managed as follows:

If the area is to be disturbed, an effort should be made locate where the house was. This would require test excavations and possibly a full excavation of the house site.

This HHA and SOHI has reassessed the potential archaeological resource at MP55. It has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act.

It is appropriate for the Project to proceed at the site of MP55, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

6.30 Muswellbrook-Jerrys Plain Landscape Conservation Area

The MJP LCA would not be directly impacted by the Project and there would be negligible impacts on its broader setting. No specific action would be required.

6.31 Management of cumulative impacts and the cultural landscape

In the last 15 years MACH and its predecessors have prepared a number of heritage studies including:

- detailed historical research forming the basis of the VAHS 2014 report;
- an oral history program completed by VAHS in 2004;
- archaeological excavation and post-excavation reports for MP10, MP11 and MP12 (UQCHU 2016); and
- a photographic archival record for MP 37 (Berrywood) (UQCHU 2017).

These studies reflect ongoing work that has cumulatively impacted the cultural landscape, but which has also had the positive result of accumulating large quantities of historical and archaeological data across a wide area. These would be augmented by photographic archival records and archaeological excavation recommended in this HHA and SOHI.



These data are contained in disparate reports and locations and although they are generally in publicly accessible documents it is difficult for the general public to engage with them. To ensure that these data are best utilised to 'tell the story' of the Mount Pleasant area, this HHA and SOHI makes the following recommendation in mitigation of the cumulative impacts:

- Within one year of obtaining development consent for the Project, an Interpretation Plan for the Mount Pleasant area should be prepared.
- The Interpretation Plan should collate and synthesise the data generated by previous studies, especially the VAHS (2014) report, the photographic archival records recommended in this HHA and SOHI, and the oral history data generated by VAHS in 2004.
- The Interpretation Plan would devise the most effective way of 'telling the story' of the Mount Pleasant area prior to the Project, which would include a consideration of: (a) relevant themes and stories, (b) the relevant 'audience' for the interpretation measures, including the general public, and (c) the most effective media for communicating those stories and themes.
- Within one year of the completion of the Interpretation Plan, the interpretation measures recommended by it should be implemented.



7. Conclusions and recommendations

7.1 Conclusions

The following summarises the potential adverse heritage impacts caused by the Project in relation to the historical heritage places addressed in this HHA and SOHI.

The MJP LGA and cumulative impacts on the wider landscape are also summarised below.

Table 6. A summary of the potential adverse heritage impacts caused by the Project

Heritage place / item	Potential impact
MP01 Broomfield	MP01 would not be directly impacted by the Project as it is located outside the Project disturbance footprint.
	Potential indirect adverse heritage impacts occasioned by the Project would be avoided by observing the recommendations in Part 6.1 above.
MP06 Coady's House	No adverse heritage impacts occasioned by the Project.
MP13 Humphries	No adverse heritage impacts occasioned by the Project.
MP20 Kayuga Coal Mine	MP20 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.4.
MP21 Kayuga School	MP21 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.5 above.
MP22 Smith's Clear Farm	MP22 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.6 above.
MP23 Devine's	MP23 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.7 above.9
MP25 Gall's Farm	No adverse heritage impacts occasioned by the Project.
MP26 Page's Farm	No adverse heritage impacts occasioned by the Project.

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As noted in Part 5.7 above, there are unsupported anecdotal data that there may be child burials at the site of MP23, which warrants a cautious approach to potential adverse impacts to the archaeological resource.



Heritage place / item	Potential impact
MP27 Thorndale	MP27 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.10 above. 10
MP29 Lynch's	MP29 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.11 above.
MP31 Cox's Portion 20	No adverse heritage impacts occasioned by the Project.
MP32 Cox's Orchard	No adverse heritage impacts occasioned by the Project.
MP36 Hill's	No adverse heritage impacts occasioned by the Project.
MP38 Rosebrook	MP38 would not be directly impacted by the Project as it is located outside the Mount Pleasant Operation Mining Lease.
	Potential indirect adverse heritage impacts would be mitigated or avoided by observing the recommendations in Part 6.15 above.
MP39 Rosebrook Quarry	No adverse heritage impacts occasioned by the Project.
MP41 Negoa	MP41 would not be directly impacted by the Project as it is outside the Mount Pleasant Operation Mining Lease.
	Potential indirect adverse heritage impacts would be mitigated or avoided by observing the recommendations in Part 6.17 above.
MP42 Fibbins	MP42 would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.18 above.
MP43 St Andrew's Anglican Church	No adverse heritage impacts occasioned by the Project.
MP44 Scarred Tree	No adverse heritage impacts occasioned by the Project.
MP45(a-b) Casey: Clenmore and Edgeway	MP45(a-b) would be physically impacted by the Project.
	Identified impacts would be appropriately mitigated by observing the management recommendations presented in Part 6.21 above.

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¹⁰ As noted in Part 5.10 above, there are unsupported anecdotal data that there may be child burials at the site of MP27, which warrants a cautious approach to potential adverse impacts to the archaeological resource.



Heritage place / item	Potential impact
MP46 Kayuga Recreation Ground	MP46 would not be directly impacted by the Project as it is located outside the Mount Pleasant Operation Mining Lease.
	Potential indirect adverse heritage impacts would be mitigated or avoided by observing the recommendations in Part 6.22 above.
MP49(a-c) Weidmann's	No adverse heritage impacts occasioned by the Project.
MP50 Waitomo House	MP50 would not be directly impacted by the Project as it is located outside the Mount Pleasant Operation Mining Lease.
	Potential indirect adverse heritage impacts would be mitigated or avoided by observing the recommendations in Part 6.24 above.
MP51 Kayuga Bridge	No adverse heritage impacts occasioned by the Project. 11
MP52 Overdene (Overton)	MP52 would not be directly impacted by the Project as it is located outside the Mount Pleasant Operation Mining Lease.
	Potential indirect adverse heritage impacts would be avoided by observing the recommendations in Part 6.26 above.
MP53 Kayuga Cemetery	MP53 would not be directly impacted by the Project as it is outside the Mount Pleasant Operation Mining Lease.
	Potential indirect adverse heritage impacts occasioned by the Project would be avoided by observing the recommendations in Part 6.27 above.
MP54 Portion 71	No adverse heritage impacts occasioned by the Project.
MP55 Portion 26	No adverse heritage impacts occasioned by the Project.
Muswellbrook-Jerrys Plains Landscape Conservation Area	The Project would result in no significant direct or indirect adverse heritage impacts to the MJP LCA.
Cumulative impacts	Low.
	Potential indirect adverse heritage impacts would be mitigated by observing the recommendations in Part 6.31 above.

Provided MACH observes an ongoing commitment (through previous development consent) to ensure that all mine-related vehicles do not use or access Kayuga Bridge (MP51).



Table 7, below, presents the questions in relation to heritage places that would be physically impacted by the Project and on which the Project would have an adverse heritage impact, taken from the document entitled: *Statements of Heritage Impact* (NSW Heritage Council 2002). It assumes that the above recommendations would be implemented.

Table 7. Responses to Statements of Heritage Impact Questions for the Project.

Question Reply

Have all options for retention and adaptive re-use been explored?

In all cases, the nature of open cut mining does not allow the development to be located elsewhere due to operational and engineering requirements (i.e. the open cut must be over the coal resource). The retention and adaptive reuse of the following places is not a viable option.

Nevertheless, each site is addressed separately below against this question.

MP20 Kayuga Coal Mine

Yes. However, MP20 is an archaeological site and its research potential (the main aspect of its significance) would be realised through excavation.

Mitigation of impacts on MP20 through archaeological investigation and documentation prior to impact is an appropriate strategy.

MP21 Kayuga School

Yes. However, MP21 is an archaeological site and its research potential (the main aspect of its significance) would be realised through excavation.

Mitigation of impacts on MP21 through archaeological investigation and documentation prior to impact is an appropriate strategy.

MP22 Smith's Clear Farm

Yes. It has been abandoned for many years and its extant structures are in poor condition due to natural wear and tear. Two options are considered:

- Retain the structures at MP22 in situ, making them safe and weather-proof. However, the extant structures are in poor condition due to natural wear and tear. Their conservation and re-occupation are not viable.
- Demolition of the structures at MP22. This would constitute a minor adverse heritage impact. Should demolition be proposed and approved, a photographic archival record would represent the best method of conserving the site's significance.

Mitigation of impacts on MP22 through archival recording prior to demolition is an appropriate strategy to ensure that the site's significance is conserved.



Question Reply

MP23 Devine's

Yes. However, MP23 has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act. Notwithstanding unsupported anecdotal data that there may be child burials at this site there is low potential for such burials. Nevertheless, a cautious approach is recommended in relation to the potential burials.

If such burials were to exist, their disinterment and reinterment elsewhere would be appropriate (recalling that no members of the family have expressed knowledge of or interest in them).

Mitigation of impacts on MP23 through archaeological investigation and documentation prior to impact is an appropriate strategy.

MP27 Thorndale

Yes. It has been abandoned for many years and the extant structures are in poor condition due to natural wear and tear. The shearing shed was damaged in a storm in 2019 and demolished. Two options are therefore considered:

- Retain and conserve the house in situ, making it safe and weatherproof. However, the extant structure is in poor condition. Its conservation and re-occupation are not viable.
- Demolition of the extant structures at MP27. However, should demolition occur, a photographic archival record of the site would represent the best method of conserving the site's significance.

Mitigation of impacts on MP27 through archival recording prior to demolition is an appropriate strategy to ensure that the site's significance is conserved.

MP27 has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act and (notwithstanding unsupported anecdotal data that there may be child burials at this site) low potential for burials. If they were to exist, their disinterment and reinterment elsewhere would be appropriate (recalling that no members of the family have expressed knowledge of or interest in them).

MP29 Lynch's

Yes. It has been abandoned for many years and its extant structures are in poor condition due to natural wear and tear. Three options are considered:

 Retain the structures at MP29 in situ, making them safe and weatherproof. However, the extant structures are in poor condition due to natural wear and tear. Conservation and re-occupation are not viable.



Question	Reply
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- Return the house at MP29 to a habitable condition. This would be impossible without the wholesale removal and replacement of most of its original fabric.
- Demolition of the structures at MP29. However, should demolition occur, a photographic archival record of the site would represent the best method of conserving the site's significance.

Mitigation of impacts on MP29 through archival recording prior to demolition is an appropriate strategy to ensure that the site's significance is conserved.

MP42 Fibbins

Yes. It has been abandoned and is dilapidated due to natural wear and tear. Two options are considered:

- Retain the structures at MP42 in situ, making them safe and weatherproof. However, the extant structures are in poor condition due to natural wear and tear. Conservation and re-occupation are not viable.
- Demolition of the structures at MP42. However, should demolition occur, a photographic archival record of the site would represent the best method of conserving the site's significance.

Mitigation of impacts on MP42 through archival recording prior to demolition is an appropriate strategy to ensure that the site's significance is conserved.

MP45(a-b) Casey: Clenmore and Edgeway

Yes. Both sites have been abandoned for many years and the extant structures are in poor condition due to natural wear and tear, and in the case of MP45(b), collapse. Three options are considered:

- Retain the structures at MP45(a) in situ, making them safe and weatherproof. Retain the collapsed remains of MP45(b) as a picturesque ruin in the landscape. However, the extant structures at MP45(a) and MP45(b) are both in poor condition due to natural wear and tear (and in the case of MP45[b], collapse). Their conservation and re-occupation are not viable.
- Retain the house at MP45(a) in a habitable condition. This would be impossible without the wholesale removal and replacement of most of its original fabric. MP45(b) has collapsed and returning it a habitable condition would also be impossible without the wholesale reconstruction of the former structure.
- Demolition of the structures at MP45(a) and what remains of the collapsed structure at MP45(b). Should demolition occur, a photographic archival record of the sites would represent the best method of conserving their significance.



Question	Reply
	Mitigation of impacts on MP45(a-b) through archival recording prior to demolition is an appropriate strategy to ensure that the site's significance is conserved.
Can all of the significant elements of the heritage item be kept and any new	No. The nature of open cut mining does not allow the development to be located elsewhere due to operational and engineering requirements (i.e. the open cut must be over the coal resource).
development be located elsewhere on the site?	Sites MP20, MP21, MP22, MP23, MP27, MP29, MP42 and MP45(a-b) are all located within the boundaries of what would be an operational mine site and would unavoidably be physically impacted.
Is demolition essential at this time or can it be postponed in case future circumstances make its retention and conservation more feasible?	Yes. Given the location of sites, MP20, MP21, MP22, MP23, MP27, MP29, MP42 and MP45(a-b) is within the Mount Pleasant Operation Mining Lease, ground disturbance works and/or demolition would be a consequence of Project approval.
Has the advice of a heritage consultant been sought? Have the consultant's recommendations been implemented?	Yes. This HHA and SOHI provides the recommendations and advice of a heritage consultant. This HHA and SOHI has identified the heritage places, assessed their significance, identified the impacts and proposed management recommendations. Please refer to Parts 4, 5 and 6 of this HHA and SOHI, respectively.



Table 8, below, includes those heritage places in the general vicinity of the Project, addressing questions contained in the NSW guideline document entitled: *Statements of Heritage Impact* (NSW Heritage Council 2002). None of these places would be indirectly impacted by the Project. They are: Rosebrook (MP38), Rosebrook Quarry (MP39), Negoa (MP41), Kayuga Recreation Ground (MP46), Waitomo (MP50), Kayuga Bridge (MP51), Overdene (MP52), and Kayuga Cemetery (MP53).

Table 8. Responses to *Statements of Heritage Impact Questions* for places in the vicinity of the Mount Pleasant Operation

Heritage place	Summary of management recommendations	
How is the impact of the new development on the heritage significance of the item or area to be minimised?	Potential indirect impacts (e.g. through vibration and air quality) would be monitored on an ongoing basis. CMPs have been recommended for MP38 Rosebrook and MP41 Negoa. Traffic movements over MP51 Kayuga Bridge would be strictly controlled. Homesteads would be retained in their existing curtilages.	
Why is the new development required to be adjacent to the heritage item?	Engineering and resource extraction requirements.	
How does the curtilage allowed around the heritage item contribute to the retention of its heritage significance?	The homesteads would be retained in situ within the existing appropriate curtilages.	
How does the new development affect views to, and from, the heritage item? What has been done to minimise negative effects?	Views to and from the heritage places would not be adversely impacted. Insofar as the Project would generate new features in the landscape, these would be subject to revegetation.	
Is the development sited on any known or potentially significant archaeological deposits?	There would be no ground disturbance at places in the vicinity of the Project, only within the Project area (see Table 7 above).	
Is the new development sympathetic to the heritage item? In what way (e.g. form, siting, proportions, design)?	The Project would result in few visible features relevant to the values of the identified heritage places.	
Will the additions visually dominate the heritage item? How has this been minimised?	The Project would result in new low features in the landscape. In the limited locations in which they may be discernible from the identified heritage places, they would not be dominant.	
Will the public, and users of the item, still be able to view and appreciate its significance?	Yes.	



7.2 Recommendations

This section reproduces the management recommendations for the places assessed in this HHA and SOHI having regard to assessed heritage significance and impacts (see Part 5 and Part 6 above).

Table 9. A summary of the management recommendations in relation to the places addressed in this HHA and SOHI

Heritage place / item	Summary of management recommendations
MP01 Broomfield	The preferred management response is to retain the pre-1965 structures at MP01 in situ, making the structures safe and weather-proof.
	It is desirable that the pre-1965 structures be restored and used where practicable as a residence with ancillary farm buildings. However, there is low demand for this at present. It would be appropriate for them to remain unoccupied provided the structures are made safe and weatherproof.
	Notwithstanding the above conclusion, it is appropriate for the structures at MP01 to be demolished provided those structures (those dating to pre-1965) are archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: <i>How to Prepare Archival Records of Heritage Items</i> (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.
	Should unanticipated ground disturbance become necessary in the vicinity of MP01, such works could proceed without the need for further inputs from an archaeologist.
MP06 Coady's	It is appropriate for the Project to proceed at the site of MP06, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.
MP13 Humphries	It is appropriate for the Project to proceed at the site of MP13, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.
MP20 Kayuga Coal Mine	It is appropriate for the remains of MP20 to be disturbed or destroyed, provided the site is first investigated by a qualified archaeologist, provided it is demonstrated to be safe to do so. The focus of those archaeological investigations would be the external areas of the former mine (i.e. the areas in the vicinity of the openings/entrances to the mine shafts), not the deep underground mine shafts and tunnels (for health and safety reasons).
	It would be appropriate for the above archaeological investigations to be undertaken using a combination of machine excavation and manual excavation.



Heritage place / item	Summary of management recommendations	
	The investigations should be undertaken observing standard archaeological recording methodologies, including the use of appropriate recording forms, measured drawings, survey, and photography.	
	For those areas identified as unsafe to undertake the above archaeological investigations, it is appropriate for works to proceed at the site of MP20, where those works cause ground disturbance, without the need for further inputs from an archaeologist.	
	Within 12 months of the conclusion of the investigations, the archaeologist should produce a report that presents the data that have been generated, including analysis of any artefacts.	
	Additionally, the report should address (at a minimum) the following research questions: What is the location of the mine shafts/entrances at the mine? How were they accessed and what evidence is there for how coal was removed from the mines and transported away for processing? How were the shafts/entrances constructed? Is there any evidence of the tools and equipment used by the miners who worked within the mines? Is there any evidence of on-site processing?	
MP21 Kayuga School	It is appropriate for the remains of MP21 to be disturbed or destroyed, after they have been investigated by a qualified archaeologist.	
	It would be appropriate for the above archaeological excavations to be undertaken using a combination of machine excavation and manual excavation. The investigations should be undertaken observing standard archaeological recording methodologies, including the use of appropriate recording forms, measured drawings, survey, and photography.	
	Within 12 months of the conclusion of the investigations, the archaeologist should produce a report that presents the data that have been generated, including analysis of any artefacts.	
	Additionally, the report should address (at a minimum) the following research questions: What does the archaeology tell us about the layout and extent of the school and its grounds? What evidence is there for the domestic quarters? How was the school constructed, and using what materials? What evidence is there for the kinds of activities that were undertaken at the site? Is there evidence of 'making do' at what was an under-resourced rural school?	
MP22 Smith's Clear Farm	It is appropriate for the structures at MP22 to be demolished provided the structures are archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: <i>How to Prepare Archival Records of Heritage Items</i> (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.	



Heritage place / item	Summary of management recommendations	
	Once the photographic archival record is complete, the structures can be demolished without those works being monitored by a heritage professional.	
	It is appropriate for works to proceed at the site of MP22, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP23 Devine's	rior to the site being disturbed it should be investigated by a qualified rchaeologist with experience in the identification of rural burials outside f dedicated/consecrated cemeteries.	
	These archaeological investigations should focus on the garden areas around the homestead where anecdotal data suggest that there may be child burials. It would be appropriate for these archaeological investigations to be undertaken by a machine excavator, with a flat-edged bucket, monitored by the archaeologist. Grass cover and soil deposits should be removed in shallow scrapes ('spits' of c. 100 mm) until natural deposits are exposed.	
	If these archaeological investigations do not indicate the possible location of a grave or graves, it is generally appropriate for works to proceed at the site of MP23, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
	However, if these archaeological investigations do indicate the possible location of a grave or graves, excavation should cease immediately. They should proceed again only after observing the requirements of the NSW Department of Health in relation to the <i>Public Health Act 1991</i> and the <i>Coroners Act 2009</i> . The archaeologist should also observe the principles and processes expressed in the NSW government guideline document entitled <i>Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the</i> Heritage Act.	
MP25 Gall's Farm	It is appropriate for the Project to proceed at the site of MP25, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP26 Page's Farm	It is appropriate for the Project to proceed at the site of MP26, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP27 Thorndale	With respect to the house at MP27: it is appropriate for the structure to be demolished provided it is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: <i>How to Prepare Archival Records of Heritage Items</i> (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, augmented with illustrative drawings, rather than full measured drawings.	



Heritage place / item

Summary of management recommendations

With respect to the potential archaeological resource, this HHA and SOHI has concluded that the site has low potential to contain archaeological material that would satisfy the definition of 'relics' under the Heritage Act. Therefore, it is generally appropriate for works to proceed at MP27, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

However, there are unsupported anecdotal data that there may be child burials at this site and this warrants a cautious approach. Therefore, the following actions are recommended:

Prior to the site being disturbed it should be investigated by a qualified archaeologist with experience in the identification of rural burials outside of dedicated/consecrated cemeteries.

These archaeological investigations should focus on the garden areas around the homestead where anecdotal data suggest that there may be child burials. It would be appropriate for these archaeological investigations to be undertaken by a machine excavator, with a flat-edged bucket, monitored by the archaeologist. Grass cover and soil deposits should be removed in shallow scrapes ('spits' of c. 100 mm) until natural deposits are exposed.

If these archaeological investigations do not indicate the possible location of a grave or graves, it is generally appropriate for works to proceed at the site of MP27, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.

However, if these archaeological investigations do indicate the possible location of a grave or graves, excavation should cease immediately. They should proceed again only after observing the requirements of the NSW Department of Health in relation to the *Public Health Act 1991* and the *Coroners Act 2009*. The archaeologist should also observe the principles and processes expressed in the NSW government guideline document entitled *Skeletal Remains: Guidelines for the Management of Human Skeletal Remains under the Heritage Act 1977*.

MP29 Lynch's

It is appropriate for the structure at MP29 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.

Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage professional.



Heritage place / item	Summary of management recommendations	
	It is appropriate for works to proceed at the site of MP29, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP31 Cox's Portion 20	It is appropriate for the Project to proceed at the site of MP31, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP32 Cox's Orchard	It is appropriate for the Project to proceed, where those works would result in the demolition of the house at MP32, without the need for further inputs from a heritage professional.	
	It is appropriate for the Project to proceed, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP36 Hill's	It is appropriate for the Project to proceed, where those works would result in the demolition of the ruinous structures at MP36, without the need for further inputs from a heritage professional.	
	It is appropriate for the Project to proceed, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP38 Rosebrook	The homestead and its landscaped gardens should be retained in situ.	
	The ongoing conservation of the homestead and the landscaped gardens at MP38 Rosebrook (including any maintenance works) is to be guided by the preparation of a CMP for the site, applying the principles in the guideline documents entitled: Conservation Management Plan (CMP) Assessment Checklist (NSW Heritage Council 2003); Guidelines on Conservation Management Plans and Other Management Documents (NSW Heritage Branch, undated); and The Conservation Plan (Kerr 2000).	
	There should be no significant ground disturbance within the grounds of the homestead without further archaeological analysis being undertaken (and, possibly, the preparation of an application for an excavation permit, made pursuant to Section 139 of the Heritage Act), with the exception of general garden maintenance, excavation within existing garden beds, and ground disturbance within areas previously disturbed by excavation (e.g. for driveways, sewage pipes and utilities, tree planting).	
	Where practicable, it would be appropriate for the homestead to be used during the construction and operation of the proposed mine works, as long as that use involves minimal physical intervention in original/early fabric.	
	Following the termination of the lease agreement in 2031, the homestead and its landscaped gardens should be retained in situ and continue to be conserved in accordance with the provisions of the CMP. Alternatively, it would be appropriate at this time to maintain 'Rosebrook' in an	
	unoccupied state provided the structure is subject to a regular maintenance regime and maintained in a safe and weather-proof state.	



Heritage place / item	Summary of management recommendations	
	The existing outbuildings at MP38 are of little or no heritage significance, being of a relatively recent date and having replaced the now-demolished mid-nineteenth century outbuildings. These structures may be retained, but ideally would be removed when resources allow.	
	All blasting activities in the vicinity of MP38 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).	
MP39 Rosebrook Quarry	As noted in Part 5.16 above, MP39 is located outside of the Mount Pleasant Operation Mining Lease and the Project disturbance footprint. It would not be physically impacted by the proposed mine works.	
	Therefore, no specific management recommendations are recommended by this HHA and SOHI for MP39.	
MP41 Negoa	Conserve and retain 'Negoa' in situ. If it is not already the case, make the structures safe and weather-proof. Maintain them in that condition.	
	Any artefacts located within the grounds of the Negoa complex would likely constitute 'relics' within the meaning of the Heritage Act. Carry out no ground disturbance in these locations without first consulting an archaeologist. The CMP prepared for MP41 Negoa must include a consideration of the potential archaeological resource.	
	Update and finalise the draft CMP prepared by Extent Heritage (2018) to reflect the ongoing maintenance works that have been undertaken since the completion of that draft. Conserve MP41 Negoa in accordance with the finalised CMP. The finalised CMP should be prepared applying the principles contained in the guideline documents entitled: Conservation Management Plan (CMP) Assessment Checklist (NSW Heritage Council 2003); Guidelines on Conservation Management Plans and Other Management Documents (NSW Heritage Branch undated); and The Conservation Plan (Kerr 2000).	
	Upon updating and finalising the CMP, continue to manage the site in accordance with its provisions.	
	The ongoing conservation of Negoa requires an appropriate and sympathetic use that involves minimal physical intervention in original/early fabric and no alteration of the original/early floor plan.	
	The ongoing use of the 1845 brick residence and the sandstone structure is preferable to leaving the buildings vacant and unused. It would therefore be appropriate for the homestead to be used during the construction and operation of the proposed mine works. Appropriate uses might include periodic uses i.e. temporary office accommodation or as a venue for meetings.	
	All blasting activities in the vicinity of MP41 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).	



Heritage place / item	Summary of management recommendations		
MP42 Fibbins	It is appropriate for the structure at MP42 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Us Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be me principally through photography, with illustrative drawings, rather than measured drawings. Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage		
	professional.		
	It is appropriate for works to proceed at the site of MP42, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.		
MP43 St Andrew's Anglican Church	It is appropriate for works to proceed at the site of MP43, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.		
MP44 Scarred Tree	It would be appropriate for this site to be disturbed or destroyed withouthe further involvement of a heritage professional. Its significance does not warrant its retention in situ.		
MP45(a-b) Casey: Clenmore and Edgeway	It is appropriate for the structure at MP45(a), and what is left at 45(b), to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: <i>How to Prepare Archival Records of Heritage Items</i> (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.		
	Once the photographic archival record is complete, the structure can be demolished without those works being monitored by a heritage professional.		
	It is appropriate for works to proceed at the site of MP45(a) and (b), where those works might cause ground disturbance, without the need for further inputs from an archaeologist.		
MP46 Kayuga Recreation Ground	All blasting activities in the vicinity of MP46 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s). Seek to retain MP46 in situ, noting that the responsibility for the conservation and management of the Kayuga Recreation Ground rests with the relevant owner, Muswellbrook Shire Council.		



Heritage place / item	Summary of management recommendations		
	However, if that is not possible:		
	It is appropriate for the structure at MP46 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: How to Prepare Archival Records of Heritage Items (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and Photographic Recording of Heritage Items Using Film or Digital Capture (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.		
	 It is appropriate for works to proceed at the site of MP46, where those works might cause ground disturbance, without the need for further inputs from an archaeologist. 		
MP49(a-c) Weidmann's	It is appropriate for the Project to proceed at the site of MP49, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.		
	The engines visible at the mill site should be offered to local historical groups (e.g. the Denman Heritage Village). If they decline to take them, it would be appropriate to dispose of them.		
MP50 Waitomo House	The house should be retained in situ and conserved within an appropriate setting. It would be appropriate to maintain the house in an unoccupied state provided the structure is subject to a regular maintenance regime, and maintained in a safe and weather-proof state.		
	A heritage professional should be consulted in relation to any proposed alterations and additions to the house.		
	All blasting activities in the vicinity of MP50 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).		
	If in situ retention is not possible it is appropriate for the structure at MP50 to be demolished provided the structure is archivally recorded through photographs by a heritage professional beforehand, observing the requirements contained in the guideline documents entitled: <i>How to Prepare Archival Records of Heritage Items</i> (NSW Heritage Office and Department of Urban Affairs and Planning 1998) and <i>Photographic Recording of Heritage Items Using Film or Digital Capture</i> (NSW Heritage Office and Department of Planning 2006). It would be appropriate for the archival record to be made principally through photography, with illustrative drawings, rather than full measured drawings.		
	It is appropriate for works to proceed at the site of MP50, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.		



Heritage place / item	Summary of management recommendations	
MP51 Kayuga Bridge	The management of the Kayuga Bridge is to remain the responsibility of NSW Roads and Maritime Services (i.e. not MACH).	
	MACH should continue to observe its existing commitment, through existing conditions of consent, relating to the use of the Kayuga Bridge. Consistent with existing commitments: all mine-related access and traffic would be via the central portion of Wybong Road, travelling south around Bengalla Mine to access the Mount Pleasant Operation; no through access is permitted from the eastern section (via Kayuga Road); all vehicles are to avoid accessing Muswellbrook via Kayuga Bridge.	
	All blasting activities in the vicinity of MP51 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).	
	No further management recommendations are required.	
MP52 Overdene (Overton)	Overdene Homestead (MP52) should be maintained and conserved in situ, consistent with the recommendations contained in the existing CMP prepared by AECOM (2015).	
MP53 Kayuga Cemetery	Retain and conserve in situ. However, the conservation and management of Kayuga Cemetery remains the responsibility of Muswellbrook Shire Council (i.e. not MACH).	
	All blasting activities in the vicinity of MP53 should be designed and managed in accordance with the BMP (MACH 2019) to meet the prescribed blasting criteria (i.e. 10 mm/s).	
MP54 Portion 71	It is appropriate for the Project to proceed at the site of MP54, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
MP55 Portion 26	It is appropriate for the Project to proceed at the site of MP55, where those works might cause ground disturbance, without the need for further inputs from an archaeologist.	
Muswellbrook-Jerrys Plain Landscape Conservation Area	The MJP LCA would not be directly impacted by the Project and there would be negligible impacts on its broader setting. No specific action would be required.	
The Cultural Landscape	Within one (1) year of obtaining development consent for the Project, an Interpretation Plan for the Mount Pleasant area should be prepared.	
	The Interpretation Plan should collate and synthesise the data generated by previous studies, especially the VAHS 2014 report, the photographic archival records recommended in this HHA and SOHI, and the oral history data generated by VAHS 2004.	



Heritage place / item Summary of management recommendations The Interpretation Plan would devise the most effective way of 'telling the story' of the Mount Pleasant area prior to the Project, which would include a consideration of: (a) relevant themes and stories, (b) the relevant 'audience' for the interpretation measures, including the general public, and (c) the most effective media for communicating those stories and themes. Within one year (1) of the completion of the Interpretation Plan, the interpretation measures recommended by it should be implemented.



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A.1. Muswellbrook-Jerrys Plains National Trust Map and Assessment	

	LANDSCAPE CONSERVATION AREA	
DENMAN	MUSWELLBROOK-JERRYS PLAINS	HUNTER
Location	Name or identification of listing	Region
Proposer A.M. WARD	Crown land Freehold	Map reference
R.MCDOUGALL	X X	Singleton 1 : 250 000
Date of Proposal 16.8.84	Local Govt Area/s	1 : 250 000
Suggested Listing CLASSIFIED Category	MUSWELLBROOK SHIRE	Owner/s
Committee LANDS CAPE (Trust use) CONSERVATION		PRIVATE/VARIOUS
Council (Trust use) 21.1.85		

Reasons for Listing

Aesthetic: The lush cultivated alluvial flats of the central Hunter and lower Goulburn

Rivers present a magnificent view, with the wide valley floor of majestic scale bounded by low hills to the east and west and the rugged escarpment

of Wollemi National Park to the south (Appendix A).

Social:

This area contains many of the high quality properties and large pastoral estates which contribute to the great rural wealth of the Hunter Valley

(Appendix B).

Description

The area begins along the Hunter River a short distance below Muswellbrook and comprises the long sweep of valley floor extending south-westerly some 25 km to the junction of the Goulburn River at Denman. The section of the Goulburn River Valley below Sandy Hollow is included. The area then extends some 25 km south-easterly down the Hunter Valley to Jerrys Plains Ridge. In this lower section, the valley widens and embraces several major tributaries. The escarpment of Wollemi National Park comprises the southern boundary of the area.

Geology and Landform - (Appendix C)

Recommendations

The high scenic and cultural qualities of the listed area should be protected through appropriate Environmental Protection zonings under a Local Environmental Plan.

Open cut mining of the alluvial river flats should not be permitted. Should it be necessary for open-cut mining of the non-alluvial lands, the aesthetic and social values of the Classified area should be recognised in the mining operation and the rehabilitation programme.

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APPENDIX A

Scenic Values

The upper section of the area comprises a flat alluvial flood plain contained on each side by low rolling hills. The land has been cleared for intensive farming - crops, dairy farming and vineyards - on the floodplain and grazing on the foothills.

The area has an air of rural prosperity, many large holdings with magnificent historic homesteads contributing to this atmosphere.

The lower Goulburn River Valley also comprises flat valley floor, much narrower than the Hunter, and contained between the foothills. Mount Dangar stands dominant over the western end of the area, marking the eastern end of the Goulburn River National Park.

Below the Goulburn River junction, the Hunter flows south-easterly. The valley floor widens and the listed area embraces several major tributaries. The valleys of the creeks which enter from the north are wide and mostly cleared; those entering from the south are narrower and more rugged, with rough sandstone escarpments.

Throughout the whole area there are extensive views of the river flats, the enclosing hills and distant ranges. The colourful bluffs of Wollemi National Park dominate to the south, contrasting with the rolling hills which form the other boundaries. Overall the area provides continuous vistas of pleasant landscapes, with no intrusive elements.

APPENDIX B

Historical and Social Values

John Howe, Chief Constable of Windsor, was the first white man to see the Upper Hunter, when he led a small party to the crest of the Hunter Range and looked down over the Hunter Valley at what is now Jerrys Plains, but which he called Coomery Roy, in November, 1819. He travelled down Doyles Creek to reach the Hunter and was greatly impressed with the quality of the country. He remarked, "It is the finest sheep land I have seen since I left England and will grow as good a swath"

Five years later Henry Dangar completed the discovery of the Upper Hunter. In August, 1824, he proceeded westward from Foy Brook, crossed the watershed between Saltwater Creek and Muscle Brook, and entered the valley of the Upper Hunter - the first white man to do so.

In October of the same year he left Jerrys Plains, (then the limit of settlement) and proceeded westward up the unexplored section of the Hunter River beyond the limit discovered by John Howe five years earlier. Reaching the junction of the Goulburn and Hunter Rivers, he decided to follow up the latter, and eventually came to the area he had found earlier near Muscle Brook.

Dangar named the alluvial flats of the Hunter upstream from the junction of the Goulburn "Twinkenham Meadows". Surgeon Peter Cunningham (brother of the explorer, Allen) described these meadows thus: "One of the finest natural prospects that can be witnessed The flat alluvial lands spread out before you are matted with luxuriant herbage. Branching evergreens are scattered singly or in clumps, with the river winding through the midst; its steep and grassy banks bordered with a deep green fringe of dark-foliaged swamp oaks. The gently rising hills beyond, thinly clothed with wide-spreading forest trees, extend in diversified magnificence as far as the eye can reach."

Following Dangar's expedition, there was a scramble for land in the area and all river frontages were soon taken. The beginnings of large pastoral estates were strung along the river upstream from Merton, the original village of the town of Denman.

APPENDIX B (CONTINUED)

Many of the grants were made to Civil Servants and retired Navy and Army Officers. Two people who came to the colony on the same ship in 1825 applied for grants adjoining each other on the Upper Hunter. Surgeon Peter Cunningham located his grant at the confluence of the Hunter and Goulburn Rivers, and named his farm "Dalswinton" after his family's estate in Dumfriesshire. William Ogilvie, Lieut. R.N., selected the land immediately upstream on the Junter and named his farm "Merton" after a village in Surrey. The village of Merton developed in this area and soon became the regional centre of administration, and the mother village of the town of Denman.

"Piercefield" was originally a grant of 2,030 acres, in 1824, to William Carter, Master in Chancery in the Colony. The area of the property was increased to 9,000 acres in a few years, but Carter became disasterously involved in land and stock deals and mortgages, and his estate passed into the hands of James Bettington.

Captain John Pike of 73rd Regiment secured a grant of 2,000 acres and purchased a further 4,000 acres, to establish "Pickering" in 1825. He was the first man to take a dray to that part of the country, and his track, which others followed, became known as Captain Pike's Road. His wife Justine and daughter Mary Elizabeth were the first white women to go to the Upper Hunter.

Two of the most prominent properties in the area were those of the Hon. Francis Forbes, Chief Justice, and his brother, George. The former named his estate "Skellator" after a Forbes Estate near Aberdeen, Scotland, and the latter, "Edinglassie" after the ancestral home in Aberdeenshire.

Most of the large estates established in this era played a leading part in the development of the substantial rural wealth of the Hunter Valley.

APPENDIX C

Geology and Land Form

The area includes a large part of the floodplain surrounding the Goulburn and Hunter Rivers and as such it consists mainly of sandy alluvial terraces (Quarternary age) within which the River follows a meandering course. A wide range of fertile soils occur and are extensively cultivated. The system of alluvial terraces if well developed with local relief up to 10 m.

On either side of the floodplain, rocks of the Singleton Coal Measures (Permian age) occur. These include sandstone, shale, conglomerate and coal seams and give rise to the gently undulating land surface which adjoins the flat alluvial plain.

