



Mamre Road Upgrade Stage 1

Statement of Heritage Impact

Transport for NSW

Reference: 509458

Revision: 3

2021-08-10

Mamre House, 1933, Photographer E.G Shaw
(State Library of NSW FL3198493)

aurecon

*Bringing ideas
to life*

Document control record

Document prepared by:

Aurecon Australasia Pty Ltd

ABN 54 005 139 873

Level 5, 116 Military Road

Neutral Bay NSW 2089

PO Box 538

Neutral Bay NSW 2089

Australia

T +61 2 9465 5599

F +61 2 9465 5598



E sydney@aurecongroup.com

W aurecongroup.com

A person using Aurecon documents or data accepts the risk of:

- a) Using the documents or data in electronic form without requesting and checking them for accuracy against the original hard copy version.
- b) Using the documents or data for any purpose not agreed to in writing by Aurecon.

Document control							aurecon
Report title		Statement of Heritage Impact					
Document code			Project number		509458		
File path		C:\Users\trina.spadaro\Documents\Syd - Mamre Road Stage 1\MRUS1-AURC-NWW-EN-RPT-000005_D.docx					
Client		Transport for NSW					
Client contact			Client reference				
Rev	Date	Revision details/status	Author	Reviewer	Verifier (if required)	Approver	
0	2020-12-07	Initial Draft	Jess Mauger	Emma McGirr			
1	2021-02-08	Revised draft	Jess Mauger	Emma McGirr			
2	2021-03-30	Final draft	Jess Mauger	Emma McGirr			
3	2021-05-12	Final	Jess Mauger	Emma McGirr			
4	2021-08-10	Updated Final	Jess Mauger	Emma McGirr			
Current revision		3					

Approval			
Author signature		Approver signature	
			
Name	Jess Mauger	Name	Emma McGirr
Title	Consultant	Title	Senior Consultant, Heritage

Executive Summary

Aurecon has been commissioned by Transport for NSW (TfNSW) to prepare a Statement of Heritage Impact (SOHI) for proposed road widening upgrade works at Mamre Road (the Proposal). The SOHI informs the Review of Environmental Factors (REF) being prepared for the Proposal. It assesses the likely impacts of the project on historical heritage and provides a targeted historical archaeological assessment. The Proposal area is along the northern section of Mamre Road between the suburbs of Erskine Park and St Clair, in the Penrith City Local Government Area (LGA).

The Proposal would upgrade about 3.8 kilometres of Mamre Road between the M4 Motorway, St Clair and Erskine Park Road, Erskine Park to a four-lane divided road. The Proposal also includes changes and upgrades to existing intersections and new facilities for public transport, walking and cycling along Mamre Road. A key aim of the proposal is to improve road safety and movement through increasing the capacity of Mamre Road, which would support future economic and residential growth in the surrounding area. The Proposal forms Stage 1 of the larger Mamre Road upgrade project, which is proposed to be delivered by TfNSW in two stages.

This SOHI assesses the impacts of the Proposal on the heritage values in the proposal area. It considers direct and indirect (visual and setting) impacts on the State Heritage Register (SHR) listed Mamre House and on four other locally listed heritage items that are located within the proposal area. The SOHI concludes with recommendations and heritage mitigation measures to inform the project.

Within the proposal area, the following heritage items have been identified:

- One State (SHR) listed item – Mamre House #00264

Four locally listed items:

- Marsden Memorial Cairn (Penrith LEP #229) – located within the Mamre House curtilage on the northern side of the entrance gates
- Blaxland Memorial Cairn (Penrith LEP #230)
- Luddenham Road Alignment (Penrith LEP #843)
- Leeholme Horse Rotunda (Penrith LEP #232)

No items listed on the National Heritage List (NHL) or Commonwealth Heritage List (CHL) would be impacted by the Proposal.

Summary of Findings

The Summary of Heritage Impacts table below summarises the findings of the heritage impact assessment, with a summary impact ranking given for each item that would be impacted by the Proposal.

Summary of Heritage Impacts

Heritage Item	Proposal	Impact Ranking
Mamre House SHR	Road widening works would occur in close proximity to the eastern entrance to the property off Mamre Road, including upgrading of road-side utilities, median strips, signage, pedestrian footpaths and embankments. The existing driveway access to Mamre House would be closed, with access to the site to be provided via the Banks Drive intersection. Other works include utility relocations and connection on the property.	<p>Moderate Adverse</p> <p>Widening works would occur directly adjacent to the SHR listed Mamre House but will remain outside the formal listing boundary. Road widening would affect the property's rural setting and visual prominence as a roadside homestead only.</p> <p>Utility relocations and connections would be undertaken within the Mamre SHR curtilage, however the areas affected would be restored once complete.</p> <p>The driveway relocation would change the historic linkage with Mamre Road, altering the layout of the grounds in the northern area of the site to establish a new access. Overall, works would have a moderate adverse impact on the visual setting and presentation of the homestead.</p>
Marsden Memorial Cairn	Road widening works affecting the eastern entrance to the property off Mamre Road would occur in close proximity to the Cairn. The closure of the Mamre House driveway that accesses Mamre Road would adversely affect the setting and visibility of the memorial cairn.	<p>Minor Adverse</p> <p>Widening works would alter the setting and visibility of the Marsden Memorial Cairn from Mamre Road due to its proposed relocation as part of the Mamre House driveway works.</p> <p>Retention and conservation of this heritage element within the new Proposal would be confirmed at Detailed Design stage.</p>
Luddenham Road Alignment	The road widening would intersect with the Luddenham Road Alignment.	<p>Minor adverse</p> <p>The Proposal will impact on a small section of the Luddenham Road Alignment in an area where archaeological potential is low.</p> <p>The broader alignment and overarching form of the historic road would remain intact.</p>
Blaxland Memorial Cairn	This item would not be impacted by the Proposal.	Neutral
Leeholme Horse Stud Rotunda	This item would not be impacted by the Proposal.	Neutral

Visual and Setting Impacts

There would be moderate adverse visual and setting impacts to the SHR listed Mamre House as its rural setting would be altered by the proposed road widening just outside the eastern boundary of the property. Additionally, driveway access to Mamre House from Mamre Road will be removed, with a new driveway access road to be aligned from the north off the new Banks Drive western stub and U-turn facility.

This would represent a change to the property's historic access point from Mamre Road, and is an alteration to the layout of the property's grounds in the northeast corner of the site. A localised landscape scheme is proposed for the new entryway to the Mamre property and forms part of the concept design package. The landscape treatment would mitigate the change to property's former access from Mamre Road and define a new entry for the property. The new entrance would feature a small interpretative 'node' serving the new driveway alignment, alongside the relocated Mamre House gates, signage and sandstone 'Marsden' memorial cairn. The landscape scheme and relocation of these elements around the revised entryway has been informed by heritage advice and consultation with Mamre House stakeholders. Further design development would occur in the detailed design stage of the proposal. Heritage interpretation opportunities would also be considered during detailed design along the shared pathway and noise walls on the eastern side of Mamre Road, opposite the Mamre House property and grounds. This would consider interpretation through stories, imagery, information plaques and wayfinding to speak to the history of the Mamre House property and its connection with the surrounding landscape as well as the local Indigenous people's ongoing connection to Country.

The current setting of the Marsden Memorial Cairn (set within the Mamre House grounds) would be affected by widening works in close proximity to this item, and would result in the relocation of this item within the Mamre House grounds in the abovementioned interpretive node adjacent to the revised entryway. The chosen new location for the Marsden Cairn has been discussed with stakeholders at Mamre House.

Views to and from the property on the eastern side of the homestead may also be affected by the road upgrade, dependant on the supporting infrastructure that may need to be installed along the new corridor (ie road side utilities, signage, public transport infrastructure, vegetation screening and noise walls) as well as from the general increase in road traffic. The detailed design of the proposal would aim to minimise road and traffic signage along the Mamre House property frontage, along the shared path looking towards the heritage property and at heritage interpretation nodes, where possible, to maintain an open viewscape and minimise visual impacts on the heritage setting.

Post-Contact Aboriginal Cultural Values – Mamre House

Mamre House and its grounds represent an important site in the post-contact history of Aboriginal survival and adaptation to the processes of colonisation and dispossession that occurred in Western Sydney as a direct result of European pastoral expansion across the Cumberland Plain. It is not anticipated that the proposal would impact on any tangible or intangible post-contact Aboriginal cultural heritage values associated with Mamre House. Intangible values are embodied in the property, in the historical record and throughout the wider cultural landscape of South Creek. The proposal would give rise to some opportunities to interpret these values and better convey this history of post contact Aboriginal occupation, survival and interaction to the broader community. This matter is further addressed in Section 7.1.1.

Cumulative Impacts

Mamre Road was widened first in the 1950s and then again in the late 1980s. The proposal adds to the cumulative impacts on the traditionally open, rural character of the Orchard Hills/St Clair area, notwithstanding that these areas have been in transition to low-scale suburbs for the past 20 years.

Construction Phase Impacts

There would be minimal direct construction phase impacts to the heritage items within the proposal area, specifically resulting from proposed excavations within the Mamre House grounds, the Luddenham Road Alignment and the relocation of the Marsden Memorial Cairn. Indirect setting impacts to Mamre House will occur due to construction works and changes to the existing driveway access from Mamre Road.

As with most major infrastructure projects involving high impact civil/structural works where construction can continue over an extended period of time, care should be taken to protect any adjacent heritage items from indirect construction phase impacts such as vibration, ground movement, subsidence or other inadvertent construction risks i.e. dust, airborne objects or site and equipment accidents. Visual impacts caused from the construction phase of the proposal could include the increased movement of plant, trucks, general vehicular traffic and personnel surrounding heritage items, particularly Mamre House. There may also be a moderate visual impact caused to Mamre House from the construction involved for the change to the existing access and the relocation of the driveway. This can be mitigated through installation of temporary hording around Mamre House grounds to limit the visual impact from construction activities.

These risks should be carefully assessed and managed, considering the construction noise and vibration specialist studies and the findings of the pre-construction condition/dilapidation surveys examining adjacent heritage items.

Heritage items that may be vulnerable to damage from vibration/construction include all those identified in this SOHI but in particular care should be taken to monitor impacts on the Marsden Memorial Cairn and Mamre House and its curtilage.

Historical archaeological assessment findings

A historical archaeological assessment is provided in Section 6 and the findings of the impact assessment are summarised below.

Historical archaeological assessment findings

Archaeological Zone	Potential Impact	Discussion
Zone 1 Mamre House	Moderate to low	<p>Ground disturbing works within the curtilage of Mamre House have potential to impact on areas of archaeological potential within the State-heritage curtilage of the property. Ground disturbance would occur in an area that has low to moderate potential for archaeological remnants (top paddocks and former driveway in line with house).</p> <p>Proposed works associated with the road widening, new driveway and utility adjustments could potentially impact scattered archaeological remains associated with Mamre House, farming activities and later phases of the homestead's development. Works do not intersect with any known former buildings or structures, which were concentrated around the homestead building 200 metres to the west. An unexpected finds procedure is to be put in place during construction on the site. The Transport for NSW <i>Unexpected Finds protocol: Unexpected Heritage Items</i>: Heritage Procedure 02, November 2015 is to be put in place during construction.</p>
Zone 2 Luddenham Road Alignment	Low	<p>The section of the Luddenham Road Alignment impacted by the project has a low level of potential for archaeological remains or original fabric. Any remains are likely to be highly fragmented and disturbed. Archaeological remnants dating from the early phases of the road's development (road surface, stones etc) would be of potential local significance dependant on their nature and extent. The Transport for NSW <i>Unexpected Finds protocol: Unexpected Heritage Items</i>: Heritage Procedure 02, November 2015 is to be put in place during construction.</p>
Zone 3 Rest of the proposal area	Nil to low	<p>The rest of the proposal area is unlikely to contain significant archaeological remains and the potential for archaeological impacts is nil to low. The Transport for NSW <i>Unexpected Finds protocol: Unexpected Heritage Items</i>: Heritage Procedure 02, November 2015 is to be put in place during construction.</p>

Recommendations

Recommendations, including heritage safeguards, heritage mitigation measures and management of potential impacts are provided below.

- **Recommendation 1** - Develop a Construction Heritage Management Plan for the Proposal, providing specific guidance and confirmation of the management measures implemented to avoid, reduce or minimise impacts to heritage.
- **Recommendation 2** - As part of the Construction Heritage Management Plan, undertake site inductions and conduct heritage awareness training which details the kinds of historical relics, structures and deposits which may be encountered during construction works and the procedure to follow would any relics be uncovered, i.e. when the Transport for NSW Unexpected Finds protocol: Unexpected Heritage Items: Heritage Procedure 02, November 2015 should be enacted.
- **Recommendation 3** - Ensure ongoing consultation with the relevant heritage stakeholders including Heritage NSW, Mamre House's owners, managers and users, the local Aboriginal community, DPIE and Penrith City Council, where relevant.
- **Recommendation 4** - Protect Mamre House, including significant gardens and grounds, throughout the course of the works. Cordon off State heritage area and define as a 'no works' zone to minimise impacts on the site and avoid any inadvertent damage to the property and significant grounds. Work completed within the SHR curtilage of the site would be carried out in accordance with the relevant conservation policies included within the Mamre House CMP (Section 6).
- **Recommendation 5** – Retain and conserve the Marsden Memorial Cairn in an appropriate location within the SHR curtilage of Mamre House adjacent to the new driveway. Minimise through design and detailing any impacts on its setting and visibility from Mamre Road.
- **Recommendation 6** – A landscape solution for the redundant gated entrance and signage to Mamre Homestead off Mamre Road would be informed by specialist heritage advice and consider the significant pastoral setting and the heritage significance of the property beyond, and might include but not be limited to updated signage, an interpretation node for vehicles, and lighting. Heritage interpretation opportunities would also be considered along the shared pathway and noise walls on the eastern side of Mamre Road, opposite the Mamre House property and grounds. This would consider interpretation through stories, imagery, information plaques and wayfinding to speak to the history of the Mamre House property and its connection with the surrounding landscape as well as the local Indigenous people's ongoing connection to Country.
- **Recommendation 7** – The detailed design of the proposal would aim to minimise road and traffic signage along the Mamre House property frontage, along the shared path looking towards the heritage property and at heritage interpretation nodes, where possible, to maintain an open viewscape and minimise visual impacts on the heritage setting.
- **Recommendation 8** – Post-contact and contemporary Aboriginal cultural heritage values would be protected and celebrated through interpretation opportunities on the Mamre House grounds as part of the new driveway landscape treatment, as well as along new pedestrian pathways and portals on the St Clair side of the proposal area, or on noise walls proposed along the length of the proposal area. Identification of a scar tree near the Blaxland Memorial Cairn, as noted in the Aboriginal cultural heritage reporting, may also be another appropriate location to explore interpretation opportunities in consultation with local Aboriginal people. Further reporting and visualisations would be continued in the Detailed Design phase.
- **Recommendation 9** - Archival Recording - Undertake an external photographic archival recording of Mamre House, focusing on driveway changes and realignment as well as changes to the setting of the Memorial Cairn.
- **Recommendation 10** - Interpretation opportunities for heritage interpretation or signage should be explored in the Proposal to further protect and enhance local and state heritage items in the vicinity of Mamre Road.

- **Recommendation 11** - Unexpected Finds Protocol - Works involving ground disturbance should be undertaken with caution within the SHR curtilage of Mamre House, and around the locally listed items within the proposal area, especially the Luddenham Road Alignment. Implement an approved unexpected archaeological finds protocol and ensure workers attend a heritage induction session prior to commencing on the project. If any unexpected historical archaeological is found, work should stop and finds would be reported to the projects nominated heritage advisor immediately. Refer to the Transport for NSW Unexpected Finds protocol: Unexpected Heritage Items: Heritage Procedure 02, November 2015.

Heritage approvals requirements

The following heritage approvals are required for the proposal:

- A Section 60 application to Heritage NSW under *the Heritage Act 1977* is required for works within the curtilage of SHR listed Mamre House
- A Section 140 excavation permit and a Section 139(4) exception notification under *the Heritage Act 1977* may be required for works within the State listed Mamre House grounds, and the locally listed Luddenham Road alignment, where work would take place outside of the SHR curtilage.

Contents

1	Introduction	1
1.1	Proposal overview	1
1.3	Proposal area	2
1.4	Methodology	3
2	Proposal Description	5
2.1	The Proposal	5
3	Existing environment	12
3.1	Proposal area description.....	12
3.2	Site visit	12
4	Statutory Framework	22
4.1	Environmental Protection and Biodiversity Act 1999	22
4.2	NSW Heritage Act 1977	22
4.3	Environmental Planning and Assessment Act 1979	24
4.4	Heritage Significance.....	25
5	History	31
5.1	Pre-Contact	31
5.2	European Settlement of Penrith Area.....	32
5.3	Mamre Homestead	38
6	Targeted Archaeological Assessment	45
6.1	Archaeological resource	45
6.2	Archaeological potential in the proposal area	49
7	Heritage Impact Assessment	53
7.1	Mamre House	53
7.2	Marsden Memorial Cairn	56
7.3	Blaxland Memorial Cairn	56
7.4	Luddenham Road Alignment.....	57
7.5	Leeholme Horse Rotunda	57
7.6	Archaeological impacts.....	58
8	Conclusion and Recommendations	59
8.1	Summary of Findings.....	59
8.2	Recommendations.....	61
9	References	63

Figures

Figure 1-1	Location of the proposal
Figure 1-2	The proposal
Figure 2-1	Key features of the proposal
Figure 3-1	Mamre Road near Banks Drive, looking north towards the M4 on-ramps
Figure 3-2	Mamre Road near Banks Drive, looking south towards Mamre House
Figure 3-3	View of Mamre House from Banks Drive/ Mamre Road intersection

- Figure 3-4 Mamre Road near Solander Drive, facing north
- Figure 3-5 Mamre Road near Solander Drive, facing south
- Figure 3-6 Western side of Mamre Road near Solander Drive
- Figure 3-7 Luddenham Road intersection near Solander Drive
- Figure 3-8 Mamre Road near Mandalong Close
- Figure 3-9 Front façade of Mamre House
- Figure 3-10 Rear and side Mamre House
- Figure 3-11 House verandah
- Figure 3-12 View of the house from gardens
- Figure 3-13 Gardens on the eastern side of the house
- Figure 3-14 Garden and oak trees to the front of the house
- Figure 3-15 View of the rear gardens
- Figure 3-16 Driveway accessing Mamre House
- Figure 3-17 Paddocks to the north the driveway
- Figure 3-18 Mamre House driveway, looking towards the house
- Figure 3-19 Front gates
- Figure 3-20 Entrance sign
- Figure 3-21 Front gates and exit to Mamre Road
- Figure 3-22 Roadside memorial cairn to Samuel Marsden
- Figure 3-23 Mamre Road and the cairn
- Figure 3-24 View of roadside memorial on Luddenham Road, facing east
- Figure 3-25 View of the memorial on Luddenham Road, looking west
- Figure 3-26 Blaxland Roadside memorial 1938, adjacent to Luddenham Road
- Figure 3-27 Blaxland Roadside memorial looking south
- Figure 3-28 Paddocks to the rear of the Blaxland memorial cairn memorial
- Figure 3-29 Paddocks to the rear, facing west
- Figure 3-30 Former Luddenham Road alignment, facing south towards current alignment
- Figure 3-31 View of former Luddenham Road alignment and paper road, facing north
- Figure 3-32 Former alignment, looking north
- Figure 3-33 Current Luddenham Road alignment, looking towards T-intersection with Mamre Road
- Figure 3-34 View of Luddenham Road t-intersection with offshoot of former alignment, facing south-west
- Figure 3-35 Leeholme Horse Stud Rotunda
- Figure 3-36 View of sheds beside the Rotunda, facing north
- Figure 3-37 Shot of weatherboarding, awning and main entrance door of the Rotunda
- Figure 3-38 Looking back towards Luddenham Road, facing north-east
- Figure 4-1 Location of heritage items in the vicinity of the Proposal area
- Figure 5-1 An engraving of Aboriginal bark gunyahs. Source: C Cousen after John Skinner Prout. 1874. *Native Encampment*. Steel engraving, 200mm by 270mm (sheet). The British Library.
- Figure 5-2 Map of early farms in the Penrith and Campbelltown regions, not to scale. Excerpt from *Colonial Landscapes of the Cumberland Plain and Camden, NSW: A Survey of selected pre-1860 Cultural Landscapes from Wollondilly to Hawkesbury LGAs*. Pg. 29.
- Figure 5-3 Excerpt from the Melville Parish Map, County of Cumberland, c1898 (left) showing the boundary of Marsden's and neighbouring properties to form an early road (in orange). Excerpt from the Melville Parish Map, County of Cumberland, c1938 (right) and cancelled in 1968, showing Mamre Road as listed wide road.
- Figure 5-4 Town of Penrith: portion of Machenery's 100-acre grant from the Crown. ca. 1885. Source: State Library of NSW
- Figure 5-5 1947 aerial photography showing outbuildings and landscape elements at this time. Source: Mamre CMP, Pg. 33.
- Figure 5-6 Excerpt from a 1956 aerial of Mamre House and Mamre Road, showing current driveway alignment to the north, the original western driveway alignment to the south, as well as faint outlines of the longest standing driveway to the north of the current driveway near the dam.
- Figure 5-7 *The Rev. Samuel Marsden: the second Australia chaplain*. 1900. Gunther, W. J. (1839 – 1918). Source: Trove: <http://nla.gov.au/nla.obj-401894501>
- Figure 5-8 Image of James and Emily Hall (seated) with members of their family c.1890. A large framed copy of this photo hangs in the 'Mamre dining'. Source, Mamre CMP page 29

- Figure 5-9 'Mamre' in 1930s including some of the infill rooms to the verandah, since demolished.
Source: Shaw, E. G. Item 17: 'Mamre', St. Marys, 1933 / Photographer E.G. Shaw, 1933
(Source: State Library of NSW).
- Figure 6-1 Historical Archaeological Potential

Tables

- Table 1-1 Heritage impact rankings
- Table 2-1 Intersection changes – summary
- Table 4-1 Heritage Items within the Proposal area
- Table 4-2 Mamre Road Stage 1 Site Significance Table
- Table 6-1 Archaeological zones
- Table 6-2 Historical phases and chronology
- Table 6-3 Zone 1 Archaeological potential and significance
- Table 6-4 Zone 2 Archaeological potential and significance
- Table 6-5 Zone 3 Archaeological potential and significance
- Table 7-1 Mamre House impacts
- Table 7-2 Marsden Memorial Cairn impacts
- Table 7-3 Blaxland Memorial Cairn impacts
- Table 7-4 Luddenham Road Alignment impacts
- Table 7-5 Leeholme Horse Rotunda impacts
- Table 7-6 Archaeological Impacts
- Table 8-1 Summary of Heritage Impacts
- Table 8-2 Historical archaeological assessment findings

1 Introduction

1.1 Proposal overview

Transport for NSW (TfNSW) proposes to upgrade about 3.8 kilometres of Mamre Road between the M4 Motorway, St Clair and Erskine Park Road, Erskine Park to a four-lane divided road (the Proposal).

The Proposal is located within the City of Penrith local government area (LGA) in Sydney, New South Wales (NSW). The Proposal forms Stage 1 of the larger Mamre Road upgrade project, which is proposed to be delivered by TfNSW in two stages. Overall, the Mamre Road upgrade project would involve upgrades to a 10 kilometre long section of Mamre Road between the M4 Motorway, St Clair and Kerrs Road.

Mamre Road is a key transport corridor, which provides connections to the Western Sydney Employment Area and the proposed Western Sydney Aerotropolis. A key aim of the Proposal is to improve road safety and movement between the M4 Motorway and Erskine Park Road through increasing the capacity of Mamre Road to support future economic and residential growth in the surrounding area. The Proposal would provide further benefits through provision of new facilities for walking and cycling, urban design measures and future bus stops.

Key features of the Proposal are detailed in Section 2 of this report.

1.2 Purpose of this report

This report has been prepared to:

- support the planning and design activities of the Proposal including identifying environmental risks, constraints and areas of sensitivity
- outline the heritage values across the proposal area and assesses the heritage impacts associated with the Proposal
- identify the heritage items affected both directly and indirectly by the Proposal
- describe key aspects of the history, significance of heritage items
- grade the impact of the Proposal on extant heritage values
- provide recommendations and mitigation measures for the Proposal
- identify the permits and heritage approvals required for the Proposal

Aboriginal cultural heritage values are addressed both in this report, and in the Aboriginal Cultural Heritage Study (ACHAR) prepared by Kelleher Nightingale Consultants for the proposal. Material pre-contact Aboriginal cultural heritage including potential for tangible cultural artefacts and cultural material predating European settlement are the specific focus of the ACHAR report. Consultation with local Aboriginal people has been conducted as part of the ACHAR process to gather information on contemporary uses, associations and values that Aboriginal people hold for the lands and waters of the proposal area.

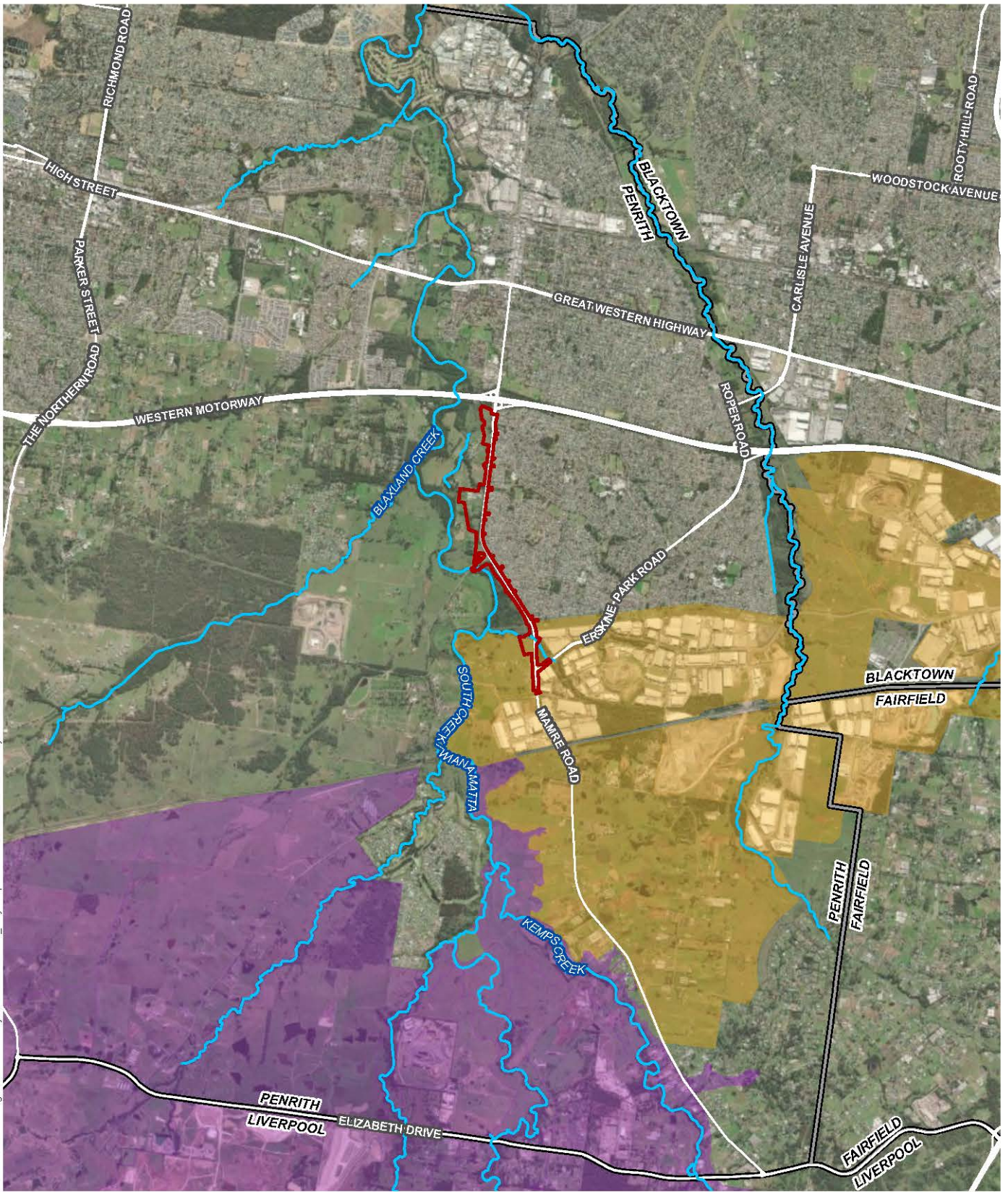
Intangible Aboriginal cultural values, specifically post-contact historical associations with the Mamre House and grounds are addressed in this report at Section 7.1.1. Further detailing around the management of post-contact Aboriginal cultural values on the grounds of Mamre House are addressed in Section 7.1.1.

Consultation with local Indigenous communities and stakeholders was not a requirement of this reporting and all consultation was completed as part of the Aboriginal cultural heritage reporting.

1.3 Proposal area

The regional location of the Proposal and the Proposal area, which has been adopted as the study area of this report, is shown in Figure 1-1 and Figure 1-2..

Mamre Road is a medium-sized thoroughfare which runs from the intersection of the Great Western Highway at St Marys, over the M4 Motorway through Orchard Hill, St Clair, Erskine Park, past Mt Vernon to Kemps Creek at the intersection with Elizabeth Drive. The Proposal is located between the suburbs of St Clair and Erskine Park.

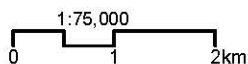


C:\Users\emma.mully\Aurecon Group\005458 - No Contract MamreRoad Stage 1 - 504 GIS\Project\MIRUS1\MIRUS1_Project.aprx\JOB No.112-03-21\Emma.Mully\Rev 0

- Watercourse
- REF proposal area
- Local government area
- Western Sydney Aerotropolis
- Western Sydney Employment Area



Source: Aurecon, Spatial Services, Nearmap, Esri

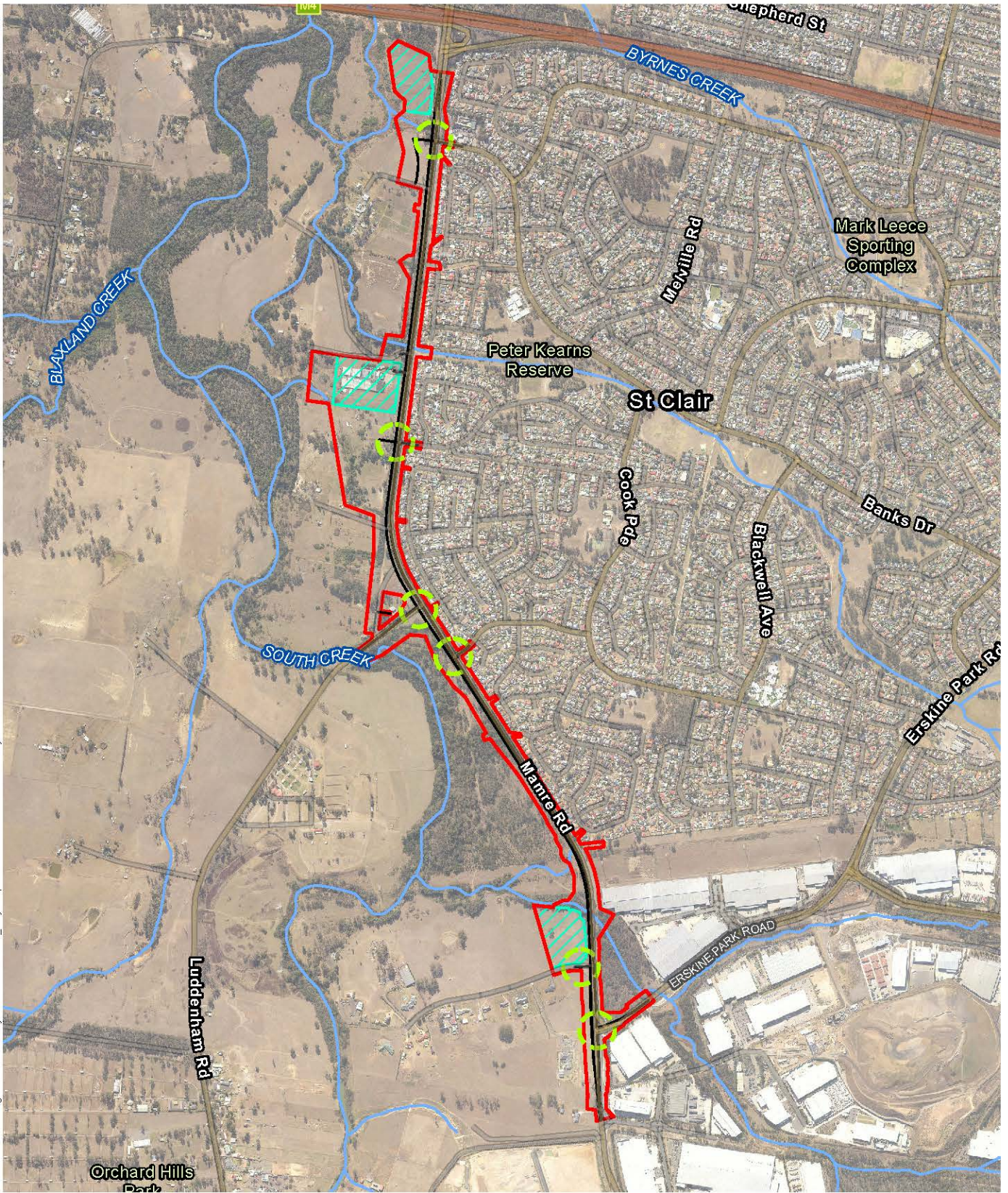


Date: 16/03/2021 Version: 1

Projection: GDA2020 MGA Zone 56

Mamre Road Upgrade Stage 1

Figure 1-1: Location of the proposal

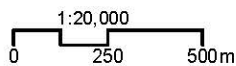


C:\Users\emma.mutty\Aurecon\Group\509466 - No Contract MamreRoad Stage 1 - 504 GISProject\WIPUS1\WIPUS1_Project.aprx\JOB No.028-05-21\Emma.Mutty\Rev.0

- Waterways
- Proposed design's centerline
- Proposed changes to existing intersections
- Compound Sites
- REF proposal area



Source: Aurecon, Spatial Services, Nearmap, Esri



Date: 31/05/2021 Version: 2

Projection: GDA2020 MGA Zone 56

Mamre Road Upgrade Stage 1

Figure 1-2: The proposal

1.4 Methodology

The following background research has been undertaken to inform this report:

- Review of applicable statutory heritage lists within the heritage proposal area, including:
 - National Heritage list
 - Commonwealth Heritage list
 - NSW State Heritage Register (SHR)
 - Local heritage items (as included on Schedule 5 of relevant LEPs)
 - Other statutory lists such as Section 170 registers
- Review of the past heritage studies and SOHIs
- Review of the concept design
- Site inspection

This report adopts the approach and terminology outlined in the Australia ICOMOS Charter for Places of Cultural Significance, (Australia ICOMOS, 2013) (*the Burra Charter*). In addition, this report has been prepared in accordance with the following heritage guideline and policy documents:

- Heritage Council of NSW *Statements of Heritage Impact* (updated 2002)
- Heritage Council of NSW *Assessing Heritage Significance: NSW Heritage Manual* (updated 2002)
- Heritage Branch, *Assessing Significance for Historical Archaeological Sites and 'Relics'*, 2009

A heritage impact ranking system is used, outlined at Table 1-1. The rankings categorise impacts in accordance with their severity or neutrality.

Table 1-1 Heritage impact rankings

Ranking	Definition
Major adverse	Actions that would have a severe, long-term and possibly irreversible impact on a heritage item. Actions in this category would include partial or complete demolition of a heritage item or addition of new structures in its vicinity that destroy the visual setting of the item. These actions cannot be fully mitigated.
Moderate adverse	Actions that would have an adverse impact on a heritage item. Actions in this category would include removal of an important part of a heritage item's setting or temporary removal of significant elements or fabric. The impact of these actions could be reduced through appropriate mitigation measures.
Minor adverse	Actions that would have a minor adverse impact on a heritage item. This may be the result of the action affecting only a small part of the place or a distant/small part of the setting of a heritage place. The action may also be temporary and/or reversible.
Neutral	Actions that would have no heritage impact.
Minor positive	Actions that would bring a minor benefit to a heritage item, such as an improvement in the item's visual setting.
Moderate positive	Actions that would bring a moderate benefit to a heritage item, such as removal of intrusive elements or fabric or a substantial improvement to the item's visual setting.
Major positive	Actions that would bring a major benefit to a heritage item, such as reconstruction of significant fabric, removal of substantial intrusive elements/fabric or reinstatement of an item's visual setting or curtilage.

1.4.1 Limitations

This report does not assess the pre-contact Aboriginal cultural heritage of the proposal area or provide advice on Aboriginal archaeological sites. No consultation with local Indigenous communities or stakeholders was conducted for this report. No physical archaeological investigations have been conducted to inform the historical archaeological assessment contained in this report.

1.4.2 Report Authorship

This report was prepared by Emma McGirr, Aurecon Heritage Specialist and Jess Mauger, Graduate Heritage Specialist.

2 Proposal Description

This section describes the Proposal including major design features, the construction method and associated infrastructure and activities.

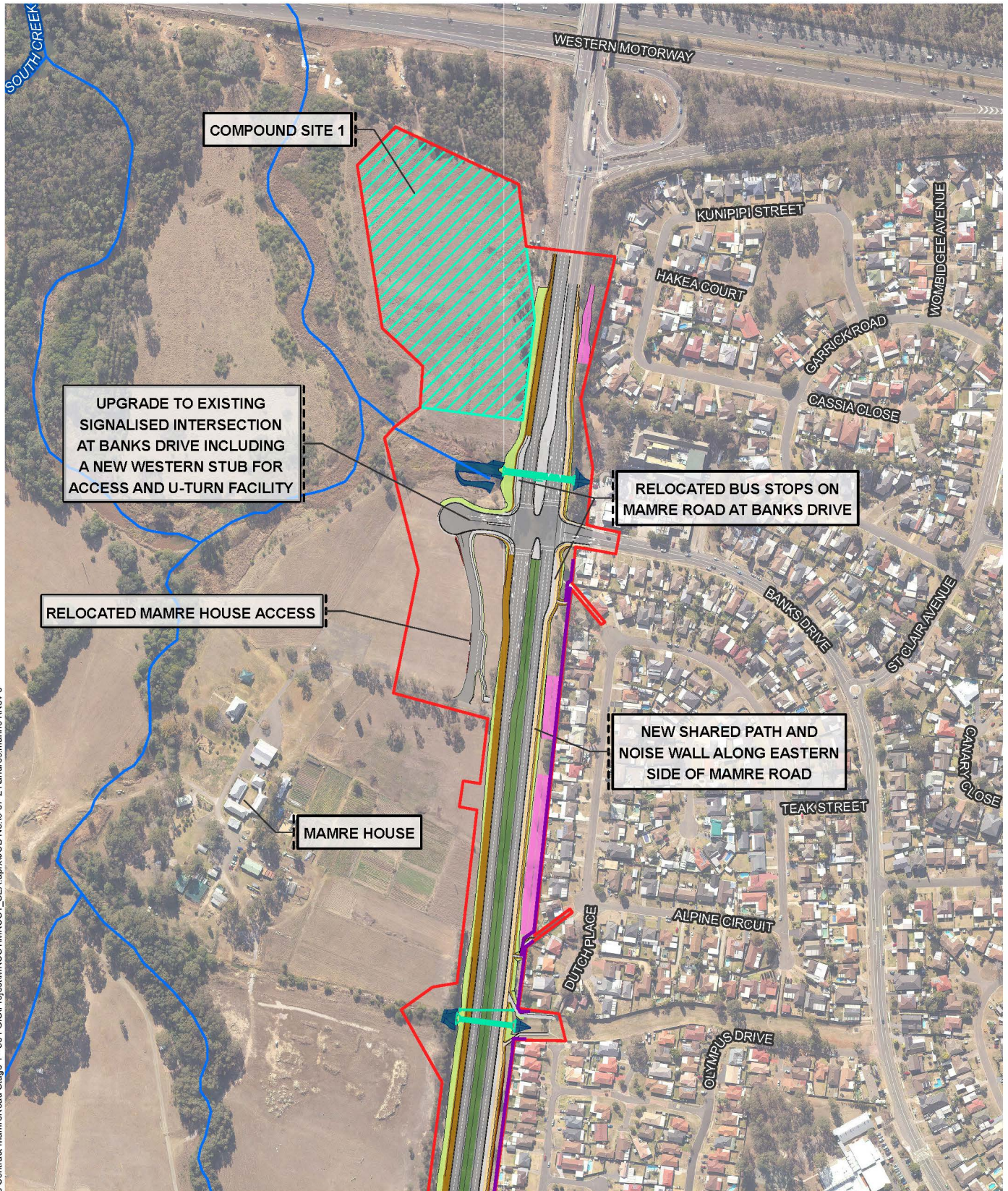
2.1 The Proposal

TfNSW proposes to upgrade about 3.8 kilometres of Mamre Road between the M4 Motorway, St Clair and Erskine Park Road, Erskine Park (the Proposal). The Proposal would support the expected economic and residential growth associated with the Western Sydney Employment Area and proposed Western Sydney Aerotropolis.

The Proposal would involve widening Mamre Road from one lane in each direction to two lanes in each direction. The Proposal includes changes and upgrades to existing intersections and new facilities for public transport, walking and cycling along Mamre Road. Sufficient space within the road corridor would also be provided for an additional lane in each direction if required in the future.

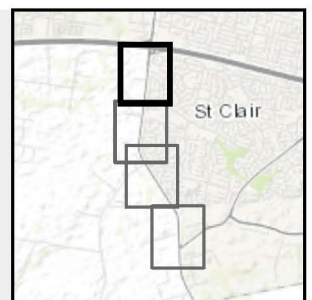
Key features of the Proposal would include (shown on Figure 2-1:):

- An upgrade of Mamre Road to a four-lane divided road with a wide central median that would allow for widening to six lanes in the future, if required
- Changes to intersections with Mamre Road including:
 - An upgrade to the existing signalised intersection at Banks Drive including a new western stub for access and a U-turn facility
 - A new signalised intersection at Solander Drive including a new western stub for access and a U-turn facility
 - A new signalised intersection at Luddenham Road with new turning lanes
 - An upgrade to the existing signalised intersection at Erskine Park Road with new turning lanes
 - Modified intersection arrangements (left in, left out only) at McIntyre Avenue and Mandalong Close
- A new shared path along the eastern side of Mamre Road and provision for a future shared path on the western side
- Reinstatement of bus stops near Banks Drive with provision for additional bus infrastructure in the future
- Changes to property access to Mamre House, Erskine Park Rural Fire Service and other private properties
- Drainage and flooding infrastructure upgrades including culvert crossings, water quality basins, grass swales and channel tail-out work
- New traffic control facilities including new traffic signals and relocation of existing electronic variable message signage
- Roadside furniture and street lighting
- Noise walls along the eastern side of Mamre Road at St Clair
- Utility relocations
- Establishment of temporary ancillary facilities to support construction including compound sites, stockpile and laydown locations, temporary access tracks, temporary waterway crossings and concrete batching plants

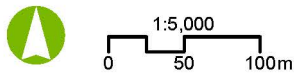


C:\Users\andres.marmosiva\Aurecon Group\509468 - No Contract Mamre Road Stage 1 - 504 GIS\Project\MRUS1\MRUS1_SEA.aprx\JOB No.16-07-21\andres.marmosiva\Rev.0

- | | | |
|-----------------------|------------------|--------|
| Waterways | Basin | Median |
| Indicative noise wall | Shared user path | Road |
| Culverts | Channel work | Swale |
| REF proposal area | Concrete | Cut |
| Compound site options | Fill | Verge |



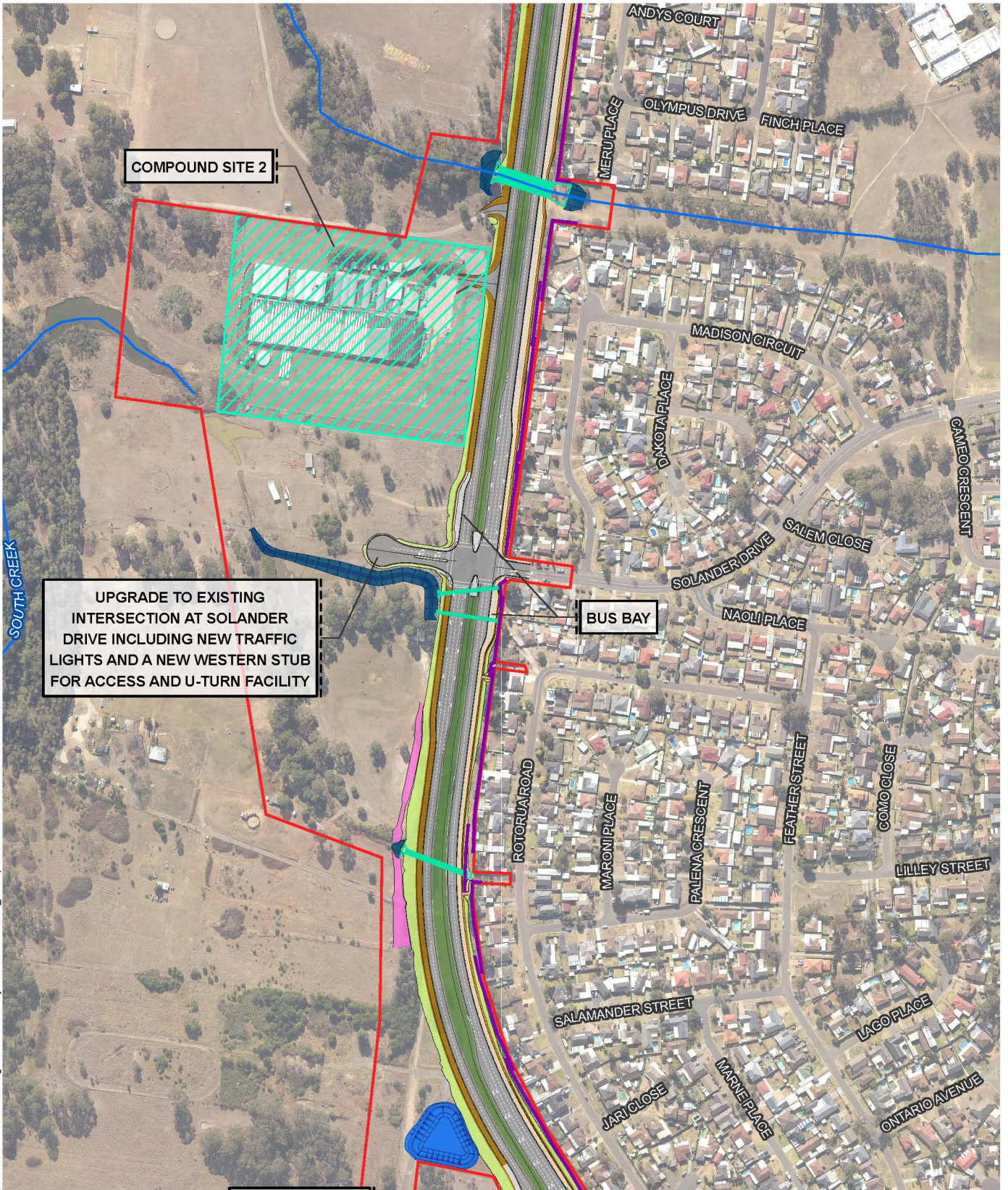
Source: Aurecon, Spatial Services, Nearmap, Esri


















Date: 6/07/2021 Version: 1
 Projection: GDA2020 MGA Zone 56

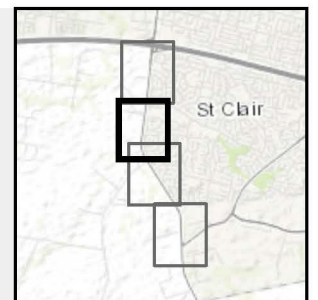
Mamre Road Upgrade Stage 1

Figure 2-1a: Key features of the proposal

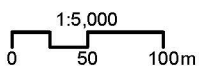


C:\Users\andres.marinovic\Aurecon Group\509459 - No Contract MamreRoad Stage 1 - 504 GIS\Project\MRUS\1MRUS1_SEA.aprx\JOB No.16-07-21\tandres.marinovic\Rev.0

- | | | |
|---|--|--|
|  Waterways |  Basin |  Median |
|  Indicative noise wall |  Shared user path |  Road |
|  Culverts |  Channel work |  Swale |
|  REF proposal area |  Concrete |  Cut |
|  Compound site options |  Fill |  Verge |



Source: Aurecon, Spatial Services, Nearmap, Esri

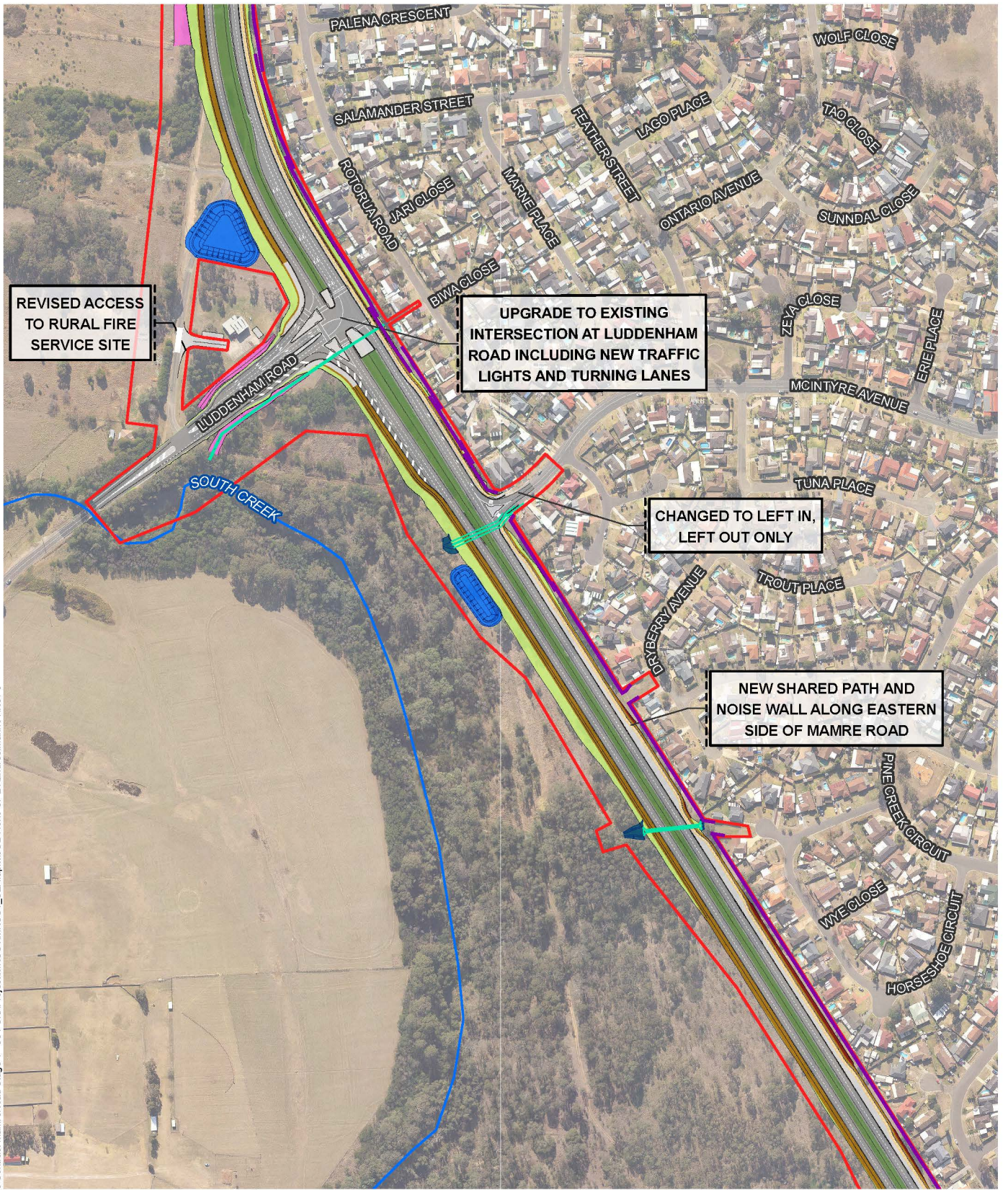


Date: 6/07/2021 Version: 1

Projection: GDA2020 MGA Zone 56

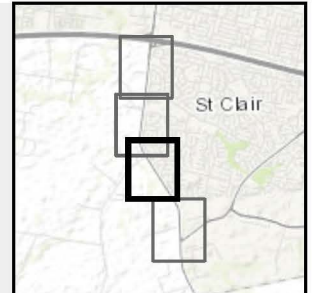
Mamre Road Upgrade Stage 1

Figure 2-1b: Key features of the proposal

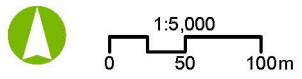


C:\Users\andres.marmosilva\Aurecon Group\659466 - No Contract\Mamre Road Stage 1 - 504 GIS\Project\MRUS\1MRUS\1_SEA.aprx\JOB No.16-07-21\andres.marmosilva\Rev.0

- | | | |
|-----------------------|------------------|--------|
| Waterways | Basin | Median |
| Indicative noise wall | Shared user path | Road |
| Culverts | Channel work | Swale |
| REF proposal area | Concrete | Cut |
| Compound site options | Fill | Verge |

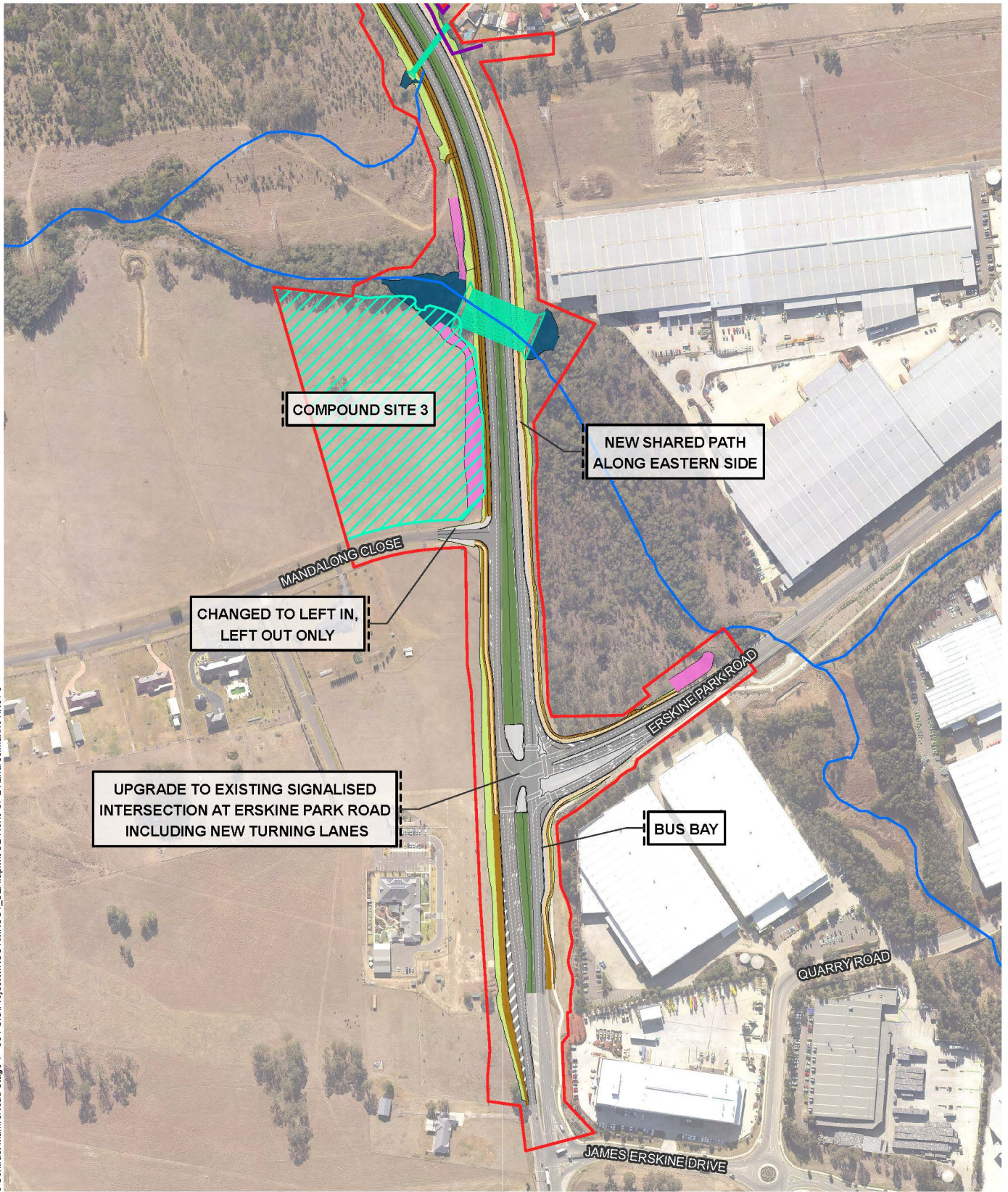


Source: Aurecon, Spatial Services, Nearmap, Esri



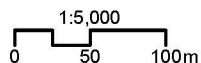
Date: 6/07/2021 Version: 1
Projection: GDA2020 MGA Zone 56

Mamre Road Upgrade Stage 1
Figure 2-1c: Key features of the proposal



C:\Users\landres.marinosa\va\Aurecon Group\509458 - No Contract MamreRoad Stage 1 - 504 GIS\Project\MIRUST\MIRUST_SEA.aprx\JOB No.16-07-21\andres.marinosa\1\Rev.0

Source: Aurecon, Spatial Services, Nearmap, Esri



Date: 6/07/2021 Version: 1
 Projection: GDA2020 MGA Zone 56

Mamre Road Upgrade Stage 1

Figure 2-1d: Key features of the proposal

2.1.1 Major design features

Mamre Road main carriageway widening

Mamre Road would be widened between Erskine Park Road and Banks Drive to be about 40 metres wide between intersections and 50 metres wide at intersections (excluding batters) and generally follow the existing Mamre Road alignment. This widened road would provide enough space for both the current proposed road arrangement of two lanes in each direction and a future road arrangement with three lanes in each direction.

Mamre Road would be raised along most of the alignment to provide improved drainage and flood immunity. As such, sections of the Proposal would need to be built on imported 'fill' material or embankments to allow for the proposed increased road height compared to the existing road and natural ground level. Where the proposed road would need to be built below the natural ground level, material would need to be removed from the ground surface ('cut').

Intersection changes

The Proposal involves changes to existing intersections with Mamre Road at Banks Drive, Solander Drive, Luddenham Road, Erskine Park Road, McIntyre Avenue and Mandalong Close. Table 2-1 describes the changes. Detailed figures illustrating the proposed upgrades are available in Chapter 3 of *Mamre Road Upgrade Stage 1 – Review of Environmental Factors* (Transport for NSW, 2021).

Table 2-1 Intersection changes – summary

Intersection	Proposed changes
Banks Drive	<p>The Proposal would upgrade the existing signalised three-way intersection at Banks Drive to a four-way signalised intersection featuring:</p> <ul style="list-style-type: none"> two southbound and northbound through lanes on Mamre Road with new left and right turning lanes for vehicles turning from Mamre Road to Banks Drive two through lanes on Banks Drive a new western approach, which would provide access to Mamre House as well as a U-turn facility provision for a future bus priority lane on Mamre Road in the left turn lanes reinstated bus stops on the departure side
Solander Drive	<p>The Proposal would upgrade the existing priority controlled three-way intersection at Solander Drive to a new signalised four-way intersection featuring:</p> <ul style="list-style-type: none"> replacement of the stop sign on Solander Drive with new traffic lights two southbound and northbound through lanes on Mamre Road with new left and right turning lanes for vehicles turning from Mamre Road to Solander Drive a new western access approach, which would provide access to development west of Mamre Road and include a U-turn facility provision for future bus priority lanes within the left turn lanes on the approach side as well as future bus priority/stops on the departure side
Luddenham Road	<p>The Proposal would involve upgrading the existing priority controlled seagull intersection at Luddenham Road to a new signalised intersection featuring:</p> <ul style="list-style-type: none"> replacement of the stop sign on Luddenham Road with new traffic lights two southbound and northbound through lanes on Mamre Road with additional turning lanes for vehicles turning from Mamre Road onto Luddenham Road dual left turn lanes and exclusive right turn lane on Luddenham Road onto Mamre Road
Erskine Park Road	<p>The proposal would involve upgrading the existing signalised intersection at Erskine Park Road. The upgraded intersection would feature:</p> <ul style="list-style-type: none"> two southbound and northbound through lanes on Mamre Road and turning lanes for vehicles travelling onto Erskine Park Road dual left and right turning lanes for vehicles travelling from Erskine Park Road onto Mamre Road provision for a future a bus priority lane and a bus bay in the southbound direction

Intersection	Proposed changes
McIntyre Avenue and Mandalong Close intersections	The Proposal would involve changes to the existing priority controlled intersections at McIntyre Avenue and Mandalong Close to be left in, left out only and have 'give-way' signage.

Utilities adjustments

Several major utilities have been identified within the Proposal area that would require adjustment and/or relocation during construction of the Proposal, as described in the REF report. Utilities adjustments would cover electrical supply and street lighting, gas, telecommunications and water mains and sewerage network. There are utility adjustments proposed to occur within the SHR curtilage of Mamre House, including adjustments to the existing Telstra network and Endeavour Energy overhead conductors that run along the current alignment of the road.

2.1.2 Ancillary facilities

During construction, several compound sites would be needed for offices and amenities and to store equipment, machinery and vehicles needed to construct the Proposal. These potential sites have been selected with a view to maximising separation between sensitive environmental zones, such as waterways and sites of ecological and heritage value as well as from sensitive receivers such as residential areas.

Three sites have been identified, as follows:

Site 1, which is located at the northern end of the Proposal area near the intersection of the M4 Motorway and Mamre Road on Lot 1 DP849524, Lot 1 DP530579 and Lot 1 DP849524. This site would be accessed directly off Mamre Road and would be used as a northern site compound for workers, car parking and material storage.

Site 2, which is located about 100 metres north of the Solander Drive on Lot 1 DP580390. This site would be accessed directly off Mamre Road and would be used as the main site compound for workers, car parking, concrete batching and bulk material storage.

Site 3, which is located on cleared grassland north of Mandalong Close on Lot 201 DP1013539. This site would be used as a site compound, car parking for workers and stockpile areas.

3 Existing environment

3.1 Proposal area description

The proposal area is aligned with the Proposal area shown in Figure 1-2. The proposal area is a large linear area of land that falls along the existing Mamre Road alignment. The proposal area runs north to south from the M4 Motorway to Erskine Park Road in the south. The proposal area is divided by Mamre Road into two distinct character zones:

- East of Mamre Road – urban development, comprising low scale residential suburbs which developed from the 1970s onwards (St Clair) transitioning into larger scale industrial development around Erskine Park to the south
- West of Mamre Road – comprises a cleared, semi-rural landscape sloping gently towards South Creek and tributaries. The area features remnant stands of native vegetation (woodland associated with the Blacktown and South Creek soil landscapes) and several clusters of residential, industrial and farming developments.

3.2 Site visit

Known heritage items, and sites identified as having potential to be impacted by the Proposal were inspected by Emma McGirr and Jess Mauger on 8 September 2020. The site visit contributed to an understanding of the current condition of these items and their significance level. It involved a pedestrian and vehicular survey from the public domain within the Proposal area as well as a detailed external and internal inspection of Mamre House and grounds. Observations of the site investigations are in the following sections.

3.2.1 Mamre Road

Mamre Road is a four-lane road bordered by grass verges and native vegetation.

Figure 3-1 to Figure 3-8 demonstrate the principal characteristics of Mamre Road and adjacent zones.



Figure 3-1 Mamre Road near Banks Drive, looking north towards the M4 on-ramps



Figure 3-2 Mamre Road near Banks Drive, looking south towards Mamre House



Figure 3-3 View of Mamre House from Banks Drive/
Mamre Road intersection



Figure 3-4 Mamre Road near Solander Drive, facing
north



Figure 3-5 Mamre Road near Solander Drive, facing
south



Figure 3-6 Western side of Mamre Road near
Solander Drive



Figure 3-7 Luddenham Road intersection near Solander Drive



Figure 3-8 Mamre Road near Mandalong Close

3.2.2 Mamre House and grounds

Mamre House is a Georgian style farmstead and the former residence of Reverend Samuel Marsden who built the main homestead building circa 1835. The property comprises a large holding of approximately 85 hectares, a remnant of Marsden's original holding.

The homestead and surrounding outbuildings are accessed down a long drive (approximately 260 metres long) off Mamre Road. The broader farmstead consists of cleared paddocks and revegetation along the boundaries and watercourses. There are cultural plantings and gardens around the house, including regular garden beds which mark out the former location of the kitchen building.

Figure 3-9 to Figure 3-16 demonstrate the principal characteristics of the site.



Figure 3-9 Front façade of Mamre House



Figure 3-10 Rear and side Mamre House



Figure 3-11 House verandah



Figure 3-12 View of the house from gardens



Figure 3-13 Gardens on the eastern side of the house



Figure 3-14 Garden and oak trees to the front of the house



Figure 3-15 View of the rear gardens



Figure 3-16 Driveway accessing Mamre House

3.2.3 Driveway, front gates and Marsden memorial cairn

The driveway planting, which extends from Mamre Road to the garden of Mamre, consists of informally and formally planted indigenous Eucalypts dating from around the 1970s (Figure 3-18). The original driveway accessed the homestead building in a straight line through the site to the rear of the homestead building but is no longer used. Either side of the driveway are cleared paddocks offering views to the homestead and the surrounding buildings. The entrance to Mamre House is flanked by timber gates and a sign to the 'Mamre Project'.

Just inside the boundary fence of the property on the northern side of the entrance gates stands a sandstone memorial cairn erected by the citizens of St Marys in 1938. The cairn marks the significance of the property and its connection to Samuel Marsden. The cairn matches and is consistent with the one erected to Gregory Blaxland fronting Luddenham Road at south-west of the T-intersection with Mamre Road.

Figure 3-17 to Figure 3-23 show the current driveway entrance and memorial cairn, in view of Mamre Road.



Figure 3-17 Paddocks to the north the driveway



Figure 3-18 Mamre House driveway, looking towards the house



Figure 3-19 Front gates



Figure 3-20 Entrance sign



Figure 3-21 Front gates and exit to Mamre Road



Figure 3-22 Roadside memorial cairn to Samuel Marsden



Figure 3-23 Mamre Road and the cairn

3.2.4 Gregory Blaxland Memorial Cairn

South of the intersection of Mamre Road and Luddenham Road, a 1938 sandstone memorial cairn is erected to Gregory Blaxland and the 1813 crossing of the Blue Mountains. The cairn is located on the western side of the road in close proximity to the northbound lane. It is ringed by a small chain fence.



Figure 3-24 View of roadside memorial on Luddenham Road, facing east



Figure 3-25 View of the memorial on Luddenham Road, looking west



Figure 3-26 Blaxland Roadside memorial 1938, adjacent to Luddenham Road



Figure 3-27 Blaxland Roadside memorial looking south



Figure 3-28 Paddocks to the rear of the Blaxland memorial cairn memorial



Figure 3-29 Paddocks to the rear, facing west

3.2.5 Luddenham Road Alignment

Luddenham Road intersects Mamre Road around the mid-point of the proposal area. The former road alignment once connected to Mamre Road and has been replaced with the current T-intersection. Within the proposal area, part of the former alignment is now a 'paper road' and is subject to local heritage listing owing to its importance as an early route connecting John and Gregory Blaxland's colonial estates.



Figure 3-30 Former Luddenham Road alignment, facing south towards current alignment



Figure 3-31 View of former Luddenham Road alignment and paper road, facing north



Figure 3-32 Former alignment, looking north



Figure 3-33 Current Luddenham Road alignment, looking towards T-intersection with Mamre Road



Figure 3-34 View of Luddenham Road t-intersection with offshoot of former alignment, facing south-west

3.2.6 Leeholme Horse Stud Rotunda

The Rotunda was originally built as a cattle exercise yard in the 1920s for William Inglis & Son, Auctioneers. The Rotunda was erected at their Flemington sale yards and was the focal point of the yards at the time. Maurie Grogan of the Leeholme Stud at Luddenham purchased the rotunda and in the 1950s dismantled it and transported it to its present location, where it was used as an exercise ring for horses. The Rotunda is now located within the Bill Spilstead Complex for Canine Affairs, off Luddenham Road in Orchard Hills.

The Rotunda is visible from nearby Luddenham Road. Figure 3-35 to Figure 3-38 show the building in its setting.



Figure 3-35 Leeholme Horse Stud Rotunda



Figure 3-36 View of sheds beside the Rotunda, facing north



Figure 3-37 Shot of weatherboarding, awning and main entrance door of the Rotunda



Figure 3-38 Looking back towards Luddenham Road, facing north-east

4 Statutory Framework

In NSW cultural heritage is managed via a tripartite system of legislation operating at national, state and local. At a federal level, the *Environmental Protection and Biodiversity Act 1999* (EPBC Act) is the national Act protecting the natural and cultural environment. At NSW state-level, cultural heritage is principally protected under three acts:

- *Heritage Act 1977* (NSW) (the Heritage Act)
- *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act)
- *National Parks and Wildlife Act 1974* (NSW) (NPW Act)

The following section outlines the applicable heritage laws and statutes which dictate the heritage listing and approvals implications for the project.

4.1 Environmental Protection and Biodiversity Act 1999

The EPBC Act is administered by the Department of Agriculture, Water and the Environment (DAWE). The EPBC Act establishes two heritage lists for the management of the natural and cultural environment:

- The National Heritage List (NHL) contains items listed on the NHL have been assessed to be of outstanding significance and define "critical moments in our development as a nation".
- The Commonwealth Heritage List (CHL) contains items listed on the CHL are natural and cultural heritage places that are on Commonwealth land, in Commonwealth waters or are owned or managed by the Commonwealth. A place or item on the CHL has been assessed as possessing "significant" heritage value.

A search of the NHL and CHL did not yield any results within the proposal area.

4.2 NSW Heritage Act 1977

The *Heritage Act* was established to conserve the environmental heritage of NSW. The Act is administered by the NSW Heritage Council, or its delegate Heritage NSW, within the Department of Premier and Cabinet.

The Act defines environmental heritage as "*those places, buildings, works, relics, moveable objects, and precincts, of State or Local heritage significance*" (Section 4). It offers protection to built heritage (standing structures and places) as well as to potential archaeological remains or 'relics'.

4.2.1 NSW State Heritage Register

The SHR is established under Part 3A of the *Heritage Act*. Heritage items assessed to be of state significance are protected by nomination to and listing on the SHR. The list is principle mechanism by which items and places of State-level heritage significance are managed, promoted and protected.

Within the proposal area there is one (1) item listed on the SHR – Mamre House #00264.

Section 60 Approval

Listing of a place or item on the SHR comes with a requirement to obtain approval for works that change, modify or impact an SHR site. The approval of the Heritage Council of NSW (or its delegate) is required for activities affecting SHR sites under Section 60 of the *Heritage Act*. Section 60 applications must be submitted to Heritage NSW and require appropriate supporting documentation, including detailed plans and a heritage impact assessment report.

Section 57(2) Standard Exemptions

Works to SHR items that are minor in nature and will have minimal or no impact on the heritage significance of an item or place may be covered by a series of standard exemptions that apply to a broad range of minor development. On the 1st December 2020 the Heritage Council of NSW released an updated schedule of Standard Exemptions to subsection 57(1) of the *Heritage Act* made under subsection 57(2). These new Standard Exemptions are listed below:

1. Maintenance and Cleaning
2. Repairs to Non-Significant Fabric
3. Alteration to Non-Significant Fabric
4. Alteration to Interiors of Non-Significant Fabric
5. Repair or Replacement of Non-Significant Services (Mechanical, Electrical and Plumbing)
6. Non-Significant Telecommunications Infrastructure
7. Fire Safety Detection and Alarm Systems
8. Excavation
9. Painting
10. Restoration of Fabric that forms part of the Significance of the Item (Significant Fabric)
11. Subdivision of Non-Significant Buildings
12. Temporary Structures
13. Vegetation
14. Burial Sites and Cemeteries
15. Signs
16. Filming
17. Temporary Relocation of Moveable Heritage Items
18. Compliance with Minimum Standards and Orders
19. Safety and Security
20. Emergency Situations and Lifesaving

When determining whether Standard Exemptions apply to Proposals for minor works and maintenance it is necessary to consider the character and context of the heritage item, including its size and setting. Works should be weighed up against the item's identified heritage significance and values, and a determination made as to whether a Proposal impacts that significance.

Archaeological relics

Specific to archaeology, the Heritage Act defines a 'relic' as any deposit, object or material evidence:

- a) *that relates to the settlement of the area that comprises NSW, not being aboriginal settlement; and*
- b) *is of State or Local heritage significance.*

Any 'relics' contained within the proposal area are subject to the relevant provision of the Heritage Act. Sections 139-145 of the Heritage Act prevent the excavation of a relic, except in accordance with an excavation permit, or an exception from the need for a permit. Permits and exceptions are issued by the Heritage Council of NSW.

Section 139 [1] of the Heritage Act states that:

A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

Importantly, not all subsurface remains are considered 'relics'. Relics can be of local or State significance subject to heritage significance assessment. Archaeological potential and finds must be assessed in accordance with the Archaeological Significance Assessment Guidelines published by the Heritage Office. Section 139 of the Act requires any person with reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to Section 140 of the Act), unless there is an applicable exception (pursuant to Section 139(4)).

Excavation permits are issued by the Heritage Council of NSW in accordance with sections 60 or 140 of the Heritage Act. Excavation permits are usually subject to approval conditions.

Alternatively, the Section 139 (4) permit is an exception from the requirement to obtain a Section 140 permit and reflects the nature of the impact and the significance of the relics or potential relics being impacted upon.

Under the 'relics' provisions of the Act if any relics of state or local significance, not identified in the archaeological assessment or statement required by this exception, are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Office must be notified in writing in accordance with section 146 of the Heritage Act.

The potential of the proposal to impact on archaeological relics of state or local significance is assessed at Section 5.2.

Section 170 Heritage and Conservation Registers

Section 170 of the *Heritage Act* requires that culturally significant items or places managed or owned by Government agencies are listed on departmental Heritage and Conservation Register. Information on these registers has been prepared in accordance with Heritage Division guidelines.

'Mamre' is listed on the Department of Planning, Infrastructure and Environment's S170 Heritage and Conservation Register, item number 3490022. No other items listed on any Government agency S170 register are located within the proposal area.

4.3 Environmental Planning and Assessment Act 1979

The *Environmental Planning and Assessment Act 1979* (EP & A Act) sets out the NSW planning framework, including the management, conservation and development of land. The EP & A Act is aimed at ensuring that development is both economical and ecologically sustainable by providing for local environmental planning instruments (LEPs) to be made.

The site is within the Penrith City Council LGA. The relevant environmental planning instrument that applies to the site is the Penrith Local Environmental Plan 2010.

LEPs provide for the protection of locally significant heritage items and places via their inclusion on Schedule 5 – Environmental Heritage.

The proposal area contains four locally listed items and one state listed item on Schedule 5 of the Penrith LEP.

A summary of the statutory heritage items located within the proposal area is provided in the table below. Figure 4-1 illustrates the location of these items in relation to the Proposal area.


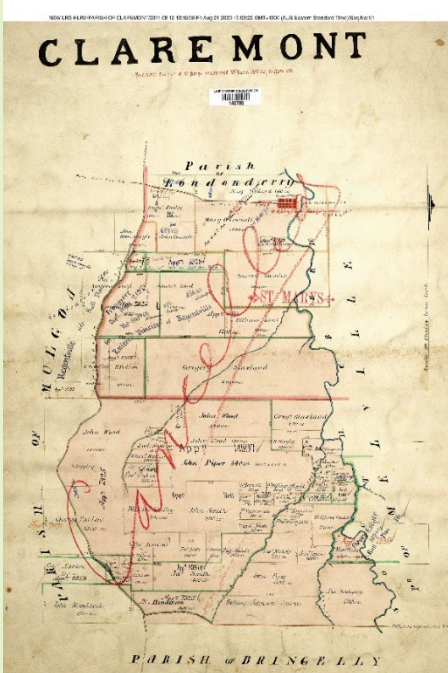
Table 4-1 Heritage Items within the Proposal area

Item	Listing	Significance Level
Mamre Homestead	State Heritage Register #00264 Penrith LEP #228 S170 #3490022	State
Leeholme Horse Stud Rotunda	Penrith LEP #232	Local
Luddenham Road Alignment	Penrith LEP #843	Local
Memorial Cairn (Blaxland)	Penrith LEP #230	Local
Memorial Cairn (Marsden)	Penrith LEP #229	Local


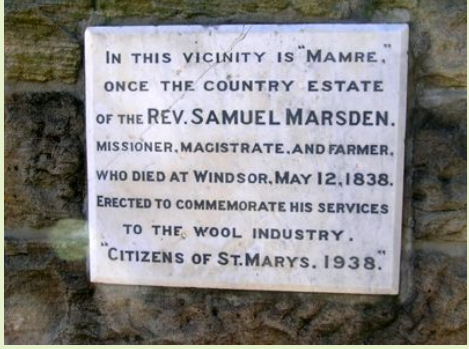
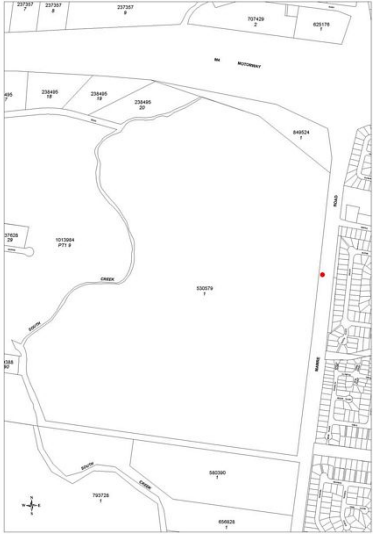
4.4 Heritage Significance

The heritage significance of the listed sites within the Proposal area is outlined in the table below.

Table 4-2 Mamre Road Stage 1 Site Significance Table

Site 1 Mamre Homestead	
Listing	State Heritage Register #00264 Penrith LEP #228
Statement of Significance	<p><i>"Mamre" property is of State significance as a substantial Georgian homestead and former residence of Rev. Samuel Marsden (1820-30), then Richard and Henrietta Rouse and the Hon. Robert Fitzgerald, MLC (1840s). Marsden and Richard Rouse, were both influential early colonials. Samuel Marsden is an important figure in the early missionary history of New Zealand. The property has strong, continuing association with the Sisters of Mercy, Parramatta and the Mamre Project which has great regional social importance. Mamre is historically significant for its association with the early sheep-breeding experiments of Reverend Samuel Marsden, which contributed to the early development of the wool industry in NSW.</i></p> <p><i>The site of Mamre property is significant for its potential to yield information on the pre-contact Aboriginal occupation of the South Creek catchment. Mamre is historically and socially significant as an important site in post-contact Aboriginal history, demonstrating Aboriginal survival and adaptation to non-traditional social, economic and political practices.</i></p> <p><i>Mamre has historic and aesthetic significance as a rare, regional example of a fairly intact pre-1860 colonial landscape and homestead on the Cumberland Plain. The Mamre farmhouse is an iconic feature in the St Marys region and immediate landscape. The building is an important example of an early 19th century homestead in the Colonial Georgian style.</i></p> <p><i>The farmstead is archaeologically significant for its potential to yield information on early colonial landscapes, farmsteads and Georgian architecture.</i></p> <p><i>The South Creek corridor is significant for its preservation of endangered ecological communities. It has potential to yield valuable information about the river-flat forests, wetlands and riparian habitats, which are among the most threatened natural landscapes in western Sydney.</i></p>
Pictures	
Early Plans / Maps	 <p>Detail of Claremont Parish Map c.1898. Samuel Marsden's grant of 1030 acres is on the top right hand side of the parish, bordered by Mary O'Connell to the south, William Kent to the north, Simeon Lord to the east and South Creek to the west.</p>

Site 2 Marsden Memorial Cairn

Listing	Penrith Council LEP #229	
Statement of Significance	<p><i>Dedicated in 1938, the memorial is notable in demonstrating the important event in the historical development of the region with Marsden's Mamre and the remembrance of this era by the local community in the sesqui-centenary of European settlement of Australia. The memorial is an excellent and large example of a civic roadside memorial of the period and utilising a mix of dress stones and lettering style evocative of its age. The significance of the memorial is enhanced by its small road reserve in view of Mamre house.</i></p>	
Pictures		
Early Plans / Maps		<p>Map indicating the location of the Marsden memorial cairn from the Heritage NSW State Heritage Inventory. The memorial has now been moved to behind the front gates of Mamre House adjacent to the driveway.</p>

Site 3 Blaxland Memorial Cairn

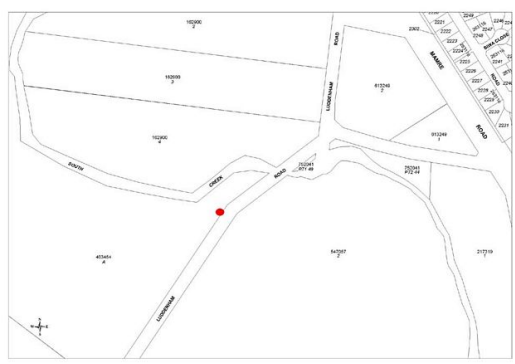
Listing Penrith Council LEP #230

Statement of Significance *Dedicated in 1938, the memorial is notable in demonstrating the important event in the historical development of the opening of a crossing at the Blue Mountains by Gregory Blaxland, Henry Lawson and William Wentworth and remembrance this event by the local community in the sesqui-centenary of European settlement of Australia. The memorial is an excellent and large example of a civic roadside memorial of the period and utilising a mix of dress stones and lettering style, evocative of its age. The significance of the memorial is enhanced by its small road reserve near Blaxland's Luddenham estate.*

Pictures





Early Plans / Maps



Map indicating the location of the mountain crossing memorial cairn from the Heritage NSW State Heritage Inventory.

Site 4 Luddenham Road Alignment

Listing	Penrith Council LEP #843	
Statement of Significance	<p><i>Luddenham Road provides evidence of the early nineteenth century pastoral activities in the Penrith region, connecting the estates of Luddenham and Lee Holme owned by brothers John and Gregory Blaxland respectively. It continued to be an important link through the nineteenth century, connecting Bringelly with St Marys.</i></p> <p><i>The sparsely settled landscape around Luddenham Road and the long surviving post and rail fencing continue to provide evidence of the predominant pastoral activities in the district in the nineteenth century through to the present time (2008) and give the road a high level of aesthetic appeal.</i></p>	
Pictures		
Early Plans / Maps		<p>Cut from the Claremont Parish Map c. 1898. Luddenham Road is shown with dotted red lines and is marked as a Government Road leading north from Elizabeth Drive to Andrew Nash's 80 acre grant.</p>

Site 5 Leeholme Horse Stud Rotunda

Listing Penrith Council LEP #232

Statement of Significance *The Rotunda is of historical significance for its association with early 20th century horse studs in the area and a rare surviving remnant of the operation of Sydney's livestock markets at Flemington in the early twentieth century. It is associated with Maurie Grogan and the Leeholme Horse Stud, one of the more prominent livestock trading firms of the era. Its design demonstrates an attempt to raise the public image of dairying at a time when milk quality was a major contemporary social issue and it is a relic of corporate image-making of the period.*

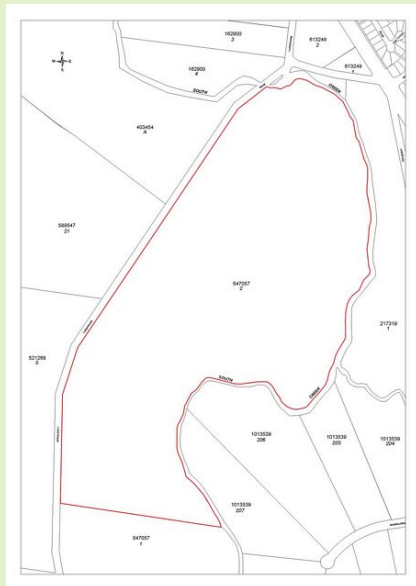
The Rotunda is significant as an extremely unusual building, of octagonal design and timber construction with corrugated iron cladding to the upper storey. The internal space appears to have been designed as an interior horse exercise yard, and is lit by a clerestory lantern and demonstrates intricate arrangements of posts, beams and trusses. Evidence of the relocation of the Rotunda during the 1950s and its use as a horse stud, as well as its present use by the Canine Council of NSW, is evident in the fabric of the building.

The Rotundas landmark qualities, including its size, distinctive form and prominent location in relation to a major regional thoroughfare contributes to its high level of local recognition. The Rotunda is significant as an integral part of the local environment.

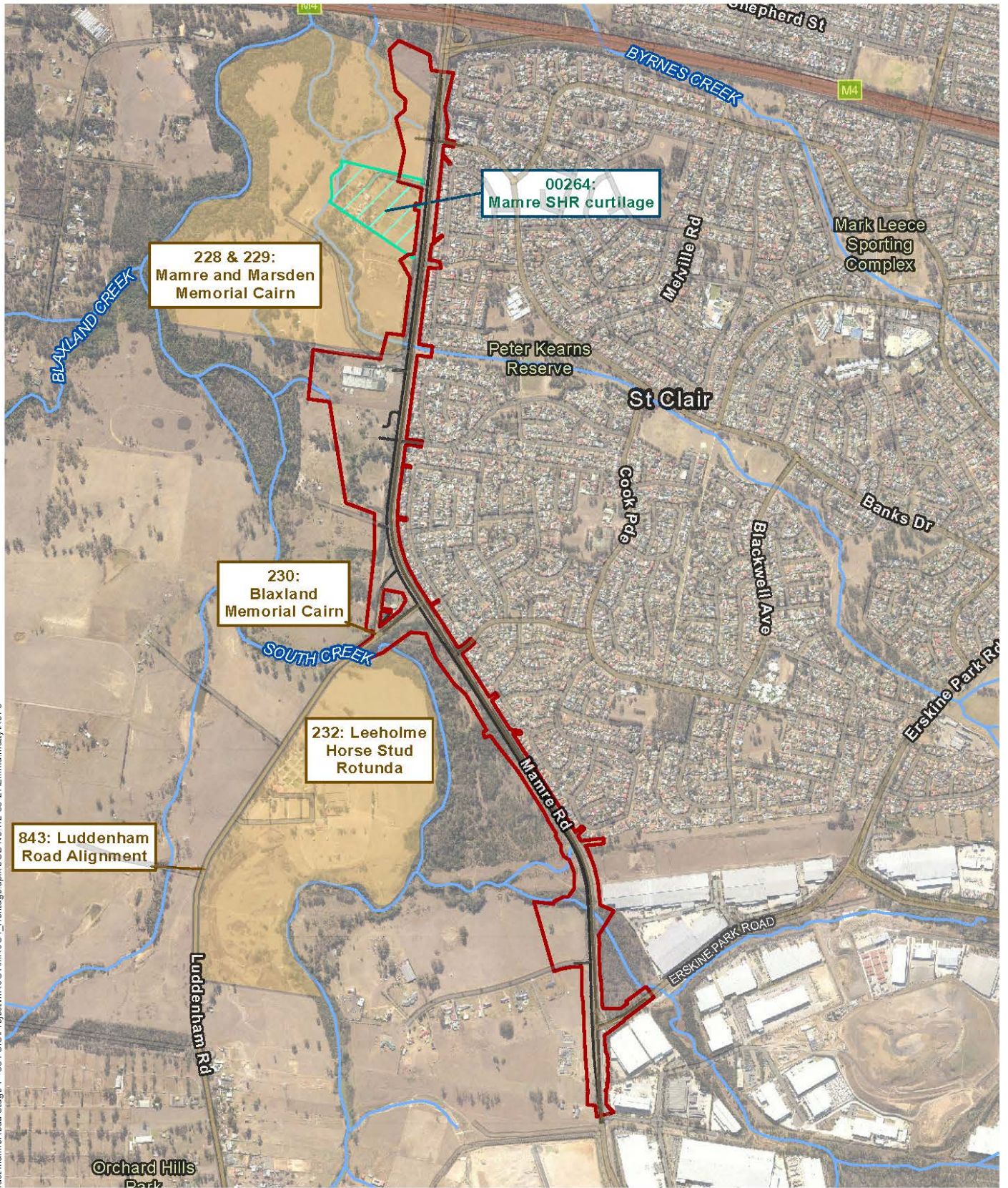
Pictures



Early Plans / Maps



Map indicating the location of the Rotunda from the Heritage NSW State Heritage Inventory.



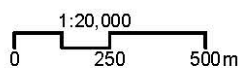
C:\Users\emma.muty\Aurecon Group\609466 - No Contract MamreRoad Stage 1 - 604 GISProject\MPRUS1\MPRUS1_Heritage.aprx\JOB No.112-05-21\Emma.Muty\Rev.0

Legend

- Proposed design's centerline
- Heritage study area
- State heritage item
- Local heritage item



Source: Aurecon, Spatial Services, Nearmap, Esri



Date: 15/03/2021 Version: 1
 Projection: GDA2020 MGA Zone 56

Mamre Road Upgrade Stage 1

Figure 4.1: Heritage items in the vicinity of the proposal

5 History

5.1 Pre-Contact

5.1.1 'The Forest Lands' of the Cumberland Plain

The area where Mamre Road is currently located, bordering the suburbs of St Clair and Orchard Hills, formed part of the western Cumberland Plain which stretched around the north-western areas of Sydney, and south to the areas surrounding Camden. The land immediately surrounding Mamre Road is mainly low to moderately grades slopes and forms part of the South Creek catchment. The area was formed on Wianamatta Shales formations and has deposits of alluvial soil which can be found right along the Nepean-Hawkesbury catchment areas.

The original vegetation which prospered in the proposal area was typical of the Cumberland Plain with open eucalypt woodlands, which consisted of Grey Box (*Eucalyptus moluccana*), Broad-leaved Ironbark (*Eucalyptus fibrosa*) and Forest Red gum (*Eucalyptus tereticornis*) with a variety of understorey grasses and low shrubs.

It is likely that throughout the course of recent Aboriginal pre-contact history, the various watercourses that are close to the proposal area would have provided the Aboriginal people occupying and/or visiting the area with a reliable source of water. Terrestrial food resources available to the people of the region would have included animals such as kangaroo, wallaby, possum, and bandicoot, a range of reptiles inclusive of snakes and lizards, and birds such as emus. Waterfowl and freshwater shellfish may also have been procured, along with a variety of edible berries, fruits, flowers, roots and tubers.

5.1.2 The Aboriginal Landscape

In their Conservation Management Plan for Mamre, St Marys prepared for the Department of Urban Affairs and Planning in 2003 (Mamre CMP), Graham Brooks and Associates note that the earliest European observations of Aboriginal life in the Sydney region were made almost exclusively within the immediate coastal strip of Sydney Cove and it is rare to find accurate descriptions made by people of the First Fleet that date to this period (1788-1792) which extend beyond the fringes of the initial European settlement into the hinterland of the Sydney district.¹ However recent investigations through oral histories, collaboration with local Indigenous peoples and environmental modelling (such as stream order modelling), historians and archaeologists are able to predict both the potential for Aboriginal archaeological sites, and indicate the likely nature, composition and complexity of Aboriginal landscapes.

Three linguistic groups are generally recognised within the Western Sydney region: the Darug, Kuringgai and Tharawal. Linguistic research suggests that the Darug (variously referred to as Daruk, Dharug, Dharruk) are the inhabitants of the proposal area.² It is possible that the subject land was occupied and used by the Gomerrigal (or Gomerigal or Gomerrigal-Tongarra) clan of the Darug, later referred to by the Europeans as the 'South Creek Tribe'.³ It is believed that at the arrival of the First Fleet in 1788, the size of the Aboriginal population of the Sydney region was close to 3000. Many of the tribes and clans were made up of several family groups which cooperated to forage and hunt in specific areas. Inland Aboriginal tribes such as the Darug had an extensive range of manufactured items including shields, weapons, baskets, cloaks, bags, fishing hooks and lines made from bark, shell or bone whilst axes and blades were made from stone raw materials.⁴ Bird feathers, animal teeth, nuts, ochre, animal skins and plant fibres were used to create tools and decorative items including clothing, cloaks and personal ornamentation.⁵ Hunting techniques often included smoking out animals by lighting a fire in the base of a hollow tree, burning large tracts of land and gathering the stranded animals, as well as cutting toe-holds in trees and climbing up to reach them, or

¹ See: *Mamre, St Marys Conservation Management Plan*. 2003. Prepared for the Department of Urban Affairs and Planning by Graham Brooks and Associates. Pp. 11 – 12.

² Attenbrow, Val. 2010. *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*. UNSW Press: Sydney. Pp. 30 – 34 on language groups of the Darug peoples.

³ Attenbrow. *Sydney's Aboriginal Past*. Pp. 16 – 17.

⁴ Attenbrow. *Sydney's Aboriginal Past*. Pp. 16 – 17.

⁵ Attenbrow. *Sydney's Aboriginal Past*. Pg. 17.

building nets and traps to gather fish.⁶ It has also been established that Aboriginal shelters were also constructed from large pieces of bark laid together in the form of a low structure or reinforced by three leaning poles lashed together (called *gunyahs*, see Figure 5-1), forming structures long enough to cover an adult or sometimes wide enough to accommodate six to eight people.⁷



Figure 5-1 An engraving of Aboriginal bark gunyahs. Source: C Cousen after John Skinner Prout. 1874. *Native Encampment*. Steel engraving, 200mm by 270mm (sheet). The British Library.

According to researcher and writer James L. Kohen, the Gomerrigal-Tongarra clan had rights to the ridges at Plumpton and the gravels of Eastern Creek.⁸ From these areas they used red silcrete rocks to make sharp flakes which were then fashioned into tools or used as barbs on spears. The MacLaurin family (who lived at 'Mamre' for some time) also asserted that the bodies of the dead were not buried but wrapped in bark and placed on platforms elevated in the branches of trees. According to recent archaeological investigations, such as those undertaken by Graham Brooks and Associates, there is moderate potential for finding items which indicate sites of Indigenous occupation however there are no remaining rock carvings or marked trees. Emily MacLaurin described a meeting place on South Creek at Mamre and it is thought that despite the arrival of the Reverend Samuel Marsden in 1804, ceremonies continued to be held at this spot for some time.

5.2 European Settlement of Penrith Area

5.2.1 The Push West

The early years of the Sydney Colony were filled with uncertainty. The exploration for rich and tillable soils closer to the Sydney Cove site proved to be fruitless, and the First Fleet encampment was at risk of falling into starvation if more suitable pastoral plains were not found.

It was also during the later stages of 1789 and into the early 1790s that diseases such as smallpox began to spread. This particularly devastated local Indigenous populations during the first three years of European colonisation, with research suggesting that it spread as far afield as tribes in the western reaches of the Cumberland Plain who were yet to come into physical contact with the white settlers. Reduction of their population saw major social reorganisation amongst Indigenous clans with many remnant clans grouping together – these groups were later referred to by the Europeans as the 'Botany Bay Tribe' and the 'South Creek Tribe'. Although this was perhaps one of the most devastating impacts on the Aboriginal peoples of the Sydney region during the First Fleet years, the 1828 Census indicates that clans were still living around the Richmond and Mulgoa areas, along many watercourses such as those which run through the proposal

⁶ Attenbrow. *Sydney's Aboriginal Past*. Pp. 16 – 17.

⁷ Attenbrow. *Sydney's Aboriginal Past*. Pg. 105.

⁸ 'St Marys' on *Penrith City Local History*. Retrieved from: <https://penrithhistory.com/st-marys/>

area, proving that the Indigenous population had begun to recover prior to the full colonisation of the Cumberland Plain.⁹

The poor soils and sandstone geology of the Sydney Cove area led to the surveying of the west around what is now referred to as Parramatta.¹⁰ The 1788 surveys reported potential for good soils. The original release of land to settlers in the early 1800s were around the areas of Bringelly and Appin to the south, and Parramatta and Windsor to the west. It was the hope that the establishment of farms in the west and south west could supply the infant Colony with food. The first grants followed disastrous floods on the Hawkesbury River in 1809, which has been the site of their primary source of grain. Lieutenant-Governor Paterson saw no alternative to settling the 'forest' lands of the Cumberland Plain.¹¹ Aboriginal management of the land had produced an open forest landscape, which the Europeans immediately recognised as ideal for livestock.¹²

Farms of twenty-five or thirty acres had been well-established at Parramatta, Prospect Hill, Kissing Point, the Northern Boundary, the Ponds, and the Field of Mars by the early 19th Century.¹³ Much of the land around Blacktown, Rooty Hill and some areas north of Castle Hill were largely reserved by Governor King for stock land. The suitability of the land in the western areas of Parramatta and Rouse Hill for growing crops was soon disproved by Colony Botanist George Caley, and pastoral activities soon turned to grazing.¹⁴

For a long time, the district further to the south-west of Parramatta was known to many as "The Cow Pastures", which included the Camden and Bargo districts. It was close to the place where the Colony's famous runaway cattle were discovered a few years after their escape from Sydney Cove. Only those in the Colony who had the means to establish themselves as successful graziers were given grants in the Cow Pastures.¹⁵ This included some of the most well-known Colonial families such as the Wentworth's, the Blaxland's, and the Macarthur's. Some of these larger grants lead to the domination of the Cox family in the Mulgoa Valley and the King family's extensive holdings at 'Dunheved'.

Many of the larger properties in the Penrith region formed pastoral chains so that stock could be moved about more efficiently. The earliest farms and homesteads in the region were 'Maryland' and 'Raby' near Liverpool, 'Kelvin Park' in Camden, and 'Bayly Park' off Mamre Road at Kemps Creek. However, by the mid-1850s more homesteads in the Penrith region had also been established including 'Leeholme' on Gregory Blaxland's farm and 'Mamre' on Reverend Samuel Marsden's farm near Orchard Hills, as well as the smaller cottage of 'Montifore' at Erskine Park. Refer to Figure 5-2 for a sketch of the earlier homesteads and farms in the Penrith and Campbelltown areas.

Small villages were also built in the area, which usually housed churches, taverns and schools, such as Castlereagh, Luddenham, Bringelly, Camden, Greendale, and Rossmore. The Luddenham village was largely established by the late 1850s along with the local South Creek Inn and Woolpack Inn, which serviced the St Marys area.

⁹ *Mamre, St Marys Conservation Management Plan*. 2003. Prepared for the Department of Urban Affairs and Planning by Graham Brooks and Associates. Pg. 16.

¹⁰ *Colonial Landscapes of the Cumberland Plain and Camden, NSW: A Survey of selected pre-1860 Cultural Landscapes from Wollondilly to Hawkesbury LGAs*, August 2000, prepared by Colleen Morris and Geoffrey Britton for the National Trust of Australia (NSW). Pg. 11.

¹¹ *Colonial Landscapes of the Cumberland Plain and Camden*. Pg. 13.

¹² *Colonial Landscapes of the Cumberland Plain and Camden*. Pg. 13.

¹³ *Colonial Landscapes of the Cumberland Plain and Camden*. Pg. 11.

¹⁴ *Colonial Landscapes of the Cumberland Plain and Camden*. Pg. 13.

¹⁵ *Colonial Landscapes of the Cumberland Plain and Camden*. Pg. 13..

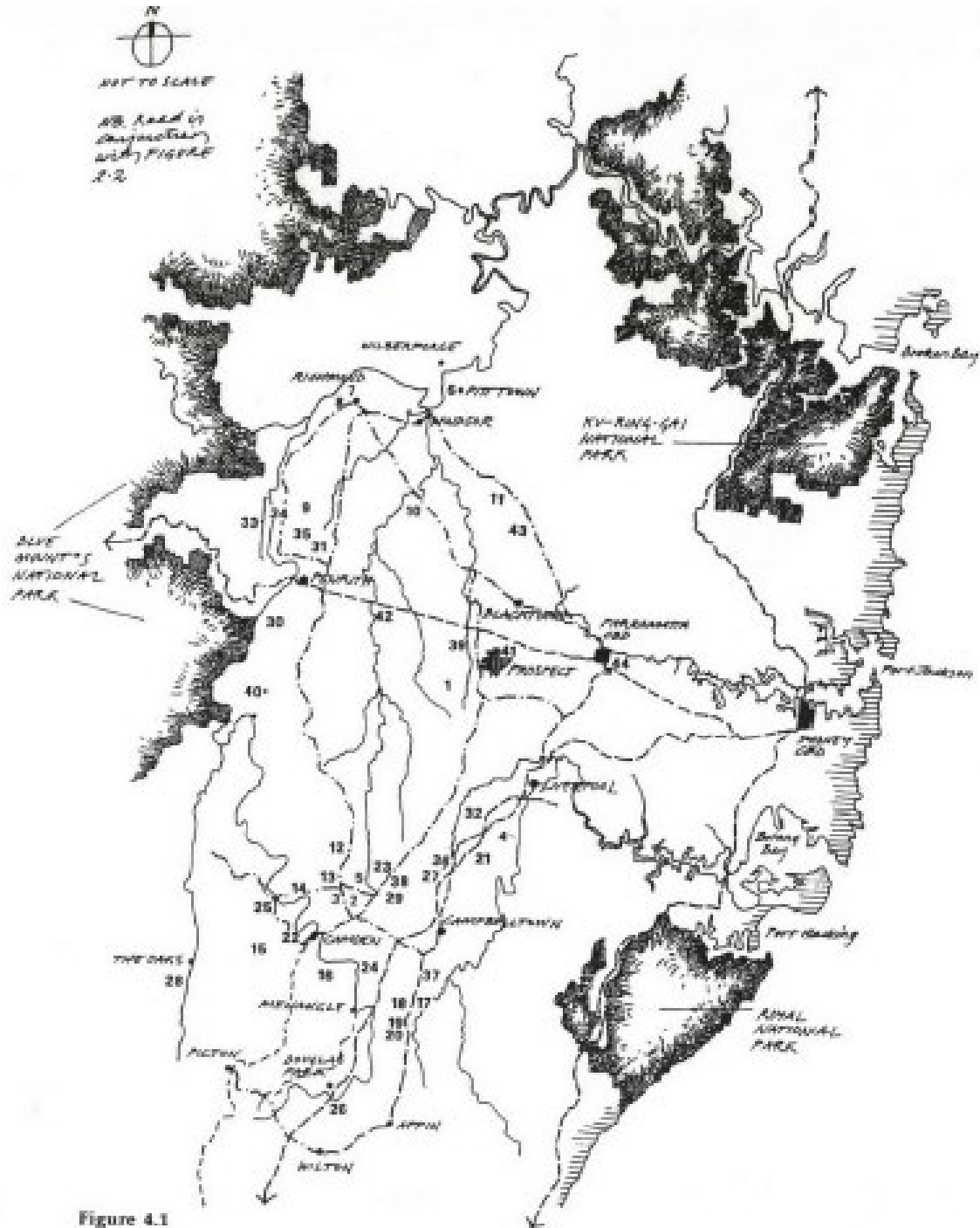


Figure 4.1

- | | | |
|--|--------------------------------|--|
| 1 Hersley | 15 Elbaerville | 31 Site of Berners |
| 2 Harrington Park | 16 Belconnen/Campden Park | 32 Former 1800 Grants/Colonial Farmsteads, Castleknagh |
| 3 Orielton | 17 Glen Lee | 33 Hadley Park, Moggan Park, Site of Minsenville, Lander's Inn |
| 4 Glenfield | 18 Mount Gillend | 34 The Poylans & McCarthy's Cemetery, Castleknagh |
| 5 Dean Park | 19 Epsom/Humewood | 35 Dunham Court |
| 6 1794 Grants - Pitt Town Bottoms | 20 Meadowdale | 36 Dunfield |
| 7 St Peter's Group/Richmond Lowlands-Carrowallis | 21 Macquarie Fields House | 37 Glenwood |
| 8 Haberville | 22 Ferguson's Nursery Site | 38 Site of Bangarrilbee |
| 9 Christ Church/Castleknagh Town Layout + Cemetery | 23 Raby | 39 Mulgona Valley Sites |
| 10 Clydesdale | 24 Glenlee | 40 Site of Vesman Hall |
| 11 Belle Vista | 25 Brownslee Hill | 41 Mamre |
| 12 Maryland | 26 St Mary's Towers (Parkhall) | 42 Merriville |
| 13 Donbigh | 27 Vaurolville | 43 Elizabeth Farm |
| 14 St Paul's Group, Cobbitty | 28 The Hermitage, The Oaks | |
| | 29 Epping Forest | |
| | 30 Epsomville | |
| | 31 Mt Pleasant Olive Windbreak | |

Figure 5-2 Map of early farms in the Penrith and Campbelltown regions, not to scale. Excerpt from *Colonial Landscapes of the Cumberland Plain and Camden, NSW: A Survey of selected pre-1860 Cultural Landscapes from Wollondilly to Hawkesbury LGAs*. Pg. 29.

Alongside these land grants was the establishment of the small town of Penrith in 1817 with a weatherboard court house and lock up built close to the newly formed Western Road, along with a 3.2 hectare paddock for travelling stock.¹⁶ This followed the earlier exploration of the Nepean region by Governor Arthur Phillip's party in 1789 and more extensively by Captain Watkin Tench in the 1790s who surveyed much of the river.¹⁷

The township of Penrith remained small for most of the early 19th Century, battling the main barrier to successful settlement: flooding, which caused many of the early settlers to lose property and some lost their lives. However, the visit of Governor Lachlan Macquarie in 1815 proclaimed the area as a viable place to grow the Colony, and eventually saw the commissioning of the Lapstone Bridge and a river punt in 1820s, which saw more travellers frequent the area.

5.2.2 Impact on Indigenous Peoples

Following the push into the south and the west from Sydney Cove between 1790 and 1800, the traditional food sources (plant life and animals) for Aboriginal people became overhauled by vast areas of agricultural crops and grazing lands. Forced by food scarcity and restricted access to their traditional foraging areas, some Indigenous peoples resorted to raiding crops and livestock. This led to hostility, the peak of which was between 1814 and 1816, shown by an Aboriginal massacre occurring at Appin in 1816 with the murder of 14 Aboriginal people. Conflict between the white settlers and the Aboriginal peoples of the Sydney region continued into the early 19th Century. During the Macquarie Governorship it has been recorded that whilst traditional socio-economic practices continued in some areas of Sydney, most Aboriginal people began to depend more on Europeans to provide shelter, food and clothing.

With decreasing birth rates coupled with high death rates, the remnants of the clans who occupied the entire Sydney area prior to contact began to congregate on a few properties owned by more "sympathetic" Europeans. The 1828 *Census* indicates that there were clans still living along the Hawkesbury at Mullet Island, and at Richmond, Mulgoa and numerous other areas within the vicinity of the proposal area. Several accounts report the South Creek Tribe occupying the property of Rev. Samuel Marsden at 'Mamre' as late as 1835. In 1835, Quaker missionaries James Backhouse and George Washington Walker visited the 'Mamre' homestead with an Aboriginal guide provided for them by the Reverend Samuel Marsden. Backhouse recorded:

*Before dark, we walked to the side of the Creek, to see the Black Natives, who resort thither. In comparison with some other tribes, the South Creek Natives may be considered as half-domesticated, and they often assist in the agricultural operations of the settlers.*¹⁸

Other evidence is cited noting Aboriginal people camping at 'Mamre' during the post-contact period and being encouraged by Marsden to work on the property in return for food and clothing.¹⁹ However there is evidence that Marsden held little respect for the Aboriginal people who occupied the lands around 'Mamre', whom he felt were impossible to convert to Christianity.²⁰ Particular stories of Aboriginal descendants living or working at 'Mamre' are also noted during the occupation of Jim Hall, who ran a large dairy on his lease at 'Mamre' from the late 1880s to his death in 1915.²¹ It is reported, according to Professor Colin Maclaurin's family (last owners of the property between 1949 and 1975), that at 'Mamre' the bodies of deceased Aboriginal peoples were wrapped in bark and placed on platforms elevated in the branches of trees. According to Murray Cree's report in 1995, Aboriginal artefacts were collected over twenty-six years by Professor Maclaurin, before 'Mamre' was purchased by the Planning & Environment Commission in 1975, 'but no evidence can be found of his parting gift of them to government'.²²

¹⁶ *Heritage Study of the City of Penrith: Vol 1*. 1987. Prepared by Fox & Associates for Penrith City Council. Pg. 40.

¹⁷ *Penrith Heritage Study, Vol. 2*, Nov 2007, prepared by Paul Davies for the Penrith City Council. Pg. 17.

¹⁸ *Mamre, St Marys Conservation Management Plan*. 2003. Prepared for the Department of Urban Affairs and Planning by Graham Brooks and Associates. Pg. 16.

¹⁹ *Mamre, St Marys Conservation Management Plan*. Pp. 16 – 17.

²⁰ *Mamre, St Marys Conservation Management Plan*. Pg. 23.

²¹ See Murray Cree, L. 1995. *Mamre: Place of Promise. Pioneers of Land and Spirit on Marsden 's South Creek Farm*. Published by Mamre Plains Ltd. Pg. 8 as cited in *Mamre, St Marys Conservation Management Plan..* Pg. 17.

²² As quoted in *Mamre, St Marys Conservation Management Plan*. Pg. 46.

It is also reported that:

*MacLaurin's daughter, Emily, believed that ceremonies continued to be a part of Aboriginal life along South Creek after Marsden arrived in 1804. She pointed out a meeting place of the Gomerrigal-Tongarra clan at Mamre where the Creek takes in a small stream from the west, the right bank of which reaches into the creek in a narrow finger. It appears that from this description that the locality comprises the previously discussed confluence of South Creek and Blaxland Creek that occurs within the south western corner of the subject land.*²³

Although the occupation of Europeans disrupted and nearly destroyed Indigenous ways of life throughout the 19th and 20th Centuries, the local Gomerrigal clan attempted to stay on their traditional country for as long as possible and survive despite the hardships and discrimination.

5.2.3 Growth of the Penrith Shire

The Western Road, or as it is now known as the Great Western Highway, provided access over the Nepean and influenced the settlement of the city that is now Penrith. The road linked the heart of the Colony in Sydney Cove to the critical outer provinces in Parramatta and the lower reaches of the Mountains. It seems that its beginning coincided with Governor Macquarie's tour of inspection westward in October 1815. He noted in his journal that he returned 'by the new Western Road now constructing' which was stimulated by the completion of William Cox's track across the Blue Mountains in January of the same year.²⁴

By 1817, travellers were using the western road frequently. By the late 1830s houses, inns and St Stephen's Church were established in a long village next to the road near the Nepean. Without the construction of this road, the agricultural and commercial ventures in the Penrith area would not have prospered as they did in the mid to late 19th Century.

The relationship to the Great Western Highway still exists to this day, even though its bigger counterpart, the Western Motorway (M4) which was constructed in the 1960s, lies slightly to the south and mirrors the old Western Highway. Other roads such as Mamre Road, Cowpasture Road (to the south east of the proposal area) and The Northern Road (to the south west of the proposal area) remained important routes for the locals in the early 19th Century, however, never became major thoroughfares. Mamre Road was originally aligned in the late-19th Century and later upgraded to a main road in the early 20th Century (see Figure 5-3 and Figure 5-4 below).



Figure 5-3 Excerpt from the Melville Parish Map, County of Cumberland, c1898 (left) showing the boundary of Marsden's and neighbouring properties to form an early road (in orange). Excerpt from the Melville Parish Map, County of Cumberland, c1938 (right) and cancelled in 1968, showing Mamre Road as listed wide road.

²³ Mamre, St Marys Conservation Management Plan. Pg. 46.

²⁴ Heritage Study of the City of Penrith: Vol 1. 1987. Prepared by Fox & Associates for Penrith City Council. Page 25.

By the 1820s, the need for viable land for crop growing prompted the push over the Blue Mountains. Following Blaxland, Lawson and Wentworth's crossing of the Great Dividing Range, land was made available for settlement in the Bathurst region which was more practicable for crop growing and further stock grazing. The mid-19th Century saw a mass exodus of the pastoralists and graziers over the mountains to grow their fortunes. By this time, the land in the County of Cumberland tended to be stock or holding stations for properties to the west in the Bathurst area or to the south around Goulburn or Braidwood. Many of the properties had absentee owners, living further west or in Sydney.

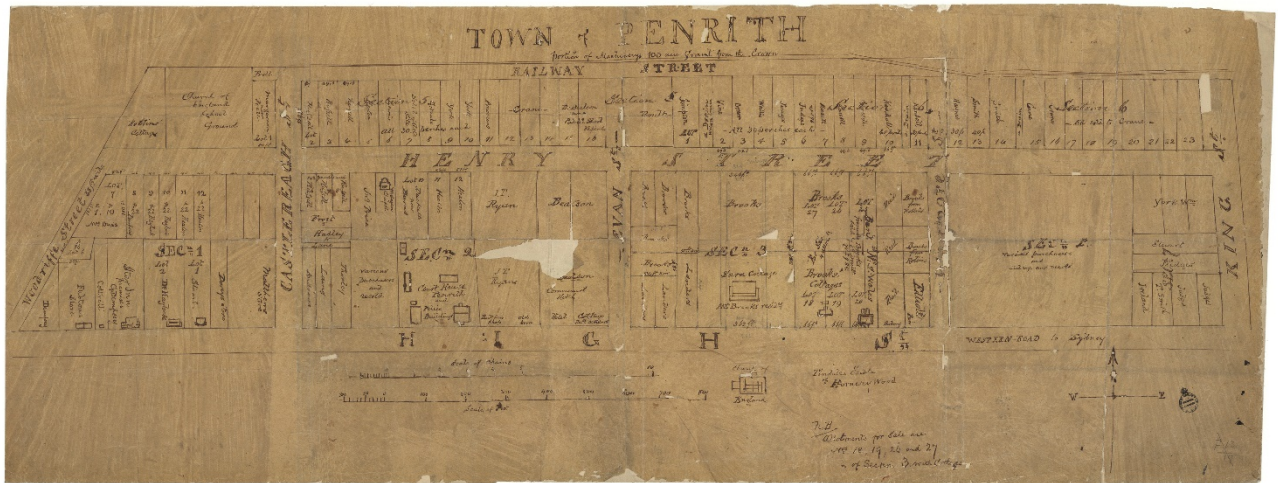


Figure 5-4 Town of Penrith: portion of Machenery's 100-acre grant from the Crown. ca. 1885. Source: State Library of NSW

However, breeding sheep and cattle was not the only endeavour undertaken by the early farmers in the Penrith region. By the 1830s, orcharding, grape growing, and vineyards became a focus of aspiring farmers. Areas of better soil produced prosperous vineyards such as Minchinbury and the Mulgoa Valley. Charles Marsden, son of Rev Samuel Marsden of 'Mamre', had a very rich orchard by the late 1890s which was described by his nephew James Hassall as 'a splendid orchard of twenty acres. The fruit surpassed any that I have seen...The grapes, chiefly muscatel, were very fine. Peaches, apples, pears, oranges, apricots and nectarines were in abundance.'²⁵

In the 1840s, orcharding continued as a major enterprise especially around Parramatta. Subdivisions of the larger estates became common practice right through to the early 20th Century, with many larger estates being reduced to smaller allotments leased to ex-convicts or tenant farmers. As at 'Mamre', these smaller farms used the smaller fertile paddocks close to the creeks and rivers for orcharding and vegetable gardens.

The desire for new pastoral holdings continued and as land in western NSW was occupied, Queensland and north-east NSW became the new frontier. By the 1860s a second generation of families, with their capital, moved out of the County of Cumberland and into the far reaches of the Colony. However, some pastoralists stayed and made the Dunheved and Rooty Hill region their permanent home.

By the late 1860s, primary schools, bank branches, churches, shops and saleyards as well as a railway line from South Creek (St Marys) to the Crossroads (Kingswood) were opened, which resulted in St Marys being proclaimed a Municipality in March 1890. A large tannery industry and wagon manufacturing became key commercial ventures in the Penrith and St Marys districts in the late 19th Century with Andrew Thompson owning the largest tannery in NSW until the 1920s.

By the early 20th Century, a telephone exchange was opened and many industrial estates established roots within the region as Sydney-siders started to spread further west to build their own version of the Australian dream. One of the initiatives within this region was the Soldier's Settlement Scheme which supported the post-war boom and returned soldiers in starting their version of the "Dream".²⁶ New building materials and techniques such as prefabricated timber cottages, weatherboard and fibro homes enabled this dream to be

²⁵ *Mamre, St Marys Conservation Management Plan*. Pg. 25.

²⁶ *Penrith Heritage Study*, Nov. 2007, prepared by Paul Davies for Penrith City Council. Pg. 49.

realised on a large and quick scale.²⁷ St Marys and surrounding suburbs still retain these 1920s and later 1950s fibro urban form.

Post-World War I saw much of the St Marys region develop rapidly with real estates opening, high schools being built, and munitions factories and defence bases being constructed. Much of the development post-World War II has been of a similar nature, including the opening of major thoroughfares and train routes, shopping centres, sporting ovals and the development of more residential properties.

5.2.4 Development of Orchard Hills Area

Orchard Hills, NSW is located in the City of Penrith LGA on the southern side of the M4 Motorway, and is still largely semi-rural. Sydney Water's supply pipeline (connecting Warragamba Dam to the Prospect Reservoir) is its southern boundary line, while the suburbs of St Clair and Erskine Park border the suburb to the east – this being the predominant focus area of this study. Kingswood and Claremont Meadows are northern neighbours and Glenmore Park, South Penrith and the rural areas of Wallacia and Mulgoa comprise the western boundary. Orchard Hills has a predominately rural character with undulating hills and scenic vistas, with smaller drainage creeks and billabongs forming the South Creek catchment.²⁸ Its landscape is mainly overlaid with grazing farms, orchards, reserves and bushland, a significant Defence base to the west and some smaller housing developments.²⁹

The history of Orchard Hills begins in 1806, when Governor Philip King granted 600 acres on South Creek to Mary Putland, the daughter of the incoming governor, William Bligh.³⁰ She named the property Frogmore.³¹ Her husband John died two years later and in 1810, Mary married Lieutenant Colonel Maurice O'Connell.³² An additional grant of 1055 acres was made to Mary at the time of her wedding as a present from Governor Lachlan Macquarie.³³ Frogmore was managed for many years by Major George Druitt as Maurice O'Connell's military duties meant they were rarely in residence.³⁴

The suburb of Orchard Hills takes in part of the original Frogmore Estate and the adjoining York Estate originally owned by the York family.³⁵ When the York Estate was subdivided in the late 1880s, the land was mainly sold for orchards and vineyards.³⁶ By the early 1900s a rural community was well established in the area and a village developed.³⁷ The Mount Hope Methodist Church was built in 1904 and in 1910 the York Estate Public School was built.³⁸ The district and village did not have a definite name however Frogmore, Mount Hope and York were all used to describe the region.³⁹ On 17th October 1910, a meeting of residents held at the public school decided on the name Orchard Hills.⁴⁰ The below details a further history and development of the Mamre Homestead.

5.3 Mamre Homestead

Established by the Reverend Samuel Marsden in 1804 as 'the Plains of Mamre' on a grant of 1,030 acres from Governor King, the 'Mamre' homestead slowly grew into one of the most successful farms in the Orchard Hills area. Marsden was awarded the large grant to perform magisterial and religious services to the region, as well as for his experience as a farmer. The grant straddled South Creek, the western portion being located within the Parish of Claremont, and the eastern portion within the Parish of Melville.

²⁷ *Ibid.* Pp. 58 – 59.

²⁸ 'Orchard Hills', *Penrith City Local History*. Retrieved from: <https://penrithhistory.com/orchard-hills/>

²⁹ 'Orchard Hills', *Penrith City Local History*.

³⁰ 'Orchard Hills', *Penrith City Local History*.

³¹ 'Orchard Hills', *Penrith City Local History*.

³² 'Orchard Hills', *Penrith City Local History*.

³³ 'Orchard Hills', *Penrith City Local History*.

³⁴ 'Orchard Hills', *Penrith City Local History*..

³⁵ 'Orchard Hills', *Penrith City Local History*.

³⁶ 'Orchard Hills', *Penrith City Local History*.

³⁷ 'Orchard Hills', *Penrith City Local History*..

³⁸ 'Orchard Hills', *Penrith City Local History*.

³⁹ 'Orchard Hills', *Penrith City Local History*.

⁴⁰ 'Orchard Hills', *Penrith City Local History*.

The Mamre homestead is typical of a farmhouse on a working farm in the Colonial Georgian style. The extant two storey Colonial Georgian homestead building was constructed c.1832 of sandstone bricks, which were rendered sometime between 1893 and 1903. The footings are stone with timber floors and the roof was originally shingled but was covered with corrugated iron at the end of the 19th Century. The sandstone flagged timber verandah wrapping around three sides of the building has a bellcast corrugated iron roof. The plan of the house is rectangular, with a central stair hall, eleven rooms and a single storey kitchen wing to the southern side. The windows of the house are timber double hung, with each sash having six panes. Some farm outbuildings still remain.

The main approach route to the homestead appears to have been in a straight line from Mamre Road, refer to Figure 5-5. It passed via the various farm and outbuildings, to the rear entrance of the homestead. According to research conducted by the Sisters of Mercy during their occupation of the homestead, there were a number of different entrances to the property. The front entrance of Mamre was built facing west, away from Mamre Road, so the easterly straight driveway axis was most likely to have been for farm vehicles. The Mamre CMP notes that it was common for main entrances to farms to intersect with farm buildings. An un-referenced statement in the *Mamre Bulletin* claims that there was an early entrance which went over South Creek at Deadman's Crossing, where the Western Freeway crosses the creek, however this would have been a long trip over the creek which makes it likely a former entrance linking directly to the lower paddocks. The Mamre CMP notes that the most long-standing entrance was located adjacent to the southern end of Mamre Road near the freeway bridge, which curved into the property. This driveway can be seen faintly on historic aerials. There is evidence that this driveway could have been lined with stone kerbing and a fence line surrounding the homestead, which suggests that this was a formal entrance to the homestead used by visitors to the family, however this has not been confirmed.

The current driveway alignment is the most recent and appears for the first time of the 1956 historic aerial (see Figure 5-6).⁴¹ This driveway is a bitumen track and is lined by a number of *Eucalyptus sideroxylon* trees, which were planted around the 1970s.⁴²

⁴¹ *Mamre, St Marys Conservation Management Plan*. Pp. 30 – 31.

⁴² *Mamre, St Marys Conservation Management Plan*. Pg. 54.



Figure 5-5 1947 aerial photography showing outbuildings and landscape elements at this time. Source: Mamre CMP, Pg. 33.



Figure 5-6 Excerpt from a 1956 aerial of Mamre House and Mamre Road, showing current driveway alignment to the north, the original western driveway alignment to the south, as well as faint outlines of the longest standing driveway to the north of the current driveway near the dam.

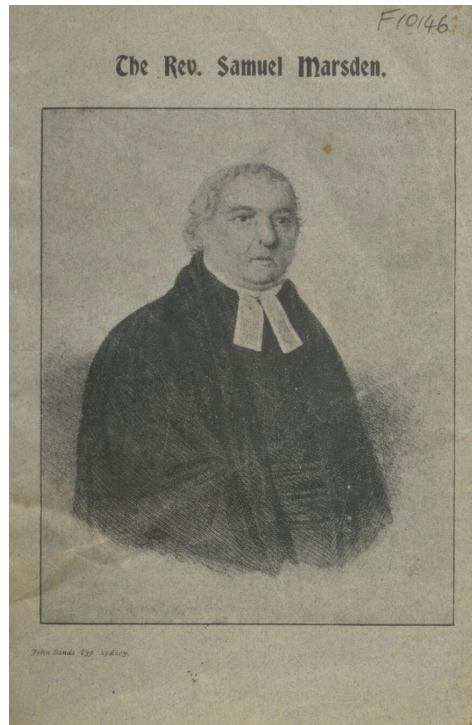


Figure 5-7 *The Rev. Samuel Marsden: the second Australia chaplain.* 1900. Gunther, W. J. (1839 – 1918).
Source: Trove: <http://nla.gov.au/nla.obj-401894501>

'Mamre' was originally constructed by the 1820s, when Rev. Marsden had a keen interest in selective breeding of stock, particularly sheep (see Figure 5-7 for a portrait of Rev. Samuel Marsden). Marsden was convinced of the economic prospects of fine wool for the Colony and began to breed primarily for fine wool production. Marsden's fleeces were noted as the best in the Colony between 1804 and 1814, an even match with another well-known colonial farmer John Macarthur. In 1807 Marsden returned to England and wore one suit to an audience with King George III and presented the other one to His Majesty. In return Marsden was presented with five merino ewes from the Royal Flock.⁴³ With this new prize Marsden set off back to Australia in 1809 to continue his efforts at 'Mamre'.

Marsden was one of the best farmers in the colony, as well as being a chaplain and magistrate. His estates were used as model farms with orchards of grapes, peaches, apples, pears, oranges, apricots, nectarines and berries. There was also wheat, oaten hay, exotic pasture grasses, sheep, cattle and horses. By 1836 Marsden's landholdings totalled almost 12,000 acres and he had well over 20,000 sheep and 1,100 cattle spread over his many properties. Marsden's will stated that 'Mamre' was approximately 1,500 acres at the time of his death in 1838. However Marsden was notorious for his use of convict labour, of whom he took great advantage.⁴⁴ Many of the convicts chosen to work at 'Mamre' were Irish Catholics who Marsden openly disdained, reflected in the name he acquired – the "Flogging Parson" – due to his tendency to inflict severe floggings as local Magistrate in Parramatta and on his farm at 'Mamre'. Marsden also openly declared similar sentiments about the Aboriginal Peoples, whom he saw as a degraded and unworthy race of receiving the blessings of civilisation.⁴⁵ At its peak, 'Mamre' had at least 35 – 40 persons working on the farm including the whole Marsden family living in the main house.

In 1838 the property passed to Charles Simeon Marsden, who successfully squandered most of the wealth and richness accumulated at 'Mamre' by his father. On 21st August 1839, Charles Marsden and his wife Elizabeth, the daughter of respected soldier, landholder, magistrate and family friend, Captain John Brabyn, applied to the Supreme Court of New South Wales for a Mortgage to Richard Rouse, for a sum of £1,300, for 'Mamre'.⁴⁶ It was advertised as existing of 1,000 acres, 500 of which were cleared, as well as "dwelling house, extensive orchard and garden, barn, stabling and enclosed paddock".

⁴³ *Mamre, St Marys Conservation Management Plan.* Pg. 22.

⁴⁴ *Mamre, St Marys Conservation Management Plan.* Pg. 23.

⁴⁵ *Mamre, St Marys Conservation Management Plan.* Pg. 23.

⁴⁶ *Mamre, St Marys Conservation Management Plan.* Pg. 26.

Richard Rouse acquired 'Mamre' in 1839 and in 1841 the property was given to his daughter Elizabeth Henrietta Rouse as her principal wedding gift when she married the Hon. Robert Fitzgerald, MLC for Windsor. Elizabeth and Robert Fitzgerald continued as absentee owners and leased the farm to several different tenants including the Marsdens. A main focus of 'Mamre' during this period was horse racing and sales, which later aerial photos confirm evidence of a racetrack.⁴⁷ On the death of Elizabeth Fitzgerald, 'Mamre' passed to her eldest daughter Elizabeth who continued to lease the property. In 1845 Charles Marsden's mother-in-law, Sarah Brabyn, repurchased 110 acres of the former 'Mamre' estate for her daughter and son-in-law and called it 'Shrivenham'. After a short time at 'Shrivenham', Sarah eventually leased 'Mamre' and the family returned to live in the homestead.

The next known tenant was James Hall, who took over the lease from 1886 to 1949 and lived in the house with his wife, Emily Elizabeth Shadlow (see Figure 5-8 for a photograph of the Halls). Hall established a large dairy on the property as well as crops and pigs. The main residence in the 1930s was as it is now, except for the infill rooms to the verandah which have been demolished. The dairy had weatherboard walls, with a gabled roof of timber shingles, later covered over with corrugated iron. About 30 feet from the dairy was a barn. The stables included a brick gaol and a harness room arranged at either end of the four stables. The stables were divided into eight stalls, with a brick floor. Behind the stables was a stone paved pig sty. Between 1915 and 1939 the property was leased by Samuel Barber Dale who lived in Strathfield, refer to Figure 5-9 for photographs of the House in the 1930s. The homestead was occupied by the Stonestreet and Ogilvie families.

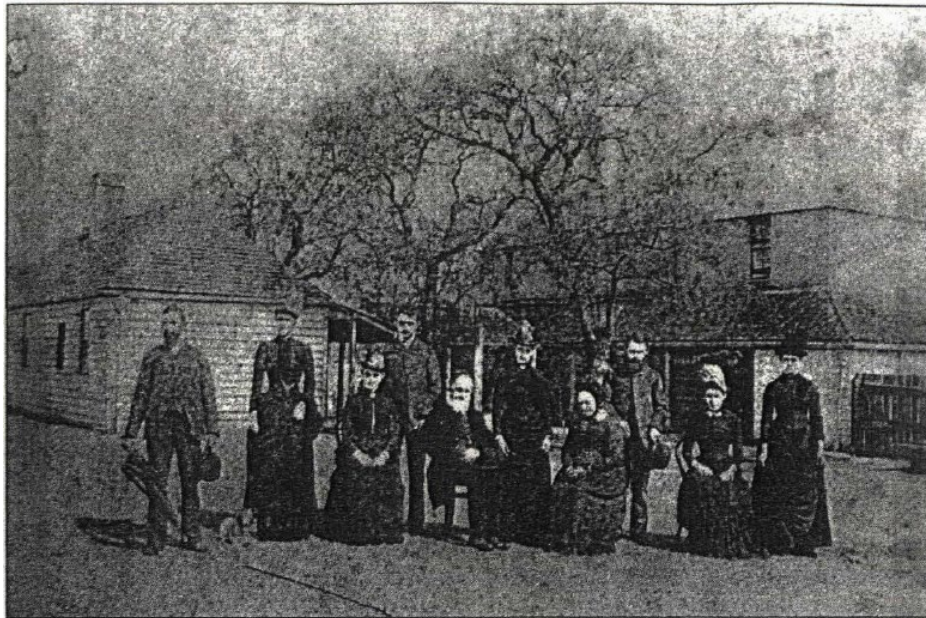


Figure 5-8 Image of James and Emily Hall (seated) with members of their family c.1890. A large framed copy of this photo hangs in the 'Mamre dining'. Source, Mamre CMP page 29

By March 1949, most of the property was transferred to Emily Ethel MacLaurin of Sydney, and her son, Professor Evan Colin Briarcliffe MacLaurin, descendants of the Fitzgerald family, who used the property as a weekend. Architects Lindsay, Thompson and Spooner were commissioned by the MacLaurins to renovate the house in 1949.⁴⁸ The alterations were instigated to improve the living conditions of the house, which was in a poor state of repair, a result of its prior use as a cow shed. Landscape works were also undertaken at this time. The works showed some concern for the original form and character of 'Mamre', as roof lines were repeated, and materials were matched, including the stone sills, timber louvred shutters, corrugated iron sheeting and stuccoed exterior walls.

⁴⁷ *Mamre, St Marys Conservation Management Plan*. Pg. 27.

⁴⁸ *Mamre, St Marys Conservation Management Plan*. See pages 34 – 35 for full details of these renovations.



Figure 5-9 'Mamre' in 1930s including some of the infill rooms to the verandah, since demolished. Source: Shaw, E. G. Item 17: 'Mamre', St. Marys, 1933 / Photographer E.G. Shaw, 1933 (Source: State Library of NSW).

The area of the original grant was first subdivided between 1952 and 1955. In May 1965 the land for the M4 Freeway was resumed by the Commissioner for Main Roads, and major subdivisions occurred in 1968 with only 85 hectares remaining. Arthur Windsor and family lived in the caretaker's cottage from 1968 and 1983 and continued the farming activities. It is unknown where the caretaker's cottage was located. The property was transferred to the State Government in 1975, however the MacLaurin family continued to use the homestead until 1978. The homestead was then unoccupied and vandalised.

In 1984 works to restore the house were undertaken by Howard Tanner and Associates.⁴⁹ The broad aims for restoration at this time were to maintain and reinforce the architectural qualities of the original building; remove elements which were not critical to the importance of the homestead, rectify structural defects; to replace deteriorated or missing original elements in new material to matching detail; and to enrich the existing characteristics by cleaning, re-fixing, supporting and finishing existing building elements.

In 1975 the NSW Department of Environment and Planning acquired Mamre House and then in 1986 leased 'Mamre' to The Sisters of Mercy of Parramatta for a term of 20 years. They proposed the re-establishment of a working farm with crops, vegetables, plant nursery, farmyard animals, and a showcase herd of cattle and Egelabra Merinos descended from Marsden's flocks. The Sisters also ran craft and community activities, educational and archival material as well as farm workshops. In July 1990 the homestead was opened to the public by the NSW Premier the Hon. Nick Greiner. 'Mamre' continues to offer guided tours, job skills and event spaces to the public, and is currently leased and occupied by Catholic Care.

⁴⁹ *Mamre, St Marys Conservation Management Plan*. See pages 37 – 39 for full details on these renovations.

6 Targeted Archaeological Assessment

6.1 Archaeological resource

The following section discusses the historic archaeological resource of the proposal area. It includes an assessment of the varying levels of archaeological potential of the proposal area and a discussion of the heritage significance of the resource. An archaeological impact assessment, which examines the likelihood of the project to impact on significant archaeology is provided at **Section 7**.

Given the large proposal area, the assessment has identified key areas or zones with potential for significant historical archaeological resources. The assessment of archaeological potential is based on the following:

- the historical analysis prepared to inform this report (Section 5)
- review of the SHR, S170 and LEP records for known listed sites
- review of the relevant archaeological background documentation, such as historic plans, aerial imagery and previous archaeological studies
- identification of previous development that would have impacted on historical archaeological resources

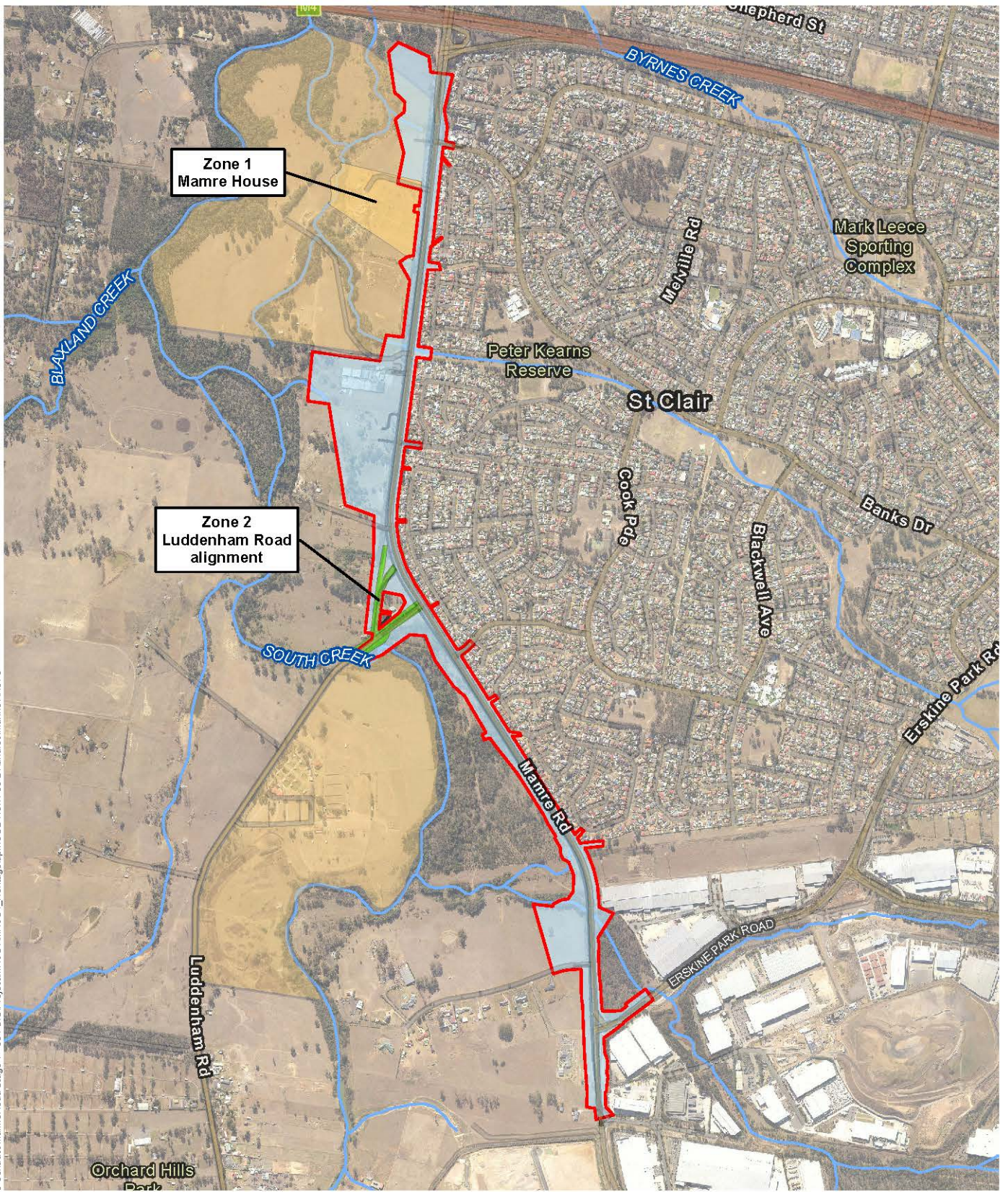
Archaeological potential is influenced by the geographical and topographical location, the level of development, subsequent impacts, levels of onsite fill and the factors influencing preservation of material such as soil type. Correlating to the levels of disturbance with the historic evidence and the phases and types of development that has occurred informs the level of archaeological potential. Levels of potential are defined as follows:

- **Low** – it is unlikely that archaeological evidence associated with this historical phase or feature survives
- **Moderate** – it is possible that some archaeological evidence associated with this phase or feature survives. If archaeological remains survive, they may have been subject to some disturbance
- **High** – it is likely that archaeological evidence associated with this historical phase or feature survives intact

Much of the proposal area, particularly the open and undeveloped land that falls to the western side of Mamre Road, has been in use as farming and agricultural land since first subdivided from the early grantees. The limited historical development within the proposal area has resulted in only localised areas with potential for historical archaeological remains. An overview of these zones is set out in Table 6-1, followed by more detailed analysis and significance assessment in the following sections.

Table 6-1 Archaeological zones

Zone	Archaeological site	Potential level
Zone 1	Mamre House and grounds	Moderate to high
Zone 2	Luddenham Road alignment	Low
Entire proposal area	Material associated with historical pastoral and agricultural activities such as postholes, outbuilding footings, farming remains including fence posts, wiring, farm objects, historical ploughing	Low to nil

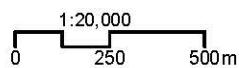


C:\Users\landres.mairino\Documents\Projects\MamreRoad\Stage 1 - 504 GISProject\MIRUS\Heritage.aprx\JOB No. V4-08-21\landres.mairino\Rev.0

- Proposed design's centerline
- ▭ Heritage study area
- Historical Archaeological Potential**
- ▭ Moderate - Zone 1
- ▭ Low - Zone 2
- ▭ Low to Nil



Source: Aurecon, Spatial Services, Nearmap, Esri



Date: 4/08/2021 Version: 2
 Projection: GDA2020 MGA Zone 56

Mamre Road Upgrade Stage 1

Figure 6.1: Historical Archaeological Potential

6.1.1 Assessment of historical archaeological significance

In NSW assessments of archaeological significance must be done in accordance with *Assessing Heritage Significance*, *Assessing Significance for Historical Archaeological Sites and “Relics”* and with consideration for the Burra Charter.⁵⁰ Subsurface deposits are one aspect of significance however with archaeological potential it is necessary to consider research potential with regard to criterion (e) of the guidelines.

The accepted framework for assessing research potential are the questions developed by Bickford and Sullivan in 1984.⁵¹ The questions are:

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

The assessment of archaeological significance has used the criteria set out in the NSW Heritage Branch publication, with reference to Bickford and Sullivan’s questions with regard to research potential.

6.1.2 Phases of historical development

The historical analysis identified four main phases that have influenced the development within and surrounding the proposal area. These relate to the post-contact periods of history only, as Aboriginal cultural heritage has been addressed in a separate study for the proposal.

These four phases are:

- **Phase 1** - Early exploration, land grants and settlement (1803-1850)
- **Phase 2** - Pastoralism and grazing - mid-nineteenth century to Federation (1850-1900)
- **Phase 3** – Farming, closer settlement - (1900-1945)
- **Phase 4** - Post war development and urban expansion (1945 onward)

Key chronological developments per phase are summarised in Table 6-2. These phases inform an understanding of the archaeological resource of the proposal area.

⁵⁰ NSW Heritage Office 2001; NSW Heritage Branch, Department of Planning 2009; Australia ICOMOS 2013

⁵¹ Bickford, A and S Sullivan 1984, ‘*Assessing the Research Significance of Historic Sites*’, in Sullivan S and S Bowdler (eds), *Site Surveys and Significance Assessment in Australian Archaeology*

Table 6-2 Historical phases and chronology

Historical Phase	Historical event or development	Date
Phase 1 Early exploration and settlement (1803-1850)	Nepean River is surveyed	1803
	Reverend Samuel Marsden is granted over 1,000 acres on South Creek and establishes Mamre farm	1804
	Mary Putland is granted large area of land at Orchard Hills which becomes Frogmore Estate	1806
	John Blaxland and brother Gregory receive large land grants which become large estates of Leeholme and Luddenham	1813
	Gregory Blaxland, Henry Lawson and William Wentworth set out to cross Blue Mountains	1813
	Great Western Road established and becomes main route west	1817
	Mamre Homestead building is constructed	c1832
	Orcharding, vineyards and farming emerge as a major industry in the area	1840s
Phase 2 Pastoralism and grazing (1850-1900)	Luddenham Road, connecting the two Blaxland estates, is first metaled -	1887
	Mamre Road is established – formerly a road between a municipal boundary of St Marys to the Orphan School Road	1892
	Expansion of the dairy industry around South Creek	1890s
Phase 3 Farming and closer settlement - early twentieth century (1900-1950)	A timber horse sale rotunda is built at Flemington for Inglis & Sons	1920s
	Soldiers settlement schemes are rolled out, encouraging expansion of residential development in St Marys and Penrith area	1920s
	Two stone memorial cairns are erected by the residents of St Marys to commemorate Samuel Marsden and Gregory Blaxland	1938
	Mamre Property is transferred to the Maclaurin family	1949
Phase 4 Post war development and urban expansion (1950-2000)	Mamre Road is widened in several places and parts of the proposal area resumed as road reserve	1958
	Land for the construction of the M4 Motorway is resumed by the Commissioner of Main Roads	1965
	State Government purchases the Mamre property and subdivision occurs	1975
	St Clair is established as a new housing development and suburb to the east of Mamre Road	1970s onwards
	'Mamre' passes to the Department of Environment and Planning and is leased to The Sisters of Mercy of Parramatta for a term of 20 years	1986 onwards

6.2 Archaeological potential in the proposal area

6.2.1 Zone 1 – Mamre House and grounds

A discussion of the archaeological potential of Mamre House and an assessment of archaeological significance is set out in Table 6-3 below.

Table 6-3 Zone 1 Archaeological potential and significance

<p>Potential archaeological site</p>	<p>Mamre House and grounds</p> 
<p>Previous disturbance</p>	<p>Low</p> <p>Mamre has remained a farming property since its establishment in the early nineteenth century. Some disturbance has occurred at the property's extremities as a result of subdivision and road widening works occurring from the 1960s onwards however in the area immediately surrounding the main homestead very little disturbance has occurred over time.</p>
<p>Historical Phases</p>	<p>Phase 1, 2 and 3</p>
<p>Level of archaeological potential</p>	<p>Area surrounding the homestead building and gardens – High to moderate</p> <p>The property once featured a range of outbuildings including a dairy, kitchen/dining room, stables and dairy. These structures have since been destroyed or removed. Archaeological potential is high to moderate around the former footprints of these structures and includes any remnant deposits, footings, subsurface materials or deposits that relate to the early period of the Mamre property 1835-1930.</p> <p>Grounds, including driveway and area (subject to Proposal disturbance) – Moderate to low</p> <p>According to the Mamre CMP (2003), the archaeological potential for historic sites is moderate to low within the homestead's wider curtilage, around the paddock areas, driveway and farming areas.⁵²</p> <p>All three driveways, including the two former 19th Century entrances and the current mid-20th Century driveway, have low potential for any subsurface historical archaeological deposits associated with earlier drives such as compacted gravel, timber fencing or stone kerbing or associated landscaping, with the former driveways unlikely to be intact below the surface. These areas were always clear of buildings and structures with no known farm structures recorded in this area, so there is low potential for any subsurface artefacts. The current entrance and gated area off Mamre Road are a highly disturbed part of the grounds being within a few metres of the road and does not present any potential for archaeological deposits associated with the early stages of the homestead.</p>

⁵² See: *Mamre, St Marys Conservation Management Plan*. 2003. Prepared for the Department of Urban Affairs and Planning by Graham Brooks and Associates. Pp. 50 – 52.

**Significance
assessment**

Mamre House is significant at State level as an early intact colonial farmstead set in established grounds. The site is a remnant of Samuel Marsden's large holding on South Creek and is an important site illustrating the pastoral development of the Cumberland Plain and beyond.

The farmstead is archaeologically significant at State level for its potential to yield information on early colonial landscapes, farmsteads and Georgian architecture. The site is also a known post-contact site, with Aboriginal people camping and occupying the property in the early phases of its establishment.

Relics and archaeological remnants associated with historical Phases 1, 2 and 3 would likely hold significance at State level depending on the nature, extent and condition of the remains. They would meet Criteria A – G of the heritage assessment criteria and would hold substantial research potential.

Any subsurface remnants associated with former historic driveways and entrances are unlikely to remain intact, and depending on their nature and condition, may not meet the threshold for State significance but could contribute some knowledge to the earlier phases of the homestead.


6.2.2 Zone 2 – Luddenham Road Alignment

Table 6-4 Zone 2 Archaeological potential and significance

<p>Potential archaeological site</p>	<p>Luddenham Road former alignment</p> 
<p>Previous disturbance</p>	<p>High</p> <p>Luddenham Road is an old route dating from the establishment of John and Gregory Blaxland's estates at Lee Holme and Luddenham which developed from 1813. It first connected those two properties as a dirt track, was metalled in 1897 and then was gazetted as a Government Road in 1900. During the twentieth century various upgrades and widenings have occurred resulting in high levels of disturbance in the area of the carriage way. The pastoral landscape surrounding the road and the timber post and rail fencing in certain areas contribute to its significance.</p>
<p>Historical Phase</p>	<p>Phase 1 and 2</p>
<p>Level of archaeological potential</p>	<p>Low</p> <p>There is low potential for archaeological remains associated with the early phases of the road's construction. These materials are likely to have been heavily disturbed by resurfacing over time and the construction of the existing road surface. Early methods of construction may have involved a compacted earthen surface or gravel however exact details are not known. Evidence of these materials is likely to be ephemeral and fragmented. There are no other known archaeological sites or former structures in proximity to the road.</p>
<p>Significance assessment</p>	<p>Local</p> <p>Early road remains are expected to be highly fragmented and unlikely to remain intact. As an early and important route, any intact or substantial remains would be of local significance for their historical values and research potential, however remains are unlikely to be extensive or legible due to the high levels of disturbance and may not meet the threshold for local significance.</p>

6.2.3 Zone 3 - Remainder of proposal area

Table 6-5 Zone 3 Archaeological potential and significance

<p>Potential archaeological site</p>	<p>Remainder of proposal area</p> 
<p>Previous disturbance</p>	<p>Moderate to high Residential development to the east, construction and expansion of existing road network (Mamre and Luddenham Roads), farming and intensive agricultural uses, services and utilities installation and urban expansion generally has resulted in a moderate to high level of disturbance across the entire proposal area outside of Zones 1 – 2.</p>
<p>Relevant historical phase/s</p>	<p>Phases 3 and 4</p>
<p>Level of archaeological potential</p>	<p>Low There is low potential for archaeological remains associated with the farming, land clearing and associated historical pastoral and agricultural activities such as postholes, outbuilding footings, farming remains including fence posts, wiring, farm objects, historical ploughing.</p>
<p>Significance assessment</p>	<p>Non-significant Archaeological evidence associated with farming and agricultural activities would not meet the threshold for local significance and are not expected to survive across much of the proposal area. These possible materials will not yield information that will contribute to a greater understanding of the cultural history of NSW or the Penrith district and are likely to be highly disturbed or fragmented.</p>

7 Heritage Impact Assessment

The following section assesses the heritage impacts to heritage items in the proposal area. Impact rankings are based on those described in Table 1-1.

7.1 Mamre House

Impacts to Mamre House SHR site are discussed in Table 7-1.

Table 7-1 Mamre House impacts

Proposal Features	Discussion
<ul style="list-style-type: none"> ■ Road widening works in close proximity (just outside) the eastern boundary of the site ■ Utility relocation: excavations ■ Realignment of driveway and removal of current access to Mamre Road 	<p>The Proposal adjacent to Mamre House would impact the broader visual setting of the Homestead through road widening works in close proximity to the eastern boundary. Earlier design iterations included the encroachment of the roadway into the SHR curtilage of Mamre, however this was amended so impacts to the homestead could be mitigated as much as possible. The current version of the proposed road widening design runs parallel with the boundary of the property instead of within it.</p> <p>Direct impacts to Mamre House include excavation for utility relocation and connection and driveway realignment. This would involve the excavation of trenches for conduits and connection to the existing electrical pole on the site. This would be undertaken in the paddock adjacent to Mamre Road over 220 metres away from the main homestead building. No direct impacts to the building would result from these works. During construction, there would be temporary visual and landscape impacts to the heritage item. Once works are complete, the grounds would be rehabilitated so that there would be no ongoing impacts to the heritage site. Potential archaeological impacts of these works are addressed at Table 7-6 and Table 8-2 below.</p> <p>The existing driveway access would be closed, and a new access will be provided from the Banks Drive intersection to the north. The existing entrance gates and associated property signage which currently sit in the road corridor (outside of the SHR site) may need to be moved. This would result in the loss of historic property access from Mamre Road, notwithstanding that driveway access has changed over time. As an early intact example of a colonial farmstead dating to 1835, the pastoral setting of the property and link to Mamre Road is an integral aspect of its heritage significance. The Proposal would result in a loss to the landscape and visual setting of the property and presentation to the road. The current proposed driveway alignment would fall close to the original formal driveway alignment, likely established in the late 19th Century. Whilst it results in impacts to the current direct access to Mamre Road, the new driveway would broadly represent the location of the former historic access route.</p> <p>Though works remain at a distance from the homestead building and its surrounding outbuildings, there would be moderate adverse impacts to the property's landscape, setting and historic access at the outer boundaries. The Mamre homestead is noted for its picturesque rural setting and its positioning whereby it can be seen not only directly from the road but also from the nearby freeway and from lower paddocks. The road widening works would see this setting become further constricted but not necessarily altered, with the inevitable changes and demands of the surrounding residential landscape and road carriageway. The main visual and setting impact would result from the removal of direct access from Mamre Road, which contributes to its setting as a roadside historic homestead and also creates a visual cue to road users. Relocating the driveway to the north would see this direct access removed and would also see a change to the visual prominence of the House from the road with the removal of the gates and signage at the current entrance.</p> <p>Views from the front gardens and from the house would be affected by the change in access and the general increase of road traffic, whilst views looking west would remain unaffected.</p>

Proposal Features	Discussion
	<p>Landscape treatment along the property's northern boundary line and new driveway are further refined during detailed design in consultation with specialist landscape heritage advice and Mamre House stakeholders. The new driveway would include landscaping and an interpretation 'node' for visitors to pull over into and view historic interpretation, new signage, new lighting, new plantings and the protection of the current gates and signage. Specialist heritage advice would also inform the relocation of the existing entrance gates and signage in this area.</p> <p>At Mamre Homestead the significant landscape elements and cultural plantings are concentrated around the main house and in the western paddocks beyond towards South Creek. These areas would not be impacted by the Proposal. These areas remain a highly important component of the curtilage and setting of the property and have recognised significance as a post-contact landscape once occupied by Aboriginal people as evidenced through the historical record.</p> <p>Recommendations and mitigation measures are outlined in Section 8.</p>
Physical Impact:	Minor
Visual and setting impact:	Moderate
Overall Impact Ranking:	Moderate Adverse

7.1.1 Post-contact Aboriginal cultural heritage values – Mamre Homestead

The State Heritage Register and Local Environmental Plan listings for Mamre House identify significant post-contact Aboriginal cultural heritage and contemporary values associated with the grounds and cultural landscape of Mamre House:

*The site of Mamre property is significant for its potential to yield information on the pre-contact Aboriginal occupation of the South Creek catchment. Mamre is historically and socially significant as an important site in post-contact Aboriginal history, demonstrating Aboriginal survival and adaptation to non-traditional social, economic and political practices.*⁵³

Mamre House and its grounds represent an important site in the post-contact history of Aboriginal survival and adaptation to the processes of colonisation and dispossession in the Western Sydney region. Several historical accounts report the 'South Creek' tribe occupying (and likely working) on the pastoral property of Charles Marsden as late as 1835. This contact period is reported to have continued for some period after the cessation of convict transportation (see Section 5.2.2). Further, in the historical accounts of the MacLaurin family (who occupied the property in the post-war years) there are historical perspectives recounting Aboriginal cultural practices that occurred at the site, told through a European perspective.

Mamre House and grounds retain these intangible cultural values as part of the larger cultural landscape of South Creek and the Cumberland Plain. Remnant colonial-era pastoral holdings such as Mamre serve to demonstrate the long-term presence of Aboriginal people across the Penrith region. Mamre is rare and highly important as a site where white settlers and Aboriginal people interacted and at times coexisted.

It is likely that Mamre possesses strong or special association for the descendants of Aboriginal people who have been documented to have lived or worked on the property, as well as for the broader Aboriginal community of Western Sydney. According to long-term caretakers of the grounds and Catholic Care employees currently working at Mamre House, there are a number of local Aboriginal people which visit the grounds, particularly around South Creek, to continue traditional practices and maintain their connection to Country. This includes using barks and woods from trees along the banks of South Creek for manufacturing bowls and artworks, and smoking ceremonies. Conflict stories are also attributed to the grounds and surrounding landscape by local Aboriginal people.⁵⁴

⁵³ 'Mamre – Homestead' and 'Mamre' listings on State Heritage Inventory, retrieved from Heritage NSW.

⁵⁴ Information sourced from Mamre House staff and Catholic Care staff. No consultation with local Aboriginal people was conducted.

These values are embodied in the larger cultural landscape of Mamre House and South Creek, are historical and intangible in nature and are reflected in the accounts of current site managers and long-term staff at Mamre House who work with the local Aboriginal community. During investigations for this SOHI, including a site inspection of the property and historic research to inform this report, no material or tangible evidence of post-contact Aboriginal occupation or interaction was identified. Although it has been documented in historical sources that Aboriginal peoples continued to occupy and use the grounds at Mamre and along South Creek for traditional practices and ceremonies during the early years of the property, no tangible artefacts or material evidence of this post-contact occupation has been found, either within the historic homestead building, surrounding areas or outbuildings.

It is not anticipated that the proposal would impact on the post-contact Aboriginal cultural heritage values associated with Mamre House and the wider cultural landscape. The proposal would give rise to some opportunities to interpret these values and better convey this history of post contact occupation and interaction to the broader community, including those who visit and use Mamre House. Further consultation on contemporary values will be undertaken by Kelleher Nightingale consultants as part of the ACHAR process

7.2 Marsden Memorial Cairn

Impacts to the Marsden Memorial Cairn are discussed in Table 7-2. It should be noted that the Memorial Cairn is within the Mamre House curtilage but the Cairn's heritage curtilage includes the Mamre House and covers areas including the lower paddocks. Impacts to the Mamre House site are not repeated below.

Table 7-2 Marsden Memorial Cairn impacts

Proposal Feature	Discussion
Road widening works	<p>The Proposal would indirectly impact the Marsden roadside Memorial Cairn through road widening works in close proximity to the item. The Cairn would be retained and conserved in a location sensitive to its heritage value and within the Mamre House SHR curtilage. Early discussions with heritage specialists and landscape designers have begun to ensure the new location is chosen sensitively to its heritage values. This location would continue to be refined and confirmed during detailed design in consultation with Penrith Council and Mamre House stakeholders.</p> <p>This relocation would result in moderate setting impacts to the Cairn which has been relocated once before since its installation at the property in the 1930s. The Cairn's location has shifted over time and introducing further change to its location would not see a major adverse impact as long as it remains within view of the road and can be interpreted by road users and visitors to Mamre House, as it was designed.</p> <p>There is also potential for indirect vibration impacts to the Cairn from the excavations proposed during the road widening works as well as the proposed new driveway.</p>
Physical impact:	Minor
Visual and setting impact:	Moderate
Overall Impact Ranking:	Minor Adverse

7.3 Blaxland Memorial Cairn

Impacts to the Blaxland Memorial Cairn are discussed in Table 7-3.

Table 7-3 Blaxland Memorial Cairn impacts

Proposal Feature	Discussion
Road widening works	The Proposal would have no impact to the Blaxland roadside Memorial Cairn. Works occur some distance from the Cairn and will not impact its fabric or setting.
Physical impact:	Nil
Visual and setting impact:	Nil
Overall Impact Ranking:	Neutral

7.4 Luddenham Road Alignment

Impacts to the Luddenham Road alignment are discussed in Table 7-4.

Table 7-4 Luddenham Road Alignment impacts

Proposal Feature	Discussion
Road widening and associated works with the Luddenham Road Intersection Upgrade	<p>The Proposal near Luddenham Road would directly impact parts of the local heritage curtilage of the Luddenham Road Alignment. These works would see approximately 88 metres of existing pavement on the former alignment of Luddenham Road cleared and replaced with a slightly shifted alignment however these works only occur between the existing road bridge and the turn off to the unmarked road which formerly led to Mamre Road. Additionally, a new driveway to the Rural Fire Service Station would be constructed on this unmarked road which is within the eastern limits of the Luddenham Road Alignment listing boundary.</p> <p>This change in the alignment would not result in changes to the entire linear alignment of the whole listing as works are limited to the section 180 metres west of the intersection with Mamre Road. The historic links between two historic properties of Luddenham and Lee Holme would not be impacted by these works with works ceasing before the former location of Lee Holme, so this historic link would not become less legible in the landscape as a result of these works.</p> <p>Utility upgrades and some preliminary drainage work to support the new road and intersection would have minor impacts to the Luddenham Road Alignment through associated excavation and ground disturbance to relocate or install new infrastructure however this is expected to be minor with most of these works occurring outside the heritage curtilage.</p> <p>The potential impact of the project on the archaeological resource of the Luddenham Road alignment is addressed at Table 7-6 below.</p> <p>Recommendations and mitigation measures are outlined in Section 8.</p>
Physical Impact:	Moderate
Visual and setting impact:	Minor
Overall Impact Ranking:	Minor Adverse

7.5 Leeholme Horse Rotunda

Impacts to the Leeholme Horse Rotunda are discussed in Table 7-5.

Table 7-5 Leeholme Horse Rotunda impacts

Proposal Feature	Discussion
Road widening and associated works with Luddenham Road Intersection Upgrade	The Proposal would have no impacts to the Leeholme Horse Stud Rotunda local heritage item. There is considerable visual and physical separation between the item and the proposed works.
Physical Impact:	Nil
Visual and setting impact:	Nil
Overall Impact Ranking:	Neutral

7.6 Archaeological impacts

Archaeological impacts across the proposal area are discussed in Table 7-6.

Table 7-6 Archaeological Impacts

Archaeological Zone	Potential Impact	Discussion
Zone 1 Mamre House	Moderate to low	<p>Ground disturbing works within the curtilage of Mamre House have potential to impact on State-significant archaeology in an area that has moderate potential for archaeological remnants (top paddocks and former driveway in line with house).</p> <p>Works could potentially impact scattered archaeological remains associated with Mamre House, farming activities and later phases of the homestead's development. Works do not intersect with any known former buildings or structures, which were concentrated around the homestead building 200 metres to the west. An unexpected finds procedure would be put in place during construction.</p>
Zone 2 Luddenham Road Alignment	Low	<p>The section of the Luddenham Road Alignment impacted by the project has a low level of potential for archaeological remains or original fabric. Any remains are likely to be highly fragmented and disturbed. Archaeological remnants dating from the early phases of the road's development (road surface, stones etc) would be of potential local significance dependant on their nature and extent.</p>
Zone 3 Rest of the proposal area	Nil to low	<p>The rest of the proposal area is unlikely to contain significant archaeological remains and the potential for archaeological impacts is nil to low.</p>

8 Conclusion and Recommendations

8.1 Summary of Findings

Table 8-1 and Table 8-2 summarise the findings of the heritage impact assessment and archaeological impact, with a summary impact ranking given for each item that would be impacted by the Proposal.

Table 8-1 Summary of Heritage Impacts

Heritage Item	Impact Ranking
Mamre House SHR #00264	<p>Moderate Adverse</p> <p>Widening works would occur in close proximity to the SHR listed Mamre House but remain outside the formal listing boundary, resulting in minor physical impact to the homestead and property's visual setting only which would result in a minor encroachment of the roadway into the SHR curtilage of Mamre. However following collaboration with heritage specialists this was amended so impacts to the homestead could be mitigated as much as possible. The current version of the proposed road design runs parallel with the listing boundary instead within it.</p> <p>Though works remain at a distance from the homestead building and its surrounding outbuildings, there would be moderate adverse impacts to the property's landscape, setting and historic access at the outer boundaries. The road widening works would see the rural historic setting become further constricted but not necessarily physically altered.</p> <p>The removal of direct access from Mamre Road would result in a moderate adverse visual and setting impact as the current driveway contributes to its setting as a roadside historic homestead and also creates a visual cue to road users. Relocating the driveway to the north would see this historic direct access removed, would alter the layout of the grounds in the northern area of the site, and would also see a change to the visual prominence of the House from the road with the removal of the gates and signage at the current entrance. Whilst it results in impacts to the current direct access to Mamre Road, the new driveway will slightly align with a former historic access route.</p> <p>Utility relocations and connections would be undertaken within the Mamre SHR curtilage, however the grounds to would be restored once complete. This would involve the excavation of trenches for conduits and connection to the existing electrical pole on the site. This would be undertaken in the paddock adjacent to Mamre Road over 220 metres away from the main homestead building. No direct impacts to the building would result from these works.</p>
Marsden Memorial Cairn Penrith LEP #229	<p>Minor Adverse</p> <p>Widening works would alter the setting and visibility of the Marsden Memorial Cairn from Mamre Road as the Cairn will need to be relocated as part of the relocation works of the Mamre House driveway to the north.</p> <p>Retention and conservation of this heritage element within the new Proposal will be confirmed at Detailed Design stage.</p>
Luddenham Road Alignment Penrith LEP #230	<p>Minor adverse</p> <p>The Proposal would impact on a small section of the Luddenham Road Alignment in an area where archaeological potential is low. The historic links to Luddenham and Lee Holme would not be impacted by these works.</p> <p>Proposed works should not affect the historical significance or visibility of the alignment within the landscape.</p>
Blaxland Memorial Cairn Penrith LEP #230	<p>Neutral</p>
Leeholme Horse Stud Rotunda Penrith LEP #232	<p>Neutral</p>

Table 8-2 Historical archaeological assessment findings

Archaeological Zone	Potential Impact	Discussion
Zone 1 Mamre House	Moderate to low	<p>Ground disturbing works within the curtilage of Mamre House have potential to impact on areas of archaeological potential within the State-heritage curtilage of the property. Ground disturbance will occur in an area that has low to moderate potential for archaeological remnants (top paddocks and former driveway in line with house).</p> <p>Proposed works associated with the road widening, new driveway and utility adjustments could potentially impact scattered archaeological remains associated with Mamre House, farming activities and later phases of the homestead's development. Works do not intersect with any known former buildings or structures, which were concentrated around the homestead building 200 metres to the west. An unexpected finds procedure is to be put in place during construction on the site. The Transport for NSW <i>Unexpected Finds protocol: Unexpected Heritage Items</i>: Heritage Procedure 02, November 2015 is to be put in place during construction on the site.</p>
Zone 2 Luddenham Road Alignment	Low	<p>The section of the Luddenham Road Alignment impacted by the project has a low level of potential for archaeological remains or original fabric. Any remains are likely to be highly fragmented and disturbed. Archaeological remnants dating from the early phases of the road's development (road surface, stones etc) would be of potential local significance dependant on their nature and extent. An unexpected finds procedure is to be put in place during construction on the site. The Transport for NSW <i>Unexpected Finds protocol: Unexpected Heritage Items</i>: Heritage Procedure 02, November 2015 is to be put in place during construction.</p>
Zone 3 Rest of the proposal area	Nil to low	<p>The rest of the proposal area is unlikely to contain significant archaeological remains and the potential for archaeological impacts is nil to low. The Transport for NSW <i>Unexpected Finds protocol: Unexpected Heritage Items</i>: Heritage Procedure 02, November 2015 is to be put in place during construction.</p>

8.2 Recommendations

Recommendations, including heritage safeguards, heritage mitigation measures and management of potential impacts are provided below.

- **Recommendation 1** - Develop a Construction Heritage Management Plan for the Proposal, providing specific guidance and confirmation of the management measures implemented to avoid, reduce or minimise impacts to heritage.
- **Recommendation 2** - As part of the Construction Heritage Management Plan, undertake site inductions and conduct heritage awareness training which details the kinds of historical relics, structures and deposits which may be encountered during construction works and the procedure to follow would any relics be uncovered, i.e. when the Transport for NSW Unexpected Finds protocol: Unexpected Heritage Items: Heritage Procedure 02, November 2015 should be enacted.
- **Recommendation 3** - Ensure ongoing consultation with the relevant heritage stakeholders including Heritage NSW, Mamre House's owners, managers and users, the local Aboriginal community, DPIE and Penrith City Council, where relevant.
- **Recommendation 4** - Protect Mamre House, including significant gardens and grounds, throughout the course of the works. Cordon off State heritage area and define as a 'no works' zone to minimise impacts on the site and avoid any inadvertent damage to the property and significant grounds. Work completed within the SHR curtilage of the site would be carried out in accordance with the relevant conservation policies included within the Mamre House CMP (Section 6).
- **Recommendation 5** - Retain and conserve the Marsden Memorial Cairn in its current location within the SHR curtilage of Mamre House. Minimise through design and detailing any impacts on its setting and visibility from Mamre Road.
- **Recommendation 6** – A landscape solution for the redundant gated entrance and signage to Mamre Homestead off Mamre Road would be informed by specialist heritage advice and consider the significant pastoral setting and the heritage significance of the property beyond, and might include but not be limited to updated signage, an interpretation node for vehicles, and lighting. Heritage interpretation opportunities would also be considered along the shared pathway and noise walls on the eastern side of Mamre Road, opposite the Mamre House property and grounds. This would consider interpretation through stories, imagery, information plaques and wayfinding to speak to the history of the Mamre House property and its connection with the surrounding landscape as well as the local Indigenous people's ongoing connection to Country.
- **Recommendation 7** – The detailed design of the proposal would aim to minimise road and traffic signage along the Mamre House property frontage, along the shared path looking towards the heritage property and at heritage interpretation nodes, where possible, to maintain an open viewscape and minimise visual impacts on the heritage setting.
- **Recommendation 8** – Post-contact and contemporary Aboriginal cultural heritage values would be protected and celebrated through interpretation opportunities on the Mamre House grounds as part of the new driveway allocation, and also along new pedestrian pathways and portals on the St Clair side of the proposal area, or on noise walls proposed along the length of the proposal area. Identification of a scar tree near the Blaxland Memorial Cairn, as noted in the Aboriginal cultural heritage reporting, may also be another appropriate location to explore interpretation opportunities, in consultation with local Aboriginal people. Further reporting and visualisations would be continued in the Detailed Design phase.
- **Recommendation 9** - Archival Recording - Undertake an external photographic archival recording of Mamre House, focusing on driveway changes and realignment as well as changes to the setting of the Memorial Cairn.
- **Recommendation 10** - Interpretation opportunities for heritage interpretation or signage should be explored in the Proposal to further protect and enhance local and state heritage items in the vicinity of Mamre Road.

- **Recommendation 11** - Unexpected Finds Protocol - Works involving ground disturbance should be undertaken with caution within the SHR curtilage of Mamre House, and around the locally listed items within the proposal area, especially the Luddenham Road Alignment. Implement an approved unexpected archaeological finds protocol and ensure workers attend a heritage induction session prior to commencing on the project. If any unexpected historical archaeological is found, work should stop and finds would be reported to the projects nominated heritage advisor immediately. Refer to the Transport for NSW Unexpected Finds protocol: Unexpected Heritage Items: Heritage Procedure 02, November 2015.

8.2.1 Heritage approvals requirements

The following heritage approvals are required for the project:

- A Section 60 application to Heritage NSW under the *Heritage Act 1977* is required for works within the curtilage of SHR listed Mamre House
- A Section 140 excavation permit and a Section 139(4) exception notification under the *Heritage Act 1977* may be required for works within the State listed Mamre House grounds, and the locally listed Luddenham Road alignment, where work would take place outside of the SHR curtilage.

9 References

- Attenbrow, Val. 2010. *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*. UNSW Press: Sydney.
- *Colonial Landscapes of the Cumberland Plain and Camden, NSW: A Survey of selected pre-1860 Cultural Landscapes from Wollondilly to Hawkesbury LGAs*, August 2000, prepared by Colleen Morris and Geoffrey Britton for the National Trust of Australia (NSW).
- 'Orchard Hills', *Penrith City Local History*. Retrieved from: <https://penrithhistory.com/orchard-hills/>
- *Mamre, St Marys Conservation Management Plan*, 2003, prepared for the Department of Urban Affairs and Planning by Graham Brooks and Associates.
- Murray Cree, L. 1995. *Mamre: Place of Promise. Pioneers of Land and Spirit on Marsden 's South Creek Farm*. Published by Mamre Plains Ltd.
- *Heritage Study of the City of Penrith: Vol 1. 1987*. Prepared by Fox & Associates for Penrith City Council.
- *Penrith Heritage Study*, Nov. 2007, prepared by Paul Davies for Penrith City Council.
- 'St Marys' on *Penrith City Local History*. Retrieved from: <https://penrithhistory.com/st-marys/>

Document prepared by

Aurecon Australasia Pty Ltd

ABN 54 005 139 873

Level 5, 116 Military Road

Neutral Bay NSW 2089

PO Box 538

Neutral Bay NSW 2089

Australia

T +61 2 9465 5599

F +61 2 9465 5598

E sydney@aurecongroup.com

W aurecongroup.com

aurecon

*Bringing ideas
to life*

