

Old
Marulan
2007

FINAL REPORT



VOLUME 2

Archaeological
Investigations
Final Report

Old Marulan 2007

FINAL REPORT

VOLUME 1

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VOLUME 2

Archaeological Investigations Final Report

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Welcome

From 2006 to 2009 the site of the old Marulan township, in the NSW Southern Highlands, was investigated as part of the environmental assessment and compliance process for the development of a new hard rock quarry near the town. This development, by Holcim [Australia] Pty Ltd, formerly CEMEX Australia Pty Limited, would result in some impact to the site of the former town, which was recognised as being a place of high state heritage significance. The archaeological works were aimed at establishing exactly what was there and how any impacts to the archaeology or the site's significance should be mitigated. As a result, archaeologists undertook survey, recording and detailed archaeological excavation on the site of Marulan. These volumes collate the information together into a single series of volumes, so that the town's contribution to Australian history can be better understood.

This is **Volume 2 - Old Marulan 2007 - Archaeological Investigations Final Report**. It reports on the history of Old Marulan researched for this project, and the results of the archaeological survey and excavations carried out on the town site.

The other volumes in the series are:

- Volume 1 Old Marulan 2007 - Overview and Summary of the Archaeological Program
- Volume 3 Old Marulan 2007 - Archival Recording
- Volume 4 Old Marulan 2007 - Specialist Reports
- Volume 5 Old Marulan 2007 – Appendices [several parts]
- Volume 6 Old Marulan 2007 – Electronic data [provided at back of Volume 1]

Some of this material has also appeared in earlier stage reports. The information previously presented formed the basis of the present volumes but in some cases this has been substantially updated and revised. The present volumes supersede all earlier volumes where there is any conflict in data or interpretation.

Authorship

This volume was primarily written by Denis Gojak of *Banksia Heritage + Archaeology*, who acted as the Excavation Director and Principal Archaeologist for the work, and has been finalised by Umwelt [Australia] Pty Ltd [Umwelt] on behalf of Holcim.

Even though I take responsibility for the overall performance of the archaeological work and the conclusions presented in this report, I acknowledge that I have relied on the support of many people through all stages of the work. These are listed below in the acknowledgements. In particular Tim Adams, Jan Wilson and John Merrell of Umwelt contributed with detailed reading, review and discussion of all of the results of the archaeological work. Richard Savage, of Readymix / CEMEX / Holcim, as Project Manager of the Lynwood Quarry Development at the time of the Old Marulan archaeological project represented the client and was able to provide relevant and useful contributions to the reporting at all stages of the work. Rachel Heath [Holcim Project Manager – Aggregates] oversaw the finalisation of the reporting.

A number of specialists contributed analytical reports that were essential to understanding the site, including Jeanne Harris, Martin Gibbs, Caroline Wilby, Roy Lawrie and Mike Macphail. These are reproduced in the following volumes. I have relied on their knowledge and insights to help form my own views and interpretations of the data. I would particularly like to acknowledge Jeanne Harris's contribution to the overall understanding of the site. I have relied heavily on her detailed analysis and many discussions about what it all means.

Abbreviations

AHD	Australian Height Datum, expressed in metres, used to relate all elevations above sea level.
DMR	NSW Department of Main Roads, succeeded by RTA [now RMS].
HB	Heritage Branch, now Heritage Division; part of the NSW Office of Environment and Heritage [OEH].
HC	NSW Heritage Council, established under the Heritage Act 1977, determines matters of state heritage significance.
MIC	Minimum item count of artefacts
OM7	Old Marulan 2007 Archaeological Project
PCO	Permanent conservation order issued under the NSW Heritage Act
RMS	Roads and Maritime Services [formerly NSW Roads and Traffic Authority [RTA]]
SHR	State Heritage Register
SRNSW	State Records of New South Wales, formerly Archives Office of NSW
TPW	Transfer printed ware ceramic, such as Willow pattern

Acknowledgements

No archaeological project, however small, can be carried out from an office as modest as the one Banksia Heritage occupies, without the assistance of many other people who contributed their labour, dedication and ideas to the task. I would therefore like to acknowledge and thank the following people and organisations for their involvement in this project over a considerable period. If any names are omitted it is my oversight and I would welcome this being brought to my attention.

Holcim [Australia] Pty Ltd [Holcim] – and earlier as CEMEX Australia Pty Limited [CEMEX], and Readymix / Rinker Pty Ltd prior to CEMEX – is the client for the archaeological work. Holcim's representative and project manager for the Lynwood Quarry development at the time of the Old Marulan archaeological project was Richard Savage. I would particularly like to recognise Richard's willingness to support the archaeological work and its aim of doing things properly and in the spirit of best practice, and his active participation throughout the archaeological excavation. Richard was always encouraging and ready to provide assistance to the project and the field teams.

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- John Merrell
- Meaghan Russell
- Sue Singleton [formerly Umwelt]
- Mary-Jean Sutton
- Julian Travaglia
- Jan Wilson

Old Marulan 2007 Archaeological Field Team

- Tim Adams
- Alice Beale
- Justin Boney
- Jason Brown
- Nathan Brown
- Sharon Brown
- Tom Brown
- Alec Falk
- Mirani Litster
- James McGuinness
- Jack McIlroy
- Rebecca Parkes
- Sarah Peisley
- Peter Falk
- Virginia Falk
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- Denis Gojak
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- Gundungurra Aboriginal Heritage Association Inc.
- Gundungurra Tribal Council Aboriginal Corporation
- Pejar Local Aboriginal Land Council
- Peter Falk Consultancy

Marulan and District Historical Society

The Marulan and District Historical Society worked closely with us in all stages of the work, being frequent visitors, caterers and thoughtful questioners of our findings. Their welcoming attitude to these strangers coming in to investigate their past made our task so much easier.

- Maureen Eddy
- Russell Montgomery - President
- Sue Montgomery - Secretary
- Lorna Parr
- Rosemary Turner – Vice President
- John Feltham, also lessee of the land on which we worked

Banksia Heritage + Archaeology

- Angela So
- Jenny Winnett

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- Katrina Stankowski

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- Russell Cooper
- Helen Dawson
- Christine McGilly

Archaeology In this report series refers to non-indigenous 'European' archaeological evidence and artefacts, except where specifically stated. A separate Aboriginal archaeological investigation program examined the site and the surrounding region.

Features/squares/trenches/units These are all different ways of dividing up the site into analytical components. Some are 'natural', i.e. they exist independently of the archaeological process, while others are arbitrary. The archaeological site consists of natural layers of soil, deposits created by humans, such as introduced fills, dumps, post hole cuts and fills and structural evidence such as footings, building demolition material and constructed surfaces. These are termed **units**, and are numbered consecutively from [01] onwards. The convention is that they are written in square brackets and drawn within a circle in documentation. Different units can be part of the same object or thing, such as a dozen separate post holes, refuse layers and footings being part of the same building. These groupings are called features and usually represent objects or constructions that are described in functional terms that ideally are the same as those of the people who created them, such as a hut, drainage line or fence. Features are given an OMF numbering. To provide spatial control, so that all artefacts recovered could be accurately described and related to each other, hand excavation took place within **squares**, usually measuring 2 x 2 metres.

Gundungurra/Gandangara The spelling of this language group name varies according to different historical sources and these variations persist to the present, including in the names of organisations. Gundungurra is used in this report, except where spelled differently in quotations, to refer to the language and as a collective name for its speakers. This extends from the Nepean to Goulburn and towards Bathurst.

Heritage Office/Branch/Division The NSW Heritage Office was part of the NSW Department of Planning until it was re-established as a separate agency, which made most of the decisions concerning Marulan reported here. It was then merged again into the Department of Planning, as the Heritage Branch. It is now the Heritage Division; part of the NSW Office of Environment and Heritage. The terms are effectively interchangeable, but Heritage Branch [HB] is used as the general term.

Holcim The Lynwood Quarry project was initiated by Readymix Pty Ltd, part of the Rinker Group. Readymix remains the name most commonly associated with the development and will probably continue so for some time. In 2007 Rinker was taken over by CEMEX Australia Pty Limited [CEMEX]. In 2009 CEMEX sold its Australian operations, with the company name changing to Holcim [Australia] Pty Ltd [Holcim]. Holcim is used in this report in most contexts to refer to the client and their activities through the duration of the work, including those undertaken by Readymix and CEMEX prior to the change in company name.

Marulan Generally refers to the original town until 1870, and then the later town, but 'old Marulan' and 'new Marulan' are used where it is not clear from the immediate context which of the towns is being discussed.

Orientation Old Marulan straddles the Hume Highway. Although this section of the road runs approximately northeast-southwest, the sides will be distinguished as the **northern** [Holcim development] and **southern** [Illawarra escarpment] sides in this report, unless required by the specific context. The **eastern** end of the former town is therefore that part nearest to new Marulan and the **western** end is nearest to Goulburn. Lots alongside the road are described as being to the east or west of each other consistently with this usage.

The archaeological excavation is based on a grid that is also oriented in the same way, with north towards the Holcim Lynwood quarry development.

The site Generally used to mean the potential area of impact from the Holcim development works, i.e. the northern margin of the Hume Highway and the hinterland where the quarry and its infrastructure will be located, and its immediate margins. This includes an area that falls mainly inside the town allotments and SHR boundary, but also some land that falls outside.

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3. Consolidated electoral and directory information 1863 - 1878
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SECTION 1.0

Introduction

1.0 Introduction

1.1. This Volume

This is Volume 2 of the Old Marulan 2007 Archaeological report. It is the main volume dealing with the archaeological program of research and investigation, including the archaeological excavation in 2007. It effectively deals only with items that are within the old Marulan township, and therefore within the State Heritage Register boundary or close by. Rural heritage is discussed mainly in Volume 3, except for activities that took place on the former town site.

This volume also includes the results of all earlier studies and the later analysis and follow-up work resulting from the archaeological excavation, so that all of the archaeological and historical information relating to the old Marulan townsite is found together in a single location, and is organised in a single coherent narrative

Volume 1 lists where deposit copies have been lodged. Not all volumes have been deposited in all locations. Additional electronic copies of all materials are available from Holcim.

1.2. Background to the Investigation

Volume 1 sets out in detail the conditions set by the successive approvals, and how these have been met in the archaeological work. A reader requiring more information than the following summary is referred to Volume 1.

Old Marulan was recognised in the early 1980s as being of potential high archaeological significance, and this was confirmed by the placement of a permanent conservation order [PCO] under the NSW Heritage Act 1977 over the town site. Apart from some initial field survey carried out before the PCO was proclaimed, there was no further archaeological work carried out on the site until the present development was initiated.

Holcim – which was then Readymix, part of the Rinker Group – had identified that it needed to develop a new quarry that mined hard stone [porphyryite] for the Sydney construction market. In 2004 they began the process of preparing an environmental impact assessment to accompany a development application for a new quarry, which would be located north of the Main Southern Railway line near Lynwood Homestead, about 4.5 km west of Marulan township. While most of the stone would be moved by rail, the NSW Roads and Traffic Authority [now Roads and Maritime Services [RMS]. Referred to as RMS throughout remainder of this report series for consistency] required that any trucks from the quarry works entering the Hume Highway did so through a traffic overpass and interchange. This essentially limited the interchange to being built

at the junction of the Hume Highway with the Jerrara and South Marulan Roads, which meant that there would be an impact in part of the town protected under the PCO, which had now become a State Heritage Register [SHR] listing [refer to Figure 1.1].



Figure 1.1 - Old Marulan – State Heritage Register boundary and development
[source – LPI 2004, Readymix Holdings Pty Ltd Aerial Photo March 2005]

Archaeological and historical investigations [OMF 1.3 below] confirmed that there were likely to be archaeological remains present in the SHR-listed area of the township, as well as evidence of historic rural activity in the remainder of the impact area. Consequently the development would need to obtain two different types of consent under the Heritage Act as part of the overall development approval.

A development consent was issued on 21 December 2005. This required that Holcim comply with detailed approvals for archaeological investigation issued by the NSW Heritage Branch. These approvals set out a staged process for dealing with the archaeology of the site. An initial detailed archaeological assessment would aim to model the likely archaeological resource within the township site and assess its significance. Based upon this a research design and investigation strategy was developed, that would allow for the maximum amount of useful high-quality archaeological information to be collected before any impacts arose from the development. Although the loss of any of the significant archaeological fabric which made Old Marulan eligible for entry on the SHR was regretted it was considered that the information obtained would, in fact, realise the potential value of that resource, and contribute to a better understanding of the historical township, its inhabitants, and rural settlement in colonial NSW.

Once the approvals were granted by the NSW Heritage Branch, systematic archaeological work began, as described in the following sections.

It is an axiom of archaeology that all excavation is destruction, and that damage is only offset if best efforts are made to retrieve any useful information that a site may contain. A corollary of this axiom is that the information needs to be made available to other potential users, both archaeologists and the wider community of interest, as an objective record of what was there. For this reason this report describes in great detail what was found and what it means, but in such a way that others may distinguish between the evidence and the interpretations placed upon it by the authors. Therefore the report, and particularly this volume and Volume 5 – Appendices, reproduce a lot of seemingly redundant information, interspersed with sections that try to make sense of it and give it meaning. Both parts are needed to do justice to the archaeological resource and to make it of enduring usefulness to others who may have questions that we cannot even anticipate.

1.3. Preliminary Investigations

The results of the preliminary investigations have been integrated into the discussion of the archaeological work on specific areas. This section outlines previous investigations undertaken before the Holcim development, and the initial stages of the Holcim work leading up to the commencement of the archaeological excavation in November 2007.

1.3.1. Department Of Main Roads – Highway Widening In the Early 1970s

The Department of Main Roads widened the Hume Highway in the late 1960s and 1970s as part of a general upgrading of the road. This included widening the road reserve to smooth out the bend at the road junction, which resulted in the loss of large parts of some of the town blocks. The most badly affected was the lot containing the Woolpack Inn, the oldest and most important building in the town, where half the lot disappeared, including almost all of the known buildings. Local anecdotes talk of machinery operators having to remove masonry stonework as part of the road widening.

Extensive archival checking has taken place, but it does not appear that there was either prior archaeological survey carried out, as the work predated the Heritage Act 1977, or recording of any of the remains that were encountered.

The extent of the widening and its impact can be seen in a succession of aerial photos taken before, during and after the works. These are found in Attachment 1 – this volume.

1.3.2. Permanent Conservation Order 1981

Helen Temple undertook her archaeological survey of the site of Marulan in 1981. This was done to provide information for the commission of enquiry into whether a permanent conservation order [PCO] should be placed over the township. A development proposal by the owners of land at the junction of the Hume Highway and South Marulan Roads had alerted the NSW Department of Planning's Heritage and Conservation Branch to the potential damage that would be caused to the site's significance by allowing the development to proceed. Although there had been awareness among heritage professionals, particularly archaeologists, that the site was important because of its short life-span, this had never translated into an effective planning control. As a result, the opposition to the development was reactive and opposed by the landowner, resulting in an enquiry being held.

The enquiry was constituted under the provisions of the Heritage Act, with Commissioner Gilpin taking evidence from departmental experts and other heritage professionals about the significance of the site. He heard that Marulan was a rare example of a township that had been by-passed by the railway and had then suffered a rapid death with no subsequent development¹. This resulted in what the commissioner called 'a snap-shot' of the mid-19th century being likely to survive on the site². Helen Temple surveyed the township area and produced a map and a report [refer to Attachment 2 – this volume]. This focussed on the southern side of the highway, where there were a number of visible substantial house ruins, the operative Catholic and Anglican cemeteries, the remains of lime kilns that post-dated the town and other readily visible remains. On the northern side she noted only the lot on which the Woolpack Inn stood, now partly damaged by highway widening and no visible remains, and some exotic plantings that may have defined a lot boundary or part of a house paddock [refer to Figure 1.2].

¹ The actual rarity of this phenomenon was perhaps overstated in the submission but, even so, 'lost' towns have never been common in the Australian landscape.

² Gilpin 1981.



Figure 1.2 - Temple's 1981 survey results [source – Temple 1981].

Even though the physical evidence was predominantly concentrated on the south side of the highway the commissioner upheld the Department of Planning's proposal to place a PCO over the entire town site. In effect this included all of the ½ acre town allotments made during successive subdivisions, named street alignments and reserves. The PCO and later SHR boundary are shown in Figure 1.1.

The main reason for the declaration of the PCO was the archaeological importance of the site. When the PCO was re-issued as a State Heritage Register listing in 1999 a formal statement of significance was prepared. This read [in part]:

The site of Old Marulan Town is considered to be an outstanding archaeological resource which is able to vividly illustrate unrecorded details of Australian history relating to the form and functions of an early colonial service town, and the way of life of its inhabitants. Examination of the ground surface indicates that the total area of the site contains relics relating to the early occupation of the town. Future archaeological research of the site should result in a wealth of information which is only suggested from surface findings. The significance of the relics and deposits within the land is heightened by the limited period of the towns existence and the subsequent lack of further development of the land. The site therefore is a rare "time capsule" relating to colonial town life from 1835-67 which has suffered minimal contamination from latter phases of use. Exploitation of the site in

order to gather historic information would necessitate the preparation of a full research study prior to archaeological excavation of any part of the site in order that all possible avenues of research be considered. [from Temple 1981]

Temple's report is:

H. Temple 1981
Old Marulan town, Hume Highway, New South Wales, archaeological evaluation,
NSW Dept of Planning Heritage Branch Library

The Commission of Enquiry report is:

A. Gilpin 1981

An inquiry pursuant to section 41c of the Heritage Act 1977 into objections to the making of a conservation order in respect of the place known as Old Marulan town together with its site as shown edged heavy black on plan catalogued H.C. 384 held in the offices of the Heritage Council of New South Wales, NSW Department of Planning, Sydney.

1.3.3. Marulan Sesquicentenary Celebrations 1985

No further archaeological work is known to have taken place following the placement of the PCO. With no further development pressure there was no incentive to seek to understand the place or realise its claimed archaeological potential, beyond the assurance that it was all safe. Further up the highway, the people of new Marulan marked the old town's establishment in 1835 with the 'Marulan 150' sesquicentenary celebrations in 1985. One enduring by-product of this work was the publication of a town history, compiled by Maureen Eddy. An excellent local history, it chronicled the development of both the original and later town and presented a view of the town as part of a living landscape, rather than a forgotten archaeological relic.

The town history is:

M. Eddy 2000
Marulan – a unique heritage, Marulan 150 Committee, Marulan.

1.3.4. Umwelt Environmental Impact Assessment [EIS] 2005

The preparation of an EIS to accompany the development application for the Lynwood Quarry included a component that identified historic heritage issues, as well as a separate study of issues that may affect Aboriginal archaeological heritage.

The survey identified that the proposed quarry itself was unlikely to cause harm, but the necessary infrastructure would have an impact on the SHR-listed township site. A number of substantial heritage items were identified in the vicinity of the township, including a town water supply dam and a timber-lined well. As well as these, evidence of the subsequent late 19th and early 20th century rural landscape were identified, including the Lynwood Homestead complex, and some of its older buildings and plantings, various sheep dips and a probable clay pit and brick making area. Figure 1.3 shows remains within and near the town site, while Figure 1.4 shows other items of rural heritage within the development area.

The survey was sufficiently detailed to determine that there was a need for further consents from the NSW Heritage Branch – a s.60 permit for works undertaken within the town site and SHR boundary, and a s.140 permit for impacts to archaeological sites in the remainder of the area.

The report for this stage is:

Umwelt 2005

Non-indigenous archaeological assessment: proposed Lynwood Quarry, Marulan report to Readymix Holdings Pty Ltd, Appendix 12 in Umwelt Environmental Consultants, May 2005

Environmental impact statement: Readymix Holdings Pty Ltd proposed Lynwood Quarry, Marulan.

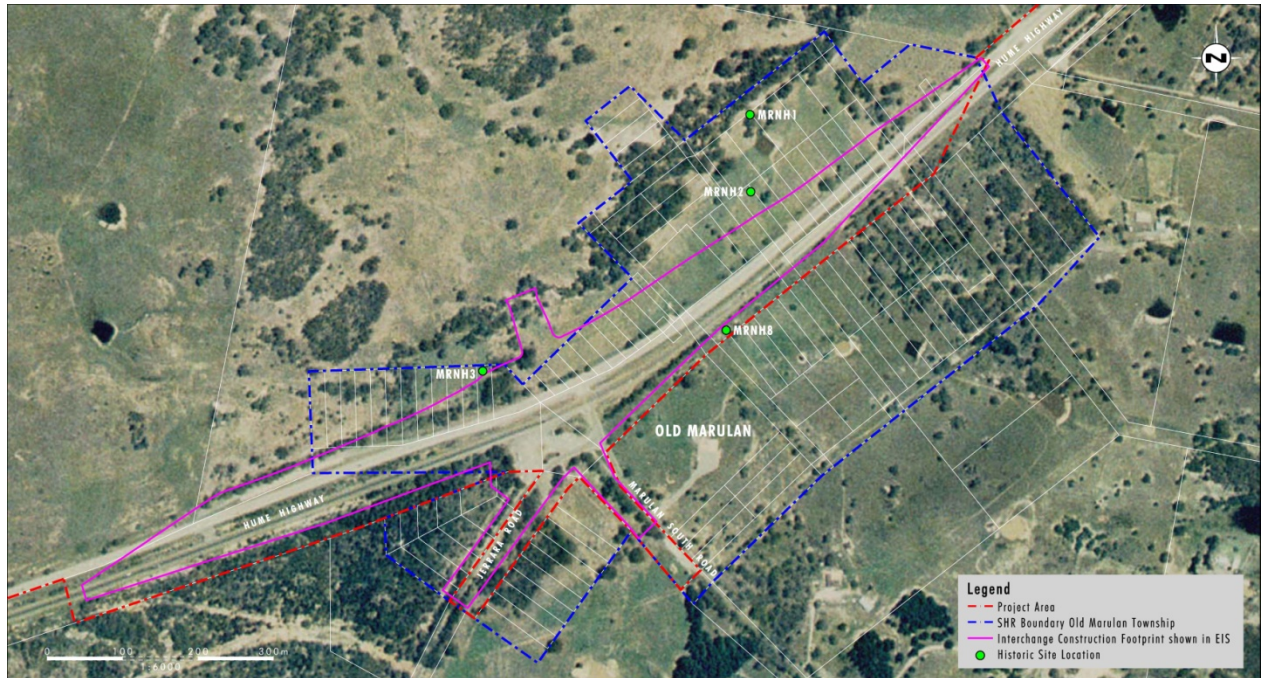
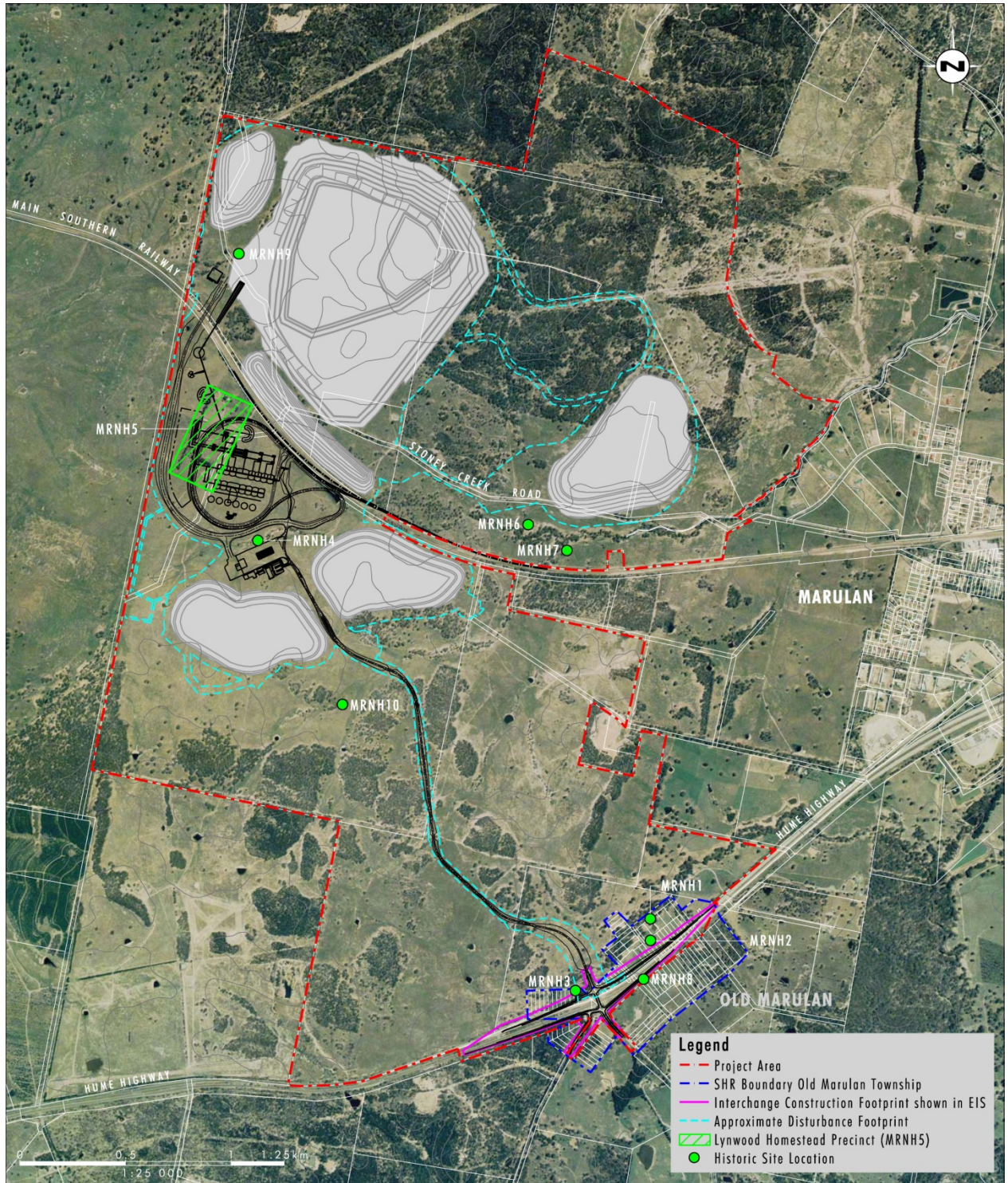


Figure 1.3 - Archaeological sites in EIS – within and near town
 [source – LPI 2004, Readymix Holdings Pty Ltd Aerial Photo March 2005]



**Figure 1.4 - Archaeological sites in EIS – within development area
 [source – LPI 2004, Readymix Holdings Pty Ltd Aerial Photo March 2006]**

1.3.5. Archaeological Research Design and Compliance Program 2006

Denis Gojak from *Banksia Heritage + Archaeology* was engaged by Umwelt on behalf of Holcim to be the Principal Archaeologist to undertake the remainder of the historical archaeological program.

The first task was to prepare an archaeological research design which set out in detail how the archaeological evidence would be investigated. While the focus was on the town site, consideration was also given to the rural heritage. By this time the plan of the traffic interchange had been more or less finalised and the approximate footprint of the impact was known. Assessing what was below the ground and what it may tell us – the first steps in establishing its significance and formulating a research design – required considerable additional research. Detailed research on the growth and development and decline of the town was carried out, including title searches to determine all owners of all lots proposed to be affected. As this only represented a third of the total town we needed to also contextualise our research by finding out how this area related to the whole town. We were hampered by a lack of useful maps or photographs, the few that survived not lending any significant detail to the impact area.

A detailed archaeological survey was undertaken, mapping all potential archaeological evidence on the surface. This included shallow depressions and slightly levelled areas, as well as plantings and scatters of artefact material. The survey revealed that there was much more complexity to the archaeological remains than earlier surveys had shown [refer to Figure 1.5]. Only part of one definite structure, right next to the road reserve fence, was revealed, also suggesting that there had been heavy loss of buildings as a result of the road widening. Most of what therefore survived was likely to relate to rear yard activities. In the case of the Woolpack Inn, for example, even if the main building was lost, inns were known to provide accommodation, stabling of horses, blacksmithing, housing for servants and other services that should have resulted in a substantial 'back of house' archaeological signature. It was unclear what most of the archaeological remains identified in the survey meant in terms of former site activities.

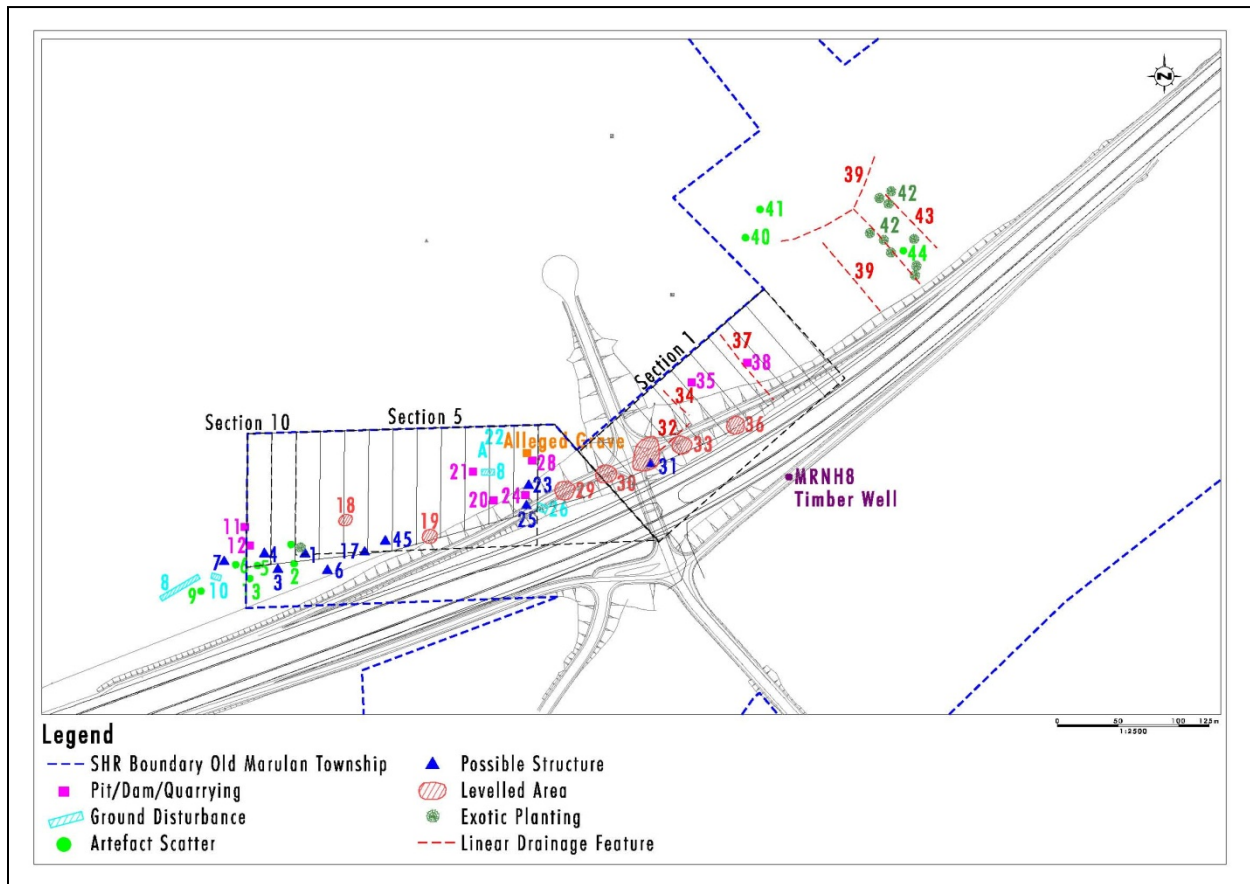


Figure 1.5 - Archaeological research design survey – identified features

The preparation of the archaeological assessment followed the applicable guidelines issued by the Heritage Branch, as well as accommodating specific conditions of the development consent. The research design identified a series of questions that were likely to be relevant to understanding the site, and also to making broader interpretations of the evidence. Because of Marulan's intactness it had the potential to tell us a great deal about a range of issues about life in 19th century rural NSW. Because very few such sites had ever been excavated or published to any standard the value of the information was likely to be very high. The research questions continued to be modified as the project proceeded, and the complete list, with responses, can be found at Section 8.4 of this volume of the report.

The archaeological program was structured into several stages:

Stage 1	s.60	Archaeological test excavations of features identified during the survey
Stage 2	s.60	Main excavation of all of that part of the impact area with research potential
Stage 3	s.60	Clearance – excavation or monitoring of ground disturbance within the impact area which does not have evident archaeological evidence
Stage 4	s.60	Analysis and report preparation
Stage 5	s.60 / s.140	Archival recording and monitoring of development impacts to rural heritage items outside the town area except MRNH 1 – sheep dip which is within the SHR area

This staged approach was necessary to allow areas of known potential to be investigated so that, if necessary, modifications could be made to the approach when dealing with less well understood areas. The research design was accepted by the Heritage Branch, who issued a s.60 excavation permit on 28 November 2006. They considered that the s.140 application could be treated as an exception issued under s.139 [4] of the Heritage Act, on the basis that the works proposed for MRNH 9 were considered to have 'minor impact' on the resource. The exception was issued on 28 November 2006.

The validity of the statement of significance for the site on the SHR was confirmed. As the impact area was a smaller part of the town site its significance had to be qualified.

The qualified statement of significance says [in part]:

The determination of the potential archaeological resource has also demonstrated that the archaeology within the development impact area is a skewed sample of what was originally there. The archaeology does not include any of the main residences of the town, as these have been lost through road widening. The survival of meaningful archaeological evidence that can demonstrate artefacts used within specific properties, the set up of the rear of house lots and the types of activities that took place on specific lots is possible, but cannot be confirmed purely from the visible archaeology. The archaeology of the individual lots is therefore a diminished sample as the residential material is at least partly gone, and the remaining evidence cannot be a very accurate proxy source of the same information.

Unsurprisingly, the description of the overall archaeological potential of the village set out in the SHR entry is not fully reflected in all of its constituent parts, particularly that under consideration here. The loss caused by the road widening of the Hume Highway and the deliberate minimisation of development impact associated with this project result in the potential archaeological resource within the development impact area being less able to provide information than much of the rest of the village site. Nonetheless, the study area has great potential, probably at a state level, to begin to provide data for archaeological research questions that relate to general issues of settlement process during the early 19th century. It also provides an opportunity to sample the village's archaeology without compromising the possibly higher integrity of some of the other sections of the site that have not been similarly affected by road widening.

The primary report for this stage is:

Banksia Heritage + Archaeology, September 2006
Old Marulan, County Argyle: a research design and archaeological compliance program for work by Readymix.

All relevant factual information in that report is also found in this volume. The historical information has been reviewed and on occasions corrected. If there are discrepancies between the studies, then this volume's information generally will take precedence.

1.3.6. Stage 1 Excavations

The s.60 permit allowed for the test excavation of a number of the features identified in the 2006 survey. A sample of sites was chosen to be examined to determine the archaeological potential of the site.

Excavation work was carried out on January 22-25 2007. It focussed on selecting an example of each of the different types of archaeological features identified in the survey, which were examined by a combination of hand and mechanical excavation.

The detailed results of the excavation are discussed in Section 6 of this volume of the report. At a general level the testing program showed that:

- the highly structured natural stratigraphy provided a good opportunity for separating out different chronological periods, and for revealing post-holes and other sub-surface features
- it was very difficult to distinguish between limited exposures of natural rock and stone reused for fireplaces or in clearing piles
- archaeological evidence [structural and artefact concentrations] was present below the ground even when there was no visible surface indication

- the archaeological horizon was shallow, less than 150 mm, making it very fragile in the presence of machinery
- although there was evidence of later pastoral use, the presumed lack of disturbance was confirmed
- there was some potential for the undisturbed preservation of biological information, e.g. pollens.

The assessment of the archaeological significance of the site was modified slightly as a result of the excavations. This read [in part]:

The significance of the archaeological resource within the impact area therefore can be summarised as being of high archaeological potential for revealing information about the history and development of Marulan as a township in the period from c. 1835 to 1870 and its subsequent decline. It has high potential to record archaeological evidence through artefact and structural evidence activities that took place in the rear of Lots in Sections 1 and 5 of the town plan and the Crown Reserve. It is unlikely to tell us much about the main buildings in these areas but it is also likely that much of the site's activity took place at the rear of the lots.

Because Marulan is both typical of other towns of the mid-nineteenth century and because there have been few examinations of this period in rural NSW there is a high potential for the archaeological resource to inform our knowledge of other sites and colonial history generally.

The main report for this stage is:

Banksia Heritage + Archaeology, March 2007
 Marulan – Stage 1 archaeological investigation, report to Rinker Australia Ltd and Umwelt [Australia] Pty Ltd.

1.3.7. Summary Chronology of Permits and Stages of Work

c. late 1960s-mid 1970s		Widening of northern side of Hume Highway
1977		Heritage Act proclaimed
1981		Temple field survey of town site
1981		Commission of Enquiry decision onto status of PCO
1982		PCO gazetted
1985		PMG / Telecom cable through site
1999		PCO re-issued as State Heritage Register listing
2005	April	Umwelt field survey of town site
2005	May	EIS with historic heritage survey issued
2005	21 December	Development consent issued for Lynwood Quarry

2006	May	Banksia Heritage archaeological survey
2006	September	Archaeological research design issued
2006	28 November	s.60 permit issued
2006	28 November	s.139[4] exception issued
2007	22-27 January	Stage 1 test excavations
2007	March	Report for Stage 1 fieldwork issued
2007	March	Geotechnical investigation monitoring
2007	March	s.65A application submitted
2007	4 September	s.65A permit issued
2007	Nov-Dec	Main excavation season [Stages 2 and 3]
2008	Jan-Dec	Analysis and report preparation
	31 July	Revised interpretation plan submitted
2009	February	First draft final report issued
	February	s.57[1] exemption application lodged
	March	s.57[1] permit issued
	March	Archaeological investigation in road reserve
	April	Interim report on road reserve work issued.
	August	s.65A application submitted – for final Hume Highway Road reserve archaeological works
	September	Investigation and recording at the Lynwood Homestead Site
	October	s.65A permit issued – for final Hume Highway Road reserve works
2010	December	Heritage Council confirmation construction works can proceed issued
2011	June	Final Hume Highway Road reserve archaeological works
2012	August	s.65A application submitted – to amend due date for final report
	October	s.65A permit issued – to amend due date for final report



SECTION 2.0

The Site in its
Natural Environment

2.0 The Site in Its Natural Environment

Marulan sat within a complex natural environment – complex because it was quite varied, because it was not static or entirely natural. The effects of Aboriginal burning and hunting likely had an effect on the appearance and structure of the landscape. And, because Aboriginal society was itself under stress when European settlement began, their traditional practices were disrupted with the consequence of a changing vegetation regime. Add to this the early impact of grazing on vegetation and erosion and there is a rapid transformation at the time of first contact, and possibly even before the arrival of European settlers. The following section discusses the environment within which Marulan sat, and how that may have changed before and during the period the town was occupied. As natural resources were patterned in the landscape some consideration is also given to how the locals were able to exploit the resources around them. Figure 2.1 illustrates the site and the major features referred to in this report.

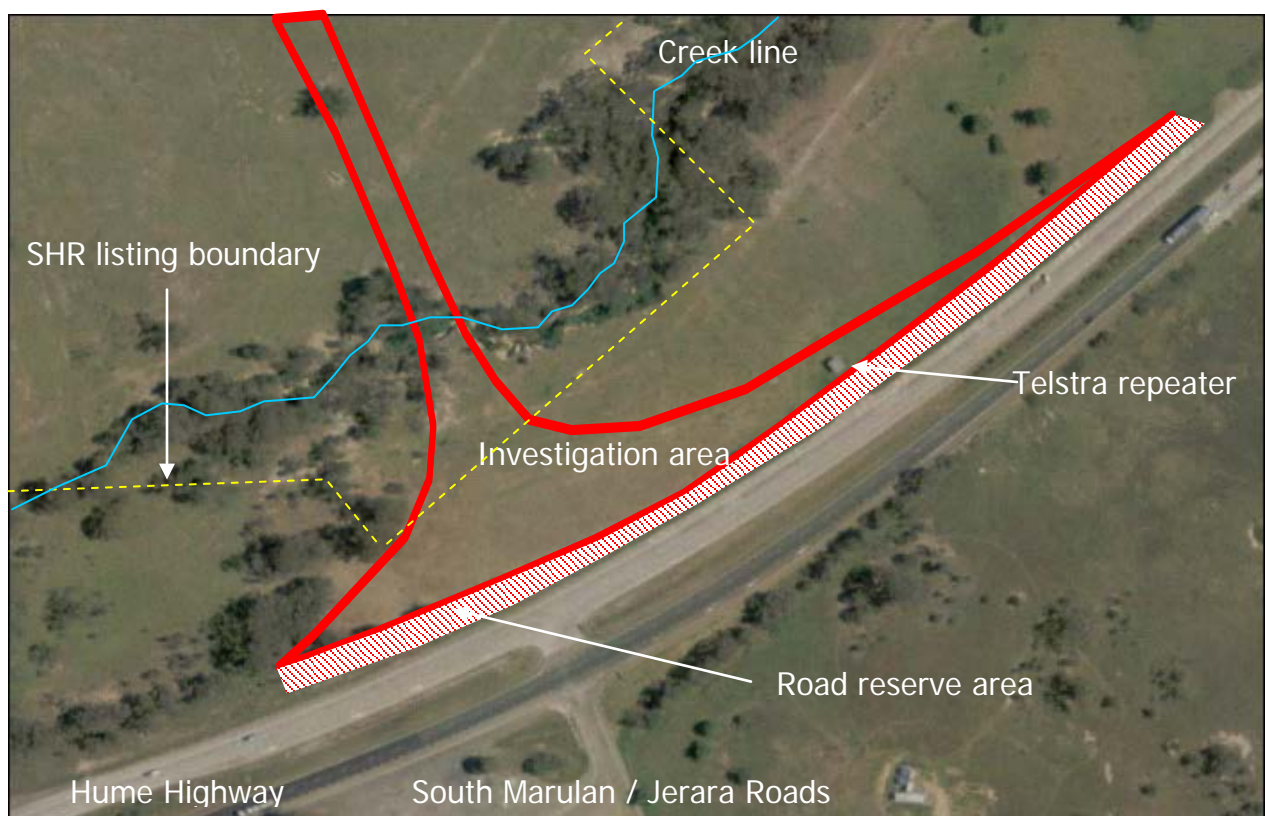


Figure 2.1 - The site, showing major features referred to in this report. Red outline shows the footprint of the interchange which forms the investigation area and yellow the SHR boundary.

[NSW Dept Lands 2012]

2.1. Geological Setting

Geologically, Marulan lies immediately outside the Sydney Basin in the Lachlan Fold Belt. This means that the suite of sandstones and shales that stretch for kilometres below and around Sydney and its hinterland are replaced with a much more complex mosaic of igneous rocks and their derivatives as well as limestones and other useful sedimentary and metamorphic rocks resulting from a complex geological history including active volcanism, marine transgression, sedimentation and tectonic upheaval³. The site itself is near the junction of several volcanic plutons of early Devonian age⁴, referred to collectively as the Marulan Supersuite or Marulan Batholith. While soil profiles are deep there are many localised igneous rock outcrops which form a significant landscape feature at the site and influence on local topography.

The volcanic bedrock dictated the nature of the soils and natural vegetation cover in the vicinity of the township and ultimately it is the presence of the extremely hard stone porphyryite that prompted the construction of the Lynwood Quarry. It was noted by Throsby on his 1818 journey, and he thought that these may make good mill stones^{5 6}.

Mining is a more significant component of the modern town's economy than the older town, but even during the short period of the old town's operation there was mining of marble at the limestone reserve south of the Wollondilly River, modest gold discovery at Shelly's Flats and a much larger late 19th century rush at Bungonia and both iron at Lockyersleigh and copper at Arthursleigh⁷. The Johnniefields Quarry, north of new Marulan, also quarries porphyryite. Other similar hard rock quarries are in development or are proposed around Marulan.

2.2. Topography

Marulan sits at the southern margin of the Southern Highlands. Depending on how the Highlands are defined it is either well within a region that also includes the Goulburn tableland or sits just beyond the boundary of Wingecarribee Shire⁸.

The sandstone plateau top, with prominent volcanic intrusions, that extends from the Blue Mountains and down the Southern Highlands is a geological feature of the Sydney Basin. It stops north of Marulan, and is overtaken by the complex geology of the Lachlan Fold Belt. The landscape it created consists of rounded rolling hills gradually dropping in elevation towards the Goulburn Plains to the south. It is bound on the

³ Branagan and Packham 2000.

⁴ Simpson *et al* 1997.

⁵ Throsby 1818 – entry 25 March.

⁶ Atkinson 1826: 22 refers to 'Murroowallin' and 'Barramarragoa' [probably Parramarrago = Bungonia] limestone, suggesting sources east or south of the town rather than the well-known marble reserve south of Arthursleigh. A reserve was established to protect the marble as a commercial resource in the 1830s.

⁷ See Eddy 2000: 85-90 and Fletcher 2002: 105.

⁸ Bowie, I 2006.

seaward side by a steep escarpment that is heavily dissected by the headwaters of the Shoalhaven River. To the west the Wollondilly River does the same, with the Cookbundon Ranges adding a further obstacle to the west. This narrow neck of readily trafficable land is known as the Marulan Ramp, and defining its extent was a necessary preliminary for constructing a viable road to the south⁹. As discussed below this was not successfully resolved by Europeans for several decades after their initial occupation of the area [refer to Figure 2.2].

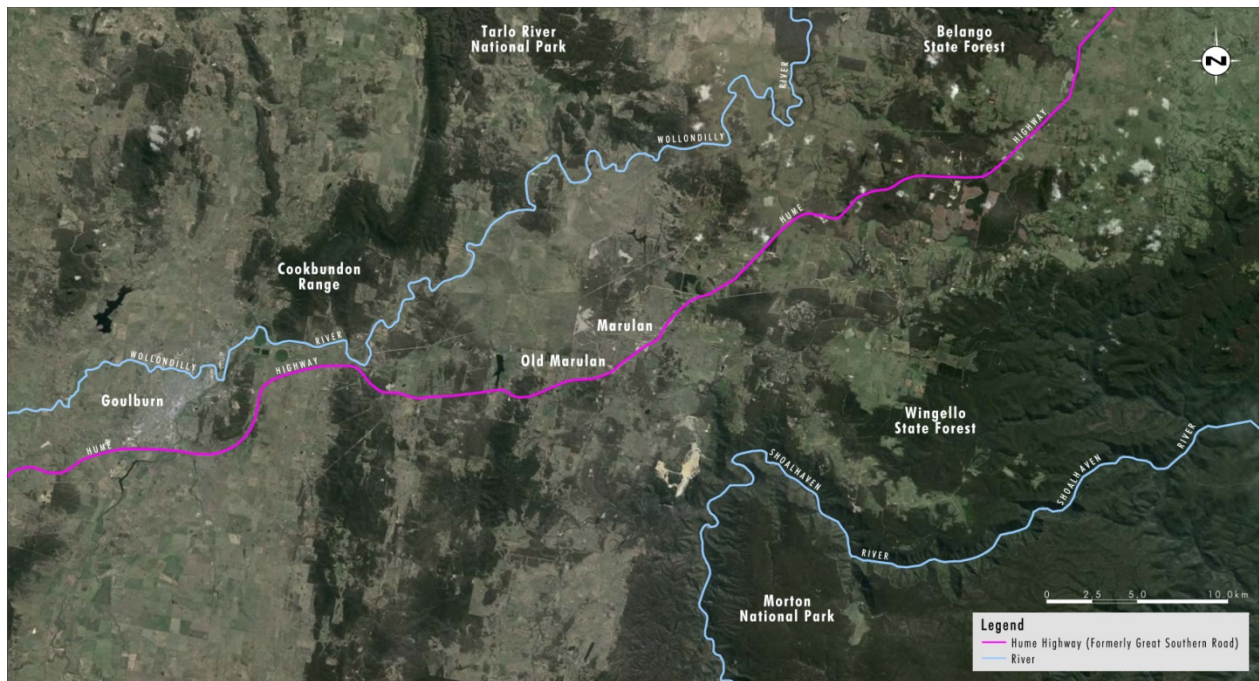


Figure 2.2 - The Marulan ramp and surrounding country

Marulan lies at the boundary of the Wollondilly and Shoalhaven catchments, and the Great Southern Road generally follows the watershed. The town site is generally higher on the southern and eastern side of the road, with a gentle fall down towards the creek line. Historically the road appears to have crossed a point of low drainage immediately adjacent to the Telstra repeater station at the eastern point of the impact area. There is a modern culvert in this location and a timber-lined well [site MRNH8 - refer to Volume 3 for detailed recording] is present on the same drainage line on the other side of the road. East of the Telstra station the land becomes noticeably wetter during rain, and is quite poorly drained. This area also contains some older channels that may have been dug to improve drainage or have served as lot boundaries. It is still not clear whether this poor drainage was established during the time the town was occupied or is a result of changes to drainage with the construction of the highway.

⁹ Perry 1963.

At the northern boundary of the town the first survey plan shows a narrow creek line interspersed with small ponds [refer to Figure 2.3. This chain of ponds formation is characteristic of southeastern NSW¹⁰. Often it was associated with more extensive poorly drained land, referred to as swampy meadows¹¹. The deeper water holes tended to retain water in all but the worst droughts, but the marshy land in between would only run with surface water during wetter periods. The present appearance of the same creek line is a massive erosion scour about 15 metres across and 5 metres deep. This is a common consequence of overgrazing resulting in erosion, but we do not know how rapidly this took place after settlement began¹². It is known from contemporary observers that there could be visible change within a decade after the commencement of grazing¹³. Other accounts from the Southern Tablelands area suggest that the impact was most extreme in the latter half of the 19th century. There is a level flood plain extending about 20-40 metres from the current edge of the creek at the rear of the original town lots of the old Marulan village site. This opens out to the east near the circular sheep dip [site MRNH 1, refer to Volume 3 for a detailed description], and also forms a shallow drainage line that leads into a modern dam. If these follow the pattern found elsewhere the sediment in the base of the channel, the main channel cut and the upper part of the flood plain, is all post-settlement alluvial deposit¹⁴.

¹⁰ Eyles 1977 discusses chain of ponds creeks, and their gradual evolution and deterioration and erosion from over-grazing.

¹¹ McTaggart *et al* 2007.

¹² Wasson *et al* 1998

¹³ Strezelecki 1845: 364.

¹⁴ Wasson *et al* 1998.

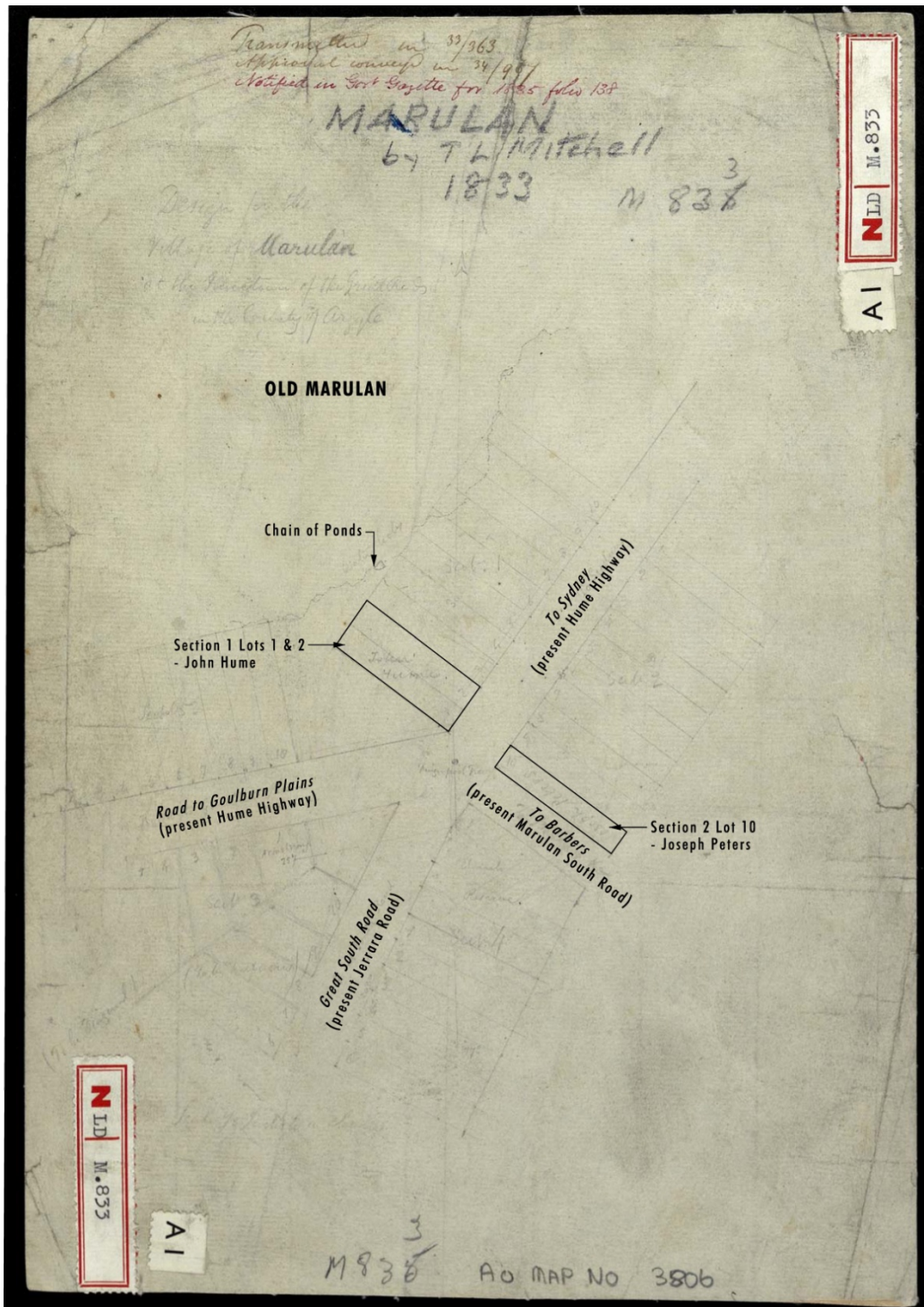


Figure 2.3 - Survey plan of the town, showing the chain of ponds forming the creekline [SRNSW Map 3806]

2.3. Soils

A number of soil landscapes occur within the old Marulan village area. The main two are the Bindook Road and Marulan soil landscapes¹⁵. The junction of the two runs roughly north through the town from the Jerara Road junction, with the Marulan soil landscape being eastwards of that line. Both are yellow podsollic soils derived from the natural decay of the underlying volcanic bedrock and leaching, and are characterised as having 'strongly differentiated profiles with coarse- to medium-textured A horizons, dominantly yellow-brown, friable more clayey B horizons and distinct pale coloured A2 horizons' [Hird 1991: 8].

Although both are predominantly yellow podsollic, with the sharp contrast in colour and texture between the topsoil and the immediately underlying A2 and again with the B horizon, both soil landscapes also develop areas of red earth or red podzolic soil at more elevated parts of the landscape.

A detailed analysis of the soils on the site, which included characterisation of their formal properties as well as any evidence of anthropomorphic change, was undertaken by Department of Agriculture soil scientists for the archaeological excavation. The full report is included in Volume 4 [Lawrie 2009]. In summary it confirms the expected nature of the soil.

Lawrie notes the following in relation to the soil of the site.

Like many places on the Southern Tablelands, the soils vary in profile features over relatively short distances ... In general, the surface soil is loamy and there is a clay subsoil present, interspersed with pockets of strongly weathered bedrock sometimes at shallow depth. Small floaters of bedrock can occur in separate layers throughout the profile. In places where it once occurred on the surface some of this rock has been picked up and stockpiled into heaps. This may have happened in the early period of settlement to make cultivation easier. Loose surface rock does not need to be removed if paddocks are used only for grazing.

Once free of rock the surface soil is quite suitable for regular cultivation. Ploughing increases the rate of breakdown of soil organic matter, releasing nutrients for plant uptake. The level of organic matter in the topsoil at P3, the site closest to the interjection of the highway, is less than half that of P2 or P1; it also has the lowest available phosphorus and total nitrogen level ... This decrease is consistent with a history of cultivation. Levels of other nutrients like potassium or sulphur are not elevated, which could have occurred if fertiliser had been applied. Finally the calcium level is also lower in the P3 topsoil (as a percentage of cation

¹⁵ Hird, C. 1991.

exchange capacity) than in the other topsoils. This suggests that ash from fireplaces was not dumped here even though the pH is slightly higher. Ash is alkaline and raises the pH of acid soil, and usually boosts the calcium and potassium content. No sign of charcoal or ash was observed in the three topsoils

The soils provide some indication of previous land use at the site. Loose stones have been removed from the topsoil, presumably to make cultivation easier. Organic matter is depleted at one site [P3] possibly by cultivation in the past, reducing nutrient levels as well. Some nutrient levels are slightly raised at another site [P1], i.e. phosphorus and potassium, probably by additions of plant material for animal fodder. This may have happened many decades ago because the nutrients have penetrated below the topsoil. Nutrient levels in this layer have not been boosted at the other two sites. Current land use practices, mostly grazing by sheep or cattle, do not appear to have been accompanied by additions of fertiliser substantial enough to increase nutrient levels significantly in the topsoil [e.g. at the P3 site].

Clay from the creek banks was dug out to burn bricks in clamps on the northern side of the creek [refer to Section 6.6 below].

2.4. Vegetation

When Charles Throsby first came to the area in 1818 he referred to it as 'fine open forest'¹⁶. Although it sounds vague to our ears it conveyed specific meanings about both the nature of the vegetation and an expectation of its utility for settlement. The open forest referred to trees spaced sufficiently far apart so that their crowns did not touch. Excavation of large open areas at Marulan revealed the distribution pattern of trees placed about 10 metres apart, which corresponds well with the description of open forest. None of the trunks remained *in situ*, unsurprising in town, but the tree boles, once the trees were lashed over or burnt out, later provided impromptu dumping spots for refuse by residents. Between the sparse trees would have been native grasses that were highly prized as fodder for sheep and cattle. Finding new grazing lands was the task Throsby had been given by Governor Macquarie.

Only a short distance to the south at the Goulburn Plains was found the grasslands, which ran with little interruption southwards for hundreds of kilometres. This land was even more attractive for pastoralists and, importantly, its further reaches were beyond the settled districts, meaning that there was effectively no governmental control over their activities. It is likely that this much more tempting land explained the patchy take up of land around Marulan. Even though there were a number of significant large

¹⁶ Throsby 1818.

grants and many more small ones over time, large amounts remained in crown ownership and were available for licensed grazing.

This natural environment was fragile and did not resist well the impacts from grazing, especially where this was carried out by unsustainably large herds and flocks. When the native grass cover was removed by the first stock to run over it, the bare shallow topsoils tended to erode. It was exacerbated by the variable rainfall and frequent droughts. Strzelecki, for example observed '... in the summer of 1838, the whole country of New South Wales between Sydney and Wellington, the Upper and Lower Hunter River, Liverpool Plains, Argyleshire, &c., presented, with very few exceptions, a naked surface, without any perceptible pasture upon it, for numerous half-starved flocks.'¹⁷ He blamed over-grazing and the mismanagement of flocks and herds by their attendants and their owners. While the worst effects were felt in the unregulated lands beyond the limits of settlement overgrazing affected even the grant lands in County Argyle.

It is likely that the character of open forest was sustained by regular burning. We know that the Aboriginal people of southeastern Australia practised what is sometimes called firestick farming, using fire as a way of maintaining ecological diversity and a constant renewal of growth¹⁸. Small low intensity fires would burn off undergrowth and encourage sweet new grasses that were attractive to marsupials, trigger the germination of those seeds that relied on heat and do all this while leaving mature flora largely untouched. The fires made movement easier as the landscape was, in the words of many Europeans, park-like. One of the sad ironies of the process of settlement was that there was little realisation of the human origin of these prized landscapes. The disruption of Aboriginal society and eventual population loss resulted in this landscape management system collapsing. The Europeans feared fire and did not use it regularly, and with good reason¹⁹. When Aboriginal people burned vegetation regularly they created a mosaic of lands with limited ground fuels. Once these were no longer being regularly burned the fuel built up to feed bushfires of increasing severity. A careless clay pipe, lightning or camp fire could set up a blaze that would destroy stock, houses and fencing, and occasionally lives²⁰. This pattern continued into the 20th century, and the battle against bushfires became a major part of community identity²¹.

Other changes are more subtle and may have passed unnoticed. We can be reasonably sure that the buildings of Marulan were predominantly shingled, and the preferred trees used for these were of the Casuarinae family. Casuarina are much less frequent in the landscape than they once were and data from the New England Tablelands, which has measured the relative frequency of different tree types using pollen information, has determined that this decline took place following European settlement. The researchers

¹⁷ Strzelecki 1845: 367

¹⁸ e.g. Jones 1969.

¹⁹ However, both Bennett 1834: 132-3 and Strzelecki 1845: 361 agree that stock-keepers would occasionally burn off old grass to encourage new growth.

²⁰ e.g. 'Black Thursday 1851' painted by William Strutt, and Atkinson 1857's dramatic description of a bush fire.

²¹ Poiner 1990.

who found this pattern suggest that this type of timber was more heavily exploited than eucalypts and that changed grazing and farming practices put greater pressure on casuarina than eucalypts, encouraging the regeneration of eucalypts in preference to other species²². Contemporary observers knew about the properties of different timbers, and recognised casuarina as being much easier for shingles and general splitting, and the trees were of smaller diameter and definitely much easier to cut down for firewood or zig-zag fencing²³.

It is also argued that some environmental changes actually preceded the arrival of Europeans and their stock. Again in the New England Tablelands, fine correlation of sedimentary and pollen data suggests that environmental change began before the first settlement²⁴. Possible explanations include the demographic collapse of Aboriginal populations who may not have been able to maintain burning practices, or localised climatic changes. It is not at all certain whether this observation is more widespread and extrapolating it to the Marulan area is difficult without good environmental data.

2.5. Climate

Our current concern with global warming also necessarily draws attention to what the climate was doing in the mid 19th century. Unfortunately working that out is not an easy matter. Our oldest comprehensive record for climate comes from 1857 when the records of Bukalong Station on the Monaro begin. Before that we have only anecdotal observations of abnormally dry and wet years and occasional temperature records that are effectively meaningless. The observations for Argyle include:

Table 2.1 - Records of drought in County Argyle during the first half of the 19th century

Author	Reference	Dates	Comment
Breton 1833	p. 96	1826-29	'great drought'
Lhotsky 1979	p. 117	1832-1833	Drought of 15 months ending at Christmas 1833 in Monaro and elsewhere
Bennett 1834	pp. 330-1	end of 1832	'scorched and arid' appearance of land at Paddys River to north of Marulan
Brodribb 1883	p. 10	1835	Drought in Monaro
Strzelecki 1845	p. 364	1838	Major drought
Foley 1957	pp. 54-5	1837-9	One of worst droughts, Lake George dry for 10 years, some areas drought affected to 1840
Fry 1973	p. 2	1839-1841	Three year drought

²² Gale and Pisanu 2001.

²³ Atkinson 1826: 16.

²⁴ Gale and Haworth 2002.

Author	Reference	Dates	Comment
MacAlister 1907	p. 123	c.1839	Drought, also severe winter
	p. 55	1842-7	Localised dry periods in different areas
	p. 55	1847-1859	Localised short dry periods in different areas
Townsend 1849	p18	1846	Drought of many months

These illustrate some readily apparent points – firstly droughts can be severe but also localised, secondly they are recollected differently by the various diarists, and they can be inconsistent across a small area. The 1838 drought already mentioned above appears to have been extensive, affecting most occupied areas in southeastern NSW.

Apart from the droughts the climate appears to have been reasonably stable in the period Marulan was in existence. Climate records such as reconstruction of ENSO [El Nino-La Nina] cycles and coral growth rings measuring sediment budgets provide some indication that the mid 19th century was climatically stable, with dryer conditions²⁵.

In drought or dryer conditions the chain of ponds behind the town was unlikely to have retained much water. Being downslope of the inn and its stables it would probably have not remained clean for long. Other sources of water that we know about are the timber-lined well [site MRNH8] on the southern side of the road and the large stone-lined well known as the town well²⁶.

2.6. Fauna

The issue of exploitation of native fauna is considered in more detail in following sections. In general terms the massive modification of the environment reduced the ability of Aboriginal people to maintain sustained hunting and foraging. It was not only habitat loss that impacted on kangaroos and wallabies, but also a complete obsession among the rural male population with kangaroo hunting as the main recreation.

At the same time attacks on flocks by dingoes became a major problem, along with the depredations of 'native cats' [i.e. dasyurids].

While farmers may have occasionally eaten native fauna, there is little evidence for townfolk eating native animals in the historical record. Therefore the amount of native fauna in the assemblage recovered from the Woolpack Inn cesspit is notable and potentially throws light on differences between urban and rural diets at the time.

²⁵ Hendy *et al* 2003.

²⁶ Umwelt 2005.

Distance from the sea made it difficult to get any fresh marine food, so the presence of oysters in the archaeological assemblage causes considerable interest [refer to Section 6.7.8]. It was not just a straight line distance, as the Shoalhaven gullies are effectively impassable and appear to have been to Aboriginal people as well as for normal travel. As an indication of the novelty of seafood a newspaper item from 1839 shows that two Aboriginal men bringing 'fresh snappers' from the coast to the inn at Hoddles Corner across the Shoalhaven gorges was newsworthy.

2.7. Exploiting the Environment

The natural environment provided a range of materials that were exploited by the townsfolk. It may be useful to consider them together to get a sense of what was being taken out of the environment over a 30 year period, what may have become locally scarce and any evidence of use recovered from the archaeological excavation.

Table 2.2 - Materials from the local environment used by the inhabitants of Marulan.

In the ground	Proximity	Use
Freestone boulders	On site	Used for building construction, e.g. the Woolpack Inn cesspit.
Sandstone	less than 10 km	Small amount present on site as building stone off-cuts.
Limestone	less than 10 km	Small amount present on site as pile of rubble. Later production of lime from limestone in the township.
Slate / tabular mudstones	less than 5 km	Small amount present on site. Possible roofing or building use.
On the ground		
Topsoil	On site	Crops grown – may have been supplemented by manuring.
Clay	On site	Used for brick making – one set of clamps known, probably early in Marulan township period, i.e. 1830s.
Water	On site	For consumption by humans and stock. Includes stormwater and from the creek.
Plants		
Casuarina	less than 2 km	Shingles, general timberwork – no evidence but likely.
Ironbarks and other hardwoods	On site - less than 10 km	Split for slabs, cut and worked by sawyers and carpenters – no evidence but likely.
Misc. timber	less than 2 km	Fencing, firewood.
Native grasses	less than 1 km	Stock grazing, but likely to be rapidly depleted.

In the ground	Proximity	Use
Animals		
Kangaroo / wallaby	less than 2 km	Food item – examples recovered.
Koala	less than 5 km	Possible pet or attraction – remains of one animal recovered.
Oyster	c.100 km	Food item – examples recovered. Direct distance c.25 km but nearest road distance used.

The other aspect of this issue is to consider not just what was brought back to the site, but the use of the immediate hinterland as well. A two hour walk would take a resident out about 10 km, which would encompass several established properties, but mainly Glenrock and parts of Lockyersleigh as well as large areas of unalienated town and rural land that could be grazed either informally by stock, or under a renewable license. It would be feasible for a farm worker to be resident in the town and to tend a small herd of stock at a considerable distance as there was a large amount of suitable grazing land that could be used.

Until the development of the South Marulan limestone quarries, which itself only became viable as a result of the coming of the railway, there was little other industry around the town. The early identification of marble as noted by Atkinson²⁷ seems to have not been taken up and most of the Marulan stone came from much closer to the Wollondilly. The small iron and copper mines did not amount to much and may have only been operated using farm workers.

It is clear, however, that the variable geology of the area was recognised early on and, as is apparent from the site, quarrying of different materials such as sandstone and limestone took place when it was required.

²⁷ Atkinson 1826: 22.



SECTION 3.0

The History of
Old Marulan

3.0 The History of Old Marulan

For the first quarter century of the NSW colony, the extent of the colony was trapped within a circumscribed space, but after that it rapidly expanded. The naming practices of the colonial administration had to keep up with the discovery of land where they could, to help give some understanding of what was being added to the sum of knowledge. The use of counties as large land areas had British precedent, and instructions were issued on how these were to be defined and mapped to assist land management. The 'Limits of location' and later the 'Nineteen Counties' were proclaimed as the extent of the promise that the law would apply to its occupants with the due rights and responsibilities. Beyond the limits there was no certainty of ownership of land, or help in the event of trouble, or expectation of compensation for government decisions.

County Argyle was one of the counties so proclaimed in 1835, although it had that name for a number of years already. It extended from the Guinecor, a tributary of the Wollondilly in the northwest, southwards to Burra Burra Lagoon, then Lake George, taking in all of the main grassland plains south of Goulburn, eastwards to the Shoalhaven and then along it to join with Uringalla Creek and back to the Wollondilly. In that form, which has remained fixed to the present it contained about 1.25 million acres or about 4,150 square kilometres. It measured about 96 kilometres by 57 kilometres. When proclaimed it was already seen as one of the richest of the grazing lands, especially because of the grassland plains. On closer inspection, as well as the grazing land it held significant amounts of rough and marginal land as well.

The boundaries of the county and its constituent parishes remain part of the current land management system, although largely forgotten. In the period under study, however, Argyle was more than a county name. Like Maneroo it evoked the image of treeless plains just waiting for herds of cattle. This chapter discusses what happened when the image met reality.

3.1. Introduction

Two different Louisas observed the rural landscape of NSW in the mid-19th century. Louisa Meredith, an acute and acerbic British traveller, described the Australian colonies in 1844. When she got to the NSW bush she wrote:

It is amusing enough, in traversing this colony, to come upon a spot in the middle of the wild bush, where a great finger-post stands to inform you that you are in the "township" of Monmouth, or Rutland, or some other old country name, with other posts at certain distances, bearing the names of streets, squares, &c., where not the semblance of a human

*dwelling is visible, though all arrangements seem made for a large and populous town. These, I imagine, are some of the "town allotments", in which such extensive and fatal speculations have been made in all parts of the colonies.*²⁸

About 30 years later, in the early 1870s, Louisa Calvert, a gifted amateur naturalist and writer born in Berrima, wrote in her regular newspaper column about travelling in the Southern Highlands:

What has become of the former population? Is the idea which constantly presents itself as the traveller passes along the highways. Towns deserted, little homesteads in ruins, fences falling to the ground. The people have moved on! But where? – in all my wanderings I have never overtaken the tide; the wave of population was ever ahead. The Southern Road, between Berrima and the Hanging Rock, offers numerous texts for such reflection.

*A few miles beyond Hanging Rock is Paddy's River, with its almost deserted township. Here again arises the question – why so deserted? A ready answer that is commonly given – "the railways have ruined the country."*²⁹

These two quotes, written about 30 years apart, encapsulate a phenomenon that had begun, flourished and almost disappeared within that short period, a time frame that almost exactly coincides with the life-span of the town of Marulan³⁰.

In the period before Louisa Meredith wrote few rural towns had been founded at all in NSW. Even though by the early 1840s pastoralists had taken up much of the good land within the settled districts and squatted their flocks and herds beyond the prescribed limits of location there simply was no incentive or effective reason for the founding of towns, as there was only a small free rural population. It was only in the mid-1830s that substantial settlements that looked like towns began to be formed, and their growth was not at all certain. Many never amounted to more than lines of survey pegs, and others began a precarious existence. Only a few grew into substantial settlements.

Thirty years later Calvert wrote about the disappearance of the very same towns. Better known by her maiden name of Atkinson, Louisa Calvert wrote soon after the Southern Railway had been put through from Sydney to Goulburn. Despite being a writer, the changes she saw in the landscape were not expressed as romanticised mysterious ruins, but the immediate and confronting effects of major changes in the economics of farming and transportation in a region that she knew well, and these changes resonated deeply with her. She acknowledged that the railways may have

²⁸ Meredith, Notes and sketches 1844, p. 58

²⁹ Atkinson 1980: 20, 21.

³⁰ About a year after I wrote this I found to my surprise that I was not the first to compare and contrast the two Louisas. In 1929 Margaret Swann wrote a comparative biography of both women.

It took old Marulan more than a decade to die, gradually turning from a busy little settlement to a ghost town. Our historical research shows that it was never a substantial town, mainly servicing a small population of local landowners, tenants and travellers. When the railway came, passing a couple of miles north of the town people did not stay put – they began to move to the railway. Administrative services shifted slowly, and the mobile part of the population followed but eventually, by 1875 the old town was effectively dead. Even so, there is evidence that Marulan still had inhabitants – the marginalised who were unable to move by poverty and disadvantage. Buildings were either dismantled for their raw materials or fell down from neglect. The features of the town that had been etched into the landscape – gardens, orderly boundaries, houses in rows – were submerged beneath weeds and the feet of grazing sheep and cattle. Marulan was largely forgotten, and the new town up the road effectively took over its identity.

At the town site there was little left to remind people that it even existed – to the casual observer now there are a few later farm houses scattered along the road, two cemeteries still in use by locals, some exotic trees, clearings and clumps of blackberries. It was not until the early 1980s that there was any real consideration of what it had become. Marulan had turned from a ghost town into an archaeological site. In a 1981 Commission of Enquiry that looked at the town's significance and whether this should be protected from development the Commissioner summed it up nicely:

[t]he site therefore is a rare "time capsule" relating to colonial town life from 1835-67 which has suffered minimal contamination from later phases of use.³³

Since old Marulan faded from memory the only major impact on the site has been the widening of the Hume Highway in the early 1970s. This resulted in the destruction of the fronts of many blocks on the western side of the highway, including probably many building sites. The eastern side of the road and the rear of blocks on the western side have avoided any substantial impact from later use, which has mainly been restricted to grazing.

Now, the Lynwood Quarry to be built to the north of the town site will supply crushed porphyryite for the Sydney construction industry. It will require the construction of an interchange over the Hume Highway to allow trucks to enter and leave the highway safely. The interchange will impact on some sites to the west of the current highway [refer to Figure 1.5]. Holcim's development application has been approved subject to, among other things, ensuring that the impact on archaeological evidence is mitigated by further documentary research and archaeological investigation. The following section sets out the known history of Marulan, from the first European explorations into this country, the formation of the town, the lives of its occupants, its decline and eventual abandonment. This is a comprehensive study of the town's history, necessary in its own right and as a basis for using the archaeological investigation to further our knowledge

³³ Commission of Enquiry 1981: 11.

of what went on in the town. It is structured in a broadly sequential order, beginning with the desire of the European settlers to move out of the Cumberland Plain and into the lands beyond, and their encounter with the Gundungurra Aboriginal people.

3.2. The Vast Southwards³⁴

The literature on the spread of settlement from the Cumberland Plain in the first years of the 19th century is extensive. This section relies on a number of syntheses, which describe the process of finding viable routes out of the Cumberland Plain and into the Southern Highlands³⁵.

Within a few years of the arrival of the First Fleet it became apparent to the colonial administrators that the immediate hinterland of their colony consisted of a plain of reasonably flat land ranging from indifferent to good in quality bordered by a river that seemed to flood at completely random intervals, all bounded by what appeared to be an impenetrable arc of mountains, plateaux and broken country to the north, west and south. Soon settlement along the Nepean – Hawkesbury was established and grants were given by successive governors to the wealthy and cooperative, but the prospect that the availability of land suitable for creating a farming economy was finite began to concern them. Private and official expeditions began to probe for ways across the mountainous country.

In the southwest exploration had been undertaken in the late 1790s, initially to provide proof to escaped convicts that there was no colony of white people to which they could escape³⁶. The two 1798 expeditions led by John Wilson make interesting reading. On the first trip the expedition had an unnamed Aboriginal guide and John Wilson, who was as experienced as any colonist in bush craft, and who appears to have had continual dealings with Aboriginal groups along the Nepean, even carrying initiation scars³⁷. They met and spoke to Aboriginal groups along the route, noted the whom-batt and cullawine and shot a pheasant³⁸. Then, after encountering a party of Aboriginal people who all wore large skins, they grabbed a girl 'thinking to learn something from them, but her language was so different from that one which we had with us that we could not understand her.' They are believed to have reached the Wingecarribee River and reported, curiously, to have heard gun shots from an unknown source.

³⁴ 'The vast Southwards' comes from a real estate advertisement in 1841 encouraging buyers for town lots along the Great South Road. It captures something of the 'big sky' allure that seemingly endless grassland and forested plains held at the time. It appeared in *SMH* 16 July 1841.

³⁵ Particularly useful are Jervis 1946, 1986, Perry 1963 and Andrews 1998.

³⁶ Wilson's expeditions are also sometimes referred to as Hacking's or Prices's expeditions. This belief in a nation of white people living in the bush encouraged convict escapes which exasperated Governor Hunter and became a bit of a joke as well, with Ensign Barrallier being given the task of a later journey as an envoy to the 'King of the Mountains'.

³⁷ *ADB* 1: 610.

³⁸ Joseph Price 1798 in *HRNSW* 3: 820-823. Respectively the wombat, koala and lyre bird.

Two months later, in March 1798 Wilson, Price and others were sent to explore further. They came to Mount Gingenbullen and continued further southwards towards Mount Towrang. This time, however, '[w]e have not seen a native since we left Sydney'. Heading further south they saw no kangaroos and were running out of supplies '... and we really believe that there never was a native in this part of the country'³⁹.

Although the report of the land from these two expeditions was extremely positive, the discovery of a flourishing herd of escaped cattle at the Cowpastures near the later town of Camden caused Governor King to restrict any movement beyond the Nepean in that direction to protect the herd, apart from some further exploration into the country around the Wingecarribee⁴⁰. However, conflict between settlers and Aboriginal people along the Hawkesbury-Nepean intensified in the early 1810s and did not abate until 1816⁴¹. All these factors effectively blocked the push southwards. However, by the 1810s land grants began to be made along the margins of the Nepean and management of the cattle herd by the creation of a network of Government stock farms had also reduced the absolute need to prevent access to the Cowpastures or beyond⁴².

In 1817 Charles Throsby, a surgeon and occupant of a large grant at Liverpool, explored the land to the southwest with his neighbour Hamilton Hume, travelling along the margins of the Shoalhaven gorges⁴³. Their report, like Wilson's almost twenty years earlier, was extremely positive. Governor Macquarie asked them to undertake another journey the following year, this time taking James Meehan, the Deputy Surveyor-General, Surveyor Grimes, Joseph Wild and Aboriginal guides Bundle and Broughton, and instructions to find a route between the Southern Highlands and Jervis Bay. After crossing the Wingecarribee at Bong Bong they tried to get down a route known to the guides at Bundanoon Creek, but it was flooded. They then began to explore further south, reaching the Shoalhaven Gorges and then heading south and westwards. At this point they crossed Barbers Creek and entered the Marulan area, the first known Europeans to do so, on 24 March 1818.

Our area is described in Throsby's words.

Bumbaalaa 24th March

Heading south crossed swampy piece of forest and entered a large plain of flat forest called by natives Tallawoo, from whence we saw the deep ravines, running to Shoals Haven, then for about 4 miles to the NW to heads other arms of the above river through a very rotten stony poor country over a small stream of water to a beautiful piece of fine forest called Mooraulin, the country here changed in the most sudden manner from miserably barren to as Picturesque and good forest as can be

³⁹ Joseph Price 1798 in *HRNSW* 3: 823-828.

⁴⁰ Good summaries of Wilson's and later explorations are found in Andrews 1998 and Brownscombe 2004.

⁴¹ Connor 2002.

⁴² Starr 2002.

⁴³ Throsby 1818; Cambage 1921 provides a detailed summary of this expedition in the context of their other expeditionary travel and ties the narrative to current topographic names.

wished for, well watered and abounding in herbage mixed with the grass [burnt lucerne, crowfoot, trefoil and chicory] fine sheep pasture.'

Moorooaulin 25 March

At daylight cloudy, wind westerly, this country abounds in very fine granite and other stone, apparently fit for mill stones.⁴⁴

The party continued south, skirting the edge of the Shoalhaven gorge and, finding it continuing to be impassable, split the party. Throsby returned to Bundanoon Creek and was able to make his way to Kangaroo Valley and Jervis Bay. The route was only feasible as a foot track and was never developed for wheeled traffic. Meanwhile Meehan continued south, meeting some groups of Aboriginal people, and eventually reaching Lake Bathurst. Returning northwards he encountered the Mulwaree Ponds and the broad grasslands of the Goulburn Plains. Rejoining his track south he found that Throsby had returned from Jervis Bay and followed behind him back to Sydney.

The locality name Moorooaulin was clearly provided by the guides although we cannot be certain whether it referred to a specific place in the landscape. The first use of Marulan in mapping was in the late 1820s as the name of Mount Marulan, a high point several kilometres southwest of the old town, referred to by Major Mitchell.

The Meehan and Throsby party comprised experienced explorers in the bush, not just the principals, but also Joseph Wild and Hamilton Hume. Their recorded interactions with the Aboriginal people were civil and positive. They did not meet large family groups, but did encounter pairs of men.

The 1818 expedition had important consequences, including defining the practical difficulty of any connection from the coast to the highlands because of the Shoalhaven gorge. It revealed a range of country including fine sheep pasture as at Marulan and Meehan's discovery of the vast grassland plains at Goulburn. The land had some prospect, but was presently not considered to be needed for settlement.

By 1819 that opinion had changed. The County of Cumberland had become badly infested by a caterpillar plague that devastated grazing land⁴⁵. The Blue Mountains to the west had been crossed in 1813 to promising land at Bathurst, but the road was arduous. Exploration north and northwest had shown endless rugged country. It was possible that the route via the southwest, which swapped enormous escarpments with deep gorges, was a more practicable way of getting across the mountains. Throsby was accompanied by John Rowley, the superintendent of the Cowpastures cattle herd, servants including Joseph Wild and an Aboriginal guide named Coocoogong and two others who acted as interpreters, Dual and Bian. Throsby's task was to establish an overland route to Bathurst and to identify land that was free of the caterpillar plague. He managed to do both, reaching Bathurst from the south nearly three weeks after

⁴⁴ Throsby 1818.

⁴⁵ Perry 1963 includes a detailed discussion of the caterpillar plague in an appendix.

crossing the Nepean at the Cowpastures, travelling along the Wollondilly and crossing the Cookbundon Range at the Cookbundon River gap⁴⁶.

A year later Governor Macquarie asked the Commissary General Drennan 'to order a working party to the newly discovered country under the direction of Mr Throsby' with the intention of building a road into the southwest and then north to Bathurst. As a result a bush road 75 miles long had been built between October 1819 and November 1820, heading from Picton as far as the Wollondilly⁴⁷.

By 1820 the only authorised settlers south of the Wingecarribee were Joseph Wild, who had a hut on the Moss Vale side of the river at Bong Bong⁴⁸, Throsby, who was establishing his property nearby, and Charles Wright at Sutton Forest. Meehan, in April 1820 revisited Throsby's route to Bathurst, seeking to create a route suitable for vehicles. Throsby was already marking out and building some of the route.

Later in August 1820 Throsby outfitted a party led by Joseph Wild to explore the area to the southwest of Lake Bathurst, where Aboriginal contacts had reported another lake, called Wee-raa-waa. They saw evidence of Aboriginal fires and recent grass burning, although no encounter is mentioned. Throsby also mentioned in a later letter that a young Aboriginal boy, about 4 years old, was being cared for by Wild, as the boy's parents and three siblings 'paid the great debt of nature during the present winter'. Throsby complained himself of 'the prevailing catarrh' which was making him feel ill enough to avoid further exploration.

Throsby's mention of the sickness understates what was happening during the later part of 1820. It was known that smallpox or a similar disease had impacted heavily on the Aboriginal people around the time of the First Fleet but had left the Europeans untouched, but this new sickness affected both Aboriginal people and settlers. More than thirty years later, the colony experienced its first definite outbreak of influenza, or as it was often called in contemporary reports 'the virulent catarrh'. Many of the settlers came down with it, being forced to rest as they could do little else. An unknown number died because of it, largely the very young and the elderly. Even worse was the impact on the Aboriginal population. A smallpox epidemic in Asia and Europe during 1818 had excited considerable concern, as it was recognised that very few people in the colony had any residual immunity from that disease through either previous exposure or inoculation with vaccines from cow pox. Once supplies were obtained from Mauritius, inoculations were offered to all who may have been susceptible and ministers were rehearsed to encourage parents to inoculate whenever they performed a christening⁴⁹. As it turned out, the epidemic passed the colony by, only to have a much more devastating epidemic by another disease in 1820 [refer to Section 3.3.3 below].

⁴⁶ Throsby's account is published in Brownscombe 2004.

⁴⁷ Jervis 1986: 59.

⁴⁸ Cabbage 1921: 247.

⁴⁹ *Sydney Gazette* 21.2.1818, p. 1.

Macquarie himself inspected the road and the newly opened lands in 1820, travelling as far as Werriwa or Lake George, which had been found earlier that year during another exploration by Throsby and Hume⁵⁰. While there Macquarie discovered that Hannibal Macarthur, nephew of the troublesome John, had already begun to graze sheep upon a property on the Wollondilly at what would become Arthursleigh, in contravention of a letter that instructed him to wait until the land had been properly surveyed. Perhaps if it had been an anonymous ex-convict Macquarie might have taken action, but a Macarthur was different and was merely cautioned⁵¹.

After Hannibal Macarthur's precedent Macquarie began to issue tickets of occupation for the lands beyond the Nepean and the Cowpastures, to get cattle into areas unaffected by the caterpillar plague. The tickets of occupation were a device to control occupation of land, the movement of assigned convicts and provided some surety that the settlers were not beyond the reach of authority. Robert Jenkins was issued the first ticket of occupation in November 1820, being permitted to take his cattle beyond the Cowpastures. Others were issued with permits that did not specify any particular location, but gradually tickets of occupation came to be for specific localities.

Land grants were given in the fertile Southern Highlands during the 1820s, and explorers used these as a springboard to further probe the land southwards and westwards. Hamilton Hume explored as far as Lake Bathurst in 1822 and the next year Ovens and Currie passed through the Goulburn grasslands and reached the northern end of the Monaro Plains⁵². By 1823 Hume's Woolloobidallah station at Lake George at the far southern end of County Argyle was the furthest extension of the European presence⁵³. In 1824 Surveyor Harper was instructed to begin a survey of County Argyle. He had to begin recording the stockyards of the ticket of occupation holders and measure out areas of land to conform to those grants that had been made. A number of grantees were living on their land, while others had managers or even just assigned convict stockmen⁵⁴.

Although it cannot be called a flood, the initial occupation of Argyle took only five years from the time of Hannibal Macarthur's illegal grazing establishment at Arthursleigh in 1819. The next ten years after that saw a large number of grants between the Cowpastures and Lake George. The majority were attracted by the grasslands which offered abundant pasture, at least in the initial season of grazing, and no land wasted by trees. Others occupied the open forest further north, so that by the time Marulan came into being there was a mosaic of land in different tenures. The densest occupation was on the plains, but significant land holdings were scattered across the landscape. This occupation pre-supposed that the land was vacant, free for the Crown to give to whomever it wished.

⁵⁰ Macquarie 1956.

⁵¹ Fletcher 2002: 15.

⁵² Currie 1825.

⁵³ Andrews [ed] 1981.

⁵⁴ Cabbage 1921; Jervis 1986.

3.3. The Aboriginal People of Marulan

3.3.1. An Aboriginal Perspective

While this process of occupation was going on it was being observed by Aboriginal people who were, in every sense, the owners of the land. That the pastoral takeover appears to have been complete and uncontested is a superficial view, the result of both a lack of detailed records and a failure to critically assess what the documentary evidence can tell us about the process⁵⁵. The entire discussion of the dispossession of Aboriginal land in Australia during the 19th century presents problems of this sort, not just the area which interests us⁵⁶. While it was a general process, the way it happened in particular places was always different.

At Marulan there was a comprehensive Aboriginal archaeological investigation that took place separately to that on the town site and rural heritage. Representatives of local Aboriginal organisations took part in both investigations. While there was evidence of pre-European occupation of the town site, there was none that suggested Aboriginal people survived the impact of European settlement and continued an active presence at the town site. The historical record shows that the process of European settlement resulted in a massive population loss, partly by catastrophic epidemic disease and partly by creating an environment that elevated mortality through loss of food sources, weakening social structures and increasing chronic disease and alcoholism. The Parramarago group which probably counted Marulan as part of its territory declines in number rapidly through the 1820s to 40s, and most of the group merges with other remnant groups. However, at least two Aboriginal men worked on the neighbouring Glenrock Station in the 1840s, and others may also have been part of the rural labour force in the area.

This pattern is typical in NSW in the mid 19th century. Following a period of major dislocation associated with demographic collapse, there is often recruitment of Aboriginal people into the rural workforce as farm workers, stockmen, maids and so on. As they take on European names they often become invisible except through genealogy. While there may have been Aboriginal people associated in various ways with Marulan during the 19th century, no information has become available to clarify this issue.

3.3.2. Contact with Europeans to 1820

As Henry Reynolds pointed out the frontier, if it existed at all, was extremely porous and while people may not have penetrated it easily, the same was not true for ideas, language, tools and microbes⁵⁷. Aboriginal people felt the influence of the Europeans, even hundreds of kilometres from the nearest settlement. In the case of the

⁵⁵ Jervis's 1986 discussion of the Aboriginal history of the Southern Highlands is a representative example.

⁵⁶ Reynolds 2006.

⁵⁷ Reynolds 2006.

Gundungurra the situation was complex. Wilson's two journeys in 1798 met no Aboriginal people in the area. That may simply be because they did not wish to be seen or because there was still major depopulation following the epidemic that had swept through the Aboriginal community in 1789⁵⁸. There is continuing debate on the nature of the epidemic, its path and whether it was intentionally released, but its effects are not disputed. Many Aboriginal groups in southeastern Australia suffered severe mortality, and when first encountered by explorers were still recovering.

Evidence for impact from the 1789 epidemic in the Southern Highlands is ambiguous. Despite Wilson's lack of sighting, when Barrallier set out on his journey to the King of the Mountains he did meet Aboriginal men and women.

Following settlement the Nepean became a frontier of sorts, but this was perhaps more a product of European thinking in terms of sharply defined lines in the landscape than any reality. Settlement beyond its limits was restricted due to such factors as the lack of good farmland and the presence of the Cowpastures cattle herd. Crossing the river with stock or supplies was not easy so the tendency would always be to keep to the Cumberland Plain side. Once the flooding propensity of the river became apparent it became an even more imposing feature, leaving the river flats to the smaller plot holders.

The porosity of the frontier became apparent when those who established good long-term relations with Aboriginal people, often people themselves living on the fringes of the European settlement, appear in the official exploration accounts. One example is John Wilson, whose route during two 1798 expeditions suggests that he had already travelled the country before the first 'official' expedition⁵⁹. Another is Hamilton Hume⁶⁰. In official reports Hume is credited with carrying out private exploration, but it seems to have been far less formal than this in its intent, given that Hume was in his late teens and was travelling with young Aboriginal men of similar age with whom he had grown up⁶¹. And these are the ones we know about. On Wilson's first expedition they distinctly heard a gun shot while on their travels, when it is very likely that no Aboriginal people possessed firearms. They fired off five reply shots in all, but no response came, suggesting that whoever it was did not want to advertise their presence further.

The Nepean also served as part of the dividing line between the Dharawal and Gundungurra groups in the southwest. During the early 1800s Aboriginal – settler tensions grew, breaking out into what is now considered to be a fully-fledged guerrilla war⁶². The war was characterised by raids on isolated farms, sometimes resulting in deaths of occupants, at other times just slaughtering stock or destroying crops, fencing and buildings. It was extremely difficult for the authorities to define which Aboriginal

⁵⁸ Butlin 1983.

⁵⁹ Brownscombe 2004: 77-78 says that the deliberate choice of this line of travel, following the Marulan ramp, suggests that Wilson was familiar with this country from earlier travel.

⁶⁰ See accounts of his early journeys in Cambage 1921.

⁶¹ Liston 1988.

⁶² Connor 2002. Grey 1990 was the first to consider these hostilities in the military sense.

individuals should be considered potentially as the enemy, and some settlers complicated matters by protecting or even hiding those with whom they were friends⁶³. Among these were John Kennedy, Hamilton Hume's uncle. Other settlers such as Throsby also thought that the more general edicts against Aboriginal groups would be ineffective and were quite prepared to subvert them to protect individual Aboriginal men from arrest or punishment⁶⁴.

It is not clear to what extent the Gundungurra were directly involved in the conflict. Certainly the territorial groups most closely bordering the Nepean appear to have been involved in the conflict, but seemingly with little or no coordination of their efforts with those of other groups. They were referred to by Macquarie as the 'Cowpastures tribe' or the 'wild Mountain men'. The Dharawal around Campbelltown and Appin appear by contrast to have been peaceful to the white settlers, and may have seen themselves as more secure with them against Gundungurra raids. There are hints that this was a traditional hostility but it could as easily have developed following European settlement⁶⁵. Because of this inability to generate a broader strategic campaign the settlers were subject to a far more random and wide-ranging but ultimately less effective war of attrition. Some Aboriginal men were able to be co-opted to provide assistance in tracking other groups, and there does not seem to have been a clear leadership beyond the personal role of Pemulwuy, who was killed early in the run of hostilities⁶⁶. At different times the government ordered that all Aboriginal people were to be treated as potentially hostile, but this was soon found to be impractical as well as unnecessarily punitive. The worst actual act of the war was the massacre of an Aboriginal group at Appin on 17 April 1816, which resulted in the deaths of 14 individuals, mainly women and children. Hostilities ended quite abruptly in mid-1816 and relations in the Cumberland Plain remained settled after that.

Around this time renewed expeditions beyond the Cowpastures begin again, carried out by Hume and Throsby who had shown themselves as willing to protect particular Aboriginal men during the hostilities. While this may be expected to have given them some credibility or confirmed a positive status with the Darug people, it would not necessarily have translated into a particular relationship once they moved into Gundungurra land. Throsby, for example, in 1819 had to rely on a guide, presumably a Gundungurra man, but with Darug translators who were sufficiently versed in English to make do. Hume is believed to have spoken an Aboriginal language, most probably the Dharawal spoken in southwestern Sydney, and may have been able to talk directly to Gundungurra who knew the language as well. In both cases they showed themselves to have treated fairly Aboriginal people they encountered and been well-received in return. It would be interesting to know whether these were purely 'cold' encounters or they were known individuals whose identity ran ahead of their explorations, and beyond the frontier.

⁶³ Liston 1988: 50.

⁶⁴ Liston 1988: 51-2; Connor 2002.

⁶⁵ Liston 1988: 52

⁶⁶ *ADB* Supplementary: 208-209.

As happened elsewhere in NSW, the impact of Europeans preceded their permanent settlement. As a result, the mentions and descriptions of Aboriginal people are not necessarily of a traditional society going about its business, but the remnants of a system in the process of collapse and under continual pressure and competition for resources. This is just one of the issues that we need to keep in mind when considering how to use the records of early explorers, settlers and administrators to reconstruct the past. Reading many of the accounts and incidental records it would seem as if the settlers of Marulan walked into an empty landscape, yet we know that the first of the colonists to travel through this area – Wild, Throsby, Meehan, Mitchell – all benefited from the knowledge of Aboriginal guides who certainly knew the area and the names of places.

As well as describing a society that has already undergone massive disruption, historical records also do not take account of the fact that Aboriginal culture was not static. The broader environmental changes would have created pressures, such as extended droughts, that would have disrupted normal subsistence patterns. Religious and cultural practices emerged or were gradually lost in the past as well, with unknown consequences.

3.3.3. Influenza and Other Impacts

The expeditions report encounters with small Aboriginal groups or individuals, unsurprising as the explorers were constantly on the move. The first sustained occupation of County Argyle, however, came with Hannibal Macarthur's initially illegal grazing at Arthursleigh, and the road party that was contracted to build a road following the route of Throsby and Meehan's 1819 overland route to Bathurst. In 1820 Throsby wrote to Governor Macquarie, who was planning on visiting the road works, apologising for being unable to attend on him earlier on as he [Throsby] was suffering severely from the flu⁶⁷. This is one of the first mentions of what would later be recognised as the first influenza epidemic in Australia. The epidemic swept through the European population, proving fatal to many children and elderly, and being even more dangerous when it moved among Aboriginal groups.

It took 32 years from the start of European settlement before the influenza epidemic hit. In theory it should have taken a lot longer. The incubation period for the flu is very short – if a person has been infected they should show the symptoms within five days. As the sea voyage from anywhere in the world to Sydney took weeks any flu on ships should have manifested itself and run through all recipients on board well before landing. It only became an issue in the early 20th century when fast shipping made transmission feasible, and when the Spanish influenza was identified as a particularly deadly strain.

⁶⁷ SRNSW Reel 6034 – Throsby to Macquarie 4.9.1820, reproduced in Cabbage 1921: 261.

Even though the source of the influenza or epidemic catarrh cannot be securely identified, thanks to newspaper reports some tracking of the disease in the community is possible. In mid August 1820 the *Sydney Gazette* noted that there had been increasing numbers of people suffering from influenza in the past fortnight, and 'scarcely a family in Sydney has escaped'⁶⁸. This places its appearance at about the beginning of August.

Deaths were recorded among the Europeans, with the very young and very old being the most vulnerable. A follow-up report of 26 August noted that 'the natives are no less affected by it than ourselves.' A letter from 'a Medical Gentleman of Bunbury Curran', i.e. Doctor William Redfern, to the *Sydney Gazette* was summarised:

... the letter proceeds to state that the natives of the interior had suffered excessively from the same cause, which had produced a great mortality; and that many young stout and robust people among them had become its victims, during the winter, In one severe instance a father, a very stout man, not exceeding forty years of age, with the mother and two daughters, and the infant of one of them, had all been carried off within the space of a month, leaving but one alive, a male about three year old, very distressed, until taken into protection by a European inhabitant of the settlement⁶⁹. Some cases, this Gentleman observes, appeared to him to have terminated in inflammation of the lungs; and that they had for the most part quitted the thinly wooded and more open tracts of the interior, and betaken themselves to the sea-coast, and brushy and broken country, where were quantities of honey, and where they would undoubtedly remain until the return of summer. That these poor people should suffer intensely under every such contagion is not to be wondered at, when their state of privation from all comforts of life is considered ; and that when prevented by bodily ailment from seeking their precarious means of sustenance, they are likely to become victims to famine, as unhappily from distemper. Thirty years ago a prodigious mortality was spread among them by a contagious distemper resembling the small pox, of which the indented marks remained on many till very lately ; and which, had it continued to rage any longer, would probably have left but few alive in our vicinity.⁷⁰

Apart from Throsby's mention of the child who lost his family at the Wollondilly, there were reports from Bathurst and along the South Coast. Alexander Berry noted that the disease was sufficiently virulent to prevent Aboriginal workers from taking part in his harvest.⁷¹ Redfern's mention of the medicinal use of honey was matched by the settler doctors, who prescribed a range of treatments which mainly revolved around lots of bed

⁶⁸ *Sydney Gazette* 19.8.1820.

⁶⁹ This is probably an incident later recorded in Throsby's correspondence with Macquarie [SRNSW Reel 6034 – Throsby to Macquarie 4.9.1820].

⁷⁰ *Sydney Gazette* 16.12.1820.

⁷¹ Berry 'Reflections' in Organ 1990 and <http://www.law.mq.edu.au/scnsw/Correspondence/83.htm>

rest, plenty of fluids and some slightly astringent drinks like lemon. The Aboriginal retreat away from open country is difficult to understand; perhaps it reflected an idea that whatever was causing the influenza was environmental and people needed to get into shelter to escape it. There was a lot of newspaper speculation about whether the disease was brought by the south-westerly wind, a theory believed by both the Aboriginal people and the settlers. An incidental effect of retreating from open country was that it probably broke the chain of transmission within the community, as small family groups rode out the disease.

This influenza seems to have hit Aboriginal people within Argyle very hard, especially as they were probably still recovering from the 1789 epidemic. Together these epidemics would have heavily depleted the population over two generations, or three as the elderly also seemed to be badly affected by the flu. With such impact some extended family units may have been wiped out completely or been so reduced that they would have to coalesce with others, as had the original Sydney groups, reduced and reformed into new groups such as the South Creek 'Tribe'. Presumably food stress was less of an issue with population loss but ceremonial life, which underpinned the connections between groups, would have been compromised. Major gatherings of widely dispersed Aboriginal groups, whether for initiations or to settle conflicts, were an important means of coming together, reaffirming kinship bonds, sharing knowledge and meeting social obligations. Disruption of these would have had both practical and psychological impacts. The Aboriginal impact on the landscape, through frequent fire-stick farming, may have been disrupted causing the gradual development of scrub understorey in the open forest, and changing habitat in subtle ways.

As a result of the 1820 epidemic the pastoral occupation more readily over-rode a badly weakened population. An epidemic mistakenly believed to be smallpox but actually the distinct *Varicella* [chicken pox] ravaged Aboriginal populations in the central west of NSW a decade later. While there are many mentions of the disease breaking out near Bathurst, there are none from County Argyle, apart from a mention by Bennett of seeing pock-marked faces on Aboriginal people in the Goulburn Plains⁷². A letter described the symptoms and noted that it had spread down the Murrumbidgee. The writer said that although this disease was not of itself fatal, it was the weakened state of many Aboriginal people that made it so. He concluded that 'it is sincerely to be hoped that the Natives will be reclaimed in some measure from barbarity, in order to enable them to moderate its fury, by participating, with us, in the blessings of domestic-life'⁷³.

There are few reports of any acts by Aboriginal people or groups that can be construed as resistance to white occupation in the area. Surveyor William Romaine Govett spent some time in the early 1830s in the area north of Goulburn, not too far from our area. His observations of Aboriginal people are an important record of their lives before European settlement became overwhelming. Even so, this was no anthropological

⁷² Bennett 1834: 149.

⁷³ *Sydney Gazette* 10.12.1831: 3.

record of a people living 'in their natural simplicity' as he thought⁷⁴. He was describing a group that had been hit by the epidemics of 1789 and 1820. It is likely that many deaths were experienced within the group and in the extended kinship lines and that the fear of the disease returning remained. While there is no credible record of systematic violence from settlers there was a history of bad dealing, sexual assault and mistreatment from some of the stockmen. When Govett visited one camp a child had a bad cough, which was seen as a matter of great potential concern⁷⁵. Their viability as a social unit was uncertain, and they would only face increasing pressures arising from pastoral settlement.

Another impact of colonisation was the effects of racism. All of the appropriation of land discussed thus far was predicated on the idea that the Aboriginal people were inferior to Europeans. As such the contact process was not a meeting of equals, however one-sided, but tainted by an expectation that an Aboriginal person was inferior in intelligence, did not have a spiritual life or systems of laws that structured their social behaviour, and consequently they had no separate identity worth retaining. While many people who knew and worked with Aboriginal individuals attested that these stereotypes did not fit 'their' friend, they seldom regarded them as representative of Aboriginal people as a whole. The best that was said was that they were more than likely noble savages, but they were disappearing along with their habitat in the face of superior civilisation⁷⁶. The worst was said far more often, and included frequent claims of infanticide if the child was of mixed race, and cannibalism⁷⁷.

The survival of the Aboriginal groups was uncertain in this environment. Although they had the protection of law, civil order was limited to administering the convict system and land matters and little else. In the open forest there were large areas that were never granted, often because it was steep country. The loss of food-producing habitat through land being taken up was a significant impact, as it was up to the individual owner whether a group could enter or camp there. There were conflicts between Aboriginal people and the shepherds and assigned convicts who formed most of the population, often over women. This resulted in several known fatal clashes around the Lake George area and threatened to develop into a much more serious confrontation as well [refer to Section 3.3.5 below]. As natural ground cover was exhausted by initial grazing and drought during the 1830s there was probably more pressure placed on the ungranted lands for temporary grazing. Animals that relied on the grasses, such as birds and kangaroos, were driven off or depleted. The colonials also took to kangaroo hunting with gusto, which must also have impacted on their numbers. Dingo numbers may have increased in response to the arrival of easily killed woolly meals, and they are likely to have also put more pressure on native animals as a result.

⁷⁴ Govett 1835-6: 11.

⁷⁵ Govett 1835-6: 30.

⁷⁶ Govett 1836-7: 9.

⁷⁷ Cunningham 1827: 184; Breton 1833: 196.

Even subsistence changed in subtle ways. Govett records that in Argyle by the mid-1830s the traditional stone hatchet had been almost totally replaced by the European iron ones and spears were tipped with sherds of glass⁷⁸. European dogs became the preferred guard dogs for camps⁷⁹ and root vegetables such as turnips and potatoes replaced traditional analogues⁸⁰.

3.3.4. The Gundungurra and the Parramarago

Marulan is within the territory of the Gundungurra language group [also Gandangara and other spellings], which extended from the Nepean to Lake George⁸¹. Within that broad range there were more or less territorially fixed groups or bands that had proprietary rights over land, but who also would have probably overlapped with adjacent groups at different times in their annual travels. It is clear from the following narrative that the period of initial European settlement of Argyle from 1819 to 1823, and the further occupation to about 1833, resulted in a collapse of the Aboriginal population, and some consolidation of the different groups.

Taking the limited historical evidence and pushing it back through this process of massive disruption to reconstruct pre-contact Aboriginal settlement is fraught with difficulties. Jackson-Nakano does attempt this with a careful and nuanced interpretation of the post-contact evidence which seems to account for all of the available information, building on Smith's detailed historical research. While her main focus is of the groups bordering Weerawa / Lake George, she does provide some indication of adjacent territories. The Parramarago was the closest known Aboriginal group to Marulan. Parramarago [or Parramaragoo] was also a locality name used for the area later called Inverary, and eventually Bungonia. It was the name of James Style's early-established run, which he later changed to Reevesdale⁸². We do not know if other unnamed groups were more closely associated with the Marulan town site. Reconstructing a pre-European landscape has significant methodological problems as well as the practical difficulty of fragmentary and ambiguous data.

Jackson-Nakano shows the Parramarago western boundary on Gunday Creek, from Goulburn southwards to Lake Bathurst, roughly keeping to the boundary between the plains and woodland. She places their confirmed southern limit at Boro Creek and then an area of overlap with the Walgalu-speaking Moolinggoolah, the next group to the south, to Mulloon Creek⁸³. The Gunday Creek boundary may reflect an established line of hostility with a neighbouring group. In 1826, for example, large numbers of Aboriginal men massed at Lake George and at Inverary, prompting the first and only military mission into Argyle. We do not know the purpose of the gatherings but one explanation is that these were rival forces massing in the lead up to open warfare. Two

⁷⁸ Govett 1835-6: 11.

⁷⁹ Govett 1835-6: 23-5.

⁸⁰ Atkinson 1857: 48.

⁸¹ Smith 1992; Wafer and Lissarrague 2008.

⁸² Cabbage 1921.

⁸³ Jackson-Nakano 2001. However, the most recent detailed survey by Wafer and Lissarrague [2008: 117] has Moolinggoolah as a Ngunawal language, but they acknowledge the strong similarity between Gundungurra, Ngunawal and Walgalu.

years later Mitchell recorded that there was still open fear and hostility between 'Marulan' and Lake George Aboriginal people⁸⁴. The breastplate for King John Cry requested to be made in 1826 [see below] refers to him as chief of the tribes at Parramarago, Bundon and Caoura⁸⁵. Bundon is almost certainly Bundong or Lake Bathurst, while Caoura was the name of the broken country above the Shoalhaven Gorge near Penrose and Bundanoon townships. This defines an area of about 80 kilometres length from southwest to northeast and unknown breadth.

From about then there is a sparse record, but still sufficient to track the rapid decline in the Parramarago's numbers. When Reid wrote to the Colonial Secretary in October 1826 he estimated that the 'strength of the tribe which constantly resort within the limits of this district I compute to be about seventy or eighty, including men, women and children'⁸⁶. The Colonial Secretary requested that blankets be issued in a circular of 31 March 1827. This included in County Camden 30 individuals [5 men, 10 women and 15 children] from the Burragorang 'tribe' and 32 individuals [12 men, 9 women and 11 children] in the Cowpastures 'tribe'. In County Argyle only the Goulburn Plains tribe was listed, comprising 45 individuals [19 men, 17 women and 9 children]⁸⁷. By comparison, a year later the census returns showed 1346 European individuals in total in Argyle and Illawarra⁸⁸. Already the Aboriginal population had become heavily outnumbered. Significantly the figure of 45 individuals would predate any impact caused by the 1831 chickenpox outbreak.

In 1829 blankets were issued at Lumley by Robert Futter to members of the Parramarrago and Gunday tribes, with the note that they also resided at those localities. Fourteen males and eleven females were issued with blankets. Four male and four female children were also noted⁸⁹. By comparison 40 blankets were issued at Goulburn Plains and the same number at Bong Bong. Robert Futter, who handed them out at Lumley, wrote to the Colonial Secretary that '... owing to the unusually long absence of these people from this part of the country up to the 7th instant [i.e. 7 August] no opportunity was afforded of distributing the blankets ...'⁹⁰ Their absence until August suggests that the Parramarago had a regular wintering spot that was more attractive than Marulan – Bungonia in June and July.

Von Hugel describes the Parramarago in September 1834, during a visit to Reid's and Futter's properties:

Dr Reid at 'Inverary Park' and Mr Futter were the first to settle in what was then regarded as the wilderness, which is now one of the inner districts and they have seen that part of the country gradually become more closely settled. At that time, there was a large band of Aborigines here, whose

⁸⁴ Smith 1990: 12 fn 37 citing Mitchell fieldbooks.

⁸⁵ Reid 1826.

⁸⁶ Reid 1826.

⁸⁷ Smith 1990: 7 cites a census figure of 90 or so Parramarago, but this conflicts with other census data from the same time.

⁸⁸ Col. Sec. Circular 19, 1827.

⁸⁹ Return of blankets issued to the Aborigines of the Lumley area [SRNSW 4/6666B.3; 34/7031].

⁹⁰ SRNSW Reel 3706 Futter to Col. Sec. 7.8.1834.

*favourite gathering place it was, but this band has now been reduced to a few families.*⁹¹

The estimate for the Parramarago population in 1832 and 1833 was 25 people, but this increased slightly in 1835⁹². In that year 30 blankets were to be sent to Inverary, 100 to Goulburn and 60 to Berrima. The blanket name list, the only one surviving from this area, lists 25 adults and six children. All are grouped as being from the Parramarago and Gundaree [Gunday] tribes. The Gunday tribe appears to have also suffered population loss at this point and merged with the Parramarago. Another possibility is that Lake Bathurst was the wintering point and that, rather than being distinct, the Gunday and Parramarago were two parts of the same grouping that came together in the colder part of the year and then spread out in spring to occupy a nearer and further range of country as far north as Barber's Creek and Caoura.

The lack of an access down the Shoalhaven gorges to the coast was not only a problem for Throsby, Meehan and other explorers. It restricted contact for the Parramarago, who do not appear in any of the adjoining coastal blanket lists or other mentions of contact with the coast. This can be contrasted with population information from Bong Bong / Berrima and their counterparts around Nowra, who seem to have had no problems moving from the uplands to the coast and back as individuals, and consequently were closely connected through marriage and knowledge of country. This inaccessibility precluded even regular access on foot, explaining the newsworthiness of a story reporting that two Aboriginal men had turned up at Gray's Inn at the Ploughed Ground, near what is now called Hoddle's Corner, with fresh snapper. They had found a new route up the escarpment behind the Shoalhaven and had made the trek with solid, fresh proof that it could be done⁹³.

As a comparison the Goulburn Aboriginal people were listed as being part of the Mulwarie tribe, who covered an area of Tarlo, Goulburn, Wollondilly and Lake Bathurst. It appears that, as in the Cumberland Plain, formerly separate groups merged as their numbers reduced.

By 1843 there were 24 individuals of the Parramarago group and they visited Goulburn for their blankets. This may indicate that they were being pushed away from the open forest and grassland being opened up towards Lake Bathurst. Another explanation proposed by Smith is that they had stayed away from Goulburn and the plains because of an established hostility with the plains people. Smith notes that the first time they came they were accompanied by Yarraginny of the Burra Burra people, who may have acted as a guarantor of their safety⁹⁴.

⁹¹ Von Hugel 1994: 440.

⁹² Smith 1990: 45.

⁹³ *Sydney Gazette* 2.11.1839.

⁹⁴ Smith 1990: 22.

In 1845-6 a select committee of the NSW Parliament examined the condition of the Aboriginal population of the east coast⁹⁵. Questionnaires were sent to various officials, mainly Anglican ministers as these were seen as the likely focus of any welfare or humanitarian understanding of the Aboriginal population. The questionnaire asked about population numbers and causes of decline and interactions with settlers. The results are important data for tracking the impact of contact twenty five years after the start of settlement in Argyle.

While Aboriginal people were populous in the Illawarra [c.350 individuals], Broulee [c.250] and Maneroo [a perhaps too exact 687] there were very few in other areas. None were recorded at Campbelltown and Denbigh [north of Campbelltown] 'as a tribe', apart from visitors from Burratorang and Camden. There were 67 at Picton and about forty at Berrima. The minister at Sutton Forest, presumably also covering the Bong Bong area, was recently appointed and did not know anything of consequence about the local Aboriginal community. This is unfortunate as they were otherwise well-documented in the blanket returns. At Goulburn the Reverend William Hamilton, more familiar with the issues, reported 'there are remnants of several distinct tribes of blacks - the Mulwaree - the Burra Burra - the Bungonia - the Lake George - and the Fish River tribes'.⁹⁶ The first three numbered perhaps a dozen individuals each, counting men, women and children. The Lake George tribe numbered perhaps fifty, and he did not know the Burra Burra tribe. Testimony by Francis Murphy of Bungonia said that the local Aboriginal group had reduced in numbers to such an extent that they had joined others in Braidwood and Goulburn. Even so:

*these few persons, probably not more than a dozen or fifteen, occasionally visit the district, in company with portions of the blacks from the places above-named, varying in number from twenty to fifty or a hundred; remain for a few days, and then decamp to some other favourite spot*⁹⁷.

Hamilton attributed the population loss directly to 'vicious intercourse of the females with white men, and to disease contracted through indulgence in drunkenness' as well as the pre-contact lifestyle no longer being sustainable. Kangaroo and wild-fowl were almost all hunted out by 'whites with fire-arms, and the numerous dogs kept at every grazing station.' The Mulwaree tribe had numbered more than fifteen men alone at the last blanket issue in 1844. He could only recall sparse incidents of violence between Aboriginal people and settlers, and generally characterised the inter-racial relationship as peaceful.

The names of the ten or twelve surviving members of the Bungonia Aboriginal group are not known. They are likely to have been the group that counted the fine open forest at Moorooaulin as part of their territory. Maybe they all died out, clinging to what they could of their culture. Alternately they may have survived as members of the ever-

⁹⁵ Select Committee on Aborigines, *NSW LC Votes and Proceedings*, 1846.

⁹⁶ Select Committee *NSW LC V+P* 1846: Evidence of Rev Hamilton.

⁹⁷ ⁹⁷ Select Committee *NSW LC V+P* 1846: Evidence of Francis Murphy.

growing community of itinerant farm labourers, loosely attached to the large properties, moving to find work in other areas or towns when the need arose, but always drawn back to traditional country⁹⁸.

Where the town of Goulburn was being laid out, Govett noted, the Mulwaree Plains:

but twelve years ago, were in the quiet and undisturbed possession of the humble native tribes, and the animals indigenous to the country. But how has the scene changed within the last few years? There is now not a section of land in the whole County of Argyle that is worth possessing, but what is in the possession of the white man. The tide of civilized population has already swarmed into that county; houses and elegant cottages are everywhere to be seen; farms are fenced in, cultivation has made rapid progress; a township has been established. a court of justice erected, and the very spot which but two years before might have been admired for its solitary natural beauties, was soon disgraced by a gibbet!.⁹⁹

Contact is far more than that brief interval where strangers meet and decide whether they will fight. In southeastern Australia the contact process began in 1788, and even though it did not reach Argyle until 1819 there was only a nominal frontier. Explorers came through, knowledge and goods were transferred, disease certainly passed through. Pastoral occupation began in 1819 in the north and 1823 in the south of Argyle and in the years following took over more and more of the land in between. The start of the contact period was marked by the 1820 epidemic, and as a result during the following years Aboriginal society was in a poor state to offer any resistance to the settlers. As settlement progressed the possibility of sustaining a traditional lifestyle became even less viable. In all cases what happened depended on the specifics of the situation, and often on the way that individuals in both communities dealt with it. In the following period, however, instead of invisibility some Aboriginal people found opportunities for working within the pastoral system. While traditional lifestyles may have disappeared Aboriginal people certainly did not, but they are hard to find.

3.3.5. An Act of Resistance?

Conflict between Aboriginal people and Europeans had been escalating since at least 1819 around Bathurst and O'Connell Plains. It may have involved both Gundungurra and Wiradjuri people clashing with settlers and each other, but for the Gundungurra does not seem to have resulted in a more general hostility towards other Europeans entering their territory¹⁰⁰. Even so, the occupation of County Argyle from 1820 increased the potential for conflict in this new area.

⁹⁸ Jackson-Nakano 2001, 2002 documents this process in detail.

⁹⁹ Govett 1835-6: 25-6. The gibbet was erected in 1832, and the bodies of two offenders were left hung on them until ordered cut down by Governor Bourke on his visit of 1833. The speed and impact can be considered as Govett wrote only a decade or so after the first Europeans brought cattle into the northern end of County Argyle.

¹⁰⁰ Smith 1990: 5-7

The push for settlement to the south can perhaps be attributed, in part, to it being relatively quieter and safer than the Bathurst lands. It is possible that some individuals who appear to have maintained better relationships with Aboriginal people significantly assisted in diffusing potential flash points of conflict. Their influence was, however, necessarily reactive, and increasingly difficult as the number of Europeans moving into the area increased, with an established hostility towards the Aboriginal population. Throsby, instrumental in opening up the Southern Highlands for settlement, also served as a magistrate. In 1824 he punished two convicts who had raped and abducted a young Aboriginal girl from Lake George¹⁰¹. This and probable unreported acts built up tensions with the settlers, which came to a head two years later. Gundungurra people also reacted to pressure from the Wiradjuri around Bathurst by forming war parties that assembled at Camden in 1824, with possibly 120 armed men¹⁰². Such actions could easily intimidate settlers and cause them to over-react if there were no intermediaries who could clearly understand their intentions.

In 1826 there was an incident in Argyle that resulted in the rapid deployment of troops from Sydney down to Inverary. This was the only known civil action that could be construed to possibly reflect organised resistance to, and enforcement of the occupation, that was already underway. No other conflict comparable to what took place at around the same time at Bathurst has been recorded. It may have happened and been suppressed but this seems unlikely.

David Reid of Inverary Park notified the Government that two stock-keepers, Thomas Taylor and another man, who were assigned to Mr Sherwin at Lake Bathurst, had been killed by Aboriginal men. Large numbers of Aboriginal warriors were reportedly then assembling at Lake George and at Inverary Park. On 5 May the government announced that it had despatched a detachment of infantry to the area under the command of Captain Bishop, with orders to prevent the matter escalating¹⁰³.

Governor Darling, who had only been in office since the end of 1825, considered that 'from the reports he has received, that the proceedings of the Natives are the effect of resentment at the outrages committed upon them by stock-keepers, who interfere with their women, and by such, and other acts of aggression, provoke them to retaliate'.¹⁰⁴ He was concerned that as well as retaliatory killings it soured otherwise peaceful relations. He therefore issued an announcement that if stockmen continued to behave in this fashion, he would withdraw their master's permission to graze in these areas and they would lose all their assigned convicts. This was to be done by printed broadsheet proclamations. The order was also to be communicated to all Aboriginal groups in the frontier area, emphasising that they were under the protection of the law, and should report any such actions by stock-keepers to the authorities rather than resort to reprisal attacks.

¹⁰¹ Liston 1988: 55.

¹⁰² Smith 1990: 6.

¹⁰³ *Sydney Gazette* 6.5.1826.

¹⁰⁴ *Sydney Gazette* 6.5.1826.

Captain Bishop of the 3rd Regiment and a detachment of the 40th Regiment arrived at Inverary 'for the purpose of restoring tranquillity, and if possible to bring the offenders to justice'¹⁰⁵. Although most of the Aboriginal men dispersed on hearing of the arrival of the troops, a 'chief' was able to be captured. He was given to understand that neither the stockmen nor any other European was to be attacked, and if there were any reprisals following, that the military would launch an attack on them, a much blunter version of the Governor's message¹⁰⁶.

Captain Bishop was praised for dealing with the matter without bloodshed. This was contrasted with the appalling Appin Massacre of 1816. In an optimistic note the *Sydney Gazette* stated '[t]his is another satisfactory illustration of the wise and humane policy of the "Powers that be"'¹⁰⁷. The government itself put a notice in the paper saying that tranquillity had been ensured due to 'the prompt measures of the magistrates'¹⁰⁸.

What does this episode tell us about the nature of Aboriginal – settler relationship in that period? Clearly the intervening years had seen a change of official attitude towards punitive action against Aboriginal people, especially as it had become clear that much of their hostility was in direct reaction to provocation and assault by specific individuals. Governor Darling was not committed to following previous governors' actions in this regard. As far as the military were concerned, strict instructions were issued that friendly behaviour was to be met by comparable peaceful conduct by the military¹⁰⁹. Questions do remain about the incident. For a start it is not completely certain that the large Aboriginal groups mustering at Lake George and at Inverary were doing so with hostility to the settlers as their aim. There were other reasons to assemble in large numbers, such as initiation and other religious ceremonies where many surrounding groups were invited to attend, and it may have been associated with a food supply issue, such as the seasonal bogong moths. It is also not clear if all of the supposed hostile party were Gundungurra speakers, as the far side of Lake George falls into the area shared with the Ngunawal speakers¹¹⁰. It may even be possible that these were opposing Ngunawal and Gundungurra forces squaring off against each other in an extension of the conflict further north.

Another observation is that there was a deliberate government policy to tread delicately, and to acknowledge that the Aboriginal groups of the Southern Highlands and Tablelands were not normally hostile or problematic. Several factors influenced this, including the need to prevent hostility breaking out along this frontier region as well, tying up more military and civil resources. As a depleted population the Gundungurra were in no position in the six years since settlement began to put up a determined resistance in any case. The problems that did arise were the common ones of sexual assault and kidnapping of women by the stock-keepers, who would have been

¹⁰⁵ *Sydney Gazette* 6.5.1826.

¹⁰⁶ *Sydney Gazette* 7.6.1826.

¹⁰⁷ *Sydney Gazette* 7.6.1826.

¹⁰⁸ *Sydney Gazette* 17.5.1826.

¹⁰⁹ 3rd Regiment of Foot 1827.

¹¹⁰ Jackson-Nakano 2001.

predominantly assigned convicts or tickets of leave. It is not clear whether the government had thought that the way the Nepean war had been conducted was ultimately unsuccessful or that it was worried by events such as the Appin massacre, and was searching for a better approach.

From the perspective of the settlers, while many would have been pleased to entirely rid themselves of the Aboriginal presence, others recognised that the Gundungurra had always been very peaceful. David Reid, writing a few months after the military incursion to the Colonial Secretary, recommended the issue of a chief breastplate to Cry [possibly the same man referred to in other records as Old Cry or John Cry] to read 'Cry, the Chief of the Tribes at Parramarigo Bundon and Caoura'¹¹¹. The letter goes on to identify Cry's brother Eurydic and another Aboriginal Maraoonon as having rendered good service in tracking down bushrangers. Maraoonon also

was sent by me a long way to the westward amongst the wild tribes, who visited this place in such numbers a few months back for the purpose of ascertaining if they still entertained any hostile feeling against the whites in consequence of what happened at Lake Bathurst, but I am happy in having to represent to his Excellency information that he has returned with intelligence that they are all peaceably disposed towards us, and that the information of the said Mararenon is somewhat confirmed by my own personal observations in a late tour to Batemans Bay, with the communications I held with the tribes there, who also declared themselves to be in perfect amity with us'¹¹².

There is no evidence that the military actually killed any Aboriginal people during this operation. It was perhaps lucky in having Captain Bishop as a quite solid and sensible military man to send off to command on the spot, and with the close oversight of magistrates. While the coda of 'destroying every native' was perhaps necessary to get the point home, and had to be seen as a serious threat so soon after the Appin massacre, the presence of the Redcoats in Argyle was also important in signalling to stockkeepers and grantees that they were not so far from Sydney that they could do what they liked without heed to the government's instructions and the law. The fact that the troops did not come out shooting at Aboriginal people would have brought home the point that they were not taking sides and therefore both Aboriginal and European lawbreakers need watch out. Smith considers it possible that punitive action may have taken place, especially after some evidence of cannibalism of the stockkeepers was raised and widely believed, and that such payback killing was concealed¹¹³.

¹¹¹ Reid 1826.

¹¹² Reid 1826.

¹¹³ Smith 1990: 12.

Two years later there were reports of further killings of stock-men by Aboriginal people near Goulburn¹¹⁴. An incident to the northwest of Marulan resulted in the death of the Aboriginal man Hole-in-the-Book, who was killed by a settler who arrested him for the presumed murder of one of his watchmen. The watchman had, in fact, got lost in the bush and emerged some time later¹¹⁵. Hole-in-the-book had escaped as he was being taken to the lock-up at Sutton Forest and had been shot in the back. The settler Jamieson who shot him was acquitted by the jury.

3.3.6. Aboriginal People in Settler Society From 1820

There is no evidence for any Aboriginal people being part of the residential Marulan community from the 1830s onwards. There is a possibility that one or more names in the Woolpack Inn ledger represent Aboriginal farm workers or travellers, but the most promising of these – Black Bill – is also a very typical bullockies name of the period.

Aboriginal camps continued to exist on properties where the owner permitted them¹¹⁶. Louisa Atkinson presents a fictionalised account of one, but we know that she was familiar with them from her own experience in the Southern Highlands and South Coast. She records the types of food being cooked, how the bark shelters were arranged around the camp and tins brewing tea on the fire. Her tone was one of resigned sadness at the poverty of the people, and their seeming lack of a future¹¹⁷. She records the employment of an Aboriginal housemaid, Nanny, and how the young Aboriginal men were employed as stockmen, benefiting from their intimate knowledge of the local environment, and horsemanship skills.

Aboriginal people were employed in the rural workforce quite readily, which was an extensive practice, but seldom recorded¹¹⁸. In 1841, in testimony to a Committee on Immigration, where the question of whether better use could be made of Aboriginal labour to overcome the shortage of rural workers, Major Lockyer said that, in his case, this would not make a significant difference - ‘... they are diminishing fast; there are now very few remaining; I do not think that ten of the Goulburn tribe are now to be found in the district’¹¹⁹.

The testimony of the 1845-6 Select Committee of the NSW Parliament on the condition of Aboriginal people asked whether they had been able to participate in the pastoral economy. The answer was a qualified yes. Aboriginal people were often ‘employed to strip bark, cut up fire-wood, gather potatoes, carry messages, ride after cattle, and so forth, and are adequately remunerated with money, rations, tobacco, or whatever else they may wish’. Individuals were also noted as bullock-drivers, domestic servants and shepherds. The Reverend Hamilton of Goulburn also remarked that recently Aboriginal

¹¹⁴ Smith 1990: 13.

¹¹⁵ R v Jamieson 1827.

¹¹⁶ See Russell 1914 for the area closer to Sydney.

¹¹⁷ Atkinson 1857: 56-7, 59, 63-4.

¹¹⁸ Broome 1994.

¹¹⁹ NSWLC V+P 1841 Committee on Immigration.

people had done shearing and reaped grain. Overall, 'what least circumscribes their liberty, is most congenial to their natural dispositions and habits'. Some of the same range of employment was also noted in questionnaire responses from other districts. This strongly suggests that Aboriginal people, at least in these settled districts, were being invited to participate in the labour market, although this may have been prompted by the chronic labour shortages and high costs of the 1840s. Provided they could find secure camping places or sufficiently flexible work arrangements they do not appear to have had any difficulty in finding paid work or moving easily between the cash and traditional economy. The problem arose, on the one hand, in an expectation by the settlers that they would take on jobs as the first step in a process of assimilation and, on the other, that traditional culture was able to be maintained.

Accounts are consistent in describing the reluctance of Aboriginal people to get involved in labouring work for any long period. However there are many references to Aboriginal people, especially men, being recruited into doing piece work, for which they were paid in kind or with rations. Alexander Berry, writing about the South Coast, used paid labour to harvest his grain. Some of the carrier assigned servants on farms also sub-contracted this task to local Aboriginal people and paid them a token fee. Very soon, however, the same Aboriginal people realised that they could cut out the middle man and contract themselves to do the work¹²⁰. We tend to think of 'fee' as being expressed in rations or token items such as blankets or axes, but there is evidence that Aboriginal people were also working for cash and understood it as a medium of exchange¹²¹.

Individual Aboriginal people were involved in farm work of various kinds, both in the field and as domestic servants. The problem seemed to rest on an unwillingness to be tied down to having to work on others' timetables. Observing seasonal obligations was also clearly important, with the requirement for travel to different areas for cultural practices, meeting kin and exchange. Being very conscious of the hierarchies that operated in settler society, they equated strict and inflexible work routines with convicts, whom Aboriginal people generally despised. Convicts had no choice in the work they had to do and this may explain the general Aboriginal reluctance to engage as workers for longer periods, and a willingness to do a range of activity on short contracts. At Berry's Coolangatta estate, the Shoalhaven Aboriginal Broughton, who had been working as a bricklayer's labourer, was verbally abused by his female cousin, who said he was no better than a prisoner, having to work every day¹²².

It is known that two Aboriginal men were living in a hut and working on the Glenrock property in the mid 1840s, northeast of Marulan. The men, 'one of whom had been with [George Barber junior] for seven, the other for three years' were attacked by others from Goulburn who blamed them for the death of an Aboriginal man at the Fish River¹²³.

¹²⁰ Berry 1912: 586-7.

¹²¹ George Washington Walker, journal entry 4 Oct 1836, giving coins to an Aboriginal group at Throsby Park 'we added some money, of wh. The Aborigines in these parts well understand the use, so as to provide themselves with tea and sugar &c.', in Organ 1990: 207.

¹²² Berry 1912: 583.

¹²³ Jackson-Nakano 2002 identifies the Gundungurra-speaking Pajong as the precursors of the Fish River 'tribe'.

They attacked the two men, but other farm workers intervened¹²⁴. Nothing further is known of this incident or the people involved, but it does confirm the presence of Aboriginal men, and probably women, in direct and long-established farm service in the area around Marulan.

The engagement of Aboriginal women in domestic work also took place. Younger children were sometimes schooled with homestead children, although the overall quality of education in the bush was probably somewhat wanting and fairly irrelevant to the daily needs of most youngsters.

There appeared to be considerable Aboriginal resistance to the idea of work to fulfil someone else's needs and permanency of residence that were part of the process of integration into white society. When Alexander Berry on the Illawarra coast asked one of his Aboriginal workers on the Coolangatta estate whether he would not fare better by living in a European style house his reply was:

*that they no doubt could do so, and that such huts would afford them better shelter, but that it would not suit their mode of life. That it was necessary for them constantly to change their place of residence in search of the means of subsistence, and that their means of subsistence had become more scanty since the country had been occupied by white men.*¹²⁵

Both older and younger men were given the title of 'chief', which was confirmed by the presentation of a crescent name plate. Such symbols of authority were accepted, at least at some level, and sought by the Aboriginal people themselves, but it was a singular application to the particular person and seems not to have changed in a fundamental way the authority that the person exercised within their traditional group. Many of these older men had several wives and appear to have been the heads of extended family groups. Relatively younger men took up a leadership role that was best shown in the field of conflict. These men, warriors, planned and coordinated attacks on European farmers in the period of open hostility. They also tended to be the ones who most readily took up company with the explorers and settlers, receiving goods in return for guiding and delivering messages. An example of a local king plate was found in c.1901 and is now in the National Museum of Australia. It was found at Tirranna, just south of Goulburn, and reads 'KING JOHN CRY / CHIEF OF / the / Duedolgong tribe, Argyle'. John Cry was noted in the blanket returns taken at Lumley as a member of the Parramarrago¹²⁶. A third authority figure was the medicine man or *kooradji*, who appears in some accounts as an older man with knowledge of both practical medicine using herbs and treatment of wounds, and powerful magic.

¹²⁴ *Maitland Mercury and Hunter River General Advertiser* 6.2.1847.

¹²⁵ Berry 1912; <http://www.law.mq.edu.au/scnsw/Correspondence/83.htm>.

¹²⁶ NMA 1985.59.380 – entry in <http://www.collectionsaustralia.net.au/collections/opensearchdetail/11195>.

The life story of Werriberrie, or William Russell, the only surviving account related by a Gundungurra person living in the 19th century, reflects the changing nature of relations between Aboriginal people and the broader community in the late 19th century. His maternal uncle and step-father and other family members were involved in the Nepean warfare until 1816. He moved with his family in an area bounded by Picton, Mulgoa, the lower Wollondilly and the Burratorang Valley. He took work at Camden on the Macarthur properties and other farms¹²⁷. His authority among his people increased with age, but it does not appear to have translated into a particular status among the settlers.

The hierarchy within clans favoured the older men, who represented the family groups and their continued status may be reflected in a recently acquired name plate. However, the arrival of the pastoralists disrupted this authority, as they generally dealt more closely with the younger men, who sometimes were able to act as guides or messengers. With the likely loss of many elderly through epidemic disease, the granting of chief plates to some, and co-opting others into the settler economy all would have combined to create many problems within Aboriginal groups. Traditional authority was upset, younger men gained power without the progressive initiation into rituals that underpinned seniority and had easier access to high prestige goods. As well as this, some Aboriginal men worked closely and repeatedly with their white peers as guides, messengers and farm workers. Friendships formed, and inter-group rivalries were maintained, and this overlay other relationships with Europeans.

A good example comes from the Nepean war when Governor Macquarie produced a list of names of Aboriginal men who were specifically sought for arrest, a sort of 'wanted – dead or alive' list. John Kennedy and Charles Throsby both harboured men named on the list and vouched for their good character when the military came knocking, at risk to their own freedom. At the same time others were working with the troops tracking Aboriginal men who were to be shot on sight¹²⁸. Aboriginal people identified themselves as being different to the settlers, but do not appear to have formed any sense of collective interest with other Aboriginal groups that over-rode traditional hostilities. This meant that resistance was generally small in scale, and that the settlers could readily recruit or coerce some of them to track down others, even within the same language group. Gundungurra people continued their traditional hostility to the Wiradjuri to the west and north, encouraging settlers to shoot them¹²⁹. The breakdown of traditional structures is likely to also have made self-interest more dominant within Aboriginal groups, so that the powerful young men would have more actively rebelled against the counsel and instruction of elders.

¹²⁷ Russell 1914 and Jim Smith's analytical foreword to the 1991 edition.

¹²⁸ Jim Kohen talks about the role of these trackers during the Nepean War, and provides a convincing argument that they probably saw a lot more than they let on to the troops.

¹²⁹ Smith 1992: 6-9.

3.4. Roads to the South

The road built by Throsby and Wild to follow the route to Bathurst was the first formal road constructed beyond the Cowpastures. Its line is shown in Figure 3.1. From the Cowpastures crossing it ran in a fairly straight line south through Bargo Brush and beyond to the Little Forest. There it rose over the eastern part of the Mittagong Range, a difficult climb, before dropping down towards the Wingecarribee, which was readily fordable at Bong Bong. There it veered southwest and swept through the gently rolling land to the western end of the plateau, before falling into scrubby land, called the Wombat Brush, down the descent referred to as the Devil's Hole, to reach the Wollondilly and the far more pleasant Eden Forest¹³⁰.



**Figure 3.1 Early routes and roads through County Argyle from 1820 to 1837
[detail from J and C Walker 1837]**

¹³⁰ Throsby and Meehan used the Aboriginal names to describe locations, but Macquarie felt no hindrance in naming features for benefactors.

The name of this road is variously Wild's Pass, given by Meehan, the Government Road or Argyle Road in contemporary use or Macquarie's Road by later historians¹³¹. It was what was called a bush road, a cleared line wide enough for a cart or dray, but no drainage or accommodation for slopes or wet ground. It is partly traceable on the northern side of the Wollondilly, but its line cannot be followed across the Cookbundon Range¹³². The crossing of the range would have been difficult and as it opened little good land the road was little used beyond the Wollondilly crossing.

In the following years as land was granted it tended to fall in two groups – the first centred on the southern bank of the Wollondilly, with the large estates being Lockyersleigh [Edmund Lockyers estate] and Advance Australia [Robert Howe's estate], and along the eastern side above the Shoalhaven gorge [refer to Figure 3.2]. The land taken up was, as far as can be determined, of the best quality available, well-watered and lightly timbered. It occasionally included rougher ground, which still provided fodder when necessary. Although earlier explorations imply that there were some regularly used Aboriginal tracks that they had followed it is not at all clear whether these continued in use, given that most of the land was only lightly timbered rolling hills. The two roads that developed as a result of settlement serviced these groups of farms, and both continued down to the more attractive grasslands beyond Goulburn.

The first of these was the Argyle Road, which turned off from Macquarie's road at Sutton Forest, and travelled south, intersecting the creeks that flowed into the Shoalhaven. It passed through John Jenkins grant, Bumballa and Barber's Glenrock, and continued south to the area called in the early 1820s Parramarago, and later Inverary Park and Lumley. There the traveller could turn westwards towards Goulburn or head further south towards Windellama and Lake Bathurst. The other road ran westwards from Sutton Forest, past the Ploughed Ground and descended to the southern bank of the Wollondilly, following it towards Towrang, where it recrossed the Wollondilly before heading to Goulburn. This road was known as Riley's Road, and developed in the early 1820s¹³³. It accessed Lockyersleigh and other properties. The result for graziers was the choice of two routes, neither of which was well made, or easy travelling, as they crossed numerous creeks, had many ascents and were founded on soil that became treacherous when wet.

¹³¹ Fletcher 2002.

¹³² Andrews 1998: 82

¹³³ *Sydney Gazette* 4.1.1822.

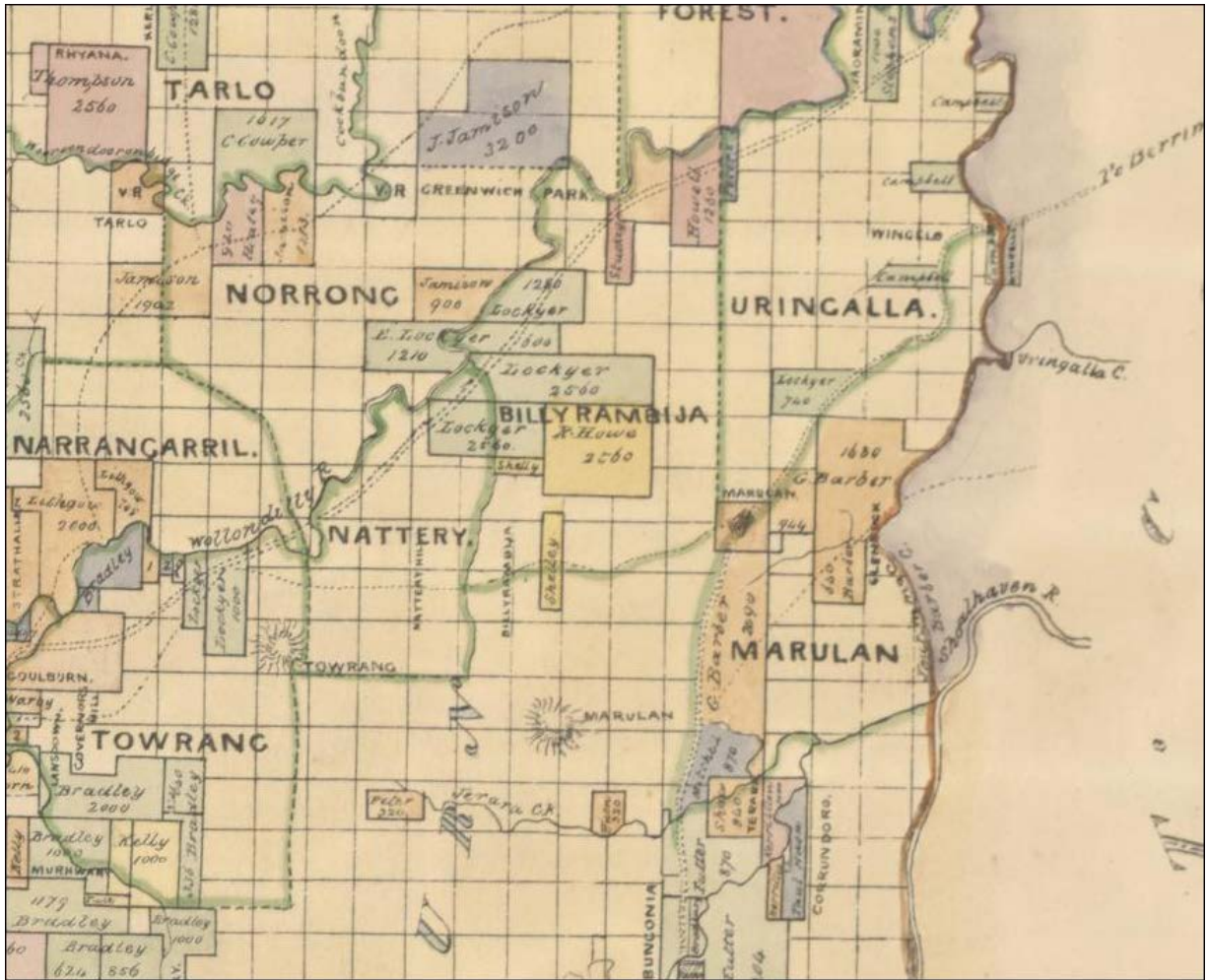


Figure 3.2 - Early land grants in County Argyle
 [extract from County Argyle map in *Baker's Australian County Atlas*, c. 1843-6]

This reflected the *ad hoc* nature of how the further reaches of the colony were settled. Routes were developed to suit local users, with no clear sense of what was the best line to develop a through road, nor indeed where it should head. Major Edmund Lockyer was granted the land that formed Lockyersleigh, to the west of Marulan, in 1827 and in the following year was made the Inspector of Roads in the colony. He does not appear to have had a particular aptitude for this task at either a technical or political level, as the position was later abolished. Major Mitchell continues the story:

In the year 1829, complaints having been made to General Darling that Major Lockyer [then Surveyor of Roads] was not making the Argyle road in the best direction, that officer received orders to make no roads until the Surveyor General had first approved of them. On receiving instructions to that effect, I was so much impressed with a sense of responsibility by the confidence His Excellency was thus pleased to repose in my judgement, that I not only made personally a particular survey and plan of the ground but also marked out the whole line, having been occupied on that important

*duty [as I find by my journal] from the 13th November to the 21st December 1829.*¹³⁴

Major Thomas Mitchell was initially Deputy Surveyor General to Oxley, until the latter's death in May 1828. A year later he added the responsibility for the construction of roads and bridges¹³⁵. Mitchell had a far more strategic view of the role of roads in the colony. His vision was of a series of great roads radiating from Sydney, built to the best standards, which would connect the ever-expanding pastoral settlement firmly back to the centre¹³⁶. There were conflicts between him and successive governors about their necessity, the routes and cost, but Mitchell had the advantage of patronage with senior British political figures. One issue was that Mitchell preferred to get from A to B by an efficient route, which meant along watersheds and ridge lines, which reduced the amount of bridge building, but this tended to avoid existing grants and settlements. It could also involve elaborate works at either end, as with the Blue Mountains crossing and the ascents to the Great North Road at Wisemans Ferry. Surveyor Elliott was instructed to carry out the detailed survey based on Mitchell's marked line.

As well as Mitchell's own six weeks in the field he had commissioned his surveyors to prepare a comprehensive topographic map of NSW, which formed the basis of his decision as to the ideal route¹³⁷. The natural watershed ran in the right direction, as a narrow ramp between those creeks draining into the Shoalhaven and Wollondilly / Wingecarribee. The northern continuation of this line was to the west of the existing Argyle Road, but he determined that a new route that ran from the Little Forest, near Bargo to the gap formed in the Mittagong Range by the Nattai River, would provide a more level road¹³⁸. It also had the advantage of crossing the Wingecarribee at a point where it looped through a deep rock gully, allowing for the construction of a stone bridge. The existing crossing at Bong Bong was a ford across a broad boggy stretch of the river subject to flooding. From there two more water crossings – Paddys River and Uringalla Creek – put the traveller onto the line of the watershed and a good section of firm, direct travel as far as a fine open forest called Moorooaulin.

At Moorooaulin a decision was required whether the main trend of travel would be to the south or southwest. Although Meehan's and Throsby's explorations had shown that the Shoalhaven gorges were effectively impassable there remained a strong hope to find a connection between these southern lands and a good port on the coast. While bridle tracks were found from time to time there was never to be a good route. Even today there is nothing between the Wool Road at Nerriga that leads to Jervis Bay and the route found by Throsby through Kangaroo Valley. The route south followed Meehan's route back from the escarpment towards Lake Bathurst. The other possible direction that settlement could go was towards the grassland plains, via the Mulwaree Ponds. From there it was possible to travel southwards to the Monaro or westwards to the

¹³⁴ SRNSW 2/44935: Surv. Gen. to Col. Sec. 19.11.1835.

¹³⁵ ADB 2: 238-42; Kass 2008.

¹³⁶ Rosen 2005.

¹³⁷ Andrews 1991.

¹³⁸ This had been suggested by James Atkinson in a letter to the Surveyor-General 16.7.1828 [cited in Rayment].

Murrumbidgee. Mitchell decided that he would divide the road at this point, with the Great Road to head south towards Lake Bathurst and a branch to Goulburn and erected a finger post to show the intended directions. In 1836 Joseph Peters addressed letters from Marulan as 'Junction of the Great Roads', but eventually it was only the line to Goulburn that became the Great South Road.

The most problematic section was that before and immediately after crossing the Nepean. Established settlements at Liverpool or Campbelltown / Appin were the logical starting points but there were two crossings already in use. The northernmost at Cowpastures accessed the Macarthur holdings on the west of the river [modern Camden], then passed through the former government stock station at Cawdor, and over a short but very steep crossing of the Razorback Range down to Stonequarry Creek [modern Picton]. The other route was via Menangle Ford further south, which required a new road to run around the south of the Razorback to reach Stonequarry Creek. From Stonequarry Creek the route travelled through the Bargo Brush to the Little Forest, where Mitchell's line swung westwards of the road in use.

A third option was also considered - the prolongation of Mitchell's line to the north. This would follow closely the current line of the Hume Highway, including at least one crossing of the deep Nepean gullies at Mrs Broughton's pass. This would put the line of road to the east of Bargo Creek, which opened up land that was otherwise effectively inaccessible. It also would have opened up land that Mitchell held and he was careful to identify this as a potential conflict of interest in discussing this option.

Governor Bourke toured the Argyle district in early 1832, inspecting Mitchell's line of road and hearing much alternative opinion about its merits. Upon his return the Governor instructed the Surveyor-General to finalise a route for the Great Southern Road, giving him the mileage for the northernmost route options near the Nepean¹³⁹. Bourke said he had no concerns with the route from Bargo southwards, and was anxious to get the road approved. Eventually Burke approved the line of road continuing from Campbelltown to Menangle Ford, where a bridge would be built¹⁴⁰.

In 1833 Governor Bourke passed *An act for making, altering and improving the Roads throughout the colony of New South Wales, and for opening and improving the streets in the towns thereof*¹⁴¹. This required that roads be fenced on either side with a three rail fence, and that scheduled roads were maintained at the public expense. Among those listed was 'The Great Southern Road, from Lupton's Inn through Berrima, to where it forms two branches at Marulan; the South Road from Marulan to Bungonia Township and the South Western Road from Marulan to Goulburn Township.'

¹³⁹ SRNSW 2/44935: Memo – 25.6.1832 Governor to Surveyor General.

¹⁴⁰ SRNSW 2/44935: Memo – 21.7.1832 Governor to Surveyor General.

¹⁴¹ 4 William IV No. 11.

The future village of Marulan was centred on the fingerpost at the branching of the Great Southern Road into its southern and southwestern routes. A traveller in 1832 described finding it:

*A marked line brings you to Johanana Creek, where stands a tree, denoting the central spot of three roads, or rather intended roads. Inscribed on its sides appear the following indications – “To Sydney” – “To Goulburn” – “South Road”, of which Major Mitchell is the projector.*¹⁴²

The marked-out road became a feature of the landscape that was commented on and travelled even before it was built. The *NSW Calendar and General Post Office Directory*, which began publication in 1832, included the road alignment in its detailed descriptions of roads, even when it was just a marked line in the landscape¹⁴³. The traveller who found the earlier post, headed north back towards Sydney:

[After leaving Glenrock] *The way now lies through a most desolate country for fifteen long miles, through Wombat Brush; neither house nor habitation, and very rarely a Christian face to be met with ...*

*But I am compelled to observe, that the whole line of road from Argyle to Bargo, for more than fifty miles is one uninterrupted morass; and truly the difficulties, concomitant on travelling it, form an endless chain of mischances; broken drays, heart-broken oxen, lamed horses, and fatigued-beyond-measure pedestrian are the never-failing consequences incidental to this most odious of all ways, whether highways or byeways.*¹⁴⁴

The construction of the road along the route took about five years, relying on a succession of convict gangs. It was a complex task, requiring the use of numerous road and clearing gangs, iron gangs and specialists such as bridge builders. Mitchell was very fortunate in securing the services of David Lennox as his bridge builder. The quality of the men in the road gangs, however, was poor as any that showed particular skill or enterprise were quickly moved to more specialised duties. The iron gangs – convicts serving sentences for secondary punishment – were similarly ineffective¹⁴⁵. There was fierce competition with other government departments, and the landowners generally, for convict labour, and any loss of labour stretched out the construction program. Often road gangs were temporarily assigned to help with gathering the harvest.

Road gangs could be housed under canvas or in portable barracks if required, but the often dangerous men in the iron gangs needed to be kept in stockades, which presented their own logistical problems. These were sited at the Razorback, on Myrtle Creek near Bargo, at Berrima township and at Wingello until 1839, when it relocated to

¹⁴² MWH 1832.

¹⁴³ 1832 *NSW General Post Office Directory*

¹⁴⁴ MWH 1832.

¹⁴⁵ See James Backhouse's description of the iron gang working near Marulan in Backhouse 1843: 438.

Towrang, operating past the cessation of convict transportation¹⁴⁶. Establishing each stockade was elaborate and distracted from the road-building process:

I should say that the iron gang of Wangillo could be most beneficially employed, in a second stage of its proceedings, at the unfinished works near Towrang ... But the immovability of the iron gangs appears to be still as great an impediment as ever to their advantageous employment on such works, and although houses have been made on wheels for the prisoners, the necessity for building barracks for the soldiers, officers quarters & commissariat stores &c besides, by the men in road parties, not only prevents any removal of such camps, according to the situation of work to be performed, but absorbs the labour of the road gang, and as these consist of men seldom good for much the complaints respecting barracks by such indifferent mechanics and the delay in the work on the roads in the other, afford little encouragement to hope for much in my particular branch – namely the road-making.¹⁴⁷

After Governor Bourke's departure the new Governor, Darling, decided that the construction of a new section of road at Menangle was not necessary when there was an existing, albeit shocking, road across the Razorback. This would prove to be a continuing obstacle to travel well into the 20th century, when the new motorway was constructed close to Mitchell's preferred line south of the Razorback Range.

Even though Mitchell had carefully planned his road to minimise climbs and creek crossings and take the shortest practicable route, there were some landowners unhappy that the Great Southern Road moved traffic away from their land. These landowners lobbied Governor Darling to investigate another route, which headed due west from Wingello to cross north of Marulan, through Lockyersleigh and rejoin the main route near Towrang. While Mitchell was away exploring Surveyor Granville Stapylton was delegated to map this route [refer to Figure 3.3]. Mitchell was livid when he returned and found out that his authority was being usurped. He pointed out to the Governor that his own route was in fact shorter with fewer creek crossings and climbs than the new one proposed 'by those for whose benefit the road was intended'¹⁴⁸. Not only that, but he pointed out that a publican, Joseph Peters, had moved his establishment from Riley's Road near Arthursleigh, and bought and built a brand new substantial inn at Marulan, which would be bypassed if the new route went ahead. Peters had written to say that he felt his investment of £500 was imperilled, should the change of route occur.

¹⁴⁶ Not Wingello township. The stockade was located on the old section of Hume Highway bypassed by the motorway about 10 km south of the Paddys River Bridge.

¹⁴⁷ SRNSW 2/44935 Colonial Secretary's letters re roads – Southern Road 1827-45: Memo 19.1.1835 'Report on the works in progress along the southern Road'

¹⁴⁸ Mitchell 1836.



Figure 3.3 - Stapylton's map of an alternative alignment for the Great South Road [SRNSW 5156]

The proposed new road never went any further after Mitchell's reaction¹⁴⁹. His line of the Great Southern Road continued to be built. The surviving section at Towrang includes the main elements of an intact convict landscape that gives a strong sense of what Mitchell and his workforce achieved. There are the remains of the stockade, a Lennox bridge, well formed operative culverts and a broad level road that made good use of the topography. He was pleased, when returning from a journey to southern NSW [now Victoria] to pass through Goulburn:

*and here I found that the iron-gangs had done some good service. I had now the satisfaction of travelling along a road every turn of which I had studied previous to marking it out after a most careful survey of the whole country*¹⁵⁰.

¹⁴⁹ James Tegg's *Directory* 1842, the successor to the *Post Office Directories* devoted two paragraphs to the tale.

¹⁵⁰ Mitchell 1836.

3.5. Establishing Marulan

3.5.1. The Pastoral Landscape

Marulan was situated in a landscape of existing land grants. The closest was Glenrock to the northeast, which was the grant of George Barber. He was the stepson of Charles Throsby and brother-in-law of Hamilton Hume, and had gone on some of their exploratory journeys. At the 1828 census Barber had 10 convicts, 14 horses, 394 cattle and 1800 sheep¹⁵¹. The Argyle road ran partly through Glenrock.

Further south there were two properties, Lumley and Inverary Park that had begun to form the nucleus of a settlement. Their owners, Robert Futter and David Reid, were prominent landowners and acted as magistrates for the surrounding area. Dr Reid was a naval surgeon who accompanied a number of convict transports to Australia. From 1822 he remained in the colony, receiving a grant of 1000 acres, which was later doubled. His grant at Inverary Park in 1824 made him one of the distant stations at the time. By 1828 he had 34 acres cleared and 17 under cultivation. His livestock consisted of 4 horses, 769 cattle and 1000 sheep. There were eight convicts assigned to him¹⁵². A traveller noted that although Dr Reid had a fine new house on a hill at Inverary Park, he still lived in the slab hut that had begun his occupation, as he could not make up his mind to move¹⁵³.

Reid appears to have assumed an important civic role and his property formed a locus for the decentralised function of colonial administration in this area. As well as being a magistrate, and doctor on call for emergencies, troops and police were stationed on his property until the towns were established in the mid 1830s.

Robert Futter had Lumley [or Lumley Park] immediately adjoining Inverary Park. In 1828 he held 4085 acres in total, of which 180 acres was cleared, and 85 under cultivation. He had 9 horses, 395 cattle and 1700 sheep¹⁵⁴. In 1837 he had 14 assigned convicts¹⁵⁵.

Barber, Reid and Futter all lived on their runs, which made them unusual in this early period. W.H. Breton said in 1833 that 'there are very few persons located on their grants, which are used more as stock stations than farms.'¹⁵⁶ Most runs were operated by a manager in charge of several convicts, and sometimes assigned men moved between stations, droving their stock to the best available pasture. The properties of Reid and Futter and the additional services they contained on behalf of the government

¹⁵¹ Sainty & Johnson 1980: B0283

¹⁵² Sainty & Johnson 1980: R0457. All of his assigned men are listed as located at Jembiacumbene, in County St Vincent, further south along the Shoalhaven.

¹⁵³ Von Hugel 1994: 443

¹⁵⁴ Sainty & Johnson 1980: F1519

¹⁵⁵ Butlin *et al* 1987

¹⁵⁶ Breton 1833: 69

gave this area the status of a proto-township, would be reflected in the establishment of Bungonia as a formal township close by.

These homesteads became head stations for managing flocks and herds that occupied adjoining runs, as well as using annual grazing licenses for vacant land and flocks that were grazed on the Monaro or Murrumbidgee. Not all of the labour they used was convict assignees. An increasing number during the 1830s consisted of tickets-of-leave, convicts who were given a form of parole that allowed them to work on their own account¹⁵⁷. These often worked as wage labour for established contracts, which could be more secure for the landowner than the lottery of an assigned convict, possibly taking part of their wages in stock, so that they had the makings of their own herd. William Hawthorne's stock agisting on the Barber and Hume properties is most likely an example of this practice.

Because of the large number of workers and the distance to Sydney these stations had a large measure of self-sufficiency:

*The homestead constitutes a regular village, with only the inn and the church missing. All the necessaries are sent from here to the station, usually only tea and sugar; wheat is grown there for local requirements and ground in handmills. The overseer either kills a beast for the men every couple of days or supplies them with salt provisions cured at the homestead. The large landholders have not only several properties of this kind within the boundaries of the colony, but also establish stations a hundred or two hundred miles beyond the boundaries. Between these out-stations and the homestead they usually also have small properties as holding centres for their wagons and working bullocks.*¹⁵⁸

As well as these resident landowners, there were other large properties within a short ride, say 10 km, from Marulan. Only about a third of the land in this radius was ever granted during the period of old Marulan's existence [refer to Figure 3.1 for grants to 1837].

The dominant landowner was Edmund Lockyer, already encountered as the Inspector of Roads before that post became the responsibility of the Surveyor General. His estate was Lockyersleigh and he systematically bought more blocks in the area to the west of the Great Southern Road. He began with 2560 acres and by 1853 had increased this to 11,810, largely contiguous¹⁵⁹. He lived at Ermington House, near Parramatta. In 1828 he had a comparable amount of stock to the resident landowners discussed above and 24 convicts¹⁶⁰. This was a much larger number of convicts than the resident landowners. Lockyer's land was poor and required drainage. In 1830 a traveller

¹⁵⁷ In the 1837 convict muster the proportion of tickets of leave among all the convicts at Inverary and Goulburn was 17%, or 1 in 6 convicts.

¹⁵⁸ Von Hugel 1994: 265

¹⁵⁹ ADB 2: 123-4.

¹⁶⁰ Sainty & Johnson 1980: L1012

recorded a conversation with Lockyer's overseer. He said that the convict assignees 'do not cost the Major more than £5 a year - 2 shirts, 5 yards of Parramatta cloth, 2 pairs shows [sic] made on the farm, 1 blanket and 1 oz. of tobacco per week. Each man is allowed the milk of one cow instead of tea and sugar.¹⁶¹ They were employed draining the low-lying floodplain along the Wollondilly with ditches, which may also have been used instead of fences for paddocks.

As well as Lockyer there were a number of other smaller landowners who only owned a single block. Stuckey at Billy Rampety [modern Billyrambija] had five convicts assigned, and 560 acres in 1828. Robert Howe, the son of the publisher of the *Sydney Gazette*, was granted land that he named Advance Australia. The same phrase also adorned the newspaper's masthead.

Near Stuckey was a grant to Joseph Peters, on which he erected an inn, named the Woolpack. This was the predecessor of the Woolpack Inn at Marulan.

While many respectable men such as the Reids, Barbers, Lockyers and Macarthurs were establishing stations in the more distant parts of the colony, there were many with less evident social connections that also turned to grazing. In fact, the acute observer Charles Darwin noted during his visit to New South Wales in 1838:

A squatter is a freed or "ticket of leave" man, who builds a hut with bark in unoccupied ground, buys or steals a few animals, sells Spirits without a licence, buys stolen goods & so at last becomes rich and turns farmer; He is the horror of all his honest neighbours'.¹⁶²

Associated with squatters, and little worse, were the 'crawler' and the 'bush ranger'. Darwin noting that '[i]n the country it is necessary to understand these three names, for they are in common use'.¹⁶³ It was not until the 1840s that the pastoralists would become more legitimised because of their newly found wealth. The term 'squatter' ceased to be disparaging and became the mark of the new ruling class. This caused discomfort among those who saw their holding of land as a sign of social superiority; their interests were not necessarily those of the newly wealthy.

At the time Marulan was established Barber was the only immediate neighbour, but during the 1830s a number of other grants were purchased around the town [Table 3.1].

¹⁶¹ Jervis 1946: 224

¹⁶² Darwin 1839: 527.

¹⁶³ Darwin 1839: 527.

Table 3.1 - Pastoral land held around Marulan
 [source - SRNSW Reel 2548 Item 7/452 Vols. 1 and 2 Register of Grants – County Argyle]

Grantee	Acres	Date Granted	Advertised As	Purchase Price
George Barber	800	14.10.1834 Grant 127 vol. 1 Register 22 folio 332	Annual rent £4.1.0	
George Barber	800	16.12.1836 Grant 254 vol. 1 Register 35 folio 163	Lot 2 advertised 1.12.1835	£220.0.0
George Barber	944	16.12.1836 Grant 255 vol. 1 Register 35 folio 165	Lot 2 advertised 1.12.1835	£495.12.0
Edmund Lockyer	740	21.1.1837 Grant 245 vol. 1 Register 39 folio 55	Lot 34 advertised 4.7.1836	£610.10.0
George Barber	655	22.11.1837 Grant 287 vol. 1 Register 41 folio 67	Lot 1 advertised 19.6.1837	£163.15.0
Joseph Peters	100 acres 'more or less'	27.2.1839 Grant 15 vol. 2 Register 51 folio 31	Lot 58 advertised 18.9.1838	£55.0.0

Even so, Glenrock remained the only significant pastoral holding that ever adjoined the town. We know from the Woolpack Ledger that men from the farms came in to drink and presumably use services in Marulan, but their economic impact on the town was still potentially quite limited.

3.5.2. Founding Towns in NSW

In 1830 settlement was officially restricted to the confines of the County of Cumberland and a few areas within the broader prescribed limits of location, but by 1850 almost all of the readily accessible grazing land within NSW had been taken up, if only at a low density and with only semi-legal status¹⁶⁴. Most of this was rural settlement by individual land grantees and squatters, but provisions had to be made for townships as part of the settlement process.

Towns could either be founded by the government establishing a village reserve and granting town lots by sale, being bound by the planning requirements of the 1829 regulations, or they could be created by private landowners subdividing their own property and offering lots for sale. Neither approach guaranteed that the town would

¹⁶⁴ Jeans 1972.

be a success, sited to attract residents and businesses or that later government decisions would not affect their viability. When Marulan was established in 1835 there were a number of small towns forming south of the County of Cumberland, which provide a sense of the range of possible towns that Marulan could have been. Louisa Meredith's earlier comments about the land speculation refer more to the 1840s, but it was during the mid-1830s that a demand and a market for towns in rural areas was first created.

For example Camden was established as a private town, set out on a rectangular grid, within the Macarthur family estate. Picton came slightly later in the 1840s subdivision of Major Antill's Jarvisfield estate, where a small nucleus of businesses had already formed a proto-town around Stonequarry Creek. Once Antill's intentions became clear the Government created an adjoining official town. Both were called Picton for a while, but the Government town was always referred to as Redbank by locals.

Other proto-towns included Bong Bong, which was based around grants for veterans, and the nearby Sutton Forest, where the richness of the soil made dense small farm plots feasible. Within Argyle a proto-town was taking shape at Inverary, although the founding seemed to consist of a vague understanding that this would become the nucleus of a settlement. As Reid and Futter were magistrates their properties hosted police and troops, a gaol and a magistrate's court held in the school on Reid's property. The civic role was later taken over by Bungonia and Goulburn. The proto-towns were not necessarily thought of by the authorities as being anything more than convenient points at which to station a constable or let a postal contract. This reflects a belief, that was still evident until the 1830s, that the rural lands of the colony were there primarily to be used for pastoralism, and that the pastoralists bore the burden of any civic infrastructure. Even though there were many rural workers nearly all were convict assignees tied to a particular master or ticket-of-leavers who were also contracted to particular employers. Only during the 1830s is there a rise in the number of people who may be described as masterless. These included piece workers such as shearers, who would flood a region during a short season, and the rising number of tradesmen such as brick makers, carpenters and saw-millers who were able to make a living travelling from job to job. The large land holders would have had many of these skills represented among their assigned convicts, but independent tradesmen were needed to support smaller farm holdings that also had to have access to specialist trades¹⁶⁵.

In 1829 the first formal regulations for town founding in NSW were established¹⁶⁶. These set out a template for towns, focussing on the size and arrangement of blocks. Notably they were to be half acre blocks, measuring where possible 1 x 5 chains, with the short frontage facing the street. Separate lots were to be provided for churches, parsonages and cemeteries for the three main faiths. Set-backs from the street line were to be maintained to the house frontages, and drainage was provided for. These

¹⁶⁵ David Reid [Ogier n.d.: 2-9] records that at Inverary there were blacksmiths, carpenters, shoemakers, wheelwrights and even tanners; all clothing was made on site and the property brewed its own spirits and beer.

¹⁶⁶ NSW Govt 1829; Jeans 1981.

regulations were simple in operation. Once a town site was decided upon, a plan was drawn up in conformity with the regulations to the satisfaction of the Surveyor-General. Then it was passed to the Executive Council. Once they approved it or any changes, the town was official. Blocks could then be sold. Individuals could make submissions for a specific block or go through an auction system. Once a purchase was made, it had to be approved, money changed hands and finally a deed was issued, giving ownership to the person.

When Mitchell laid out the Great Southern Road he laid out towns along its route [refer to Figure 3.4]. It appears he did not have a complex view of the purpose of towns as an element in the rural population. They were to be mainly administrative centres and places where inns and a blacksmith were located. The towns he placed on the route were Berrima, Murrimba [a now lost town at the Paddys River crossing], Marulan, Bungonia and Goulburn. As well as these Mittagong and Picton [both Antill's private town and the official town] were essentially created as a result of the Great Southern Road. Of the official towns all were new, although Bungonia was located near the existing proto-town at Inverary Park, and both planned and *ad hoc* settlement around the Mulwaree Ponds near the site of Goulburn was already intensifying.



Figure 3.4 - Established and new settlements along the Great Southern Road [base image – Google Earth]. Yellow – pre-1833 roads and settlements, orange – initiated by Mitchell for the Great South Road.

There remained critics of the establishment of roadside towns. Some pastoralists feared that their formation represented an alternative authority structure outside the direct control of magistrates¹⁶⁷. Others liked the idea of towns, but essentially in an idealised English model, where they as the local gentry owned the town and acted as lord and law. Roe called this the 'merrie Australia' mindset of the colonial self-styled gentry, who wanted to recreate an English social landscape¹⁶⁸. This was a logical extension of the mini-villages into which some of the major homesteads had already developed, sustained by the assignment of large numbers of convict workers.

Another critic, John Dunmore Lang, wrote in 1852:

*No forcing on the part of a Government can create a town in an improperly chosen locality, as the case of Liverpool sufficiently proves; and the principal part of the population that will collect in such a place will in all likelihood consist of publicans of an inferior character, and the other useless drones that contrive to pick up a subsistence in some way or other along the highways of the colony, by preying upon honest people who are travelling to and fro in the way of their respective callings.*¹⁶⁹

Lang criticised Berrima ['the population ... chiefly of a few publicans and their dependents, who seem to have nothing to do but to look out for the next carriage or bullock-dray that may be passing along the road'] and the other towns on the South Road including Marulan, if only for their boring scenery if he couldn't find anything pithier about which to complain¹⁷⁰.

The genesis of Marulan was the road junction, necessitated by Mitchell's uncertainty as to which route southwards would prove the most viable. While Hoddle prepared plans for Bungonia and Murrimba at Mitchell's instruction, nothing appears to have been done at Marulan for a considerable time. Although Mitchell seems to have wanted a town there from the start of his detailed thinking about the planning of the road, its design seems not to have been done until much later. While Hoddle is sometimes credited with the town plan, examination of his monthly returns does not indicate any survey that can match the work¹⁷¹. Neither does his biographer Colville attribute the plan to him¹⁷². The design of the town is therefore open, but it is most likely that Mitchell undertook it as the final plan submitted for approval is credited to him, based on an identical pencil draft [refer to Figure 2.4].

¹⁶⁷ Roe 1965.

¹⁶⁸ Roe 1965.

¹⁶⁹ Lang 1852: 292-3. These observations were not present in the 1837 second edition.

¹⁷⁰ Lang 1852: 293. Although Lang was a famously cranky old man he did approve of Mitchell's practice of using the mellifluous Aboriginal names.

¹⁷¹ SRNSW Reel 3070 – Hoddle monthly returns.

¹⁷² Colville 2004.

The name Marulan was initially given by Mitchell in c.1829 to a small mountain to the southwest of the town site as a simplification of the original Moorooaulin or Mooraulin recorded by Throsby¹⁷³. The first mention of Marulan in relation to a town is in mid 1833 with the design submitted to the Executive Council. It comes into active use when Hoddle is asked to measure up some blocks, but he mistakenly referred to lots in Bungonia, seemingly unaware of the new town's placement. It seems that while the town was planned, it had not been marked on the ground at that stage¹⁷⁴.

The only other probable Aboriginal place names recorded in this period are the creek along the northern edge of town being called Johanana Creek¹⁷⁵, while the more substantial drainage to the northeast, close to modern Marulan in Jaorimin Creek.

The first town plan - SRNSW Map 3806 [refer to Figure 2.4] - is a pencilled outline of the part of the town centred on the road junction. A pencil annotation says the design was by Mitchell and the plan contains construction lines, suggesting it is an original rather than a copy¹⁷⁶. It is annotated as being transmitted, with approval of the plan on 15.11.1834 and the Executive Council approved it on 10.3.1835. This was followed by a notice in the Government Gazette the following day¹⁷⁷.

*Notice is hereby given that a site has been fixed upon for the Village of Marulan at the junction of the Great Roads in the County of Argyle.
Alexander Macleay.*

Once gazetted, lots could begin to be sold. This plan contains the name Joseph Peters in Section 2 Lot 10, and John Hume in Section 1 Lots 1 and 2 [refer to Figure 2.4]. The adjoining block purchased by Mary Anne Winter [refer to Section 3.8.3 below] is not shown. Overall this appears to be an early working plan, possibly even the original town layout plan. It is very close to a printed map titled 'Design for the Village of Marulan on the junction of the Great Roads in the County of Argyle' which became the base map for later land transactions¹⁷⁸ [refer to Figure 3.5]. There are some small differences from the pencilled version, including the absence of the school lot, which probably only dates from Hoddle's measurement in June 1834, and the Anglican church lands are not shown grouped. The inked version shown in Figure 3.5 was the one put before the Executive Council in early 1835 or done immediately following approval as the official plan. Two copies are known¹⁷⁹.

¹⁷³ Smith 2008 derives Moorooaulin from the Bullun, who were Gundungurra creation beings. Their journey through the Wollondilly, Nepean and Cox's River valleys left many place names containing 'bullun' components. E.g. Jenolan was originally *Jennowullan* for 'Bullun's foot'. Gundungurra compounds drop the non-initial 'B' and replace with a long vowel. . With anglicisation, many Gundungurra names were simplified by removing the central tonal syllables. Based on this Smith proposes Murrola bullan ['Bullun's fingers'] → Moorooaulin → Marulan.

¹⁷⁴ SRNSW Reel 3070: response to SG No 34/200 date 26.6.1834.

¹⁷⁵ *Sydney Gazette* 17.3.1832, p. 3.

¹⁷⁶ SRNSW Map 3806.

¹⁷⁷ *NSW Govt Gazette* 1835: 138.

¹⁷⁸ SRNSW Map 2287.

¹⁷⁹ SRNSW Map 2287 has fewer annotations than SRNSW Map 3807, which went to the Colonial Secretary.

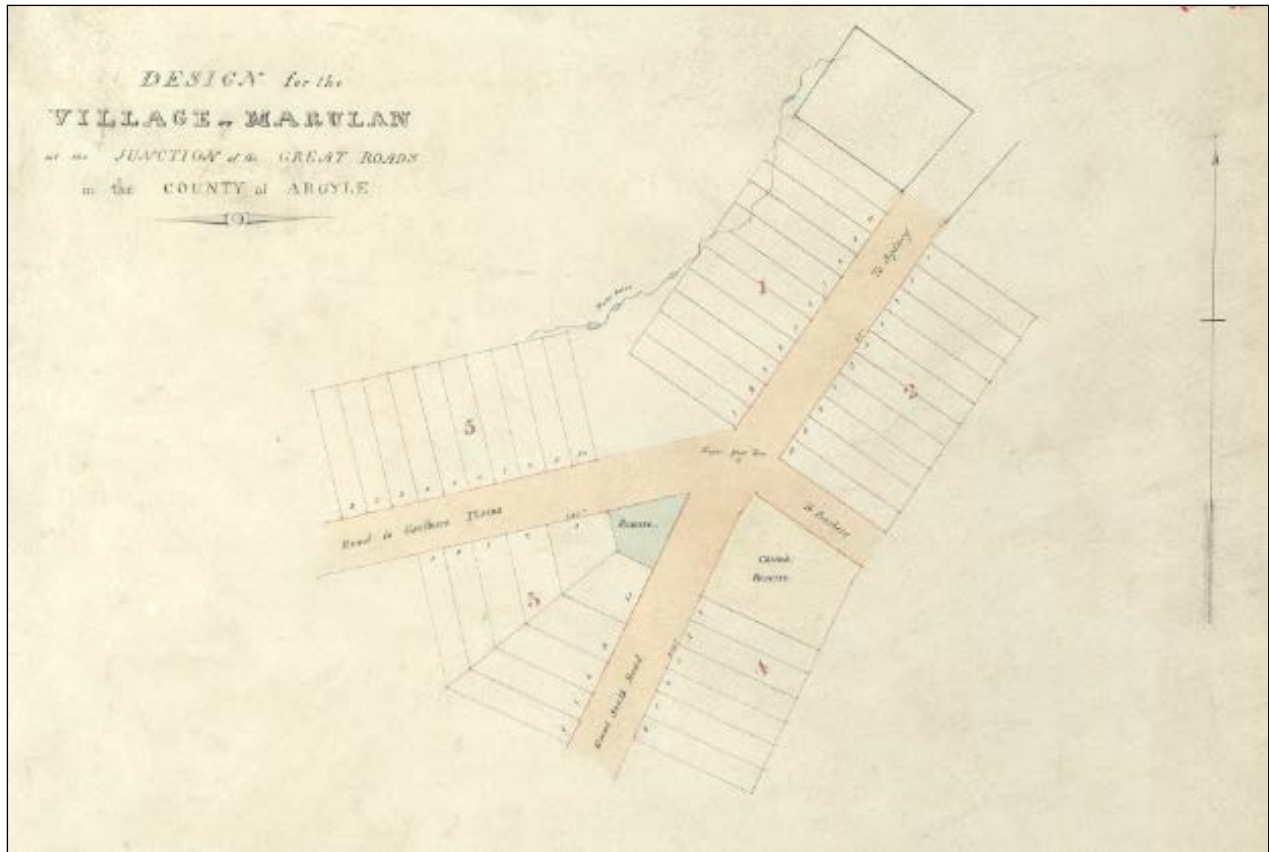
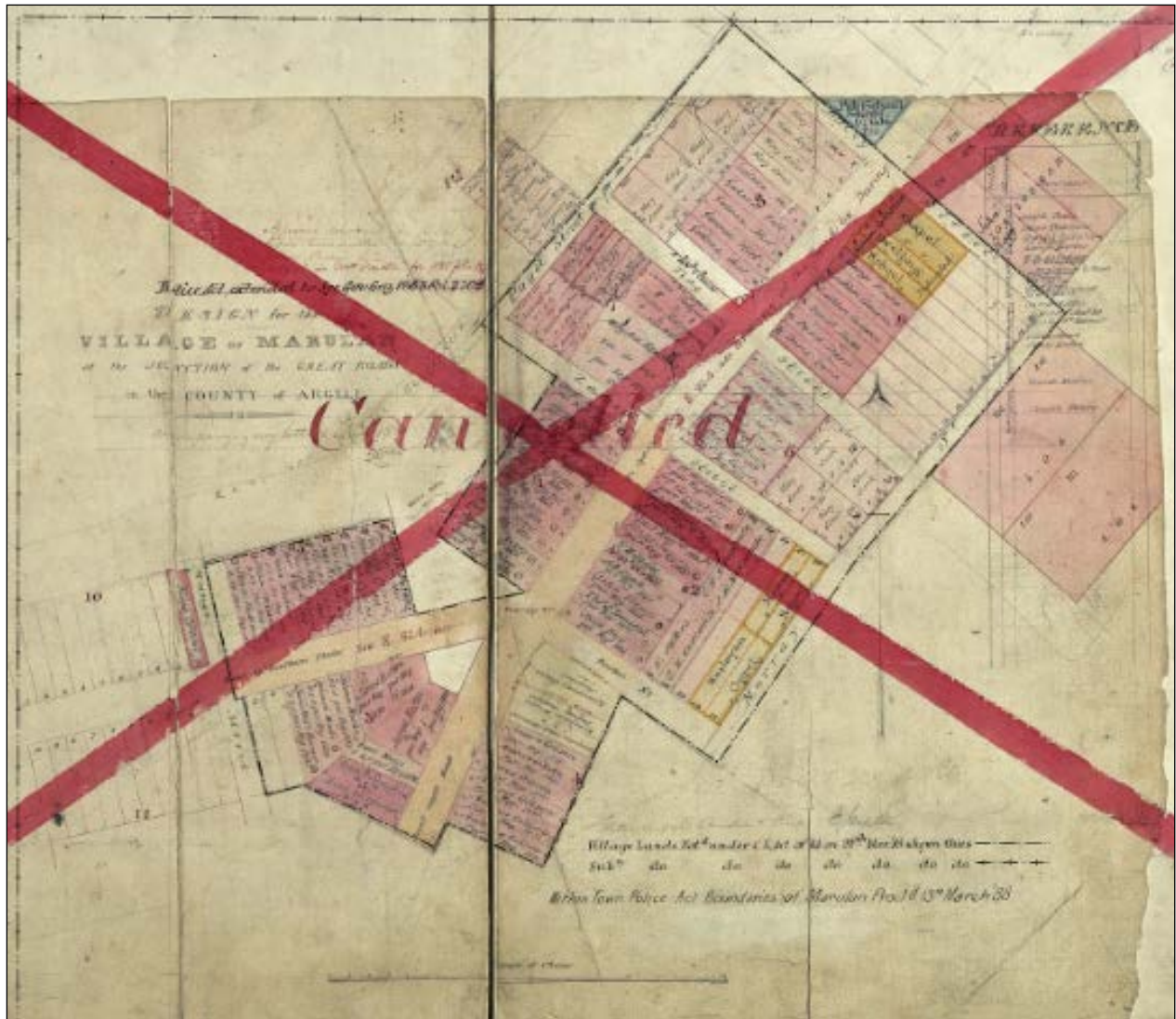


Figure 3.5 - The town map of Marulan, c.early 1835 [SR Map 2287]

SRNSW Map 3086A is an annotated and extended copy of Map 2287, stuck onto a larger piece of paper, to allow the full township reserve to be drawn [refer to Figure 3.6]. It was used as a charting copy for documenting changes in land ownership and legal requirements. It is marked as being withdrawn from office use in 1902. It is annotated with all official lot purchasers, and there is an annotation 'Transmitted with my letter of [Sept] 183[?].'



**Figure 3.6 - The updated town plan of Marulan, annotations to 1902
[source – SRNSW Map 3806A]**

Marulan appears to conform to the town planning regulations of the day in all respects where comparison is possible. It contained town sections 1 through to 5, each of 10 lots, with minor variations from the half acre ideal to accommodate a school, a reserve, church reserve and side roads. Aside from the need to design around the road junction the town's layout adhered as much as possible to the 1828 planning regulation.

During the period that Marulan was founded the Surveyor General also incorporated separate church reserves for Catholics, Anglicans and Presbyterian Protestants, each with their own cemetery. Later in the decade these would be replaced with an allocation made once sufficient local subscription had justified building a church, and cemeteries became a single block with denominational areas. Apart from the roads themselves and survey posts marking allotments there was no infrastructure. No stock reserves are located in the town plan.

3.5.3. The Town and Its Cadastral Evolution

The original five sections shown in the original plans were supplemented by further sections to the northern end of the town and in a second range behind the road front lots by the late 1840s and 50s¹⁸⁰. It would be tempting to believe that the town was so successful that it needed to keep growing, but that is contrary to the evidence. Towns designed consistently with the 1829 regulations all have a single size of allotment, sufficient for an average residence. As a consequence, placing larger dwellings or an inn required buying contiguous blocks. Another effect of this type of planning was that there was no internal zoning or hierarchy of spaces within the town. Each lot was effectively like any other. As will be shown at Marulan this lack of structure resulted in an interesting patterning of businesses and residences in the town.

Data has been located on 40 town lots sold in the period from 1834 to 1842. Apart from Mary Ann Hawthorne's 2 acre school lot, the lots were uniform in size at half an acre, and all the same one chain wide by 5 chains deep, the narrow end fronting the highway. The lots were sold at a series of land auctions. When tabulated this shows that there was only a gradual accumulation of blocks into private ownership in the town. It definitely did not arrive fully formed. It also presents a different picture of the land speculation spoken of by Louisa Meredith at the beginning of this section.

Table 3.2 - Prices and sale dates for town lots [source - Colonial Secretary's records of land sales in County Argyle]. *This block was about 2 acres. Price has been averaged to cost per half acre block.

Date Of Auction	Lots Bought	Town Section	Average Price	Number Of Buyers	Date Of Grant
8.7.1834	2	1	£7.10.0	1	26.11.1834
1.9.1834	1	2	£13.0.0	1	14.2.1835
29.4.1835	1	7	£1.9.10*	1	8.11.1835
8.12.1835	2	2	£1.3.4	2	25.2.1836 4.5.1836
5.4.1836	2	1	£4.0.0	1	5.3.1838
4.7.1836	2	3, 5	£1.10.0	2	3.3.1838 13.11.1838
22.3.1836	10	1, 3	£6.6.0	5	3.3.1838
10.4.1837	7	2, 5	£1.2.8	3	29.5.1838 15.11.1838
19.6.1837	3	2	£1.4.0	2	7.5.1838 29.5.1838
31.8.1839	8	4, 5	£10.1.0	2	23.12.1839
7.1.1842	2	3	£4.0.0	1	9.5.1842

¹⁸⁰ There is no single date for this expansion. The earliest graphic presentation of the town in its final form is the 1857 subdivision map – NLA F832.

A useful price comparison is provided by James Macarthur, who lists the minimum rated price per acre for land in various centres in about 1836¹⁸¹. Marulan was rated at £2 per acre, which was the same as Bathurst, Berrima, Bungonia, Goulburn, Murrimba, Muscle Brook [later Muswellbrook], Paterson, Sutton Forest, Wollombi and Wollongong. Areas where £5 per acre were charged were Appin, Emu [Plains], and £7 for Maitland. There is then a jump to Balgowlah at £10, and a host at £20 – Campbelltown, Castlereagh, Liverpool, Narellan, Pitt-town, Richmond, Watson’s Bay, Wilberforce and Windsor. At £40 were Double Bay and then £1000 for Sydney.

The price paid per block fluctuated greatly between auctions without any good reason evident from location in the town [Table 3.2]. The number of blocks in private hands, and the total number of owners can also be calculated, to show how concentrated or diverse land-ownership was in the township [Table 3.3]. This shows how many blocks had been bought at auction, and how many had been through the process of a grant being confirmed, following payment.

Table 3.3 - Cumulative totals for purchase and ownership of blocks within the town.
[source – Col.Sec. records of land sales in County Argyle]

At End Of Year	Total Number Of Blocks Bought At Auction To Date	Total Number Of Blocks Granted To Date	Number Of Grantees Holding Land In Town
1834	3	2	1
1835	6	4	2
1836	20	6	4
1837	30	6	4
1838	30	30	14
1839	38	38	15
1840	38	38	15
1841	38	38	15
1842	40	40	16

As can be seen, during the late 1830s the processing of deeds failed to keep pace with property purchases, even before the speculative boom of the 1840s. Delays in granting could reach almost 2 years, leading to great frustration. It is not clear whether individual owners felt secure enough in the official acceptance of their town purchase to go ahead with building or leasing the land, although within the settled districts there was little or no likelihood of a loss of tenure.

¹⁸¹ Macarthur 1837: 155.

3.6. Landholders

The information sources for Marulan include data about both landowners and town occupants, depending on the purpose of the information. Generally ownership records survive more frequently than information about town residents in NSW records of the 19th century, but neither is comprehensive for Marulan.

The full range of land ownership in the town as recorded in the parish maps and land title information is shown below [Table 3.4]. These chart purchases across the 30 or so years that the town was in existence from the mid 1830s. In some cases the initial purchase was rescinded soon after for failure to make a full payment.

Table 3.4 - Land owners in the town of Marulan and their holdings [source - initial grantees as shown on parish maps]

Name	No Of Lots Bought	Total Area Bought [Acres-Rods-Perches]
Addison, William	2	0-3-20
Barber, George	2	1-0-0
Benjamin + Moses	1	0-2-0
Buttenshaw, Ellen	2	1-0-0
Cameron, Lachlan	2	1-0-0
Collins, Joseph	1	0-2-0
Cooper, L.T.	6	3-0-0
Davidson, W.R	1	0-2-0
Davis, David	3	1-2-0
Davis, Rebecca	1	0-2-0
Eustace, Thomas	1	0-2-0
Evans, George	1	0-2-0
Fulljames, Jas	1	1-0-0
Fulljames, John	8	5-0-36
Gibson, Andrew	6	3-0-0
Greenhill, K.T.	1	0-2-0
Hart, Goodman	5	2-2-0
Hawthorne, M.A.	1	2-0-12
Hillas, John	4	2-0-0
Hughes, Jas	2	1-0-0
Hume, John	1	0-2-0
Hutton, James	4	2-0-0
James, T.H.	2	1-0-0

Name	No Of Lots Bought	Total Area Bought [Acres-Rods-Perches]
Jaques, Henry	1	0-2-0
Jones, Mary	11	6-3-0
Marks, Solomon	2	1-0-0
Miles, Daniel	1	1-1-14
Moses, Isaac	1	0-2-0
Newcombe, C.E.	3	1-2-0
Nicholson, Charles	1	0-2-0
Oakes, Francis	1	0-2-0
O'Neil, John	4	2-1-12
Peters, Joseph	10	5-0-0
Presbyterian Church	3	4-0-0
Roemer, C.W.	1	0-2-0
Roman Catholic	4	2-0-0
Spark, A.B.	1	0-2-0
Titterton, Isaac	2	1-0-0
Townsend, T.S.	1	0-2-0
Wells, J.E.	10	5-0-0
Wheatley, Geo.	1	0-2-0
unidentified	2	1-0-0

The following landowners were the original grantees on the northern side of the road¹⁸². General information about them and their social status is tabulated to provide a sense of the social structure of the town [Table 3.5].

Table 3.5 - Biographical summaries of original grantees on northern side of the Southern Road

Land Holder	Biographical Information	Resident In Town
Barber, George	Large district landowner. Came to Australia free in 1814. Stepson of Charles Throsby, brother-in-law of Hamilton Hume. Died 1844.	No
Collins, Joseph	Storekeeper at Goulburn ¹⁸³ . Successful Jewish merchant.	No

¹⁸² Based on land title and grant information in NSW State Records and Land Titles Office.

¹⁸³ McAlister 1907: 98

Land Holder	Biographical Information	Resident In Town
Fulljames, James Fulljames, John	Probably part of the district land-owning family. John bought substantial amounts of land, was a storekeeper, poundkeeper and post master in Marulan.	Yes
Hart, Goodman	Came free, initially to Van Diemens Land [VDL]. Publican in a succession of hotels in VDL, NSW and South Australia.	Yes
Hawthorne, Mary Ann	Came to Australia free, probably as an assisted passage. Married ticket of leave convict William Hawthorne and bought property in her name to circumvent ownership restrictions on convicts.	Yes
Hillas, John	Large regional landowner, based at Taralga, to the north of Goulburn.	No
Hughes, James	No biographical information. A James Hughes took up land near Gundaroo during this period.	Probably no
James, Thomas Horton	Newspaper publisher and writer. Lived also in VDL. Wrote <i>Six months in South Australia</i> in 1839, and travelled in US in 1840s.	No
Jones, Mary	No biographical information.	Unknown
Miles, Daniel	No biographical information.	Unknown
Nicholson, Charles	Came to Australia free in 1833. Medical doctor by training, worked with landowner and merchant uncle. Eventually became a member and speaker of the Legislative Council, and a significant figure in colonial politics.	No
Peters, Joseph	Transported to Australia in 1819 as a convict. Worked as convict overseer, manager for other landowners, owned earlier inn and land in County Argyle.	Yes
Titterton, Isaac	Arrived as convict in 1820. Became moderately successful landowner in Parramatta.	No

A number of the original owners on the southern side of town also have biographical information available as tabulated below [Table 3.6].

Table 3.6 - Biographical information on selected landowners in southern side of town

Land Holder	Biographical Information	Resident In Town
Benjamin, Samuel Moses, Elias	Both were Sydney-based when lot was bought. Had Sydney House in George Street, and another in Windsor. Later became successful merchants in Goulburn and 'established Australia's first retail chain store' ¹⁸⁴ .	No
Hume, John	Resident at Bong Bong. Possibly John Kennedy Hume, brother of Hamilton Hume.	No
Jaques, Henry	Resident at Sydney, worked as land agent and auctioneer.	No
Roemer, Charles	Saxon resident at Sydney. Wool exporter and land owner, who in 1834 established the 'Sydney Bank'. ¹⁸⁵	No
Buttenshaw, Ellen	Widow of Thomas Buttenshaw of Royal Navy. Bought property with his naval service payout.	Probably not

Three landowners had 10 or more lots [Jones, Peters, Wells]. Another four had five or more lots [John Fulljames, Cooper, Gibson, Hart]. Seven owners had three or four lots, including the Roman Catholic and Presbyterian churches with three each. There were 28 other owners who had one or two lots.

When looking at the total holding of land in the village the pattern remains similar. As nearly all of the lots were half an acre in extent, the relative amount of land matches the total number of lots held. Again, the same seven owners dominated, along with the Presbyterian Church, with 2.5 acres or more. The remainder of owners had one to four lots and these totalled 2.5 acres or less.

The owners were predominantly those who came to Australia free, with fewer identifiable emancipists and no definite native-born. This was typical of the period where the emancipists and their offspring were largely excluded from land-ownership¹⁸⁶. Most identifiable large landowners, or possible members of family dynasties, were based in the Southern Highlands and County Argyle [Hillas, Hume, Barber]. Some of these would become part of the pastoral elite in later decades. Notable also is the number of identifiable Jewish merchants who bought one or two lots in the town [Benjamin and Moses, Davis, Collins, Marks]. Goulburn had a significant Jewish mercantile population

¹⁸⁴ Levi and Bergman 2002: 182.

¹⁸⁵ *ADB* 2: 392.

¹⁸⁶ Molony 2000.

in its early history, perhaps the main rural Jewish community in colonial NSW¹⁸⁷. Marulan's land ownership therefore had substantial links into extended local and regional networks. These networks were mainly pastoral and family-based but, as with the Goulburn merchants, could also be town-based.

There were a number of small Sydney businessmen who also owned one or two lots. These all seem to have had diverse interests, including a bit of land speculation, coaching and carting, import and export and a variety of other activities. Some, such as Charles Nicholson and A.B. Spark, were among the very wealthy but most appear to have come from a more modest class of merchant. The ownership of blocks may have been deliberate or, as seems to have happened a lot in this period, land titles for underperforming lots in far-off towns were traded very easily to pay off small debts. A half acre in Marulan may have been considered a trifle compared to hundreds or even thousands of acres held by some of these individuals in the squatting districts.

The owners of Marulan are therefore an interesting mix of newer and older money, free and emancipist, absentee and resident owners. As an exercise in creating opportunities for investment in rural areas the development of this town and the way lots were sold was probably a success in tapping into a diverse pool of owners. No one sector of the NSW colonial world appears to have been particularly favoured or over or under-represented among the purchasers.

3.7. Marulan's Residential Population

There are a range of sources available that provide information about the people who actually lived in Marulan. None of them provides a definitive 'snapshot' of the town's population at a single point. Neither do they tell us where anyone lived. Nonetheless they do provide a sense of how the residential character of the town developed over time.

1836 Census

The 1836 census effectively predates Marulan's rise as a town, with possibly only Joseph Peters and the Hawthorns in residence. This census, as all until 1967, excluded Aboriginal people.

County Argyle as a whole had 2,417 people, overwhelmingly males. The 1,929 males comprised 1,106 convicts, and there were 36 female convicts. There were 331 children of twelve years or under in the free population. By comparison County Camden, longer settled, had 3,161 people, but the gender ratio was similar.

The only other information provided by the census referred to religion. The breakdown in Argyle was Protestant – 1,618, Roman Catholics – 783, Jews – 13 and 3 pagans. The

¹⁸⁷ Forbes 2005.

pagans could conceivably have included Hindu or Muslim household servants from India. The Jews would have been predominantly the beginnings of the small Jewish community in Goulburn, some of whom soon bought town lots in Marulan. The Protestants would have included Anglicans, Presbyterians and other smaller sects, resulting in relatively even numbers for the three main Christian groups, as reflected in the three separate religious grants in the layout of the town.

1837 Muster

A muster or census of convicts was held in 1837. This provides some sense of the nature of the surrounding population. There is some difficulty as there is no specific place term that clearly relates to the Marulan area. The locality name of Inverary covered the properties along the Old Argyle Road south from Bumballa, through Parramarrago and the later Bungonia, and westwards towards Marulan. It included the property of Glenrock. It records 139 convicts who were assigned to a total of 32 landholders, with 10 of the convicts listed as being tickets of leave. Of the 13 landholders who had a single assignee, another 11 had between two and five convicts, and another eight who had from eight to 21 assigned convicts. George Barber of Glenrock had 21 assigned to him, the highest in Inverary.

In addition to these there were another 30-32 tickets of leave in this area that were not associated with any particular landowner¹⁸⁸. These were most likely contract farm workers, who may have leased a small plot within a large grant, or run their small personal herds in with the pastoralists, taking payment partly in cash, partly in rations and the remainder in young animals. They may have had a trade that they learned before transportation or as convicts. It is this group that probably was best placed to become the population of the newly established towns, but not necessarily with the means or the desire to become lot owners.

Joseph Peters is recorded as having one assigned convict – Owen Smith, who had been with him since at least 1832¹⁸⁹. It is not clear if this person would have been a town resident or managing the herd or flock that Peters is likely to have retained.

The 1839 *Post Office Directory*

The *Post Office Directory* was the first systematic listing of individuals in Sydney, other towns and in rural NSW. It was the initiative of James Macle hose, and follows from a number of earlier annual editions, beginning as a simple name list, each name having the postal town. Later editions included an itinerary of roads, describing significant landmarks, and where individual properties were located.

¹⁸⁸ There are 32 listings but 2-3 are probable double entries.

¹⁸⁹ Butlin *etal* 1987: Entry 23851.

There is no listing for Marulan in examined editions from the first in 1832, then 1835 and 1836. Joseph Peters is noted as being at 'Divorow Forest, Goulburn'¹⁹⁰ in 1835 and the 1836 *Directory* notes that the new line of road to Goulburn Plains 'which has only been marked thus far' clearly has not been officially opened.

The situation changes in 1839¹⁹¹. There are 33 entries for people [effectively heads of households] in the 1839 *Post Office Calendar* that are serviced by the post at Marulan, although more than 80 percent were from the surrounding region. Excluding those that are clearly outside the town leaves six possible residents.

The householders identified as being at Marulan are listed below.

Table 3.7 - Marulan landowners in 1839 [source - *NSW Post Office Directory 1839*]

Name	Listed Trade
Drover, John	Blacksmith
Dwyer, Edward	Settler
Ellis, William	Settler
Peters, Joseph	Innkeeper
Powning, William	Schoolteacher
Vine, Ernest	-

Drover and Peters are well-known from other sources. Powning is only known from this mention, an entry in the Woolpack Inn ledger and a letter he wrote concerning the behaviour of coach drivers and publicans¹⁹². Vine arrived free as a farmer in 1836¹⁹³. William Dwyer, 'son of Phillip Dwyer of Liverpool' is listed in the Woolpack Inn ledger, as is Stephen Dwyer, who was a shepherd assigned to Joseph Peters. The ledger contains no mentions of Ellis. The Woolpack Inn ledger is discussed further below.

1841 Census

The 1841 census only contains three surviving records that relate to Marulan. These are for three men - Joseph Peters, William Drovers and James Strachan – and their households. The information they contain is tantalising but ultimately not able to be generalised into a picture of the town at this date.

¹⁹⁰ *Post Office Directory* 1835. Clearly this is a poor transcription of Durrah Forest.

¹⁹¹ The volumes for 1837 and 1838 were not available for examination.

¹⁹² ML FM4 Woolpack Inn ledger: 126.

¹⁹³ *Sydney Gazette* 26.11.1836.

As context, the data for County Argyle was for an imbalanced gender ratio of 2,434 males and 963 females. There were about 400 married couples in this total meaning that about 2000 single men compared to 563 single women¹⁹⁴. The nearest towns had:

Berrima 249 total [169 males, 80 females]
 Goulburn 655 total [444 males, 211 females]
 Bungonia 82 total [51 males, 31 females]

Joseph Peters' household lists 15 people total, with 5 men and 10 women¹⁹⁵. The breakdown into gender and age categories was:

Table 3.8 - Age and gender distribution in Joseph Peters' household, based on the 1841 census

Gender	Age Range	Number
Male	21-45 years	5
Female	less than 2 years	2
Female	2-7 years	2
Female	7-14 years	2
Female	14-21 years	1
Female	21-45 years	2
Female	60+ years	1

We know from his own family records that he had eight children, all girls, and the dates of their births would account for the six or seven youngest women, his wife in the 21-45 age group, and then only two or three unexplained females. The five males are all listed as being married, but only three of the women. Fourteen of the people were Church of England and the other a Roman Catholic.

The trades of the people are one shopkeeper, presumably Peters himself as innkeeper, seven domestic servants, which would be his wife, the older girls and one or both of the unidentified women, and possibly some of the males.

The legal status of the inhabitants was important. One male is recorded as arriving free, which we know was not Peters. The other four men were 'other free' meaning they had served or discharged their sentences. Of the women six were born in the colony, being most likely his daughters, two are recorded as arriving free and the other two being 'other free'.

¹⁹⁴ SRNSW Reel 2222.

¹⁹⁵ SRNSW Reel 2222: p. 147 ref. 55; *SMH* 8.6.1838 p. 3.

From this information several possible households can be conjectured to have been included in the entry. Peters, his wife Mary and their six daughters would have shared a house or property with two other married couples, probably working in the Inn, and a number of members of an extended family.

Much simpler was the household of William Drovers [correctly Drover]¹⁹⁶. He is discussed in more detail below. The household at the time contained him, aged between 45 and 60, and a boy between 7-14 years old, who we can presume was his grandson. Drovers had a ticket of leave and the boy arrived free. Both were Church of Scotland members, and Drovers was listed as 'mechanic and artificer'. Their house was made of timber. In land purchase records and the *Post Office Directory*, both produced in 1839, John Drover, William's son who came free to the colony, is mentioned as a blacksmith, and was absent at the time of the census, presumably working elsewhere, and his wife and any other children may have been with him.

James Strachan lived in a household of three males and three females. The males were all aged 21-45, while there was one female in this range, and two under 7 years. Two of the men were single and one couple were married, presumably with two female children. Two were Church of England and the rest were Church of Scotland. One of the men had a ticket of leave, while the others came free. All of the three females arrived free. The men were all artificers, and they listed one timber house for the household.

Woolpack Inn Ledger

The Woolpack Inn was the first known building in the town, built by Joseph Peters in 1835. It is discussed further in Section 3.9.3. An account book for the Woolpack Inn survives. It is a ledger recording amounts owing to the Inn for the provision of alcohol, meals and accommodation, horse stabling and other services. It has an alphabetical index which lists about 500 separate individuals.

The information contained in the account book is being systematically analysed, but this is a process being undertaken separate to this report. In the interim it can be noted that many names from the local area in the period from c.1835-1850 are represented, some as repeat visitors. The entries record a travelling population using the road, as well as a local custom. No reliable way of distinguishing between residents, locals and regular travellers has been identified.

Land Title Information

The land title information that was found for Marulan consists of the original entries in the Town Grants Registers, plus later transfers of title. None of these was able to add additional information on occupants of specific blocks. Relevant information about ownership of land parcels was documented in detail in the Archaeological compliance

¹⁹⁶ SRNSW Reel 2222 p. 145 ref. 19.

plan. Relevant details are summarised in the detailed discussion for each lot [refer to Section 6.0].

A Gap in the Records

There is a substantial gap in our sources from the early 1840s until the 1860s. During this period the town expanded in size and the rural economy underwent massive social impacts as firstly convict transportation ceased, a rural working class arose, the gold rushes began and the railways revolutionised transport. In the 1860s a changed electoral system required the listing of all eligible electors, which provides a renewed source of information about town occupancy. At the same time detailed directories of rural towns begin to be printed, taking advantage of the improved communications offered by the rail network and the expansion of commerce. These list people in a slightly different way, and give better information on professions.

No individuals known from Marulan prior to 1850 are mentioned in any of the town records beginning in 1863. The gap is therefore one in which an almost complete turnover in population would have taken place. As we will see, this is also the case for the 1860s period as well.

We do have some information on specific individuals in this gap. A few come to notice because we know from legal documents that, for example, Goodman Hart took over the license for the Woolpack Inn and John Fulljames became the poundkeeper. These are useful data points but add very little to our understanding of the town's population at this extremely volatile time. During this period the rural economy was transformed as the first large migration of free workers arrived into the colony, there was a short but severe economic depression, and then the discovery of gold encouraged many to temporarily or permanently relocate.

Electoral Rolls and Directories

The 1863-64 electoral roll for the Argyle electoral district lists 28 men who were eligible to vote because of a Marulan connection [Table 3.9]. At the time all males who had lived in the electorate for 6 months previously were eligible as long as they were British subjects, or had been naturalised at least five years previously with two years' residence. Police, serving military, paupers and prisoners were not eligible to vote. If you held property in an electorate where you were not a resident you could still vote through the property right. The list of names is shown in Table 3.9 below.

Table 3.9 - Men qualified to vote in the electorate of Argyle in 1863-64, who were listed at Marulan [source – SRNSW Fiche 774]

No.	Name	Residence	Qualification	Where Situated
40	Barber, George Hume	Long Reach	residence	Marulan
75	Berrisford, Obediah	Jaorimin	freehold	Marulan
319	Collins, Joseph	Goulburn	freehold	Marulan
409	Daly, William	Marulan	leasehold	Marulan
411	Davis, David	Yass	freehold	Marulan
452	Drennan, William	Tangryang	freehold	Marulan
469	Edmonds, Edward	Jaorimin Creek	leasehold	Marulan
485	Elworth, Michael	Marulan	residence	Marulan
493	Eustace, William	Lambing Flat	freehold	Marulan
512	Ferguson, John	Jaorimin Creek	freehold	Marulan
559	Fulljames, John	Goulburn	freehold	Marulan
651	Halpin, Daniel	Marulan	freehold	Marulan
671	Hatter, James	Jaorimin Creek	freehold	Marulan
822	Kildea, John	Marulan Creek	freehold	Marulan
823	Kildea, Patrick	Marulan Creek	freehold	Marulan
930	McCarthy, Francis	Marulan	leasehold	Marulan
1127	Moroney, James	Lachlan	freehold	Marulan
1164	Newcombe, Charles Edwin	Queanbeyan	freehold	Marulan
1175	Nolan, Thomas	Marulan	leasehold	Marulan
1219	O'Neil, John	Woolpack Inn	freehold	Marulan
1221	O'Neil, John	Marulan	freehold	Marulan
1230	Oslington, John	Tangryang	residence	Marulan
1237	Pallier, Joseph	Marulan	residence	Marulan
1431	Shepherd, James	Jaorimin Creek	freehold	Marulan
1558	Tindall, William	Marulan	leasehold	Marulan
1587	Wade, John	Golden Fleece Inn	leasehold	Marulan
1603	Waterworth, James	Berrima	freehold	Marulan
1655	Willock, Matthew	Marulan	leasehold	Marulan

Based on this information the electors can be divided into those who were external to the district [living in Goulburn, Queanbeyan, Lambing Flat, Yass, Berrima] but were eligible because they owned land in the Marulan area, those within the district with Marulan as their central voting place [Jaorimin Creek, Marulan Creek] and those who lived in the town proper. This latter group comprised the following individuals:

Daly, William	leasehold
Elworth, Michael	residence
Halpin, Daniel	freehold
McCarthy, Francis	leasehold
Nolan, Thomas	leasehold
O'Neil, John Woolpack Inn	freehold
O'Neil, John	freehold
Pallier, Joseph	residence
Tindall, William	leasehold
Wade, John Golden	Fleece Inn leasehold
Willcock, Matthew	leasehold

Of the 11 listed it is probable that the two John O'Neils refer to the same individual. This may not represent the full population of the town as their families are not listed along with any households headed by women, those who had occupancy for less than the requisite time, plus police, paupers and non-British subjects.

'The World's Oldest Married Couple'

In 1863 newspapers around the world reprinted a story originating in the Sydney *Empire* that a couple living in Marulan were the world's oldest married couple¹⁹⁷. John Bently, it said, had arrived with the First Fleet and now was aged 112, and his wife Margaret was 107. Early in the following year John died.

Family history researchers have uncovered a slightly different, but still impressive story¹⁹⁸. Bently appears to have arrived in the *William and Anne* as John Battaley in 1791, as part of the Third Fleet, not the First. Margaret Coulter came on the *Elizabeth* in 1818. Their actual ages, based on their transportation records, were 92 for John and 89 for Margaret. Perhaps not a record, but this was still a notable achievement. Even so, their death certificates issued in Goulburn recorded their 'showbiz' ages.

Why were they in Marulan? Margaret was the mother of John O'Neil, who came to Australia with his transported mother, although he came free. Margaret married Bentley / Battaley in 1821, and they were living in Liverpool at the time of the 1828 census. Some time before 1863 O'Neil moved to Marulan with his mother and step-father, and eventually he became the publican of the Woolpack Inn. It is not clear if the claim

¹⁹⁷ e.g. *Courier*, Brisbane 18.3.1863; *Times*, London 25.11.1863.

¹⁹⁸ <http://listsearches.rootsweb.com/th/read/AUS-PT-JACKSON-CONVICTS/2002-06/1025049539>.

about their ages was a deliberate deception or an exaggeration that got entrenched as established fact.

As well as this elderly couple, Andrew Hamilton Hume, who arrived with the Second Fleet and was the father of explorer Hamilton Hume, lived at Glenrock and died in his 89th year in 1849. The presence of elderly people in the town provides a corrective to the idea that the bush was dominated by the young and mobile. Peel notes that while the 19th century idea of what constituted 'old' varied, even a fifty year old could be considered in the category¹⁹⁹. It also highlights that if you were elderly, frail or incapacitated you were entirely reliant on your family. Having to care for a relative would potentially have limited the ability to relocate as readily as others.

1867 Post Office Directory

The *Post Office directory* for 1867 gave a mixture of old and new Marulan locations without clear differentiation between them.

1871 Census

The 1871 census unfortunately does not contain records of individuals. The village of Marulan is listed as having 54 males and 58 females, for a total of 112 people. There were 44 under twelve years old, another 26 between 13-18 years and 23 males and 19 females 19 years old and above. By comparison Goulburn had 4453 individuals and Bungonia had dwindled to 71.

Of the inhabitants, more than half [34 males and 39 females] had been born in NSW, and all of the rest, apart from one male born in the USA, had come from England, Scotland or Ireland.

There is no differentiation of figures into Marulan and Mooroooolen as the newer town was still called, but the number cited is most likely just for the old town if compared to the 1872 directory below.

Greville Directory 1872

The *Greville's Directory* for 1872 gives listings for both the old and new towns, as the arrival of the railway had resulted in the establishment of the new settlement up the road, and it was rapidly growing. This allows for important comparisons to be made between a town on that ascendancy and another that was in serious decline. Table 3.10 shows the identified household heads serviced by the Marulan post office, along with their occupations.

¹⁹⁹ Peel 2001.

Table 3.10 - Occupants of Marulan in 1872. Shaded entries are likely to have resided outside the town. [source – *Greville's directory 1872*]

	Surname	First name	Occupation	Address	Post town
1	BELL	William	sawyer	Terrera	Marulan
2	BRENNAN	Kate	charwoman		Marulan
3	BRENNAN	Mary	charwoman		Marulan
4	BROWN	John	overseer		Marulan
5	CARRIGAN	Mary	innkeeper		Marulan
6	COOK	Steven	labourer		Marulan
7	DEAKLY	Ellen			Marulan
8	DRINNAN	William	grazier		Marulan
9	ELLIS	Alfred	farmer	Jerera Ck.	Marulan
10	FITZGERALD	George W.	grazier	Shilly Flats	Marulan
11	FLETCHER	James	labourer	Jerera Ck.	Marulan
12	FULJAMES	J. & R.	storekeepers		Marulan
13	HUGHES	George	sawyer	Terrera	Marulan
14	JENNINGS	Elizabeth	farmer		Marulan
15	JONES	Harry	labourer		Marulan
16	KELLY	George	contractor		Marulan
17	KELLY	Thomas	constable		Marulan
18	LENNON	Mary	teacher		Marulan
19	MARSH	William	farmer	Jerera Ck.	Marulan
20	NOWLAN	Thomas	bootmaker		Marulan
21	O'BRIEN	Cornelius	sawyer	Terrera	Marulan
22	O'BRIEN	Thomas	farmer	Terrera	Marulan
23	O'NIEL	Anne			Marulan
24	O'NEIL	Eleanor	postmistress		Marulan
25	O'NEIL	John	poundkeeper		Marulan
26	OSLINGTHON	John	labourer		Marulan
27	PATHER	Joseph	bootmaker		Marulan
28	PAYNE	Job	overseer	Shilly Flats	Marulan
29	PEPPER	Henry	farmer		Marulan
30	PEPPER	William	farmer		Marulan
31	PHILLIPS	James	labourer		Marulan
32	REID	Ellen	servant		Marulan
33	RIPPON	Henry	farmer		Marulan
34	SIMPSON	George	farmer	Jerera Ck.	Marulan
35	SMITH	John	labourer		Marulan
36	SPRIGGS	Robert	labourer		Marulan
37	TICKNER	Edward	farmer		Marulan

	Surname	First name	Occupation	Address	Post town
38	WADE	William	blacksmith		Marulan
39	WALCH	Nicholas	bootmaker		Marulan
40	WHEATLY	Ellen			Marulan

The postal town of Marulan also serviced Jerara Creek [4 entries], Terrera [4 entries], Shelly's Flats [misspelled Shilly Flats] [2 entries]. Excluding these leaves 30 households. Notably there were 10 households, a third of the total, that were headed by women [nos 2, 3, 5, 7, 14, 18, 23, 24, 32, 40].

By comparison Mooroowoollen²⁰⁰ has 65 households listed, 13 of which are out of town [Table 3.11]. Of the 52 town households none has a woman listed as head. While this may be a statistical aberration, it arguably shows the difference between a town largely being built, compared to one which has been established for a long time, with the early deaths of husbands working on the land, or gone to look for gold and never returned. Three of the listed women in Marulan had no trade, suggesting also that they were elderly or otherwise stuck in a dying town with no options for moving elsewhere.

Table 3.11 - Residents of Mooroowoollen in 1872. Shaded entries are likely to have resided outside the town. [source - *Greville's Directory 1872*]

	Surname	First Name	Occupation	Address	Post Town
1	ARDLEY	William	labourer		Mooroowoollen
2	BATES	William	carpenter		Mooroowoollen
3	BEAZLEY	William	farmer	Cawarra	Mooroowoollen
4	BERESFORD	Obadiah	farmer		Mooroowoollen
5	BERWICK	George	labourer		Mooroowoollen
6	BLAXTER	John	farmer		Mooroowoollen
7	CAPON	Charles	teacher		Mooroowoollen
8	CASBURN	Charles	farmer	Wingelo	Mooroowoollen
9	CHAPMAN	Richard	innkeeper		Mooroowoollen
10	CLARK	George	carpenter		Mooroowoollen
11	CLAWTON	Henry	baker		Mooroowoollen
12	CLOUT	John	labourer		Mooroowoollen
13	COCHRANE	John	labourer		Mooroowoollen
14	COLEMAN	John	labourer		Mooroowoollen
15	COOK	Stephen	labourer		Mooroowoollen
16	COOMBES	James	storekeeper		Mooroowoollen
17	CRAWFORD	William	farmer	Bombarlo	Mooroowoollen
18	DAWSON	George	blacksmith		Mooroowoollen

²⁰⁰ Spelled as Mooroowoolen in this directory. There is considerable variation in spelling in different sources but Mooroowoollen is adopted for consistency in this report except in direct citations.

	Surname	First Name	Occupation	Address	Post Town
19	DOBYNS	William	labourer		Mooroowoollen
20	DOWNS	John	carrier		Mooroowoollen
21	FARRER	Walter	carpenter		Mooroowoollen
22	FENNING	John	sawyer		Mooroowoollen
23	FERGUSON	John	butcher		Mooroowoollen
24	FERGUSON	Robert	farmer	Bombarlo	Mooroowoollen
25	FERGUSON	Thomas	farmer	Bombarlo	Mooroowoollen
26	FERGUSON	William	contractor		Mooroowoollen
27	FITZGERALD	W.	squatter	Shelley's Flats	Mooroowoollen
28	GREEN	Thomas	innkeeper		Mooroowoollen
29	GREEN	William	carpenter		Mooroowoollen
30	HADDEN	Walter	labourer		Mooroowoollen
31	HATER	George	farmer	Cawarra	Mooroowoollen
32	HOPKINS	Jacob	farmer	Bosworth	Mooroowoollen
33	JENNINGS	William	carrier		Mooroowoollen
34	JONES	Charles	bootmaker		Mooroowoollen
35	JONES	Henry	carrier		Mooroowoollen
36	KILPATRICK	Henry	carrier		Mooroowoollen
37	LEAP	James	labourer		Mooroowoollen
38	LIARDET	Frederick	railway porter		Mooroowoollen
39	MAHER	James	butcher		Mooroowoollen
40	MONTGOMERY	Hugh	storekeeper		Mooroowoollen
41	MORRICE	David	squatter	Glenrock	Mooroowoollen
42	MUNDAY	William	carrier		Mooroowoollen
43	OSLINGTON	James	carrier		Mooroowoollen
44	PAYTEN	Edward	farmer	Wingelo	Mooroowoollen
45	PENNY	Thomas	labourer		Mooroowoollen
46	PETTINT	George	labourer		Mooroowoollen
47	PHILLIPS	James	labourer		Mooroowoollen
48	POLLARD	James	carrier		Mooroowoollen
49	PROSSER	George	contractor		Mooroowoollen
50	RANKIN	John	squatter	Lockyer's Leigh	Mooroowoollen
51	RIPPON	John	labourer		Mooroowoollen
52	ROBINSON	Thomas	mason		Mooroowoollen
53	ROBOTHAM	Isaac	butcher		Mooroowoollen
54	RYAN	John	farmer	Wingelo	Mooroowoollen
55	SHEPPARD	James	farmer		Mooroowoollen
56	SHEPPARD	John	farmer	Mount Otway	Mooroowoollen
57	SIMPSON	George	tanner		Mooroowoollen

	Surname	First Name	Occupation	Address	Post Town
58	STACE	Henry	labourer		Mooroowoollen
59	STALL	Joseph	labourer		Mooroowoollen
60	STEPHENS	William	labourer		Mooroowoollen
61	WADE	John	contractor		Mooroowoollen
62	WARBURTON	Isaac	sawyer		Mooroowoollen
63	WARBURTON	John	sawyer		Mooroowoollen
64	WELSH	John	labourer		Mooroowoollen
65	WRIGHT	Charles	labourer		Mooroowoollen

The mix of trades in the two towns is interesting [Table 3.12]. Mooroowoollen is the larger town, but with many more labourers and carriers, probably moving goods to and from the railway. It is not clear how many of these may have been short-term railway workers. Also there may be appreciable differences between what people actually did to earn a living and the trade that they had learned. Presumably the four boot makers in the two towns turned their hands to other sorts of work as well to make a living.

Table 3.12 - Comparison of trades represented in old and new Marulan 1872
 [source – *Greville's Directory 1872*]
 *J and S Fulljames counted as two but are listed in one entry

Trade	Marulan	Mooroowoollen
Baker	-	1
Blacksmith	1	1
Boot maker	3	1
Butcher	-	3
Carpenter	-	4
Carrier	-	7
Charwoman	2	-
Constable	1	-
Contractor	1	3
Farmer	5	3
Grazier	1	-
Innkeeper	1	2
Labourer	6	18
Mason	-	1
Overseer	1	-
Postmistress	1	-
Poundkeeper	1	-
Railway porter	-	1
Sawyer	-	3

Trade	Marulan	Mooroowoolen
Servant	1	-
Storekeeper	2*	2
Tanner	-	1
Teacher	1	1
No trade listed	3	-

The trades carried on outside the two towns are perhaps what could be expected in an area with a number of rural blocks that may be farmed, through to the larger estates [Table 3.13]. There is an interesting social distinction between farmers and squatters, which would have been very apparent to those on both sides of whatever invisible line separated the two. Many of the 10 farmers would have taken up the small blocks subdivided northwest of the town in 1866 along Jaorimin Creek and Red Hills.

Table 3.13 - Occupations for those listed as being outside the townships.
[source – *Greville's Directory 1872*]

Trade	Marulan	Mooroowoolen
Farmer	4	10
Grazier	1	-
Labourer	1	-
Overseer	1	-
Sawyer	3	-
Squatter	-	3

Greville's Directory 1875

Greville also published a directory in 1875²⁰¹. This only contained an entry for Moorooowoolen, and none for Marulan. A total of 135 individuals are listed, but the entries are less informative, mainly omitting trades or exact residential location information. As a result it is not clear whether the increased numbers reflect a prospering town or a larger postal district taking in the old town.

County Argyle Electoral Roll 1878-9

The 1878-9 electoral roll for County Argyle lists places of residence [Table 3.14]. This reveals the following electoral qualifications in the two towns and also in Tangyang.

²⁰¹ Greville 1875.

Table 3.14 - Electoral rolls 1878-9 – County Argyle – residence or situation Marulan, Mooroooolen, Tangryang

No	Name	Residence	Qualification	Situated
1570	Maher, James	Mooroooolen	Freehold	Dairy Hills
731	Feltham, John junior	Tangryang	Residence	Jerrara
1061	Hogg, John	Marulan	Freehold	Marulan
1062	Hogg, Ralph James	Marulan	Freehold	Marulan
1818	O'Neill, John	Sydney	Freehold	Marulan
1893	Perry, John	Goulburn	Freehold	Marulan
2159	Simpson, George	Marulan	Freehold	Marulan
50	Armstrong, George	Marulan	Household	Marulan
362	Capon, Charles F, senior	Marulan	Household	Marulan
376	Carmichael, Samuel	Marulan	Household	Marulan
1724	Munday, William	Marulan	Household	Marulan
1758	Nettleton, George H.	Marulan	Household	Marulan
1992	Reid, George P.	Marulan	Household	Marulan
2023	Roberts, William	Marulan	Leasehold	Marulan
247	Brown, John	Marulan	Residence	Marulan
620	Davis, Thomas	Marulan	Residence	Marulan
1532	McLaren, Arthur	Marulan	Residence	Marulan
2383	Veares, John A.	Marulan	Residence	Marulan
215	Brennan, Thomas	Mooroooolen	Freehold	Mooroooolen
427	Chapman, Richard	Mooroooolen	Freehold	Mooroooolen
518	Coombs, James	Mooroooolen	Freehold	Mooroooolen
516	Coombs, Joseph	Mooroooolen	Freehold	Mooroooolen
586	Cunningham, William M.	Mooroooolen	Freehold	Mooroooolen
729	Farron, Walter Reeve	Mooroooolen	Freehold	Mooroooolen
1114	Hunter, Thomas	Mooroooolen	Freehold	Mooroooolen
1165	Jones, Charles	Mooroooolen	Freehold	Mooroooolen
1656	Montgomery, Hugh	Mooroooolen	Freehold	Mooroooolen
2534	Wright, Alfred H.	Mooroooolen	Freehold	Mooroooolen
2390	Wade, John A.	Moss Vale	Freehold	Mooroooolen
2410	Ward, John A.	Murrimba	Freehold	Mooroooolen
220	Brett, James	Mooroooolen	Household	Mooroooolen
844	George, William	Mooroooolen	Household	Mooroooolen
1091	Hourn, John	Mooroooolen	Household	Mooroooolen
1659	Moodie, Andrew	Mooroooolen	Household	Mooroooolen
41	Ardley, William	Railway line	Household	Mooroooolen
2377	Tweedey, John	Binalong	Leasehold	Mooroooolen

No	Name	Residence	Qualification	Situated
277	Burcher, George H.	Mooroowoollen	Leasehold	Mooroowoollen
1230	King, James	Mooroowoollen	Leasehold	Mooroowoollen
3	Abbott, Charles	Mooroowoollen	Residence	Mooroowoollen
216	Brennan, Timothy Chas.	Mooroowoollen	Residence	Mooroowoollen
266	Buck, Horatio nelson	Mooroowoollen	Residence	Mooroowoollen
288	Burns, Paul	Mooroowoollen	Residence	Mooroowoollen
363	Capon, Charles F, junior	Mooroowoollen	Residence	Mooroowoollen
517	Coombs, Edward	Mooroowoollen	Residence	Mooroowoollen
520	Coombs, William	Mooroowoollen	Residence	Mooroowoollen
626	Dawson, George junior	Mooroowoollen	Residence	Mooroowoollen
622	Dawson, George senior	Mooroowoollen	Residence	Mooroowoollen
624	Dawson, William	Mooroowoollen	Residence	Mooroowoollen
1044	Hill, James	Mooroowoollen	Residence	Mooroowoollen
1282	Lawson, Peter	Mooroowoollen	Residence	Mooroowoollen
1744	Nash, Robert	Mooroowoollen	Residence	Mooroowoollen
1885	Penny, Thomas	Mooroowoollen	Residence	Mooroowoollen
1895	Perks, John	Mooroowoollen	Residence	Mooroowoollen
2091	Ryan, John	Mooroowoollen	Residence	Mooroowoollen
2129	Shepherd, George	Mooroowoollen	Residence	Mooroowoollen
2242	Stevens, William	Mooroowoollen	Residence	Mooroowoollen
2308	Taylor, Alfred	Mooroowoollen	Residence	Mooroowoollen
1287	Leap, James	Railway Line	Residence	Mooroowoollen
1791	Noughnan, John	Railway line	Residence	Mooroowoollen
2409	Ward, Patrick	Railway line	Residence	Mooroowoollen
822	Gall, Francis H.	Sydney	Freehold	Tangryang
467	Cloute, David	Tangryang	Freehold	Tangryang
913	Grecean, Thomas	Tangryang	Freehold	Tangryang
1576	Malley, James	Tangryang	Freehold	Tangryang
1772	Nimmett, Robert	Tangryang	Freehold	Tangryang
1695	Morrice David	Ealing Forest	Leasehold	Tangryang
1059	Hogg, James	Sydney	Residence	Tangryang
466	Cloute, William senior	Tangryang	Residence	Tangryang
591	Curtis, Edward	Tangryang	Residence	Tangryang
733	Felthorn, George	Tangryang	Residence	Tangryang
737	Ferguson, Walter	Tangryang	Residence	Tangryang
763	Fitzpatrick, Hugh	Tangryang	Residence	Tangryang
1049	Hoare, James	Tangryang	Residence	Tangryang
1147	Jennings, William	Tangryang	Residence	Tangryang

No	Name	Residence	Qualification	Situated
1444	McEwan, William	Tangryang	Residence	Tangryang
1889	Pepper, Charles	Tangryang	Residence	Tangryang
1888	Pepper, William	Tangryang	Residence	Tangryang
2398	Wallace, Joseph	Tangryang	Residence	Tangryang
2431	Weekes, Henry	Tangryang	Residence	Tangryang

By 1878 there was a clear and growing disparity between Marulan and Mooroooolen. There were 27 residents or householders at Mooroooolen, and only 6 householders and 4 other residents at Marulan. We assume these are living within or close to the former town.

Also significant is the development of Tangryang, along the South Marulan road. Previously only a property name, there are 13 residents listed. This coincides with the development of more systematic limestone mining, which could now be freighted to Sydney on the new railway line.

3.8. Key Figures in the Township

Several of the town's inhabitants need to be investigated because they are important to understanding the area investigated archaeologically, such as Joseph Peters and Goodman Hart, who were both licensees of the Woolpack Inn, but very different in their personal histories and probably in how they set about managing a pub. Others come forward simply because they put things down on paper. We have some useful information about William Hawthorne and Mary Anne Winter, who were married to each other, very unhappily, but whose collapsing relationship documents a lot about how small towns worked and the lives of people without a social safety net. Also discussed here is a father, son and grandson trying to rejoin each other in Australia, perhaps not quite as nice a family picture as it seems, as the father was transported for killing his wife.

The lives of these people have been explored in some depth. They reveal the diversity of backgrounds of those who came to live in this small rural town, and the complexity of their interactions with each other. In relation to marriages there are convict-convict, free-widowed, convict-free and free-free pairings, as well as spousal murder mentioned above. The backgrounds are not always easy to classify but include a broad swathe through the lower middle of Britain's class system. Their eventual fates are even more diverse, ranging from Joseph Peters' success, large family and long life, through to William Hawthorne's all too public humiliation by his wife. These lives are far more complex and intricate than any archaeological analysis could reveal, but they remain a necessary step in making sense of the town and its physical remains.

3.8.1. Joseph Peters

Joseph Peters was the licensee of the Woolpack Inn and arguably the most important person in the early development of Marulan. We are indebted to Goulburn researcher, Mr Tom Bryant, for his detailed work on Peters life before and after Marulan, which clarifies a number of errors that have appeared in previous historical studies²⁰².

Peters came to Australia as a convict on board the *Grenada* in 1819 which began its voyage at Birmingham²⁰³. He was assigned to the Emu Plains Agricultural Establishment, where he eventually became overseer of the tobacco gang in 1822. Even though a convict he received a small salary for this supervisory role. A year later he married convict Mary Robinson at St John's Church Parramatta. He received a certificate of freedom in 1825. The 1828 census describes him as a tenant at Oakbrush Farm, while he worked as an overseer for MA Kinghorne at Cardross, both on the Goulburn Plains. Kinghorne owned a watermill at Emu Plains, north of the agricultural establishment and may have known Peters during his time as an overseer²⁰⁴. Peters had an assigned servant, David Foley, working for him at Oakbrush Farm²⁰⁵.

Four years later Peters is recorded as having three assigned servants – Owen Smith on the Wollondilly, presumably the Durrah Forest block, Catherine Daley and Christopher Herbert – on Goulburn Plains and Argyle respectively²⁰⁶. These latter two listings are likely to refer to the Oakbrush Farm property. Both Herbert, aged 20 in 1837, and Smith, aged 26, had arrived in 1832 in the *Dunvegan Castle* convict transport²⁰⁷.

Joseph and Mary gave birth to a number of children but only one, Mary, born 1828 survived from this early period.

In a letter to the Colonial Secretary in January 1833 Peters said that he was occupying land that had been promised to him by Governor Brisbane in 1825 and requested a deed. 'It has been measured two and a half years since by Mr Surveyor Dickson, containing three hundred acres, situate on the bank of the Wollondilly River. County of Argyle and bounded to the west by Wilmott.'²⁰⁸ Eventually this was granted [refer to Figure 3.7].

²⁰² Wyatt 1941, for example, confused the location of the first Woolpack Inn, making it at Marian Vale rather than along the Wollondilly, and duplicated the 1835 and 1836 *Calendar and Post Office Directory's* mistaken 'Divarrow Forest' for Durrah Forest. These mistakes have been repeated in later regional histories. Tom Bryant's work is invaluable in documenting the detail of Peters' movements following the completion of his sentence, and sorting out his actual land purchases and intentions.

²⁰³ Peters himself sometimes says 1820.

²⁰⁴ Kinghorne's mill was at the northern end of Emu Plains.

²⁰⁵ Sainty & Johnson 1980: F0929.

²⁰⁶ Trinder and Stemp 2005. In the 1837 Return of Convicts [Butlin *etal* 1987] Herbert [no. 12191] is listed as being in Maneroo and Smith [no. 23851] at Inverary.

²⁰⁷ Butlin *etal* 1987.

²⁰⁸ SRNSW Reel 1172: Peters to Col. Sec. written from the Wollondilly 9.1.1833.



**Figure 3.7 - Peter's grant at Durragh Forest on the Wollondilly, on the bottom edge of a partly damaged survey plan dated to the late 1820s.
[source – SRNSW Map 3354]**

This grant²⁰⁹, portion 230 Parish Uringalla ran south from the bank of the Wollondilly River, crossing Riley's Road along the southern side of the Wollondilly. The property was known as Durragh Forest or Durragh Forest. Peters had already applied for and received a license to establish an inn, the Woolpack, there in July 1833²¹⁰. It was this inn at which the Polish naturalist John Lhotsky stopped in January 1834. 'I arrived in some exhaustion at the Pack Inn, and took my noon's rest on the banks of the Wollondilly in a small valley, a short distance to the right hand side of the Inn.'²¹¹

The locality names Durragh Durragh and Durragh Durragh are also found in letters written by William Davis in 1827, so it is likely to be an indigenous name²¹².

²⁰⁹ Parish Uringalla Portion 230. This is now part of a larger lot.

²¹⁰ SRNSW Reel 5051 Publicans License No. 33/359, 25 July 1833.

²¹¹ Lhotsky 1834, p. 24.

²¹² Col. Sec re Land Reel 1167 – William Davis.

It is not certain why Peters opened an inn along Rileys Road, but clearly he perceived a demand. After Bowman's Inn at Bong Bong there was nothing for travellers until a single inn at Mulwaree Ponds, unless they relied on the hospitality of the sparse inhabitants. By the time he had applied for his license the route of the Great Southern Road was already approved by Governor Bourke. There is no mention of the inn being a substantial building of any sort, and possibly it was of the simplest form. We know that by the end of 1835 he had closed the Durrah Forest inn and begun work on the Woolpack Inn at Marulan. By March 1837 he had also sold his 300 acres to Major Lockyer²¹³. This is the only land that we know Peters owned at the time and it may have provided the capital to begin work at Marulan, but this is not clear.

The Woolpack Inn was under construction when other Argyle landowners, particularly Lockyer, began to lobby Governor Darling to investigate an alternative route from Paddys River to Goulburn. This ran from near the Wingello stockade to near Lockyersleigh and then on towards Towrang. If built it would completely bypass Marulan [refer to Figure 3.3]. Peters wrote several letters to Mitchell as Surveyor-General who, equally angry, used them as ammunition to prevent the Governor from proceeding²¹⁴. Mitchell wrote 'One of the most palpable consequences of the interruption my plan experienced was that it interfered with the prospects of an innkeeper whose inn had already been half built of brick in anticipation of the opening of the new line'²¹⁵. He noted that the construction of the road had been 'retarded nearly two years on the representations of some of the settlers'²¹⁶.

An advertisement of January 1836 advertised the Woolpack Inn being readied for business [refer to Figure 3.8]²¹⁷. Peters had bought the first lots in the town at auction in October 1834, and the deed of grant was made on 26 November 1834. It is likely that construction began immediately on the inn and so perhaps there were about 6 months delay due to the argument about realigning the road. Nonetheless, travellers heading southwards or westwards would be able to take advantage of 'most respectable accommodations' and knowing 'his stock of Wines and Liquors, Beds, &c., cannot be equalled in the Colony.'

²¹³ Walker 1838: 4.

²¹⁴ SRNSW 2/44935 Letter Joseph Peters to Col Sec 20.6.1835; Letter Surveyor-General to Col. Sec. 19.11.1835.

²¹⁵ Mitchell 1836.

²¹⁶ SRNSW 2/44935 Letter Surveyor-General to Colonial Secretary 19 November 1835.

²¹⁷ *The Australian* 26 January 1836.

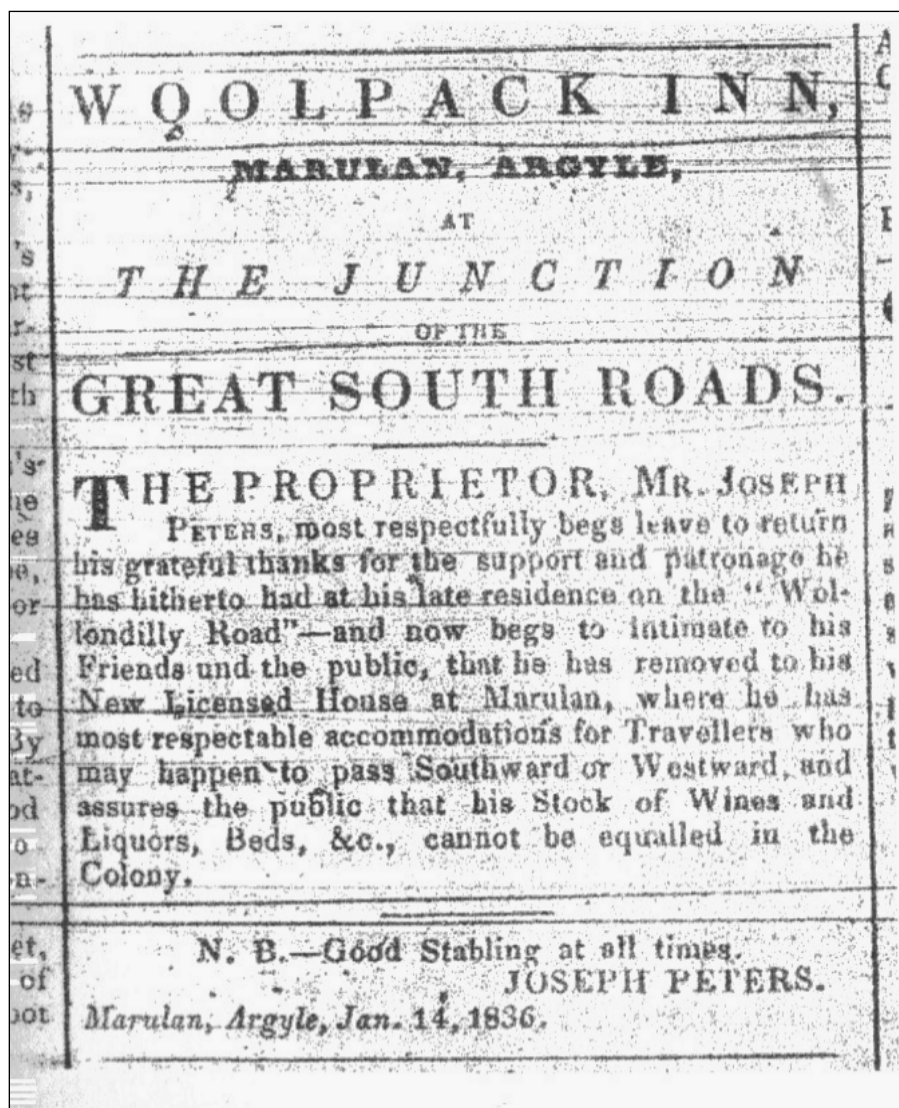


Figure 3.8 - The Woolpack Inn opens for business
 [source – *The Australian* 26.1.1836]

Once in place we know that Peters bought other properties within the town and elsewhere [Table 3.15]. In 1839 he bought land at what is now known as Marian Vale, on the old line of road between Bungonia and Goulburn²¹⁸. Other purchases followed, including land at Little Forest on the way to Towrang, and around Marulan. By 1843 he was living at Marian Vale, based on the baptismal evidence of one of his daughters. In 1845 his family had relocated to Bungarby, near Bombala, where the family remained, the property eventually becoming 'Peter's Park'. By 1842 he seems to have discontinued active involvement in Marulan, with his land in Section 5 being sold, although his four lots in Section 1 were not sold until 1852.

²¹⁸ Parish Jerrara Portion 81. This building is still standing and has been conserved. It appears to be the one mistaken by Wyatt [1941] as Peters' first Woolpack Inn. Tom Bryant has tried to set the local record straight.

**Table 3.15 - Successive land holdings of Joseph Peters.
[source - SRNSW Reel 1172 Joseph Peters]**

Location	Area / Price	Requested	Response	Deed Executed	Deed Despatched
Wollondilly River	300ac	JP letter 9.1.1833	Approved 2.4.1838	28.9.1833	1.8.1834
Marulan town Section 1 Lots 1, 2	1 ac total £10.13.4 £4.6.8		IRO 11.10.1834	26.11.1834	22.12.1834
Marulan town Section 1 Lots 3-10		Applic for sale 25.1.1835		declined	
Marulan town Section 2 Lot 10	0.5 ac £13.0.0		IRO 20.1.1835	14.2.1835	11.3.1835
Marulan town Section 1 Lots 3-4	1 ac total £11.6.8			3.3.1836	21.4.1836
Marulan town Section 5 Lots 5-10		Applic for sale 16.12.1836	Approved Col sec14.3.1837	29.5.1838	29.10.1838
New Line of Road 4 miles west of Marulan	320 ac 320 ac	Applic for sale 7.2.1837	Approved 27.5.1837	Possibly never went ahead	
Head Jerara creek Lot 46 [<i>Marian Vale</i>]	320 acres £80	Applic for sale 6.11.1837	Sale 24.9.1838	24.1.1839	13.4.1839
Parish Marulan Lot 58 – east of village, south of Barber	100 acres £55	Applic for sale 9.7.1838		27.2.1839	11.6.1839
Marulan town Section 6 Lots 1-6	3 acres total		Sold – but cancelled by Col. Treasurer as deposit withdrawn ²¹⁹	Withdrawn mid-1839	
Little Forest ²²⁰	100 acres	JP letter 28.8.1839	Approved Col Sec 9.10.1839 Sale 40/607 6.5.1840	? Never went ahead	

Not included in Table 3.15 are holdings, squatting runs or speculations that Peters involved himself in on the Monaro tablelands and possibly elsewhere. As early as 1837 he had assigned convicts listed as situated on the Maneroo and mentions are made of partnerships with various squatters.

²¹⁹ NSW LTO CP 10.872 – annotated plan Section 6.

²²⁰ This was incorrectly listed in the deed as Little Forest in the County of Camden, which is near Mittagong and appears to have resulted in some confusion [e.g. repeated in Day + McCartney 1996: 17]. This holding is not shown in either Dixon's later map [Walker 1837] or Baker's County Argyle map.

While Peters does not appear to have planned on maintaining his career as a publican, his purchase in 1839 was for land 'at a place called the Little Forest, on the New line of road, from Marulan to Goulburn'. 'This land is intended to be purchased for the express purpose of erecting thereon a House, buildings, and offices +c., for a public inn, as there is no house between Marulan and Goulburn, and a place of accommodation for travellers is much wanted thereabouts.²²¹'. The pub, and possibly the land sale, appears to have never proceeded, and later pubs at Shelly's Flat [Plumb's] and Towrang [The Harrow] serviced travellers. The cancellation of the sale of the six town blocks in Section 6 to Peters came at about the same time. It is tempting to speculate that as he finally got the deed to Marian Vale in April 1839 he cancelled these other pending purchases and invested all of his money into getting his home built.

The ownership of land in the 1840s was not without risk as well. Peters tried to sell the inn in 1841 and in 1842 the license was taken up by George Wakeley, but later records suggest that this was only the sale or lease of the inn operation itself. Peters may have acted as an unregistered mortgagee for this transaction. In 1847 however a mortgagee sale included three of Peters' key holdings – his lots in Sections 1 and 5 of the town and the 100 acre holding immediately to the southwest. No further information is available on this action and whether it was successful, but Peters remained the registered owner until his sale to James Kirwan in 1852.

The building of the Marian Vale property took place during the period recorded in the Woolpack Inn ledger. As a result we have some sense of the tradespeople who Peters was employing to build it, as well as his other servants and employees.

While Peters had considerable authority as the licensee of a successful inn and increasingly a landholder, he had to be careful in his relationships with the large district landholders, who acted as magistrates or who could use influence to make his life easier or harder. For example his license to sell wines and spirits at Marulan was assessed by three justices of the peace at Goulburn. These were J. Rossi, Andrew Gibson and L. Macalister, all of whom were large landowners with establishment connections²²². Major Lockyer was another landowner who supported Peters getting the postal contract at Marulan²²³, and bought the Durrah Forest block, but also prominent among those who lobbied to get the South Road redirected closer to Lockyersleigh and away from Peters' new inn.

Joseph and Mary had the misfortune to lose children early in their marriage. Later they had 11 daughters, whose names and dates of birth were carefully recorded in the front of the register of the Woolpack Inn, which acted as a sort of family bible²²⁴. Seven were named in Joseph's will, marrying in to established Monaro pastoral families.

²²¹ SRNSW Col Sec re land Reel 1172 Joseph Peters letter 28.8.1839.

²²² Tom Bryant, pers. comm.

²²³ SRNSW Col. Sec. Letters received 38/979 Major Lockyer to the Col. Sec. I am indebted to Tom Bryant for bringing this correspondence to my attention.

²²⁴ A microfilm copy of the Woolpack Inn register is kept in the Mitchell Library. The current location of the original has not been established.

Joseph died in January 1872, his death coinciding with the abandonment of old Marulan. His will was drawn up two months before his death, suggesting he was suffering from a debilitating disease and was likely to die soon²²⁵. Mary passed away in 1884. Both are buried in the Church of England Cemetery in Bombala.

Based on the information above and clues in the archaeological record is it possible to present a character sketch or a deeper understanding of Joseph Peters? He appears to have been a capable businessman, steadily building wealth and moving his business to maximise his returns. Nothing is recorded of his character, although the few mentions of the Woolpack Inn during this period tend to refer to it as 'Joe Peters inn' or 'Peters Inn', suggesting that he made himself known to his guests and that personal recognisance was important²²⁶. He took a big risk in putting the Woolpack Inn on an as-yet unbuilt road, and particularly in investing so much money in it. While the Durragh Forest inn was probably modest the Woolpack Inn aimed at being a high quality inn. From its advertisements it aimed at the 'quality' traveller, who would have appreciated the fine wines and a good bed. It was not aimed at the commonplace road users – a convict carrying messages, shearers, bullockies. They were still served, but there seems to have been a deliberate desire to attract and make the acquaintance of the landowners and squatters who also travelled the road, as the people who mattered, and who could help with favours, information, contacts and so on. Not least, as the father of numerous daughters in an area that still had very uneven sex ratios he would have been careful to make sure that their marriage prospects were boosted.

Even less visible was his wife Mary. Most of the Woolpack ledger customer headings are in a confident and practised hand, which we may assume is Joseph's writing. But there is another distinct hand, a bit shakier, that does some of the headings and entries. As any entry into the ledger represented credit given by Peters, it is likely that he was responsible for determining whether a customer could be trusted sufficiently to have an account. This makes it likely that he would be the one opening the ledger and starting a new page. The only other person who he is likely to have trusted to make this sort of decision in his absence would have been Mary. If so, her handwriting reveals someone less educated in penmanship and not a confident writer, often spelling names phonetically. The wife of an inn-keeper would typically have been responsible for the domestic staff of the inn, the kitchen and comfort of the guests. Her daughters would most likely have also worked in the inn, and part of her role would be in teaching them both domestic duties and managing a hostelry.

In looking at what survives of the Woolpack Inn – the bottom part of a toilet – we note that even this most out of the way and never-to-be-seen part is built of incredibly hard porphyryite. This has to reflect a great confidence in his investment in this new inn on an untried road. Probably, by his own time spent working on the Goulburn Plains and talking to respectable travellers, he was able to form a sound view that the south would

²²⁵ Probate record – Joseph Peters – date of death 30.1.1872, date probate granted 17.5.1872 SRNSW Container 14/3473 Item – Series 1 9451

²²⁶ e.g. Russell 1888: 190.

continue to grow in prosperity and that a good strategy would be to aim for the 'quality' customer, who may not drink so much but would bring other benefits. The Marian Vale house also shows a man who was not ostentatious but going for solid sensible well-built joinery, decent-sized rooms, comfortable but not grand setting. The house is oriented for the view out, rather than for the benefit of passers-by. It does not look like he had anything to prove to anyone; he had done well and was planning on enjoying it how he liked.

This sketch is consistent also with the archaeological evidence from the Woolpack Inn site. The artefactual material in the cesspit shows that there was a definite catering for a better quality of customer. This can be seen in the quality of the ceramics and the cuts of meat, both of which are above the normal quality that would be expected.

3.8.2. Goodman Hart

Goodman Hart appears in Marulan as the third licensee of the Woolpack Inn after Joseph Peters and the poorly known George Wheatly [also Whatley and other spellings]. Hart first appears as licensee in 1845 and again the following year when he also bought five town lots further to the east in Section 8. Then, after a gap in the records Hart reappears but he quickly falls into bankruptcy, followed by a short period as licensee of another Marulan inn²²⁷.

Isabella McPherson originally married James McClure. They had seven children, and migrated from England to Van Diemens Land, arriving in 1823. James held an inn license, which passed to Isabella when he died in October 1835. Isabella then married Goodman Hart on 28 June 1836. According to Jim Webster's comprehensive research Goodman Hart's family came from Portsea in Hampshire. Hart was born in 1811 and arrived free in Hobart in August 1833 as a passenger in the *Emperor Alexander*, a convict transport. Raised in the Jewish faith a Hebrew prayer book exists with Goodman's signature in Hebrew script and an inscription 'The Freemason's Tavern, Launceston, Van Diemens Land'.

On 18 June 1836 Goodman asked permission to marry Isabella McClure and on 28 June 1836 they married. The witnesses to the marriage were Frederick George Spicer and Anne Maria Spicer. Frederick Spicer was a chemist and druggist in Launceston and on balance it seems that Goodman must have worked for and formed a close association with the Spicers as later Goodman claimed to be a chemist and druggist.

Following his marriage to Isabella he took over the license to the Royal Oak Inn in Launceston for a time, but in 1837 newspaper reports record Hart as being insolvent and court proceedings followed. In 1839 he was further charged with stealing a goose,

²²⁷ Detailed information about Goodman Hart's life before and after his time in Marulan has been obtained from Jim Webster, the great-great-grandson of Hart's wife Isabella McClure. I am grateful for his generosity in sharing his research and for permission to quote from his family history in progress – Webster 2009.

valued at 6 shillings, and received a term of prison with hard labour for two years, but this was commuted after about a year.

Hart had married into a large family, with Isabella having eight children aged from 31 years down to less than 13 years old. Their reaction to their new father-in-law was not good, the re-marriage prompting most of the children to leave home and head to New South Wales. Soon after his release Hart and Isabella moved to Sydney in c.1842. The reason for the move to the mainland is not clear, but possibly a clean start following insolvency and prison in a more open society than Van Diemens Land had to offer. Hart's brother Lazarus had been transported to New South Wales and by then had been issued a ticket-of-leave and a conditional pardon in 1843. Hart's father, Asher, and family had also emigrated to New South Wales around 1841 where he established himself as a clothier with a business in George Street. By July 1841 Hart's brother Henry had begun managing a general store in Goulburn next door to the Royal Hotel and later was a publican in Yass²²⁸.

Hart next appeared at Marulan following his brief period in Sydney, which included an affair that resulted in the birth of a child to his mistress. Hart became licensee of the Woolpack Inn first in June 1845 and again the following year. In 1846 he also bought five town lots in Section 8²²⁹. It is unclear if Isabella moved to Marulan with Goodman. Hart had leased the Woolpack Inn from its owner George Wheatley for a period of three years for £170 per annum. They fell out in a dispute over money loaned by Wheatley to Hart in 1846, resulting in a court case, and that seems to have soured their relationship sufficiently for Hart to terminate his lease²³⁰.

Hart's Jewish faith may or may not have been significant to him, but in establishing himself at Marulan he did so in a town that was close to the most substantial Jewish community outside of Sydney or Melbourne at the time. Many of Goulburn's merchants were Jewish and had established businesses that had survived the early 1840s economic troubles and which were to flourish in the gold rush years and Yass also had a number of prominent Jewish-owned businesses²³¹. In the following years, when he borrowed funds to build his own hotel, all of the money came from other Goulburn and region Jewish businessmen.

In 1848 the Freemasons Arms Tavern [or Inn] was built in Section 2 Lot 7, across the road and slightly to the east of the Woolpack Inn²³². A previous owner, John James, had built a house upon the lot. 'Hart has made, and is making, very extensive improvements on it. There is now built on it, an excellent inn occupied by Mr Hart, and he has also a store in course of erection on it.' A mortgagee for the inn, Edward Kitson, noticed that in an earlier clerical error the deed for Lot 7 referred to Lot 6 and vice versa. He wrote to the Colonial Secretary pointing this out, and the legal problem it

²²⁸ Levi and Bergman 2002: 300.

²²⁹ NSW LTO Serial 220 p46-50.

²³⁰ SMH 15.2.1848.

²³¹ Forbes 2005.

²³² Umwelt 2005 mistakenly believed that the Freemasons Tavern was built on Hart's blocks in Section 8.

caused – that the respective owners had title to the wrong blocks. Tellingly Kitson wrote that, as Hart had by then been declared bankrupt, ‘I have been afraid, believing Hart to be a very great rogue, that he would concert with the parties who have the other grant’ to in some way seek excessive compensation as a result of this error. He estimated Hart had invested about £1500 into the improvements to build the inn²³³. In the end the Government resolved the problem by paying compensation to the owners and retracting the deeds.

Hart became bankrupt shortly thereafter, but was charged with fraudulent insolvency, as he sought to claim additional false creditors which would have reduced his payments to legitimate creditors²³⁴. As a result of this he was sentenced to three years’ hard labour on Cockatoo Island.

Jim Webster picked up Hart’s trail again in Mudgee, after his release from Cockatoo Island. Shortly afterwards Hart moved to Adelaide where he became licensee of a pub, renaming the Family Hotel to Hart’s Family Hotel in Currie Street, in March 1853. He remained as the licensee until at least the end of the decade, when he took over another pub in Currie Street, the Golden Fleece Inn, from June 1860 to June 1862 as licensee. He managed to fit in two further relationships resulting in two more illegitimate births during this period. Then Hart moved to Port Augusta and took over the license of the Dover Castle Inn for two years. There he tried another insolvency fraud, this time being caught and sentenced to three years’ prison. From then until his death in 1874 records of Hart are sparse, although one places him as living in Currie Street again in 1870.

Did Goodman Hart live up to his name? Jim Webster certainly believes not, pointing out his convictions, the failure and insolvency of his hotels, affairs, bizarre clashes with others that took place later in Adelaide over a pet magpie and another over a pet dog, and an acrimonious dispute with Isabella’s children as repeated evidence that he was at best an indifferent businessman and fractious. His personality and conduct would have had a significant impact in the small community of Marulan. He also represents another category of rural person – the professional publican. From the time he married Isabella McClure he was involved in pubs, managing at least six during his life time. His motivations for managing the Woolpack Inn would probably have been very different to Peters, who was ultimately aiming to do well for himself and a large family, whereas Hart seems to have worked hard to reduce his step-children’s expectations. It would be reasonable to expect that during his period of management the Woolpack Inn would have changed its mode of business from that of a hotel aiming to capture the ‘quality’ trade along the road to getting in more paying customers. Peters appears to have valued contacts with the pastoral elite because they brought him opportunities to extend his business and invest intelligently, and he was able to use his contacts to cement his position solidly within society in the Southern Tablelands and beyond. Even giving

²³³ Reel 1167 Col Sec re Land – Joseph Newton – land at Section 2 Marulan.

²³⁴ *Moreton Bay Courier* 25.11.1848: 3.

credit relied on a good network of social contacts that assisted in sizing up peoples' capacity to eventually pay²³⁵.

Hart was a very different kind of man; coming from Van Diemens Land with perhaps few or no useful contacts in New South Wales, he could not afford to indulge in this type of generosity. He had a pub to run and a profit to make. There is no sense that he had particular ambitions to create something special for himself out of those profits, and no sign that the Woolpack was more than just the next job. He had no problem shifting to the Freemasons Tavern up the road later on.

3.8.3. William Hawthorne and Mary Ann Winter²³⁶

An important aspect of small town life that is often forgotten in histories supporting archaeological work is the sometimes tawdry personal dramas that people lived out. We are fortunate in having one example, which is presented here as an illustration of the town's social operation, and a reminder that archaeology needs to expect all manner of human behaviour.

The second successful application for land in Marulan after Joseph Peters was made by Mary Ann Hawthorne [nee Winter] in 1835, for 2 acres 12 perches, to be used as a school. This was for a lot on the western side of the road, placed close to the nominal centre of the town. Soon her dissolving marriage provided an opportunity for her aggrieved husband to petition the governor to present his side of a very ugly dispute, preserving a lot of incidental detail that is very useful in reconstructing life in early Marulan. But first, some background on the protagonists.

Mary Ann Winter had arrived in Australia in the *Florentia* in January 1834 aged 30²³⁷. This was its fourth trip to Australia, and the second as a normal passenger ship. It is probable that she came out as an assisted free migrant or bounty immigrant²³⁸. The colonial government developed a scheme in which the sales of crown land such as town lots at Marulan contributed to a fund that subsidised the passage of different classes of free people. The aim was to balance out the colony's demographic skew towards convicts and males. More than 800 assisted free migrants came out annually each year from 1832 to 1834²³⁹. Assisted passage to the value of £17 was paid to each passenger, about half on departure and the remainder upon arrival in Sydney, with many of the emigrants coming on specially chartered ships. One problem with the scheme was that it attracted people who were keen on leaving Britain rather than settlers keen on moving to a new land. The Committee appointed to review the

²³⁵ It should be noted that after the gold rushes began strangers were everywhere and many relationships that had previously relied on chains of identification and recommendation that allowed an assessment of credit-worthiness had to now be managed solely by cash payment. This experience of Peters and Hart as publicans may have been essentially different.

²³⁶ Sometimes Hawthorne is spelled without the final 'e', but this spelling is adopted for consistency in this document. Mary Ann is almost always written as two capitalised names, rather than hyphenated.

²³⁷ The *Sydney Gazette* 24.2.1834 lists her as travelling individually as steerage passenger 'Jane Winter' on the *Florentia*. Marriage certificate – William Hawthorne and Mary Ann Winter NSW Registry BDM No 1413 Vol. 19.

²³⁸ She is not listed in the standard index of Bounty immigrants.

²³⁹ Macarthur 1837: Appendix 10.

program later noted that they 'concur in representing a great number of the Female Emigrants as very different in character from what they appear to have been represented to the Committee in London, and quite unsuited to the wants of the Colonists'²⁴⁰. One ship name in particular, *Red Rover*, carrying female emigrant passengers, became a colonial euphemism for promiscuity²⁴¹.

About six months later we know that Mary Ann was in the Marulan area. This makes it very likely that she had either met William Hawthorne by this time, or possibly had picked up work as a governess to one of the wealthier pastoral families, and had met him locally. On 3 January 1835 she married William at a ceremony at Glenrock, near Marulan. We know her movements because Surveyor Hoddle responded to a letter from the Surveyor General, saying that he will do work on 'James R. Styles and Mary Ann Winter Allotments at Bungonia'²⁴². From the internal context of Hoddle's correspondence this appears to be an error, and he meant Styles at Bungonia and Winter at Marulan.

The marriage was announced in the Winter family's local paper, *The Lincolnshire, Rutland and Stamford Mercury*, stating that it was performed by the Reverend John Vincent. It made no mention of William Hawthorne's profession or former convict status, and Mary Ann was 'second daughter of the late Mr Richard Winter of Grantham'²⁴³. A Richard Winter had been mayor of Grantham earlier in the century, perhaps suggesting some social status for the family. Closer in time a business directory of Lincolnshire shows both Richard Winter and Richard junior as grocers and tea dealers²⁴⁴. Perhaps the death of the father some time after that made life difficult for an unmarried second daughter and this prompted her migration with the incentive of an assisted passage. Alternately, she may have already have caused problems with her behaviour and the opportunity of a paid passage to the other side of the planet was a good reason to leave²⁴⁵.

Little is known of William Hawthorne, and the record is confused because two convicts, both sent out in 1818, shared the name. He was born in 1798 but there is no other biographical information²⁴⁶. Judging from his handwriting and his use of language, William was probably a school teacher, which explains the intention to establish a school. He was probably the Hawthorne who came in the convict transport *Shipley*. If so he appears to have worked initially around Windsor and Wilberforce, receiving a ticket of leave in 1827²⁴⁷. One of the Williams was issued with two separate ticket of leave passports, one in November 1835 and the other in March 1837. Both were issued

²⁴⁰ Macarthur 1837: 110.

²⁴¹ Introduction by Elizabeth Lawson in Louisa Atkinson, *Gertrude – the emigrant*, Australian Scholarly Editions.

²⁴² SRNSW Reel 3070: response to SG No 34/200 date 26.6.1834.

²⁴³ *Lincoln, Rutland and Stamford Mercury* 26.6.1835.

²⁴⁴ *Pigot and Co's National commercial directory for 1828-9*, Lincolnshire volume: 529.

²⁴⁵ There is a large body of commentary on whether female assisted immigrants in this period were beneficial to the colony or not. The evidence overall tends to support the former, making Mary Ann one of the anomalies on which the stereotype was based. See Haines 1997 for a summary of the debate.

²⁴⁶ BDM Marriage certificate – William Hawthorne and Mary Ann Winter NSW Registry No 1413 Vol. 19.

²⁴⁷ SRNSW 4/4064 Ticket of leave no 27/528.

on the recommendation of the Windsor Magistrates Bench, the closest to Wilberforce²⁴⁸. These coincide with William's marriage to Mary Ann in early 1835 and subsequent settlement at Marulan. Shortly thereafter the Wilberforce William received two conditional pardons in quick succession, coinciding with his relief in his letters that he no longer had the possible revocation of his ticket of leave hanging over him²⁴⁹.

William asked Mary Ann to buy some land for them both as he was unable to take land in his own name. There appears to have been some correspondence with either the Colonial Secretary or Surveyor-General about the potential for establishing a school and therefore seeking a much larger grant before the town plan was finalised²⁵⁰. This she did at Marulan at auction in August 1835, and the deed was dated from 15 October 1835. Only her name was on the title, because William was still serving his sentence. Soon after the purchase of the property in late 1835 her behaviour became so extreme that 'the neighbours threatened to report her to the government, and endeavour to have the sale of the land cancelled as memorialist [which was how William referred to himself] was only a Ticket-of-Leave'. What exactly her behaviour was is not known. William's concerns for his tenuous position were possibly justified, as the upset neighbours would have included the large landholders who acted as magistrates and could have rescinded his ticket of leave. He made up with the neighbours for his wife's behaviour and applied to have his name added to the deed for the land, which was never done. In October 1835 Mary Ann 'with the consent of her Husband, WILLIAM HAWTHORNE, of Marulan' borrowed £69 for six months, using 24 head of cattle belonging to William as security²⁵¹. But things got worse from there.

*The petitioner [i.e. William] built a dwelling on said land and resided thereon until March 1836; when in consequence of his wife having polluted his person, and being of grossly dissolute, and infamous morals and habits, and retailing liquors illegally, [instead of assisting memorialist to keep a school, agreeably to the purpose for which said land was obtained] and in opposition to the repeated remonstrances of memorialist, who would in case of a conviction be liable ... to the deprivation of his ticket, and probably to transportation to a penal colony ... decided to leave and look for a job in Goulburn. The job was already filled ... and he therefore returned; but found his wife had in his absence sold the material of the dwelling house, and other property; but other unfinished buildings remained, together with the fences &c., and She forthwith went to live in an open and public state of adultery, and she still continues living with her paramour even unto this day.*²⁵²

²⁴⁸ SRNSW 4/4235 Nos 35/015 and 37/023.

²⁴⁹ SRNSW Reel 776 27.6.1837 – Pardon 36/10601; 20.11.1837 – 39/068.

²⁵⁰ No relevant correspondence has been located to date.

²⁵¹ *Sydney Gazette* 3.3.1836. The lender was James Quin. The stock was agisted on Mr Hume's property at the Fish River and Mr Barber's at Yass. As Barber was local it is likely that this was a personal arrangement between him and William.

²⁵² SRNSW 2/7876 Col. Sec. re Land - Hawthorne – the entire submission goes on for 8 pages, including copying sections of relevant correspondence and permits for the Governor's benefit.

Early in 1836 Mary Ann was advised 'by her public paramour "Donald Duncan", and another person, to sell unto her private paramour "John Richards" of Berrima the said land'²⁵³. The land was sold for £20, supposedly in grog, when it was worth £80-100 with a promise by Richards that Mary Ann and Donald Duncan could remain living there for another two years, and that Richards's mail coach and horses would be housed there as well. Because she ran a sly grog house frequented by the servants of the surrounding grants the neighbours again jacked up, causing the adulterous couple to move to Berrima, where Duncan worked as a clerk for Richards 'until their further misconduct caused them to leave'. Their further adventures have not been researched for this report²⁵⁴.

Hawthorne's complaint, apart from the obvious pain of being polluted, cuckolded and publicly humiliated, was that Mary Ann had sold the land for a quarter of its value and, as his name was not on the deed, was unable to prevent any of this happening. In May 1837 William received a pardon, meaning he no longer had that particular threat hanging over him, but he did have continuing money worries²⁵⁵. A month later all his cattle that were being agisted on the Fish River near Bathurst were seized to cover the payment of the loan and other debts of more than £85 that Mary Ann had generated. The cattle were sold for only £60. Being now broke, landless, and without any property of value at all he accepted a job at a small school at Collingwood station, near Gunning.

Hawthorne had placed a notice in newspapers, but this had no effect:

CAUTION

Whereas, My wife Mary Ann Hawthorne, has thought proper to elope from me, I hereby caution the Public not to agree with, bargain, or purchase any land, horses or [?] cattle, or any part or parcel, goods or chattels [?], as I will not sanction such bargain [?] whether by oral or written authority.
*WILLIAM HAWTHORNE*²⁵⁶

In concluding his petition to the Governor Hawthorne betrayed the depth of his despair, quite sure that:

... his wife, Donald Duncan and said Richards were in hope that by plunging him into difficulties and reducing him to a state of bodily and mental misery, they could enjoy without molestation the fruits of their joint villainy...

This sad story reveals not only a troubled marriage but also the way that things worked in a very small town like Marulan. Even though they were located in a remote town their interactions took in an extended region from Berrima to Goulburn and Gunning, and correspondence to one of the highest officials in the colony. The policing of the

²⁵³ John Richards of Berrima was a businessman with interests in coaching and cartage in Sydney and the Southern Highlands. He bought the Goulburn Brewery a month or so before his death in December 1838 – *Sydney Gazette* 10.11.1838; 15.12.1838.

²⁵⁴ Apart from the stroppey letter from Mary Ann to Mrs Styles in February 1838 she disappears from view.

²⁵⁵ *NSW Govt Gazette* 17.5.1837.

²⁵⁶ Unsourced news clipping attached to SRNSW 2/7876 Hawthorne. Gaps are damage in the original.

moral tone of the town was left to the major landowners in the surrounding district, directly affected because their workers were coming into town to buy grog and get up to mischief. The publicans were also concerned because it cut into their business and caused disorder. Their leverage was against William rather than Mary Ann, because he held a ticket of leave and they could hold its rescission as a real or imagined threat. He was expected to keep his wife in line, and any failings fell upon him. When things got bad there was no safety net for recent immigrants in family or friends, let alone a sympathetic administration.

Some sense of the approbation that Mary Ann caused comes from the Woolpack Inn ledger. Mrs Hawthorne has a page with her account. Everyone else is headed 'Mr Williams' or 'Mrs Keefe of Maneroo' and so on, but instead we find 'Mrs Hawthorne !!!', as clear a badge of notoriety as there could be. And, if that was not enough, in the alphabetical index at the front we find, under H the entry 'Hawthorne Mrs [damn her]'. She only has a single entry, unfortunately undated, totalling £1, while her husband remains a steady customer throughout the period September 1839 – June 1841²⁵⁷.

This was not only a problem between her and the authorities. It also affected her standing with the other women of the area, who clearly disapproved of her conduct, and who could be expected to pressure their husbands and families in their dealings with her. Mary Ann, however, was not the sort to meet an insult with a dignified silence. The following extraordinary paid advertisement appeared in two successive issues of the *Sydney Gazette* in February 1838:

MADAM,

IT is long since I addressed you, and never before through the medium of the newspaper, and doubt not that these lines will be less welcome than they once had been, still I have a christian feeling though it has been much abused.

Look back, look forward, and you will see a back door in most families; and cast not dagger remarks upon the unfortunate by saying, when you learnt I passed your residence, I had gone to the dogs like many more. I deny it, both in public and private, for since my separation from William Hawthorne I have paid my way, and that with hard earning, I owe nothing, and want for nothing, and what can you say more!

*I am, Madam,
Yours, agrieved,*

*MARY ANN HAWTHORNE.
To Mrs. Styles, Argyle²⁵⁸*

²⁵⁷ ML FM4 5366 Woolpack Inn ledger.

²⁵⁸ *Sydney Gazette* 6.2.1838, 8.2.1838.

This is the last certain record that we have for Mary Ann Hawthorne possibly apart from the Woolpack Inn ledger entry. Even though she had publicly destroyed her husband's life and both their reputations she still thought it important to keep his name, and clearly would not allow any sense of apology for what she had done.

3.8.4. John Drover and William Drover

John Drover [sometime Drovers] was a blacksmith who lived in Marulan. We do not know where he lived in the town, but as Joseph Peters had a blacksmith attached to the inn, or who contracted work via the inn, it may be the same person²⁵⁹. Some of the information below comes from research carried out by Lorna Parr, and we thank her for her generosity in sharing it.

John is listed in the 1839 *Calendar and Post Office Directory* as a Marulan resident and blacksmith²⁶⁰. At the beginning of the same year in February he made an application to purchase land in the town²⁶¹. The letter provides some useful information about the early township.

Two acres adjoining Hawthorne's land purchase on the Great South Road in the Parish of Marulan, near town of Marulan.

The above is applied for the purpose to erect a Blacksmiths and Carpenters shops.

Also 6 allotment as near the road as possible [cannot describe them as there is now marked out, but what is sold] in the town of Marulan.

Also 3 other allotments near the church reserve, town of Marulan.

Also 3 other allotments near Peters and Tittertons allotments, town of Marulan.

I am free and arrived in the Colony by the Ship Goshawk from Liverpool in the month September of the year 1836.²⁶²

The letter implies that he is already resident in the town.

After the letter was received in the Colonial Secretary's office notes were made on the rear about the merits of the application.

²⁵⁹ The following information comes from research undertaken by Lorna Parr of the Marulan and District Historical Society, and Ms Ann Holmes, a descendant of John and William Drover. I thank both of them for their willingness to share their material for this project.

²⁶⁰ *NSW Calendar and Post Office directory* 1839: 46.

²⁶¹ SRNSW X645 Col. Sec re land application 39/3219.

²⁶² SRNSW X645 Col. Sec re land application 39/3219.

Reference no 39/69. 39/70

1st portion

Vacant. This sounds was previously applied for as a purchase by M.A. Hawthorne vide Abstract 36/37 for the purpose of making a paddock but the application was refused by Colonial Secretary's letter 36/270. The [??] now assigns for purchasing it is for the [purpose?] of erecting Blacksmiths and Carpenters shops. I have not given direction for the measurement but await His Excellency's directions on this subject, although I must own that I do not see any sufficient grounds for attending to this irregularity. The party should purchase from [??] area allotments.

"Refused"

The application for lots near the Church reserve was also unsuccessful as all blocks had been allocated.

In the 1841 Census William Drover, rather than John, is listed as one of three householders in the town. Originally this was dismissed as a clerical error except that there is a very useful explanatory letter that explains that William and John are not the same person.

In the 1837 Return of Convicts William Drover was recorded as assigned to Hannibal Macarthur at Arthursleigh²⁶³. In October 1839 William was granted a ticket of leave, and was given permission to remain in the Goulburn district²⁶⁴. He later received a conditional pardon in 1847²⁶⁵. William Drover, unlike John Drover who came free to the colony, was a transportee. Working backwards he arrived in 1831 on the ship *Camden*. He was tried in Glasgow on 7 January 1831, and received a life sentence.²⁶⁶ He had been a blacksmith at Govan Colliery.

In a letter to the Colonial Secretary in July 1839 William laid out his circumstances:

*Arthursleigh Wollondilly
Argyle July 18 1839*

Sir

I beg leave to intimate to you that my form for a Ticket of Leave has been placed in the police office Goulburn, upwards of the term required by law. I have presumed the liberty of addressing you on this subject from your former kind interference in my behalf and your recommendation of me to Mr

²⁶³ 1837 Return of Convicts no. 7774 – William Drover.

²⁶⁴ SRNSW Tickets of leave No. 39 / 1869 – 7 October 1839.

²⁶⁵ SRNSW Reel 784: pardon 47/547 30.7.1847.

²⁶⁶ *Glasgow Herald* 7.1.1831; 10.1.1831.

H. McArthur which recommendations have been the cause of me obtaining considerable indulgences from that gentleman and likewise respectful treatment from all his good family which have in my misery been cheering to my mind and such kindness will ever be bore in most grateful remembrance.

One of my sons, his wife and children came to this colony, about two years since. He has commenced business on the New Line of Road heading to Goulburn and is making a comfortable home for his family - and I am most desirous to join him. Hoping you will pardon the liberty I have taken and have humbly to solicit further interference to forward a ticket of leave as requested in form delivered when I will then acquaint Lord Melville who has [considered] frequently to recommend me to the [authorities] in this place. Your further interference will ever be remembered with gratitude.

*I am Sir
Your very obedient & humble [servant]
William Drover²⁶⁷*

This courteous letter came from a man whose crime was the culpable murder [i.e. manslaughter] of his wife Isobel, for which he was given a sentence of transportation for life²⁶⁸. Even so, his son John appears to have wanted to stay close to his father, coming to the colony and setting up a blacksmith business in one of the towns nearest to his father forming along the road.

In the 1841 census the household record is William Drover, aged between 45 and 60, and a boy between 7-14, who came free, and was almost certainly his grandson. Befitting a man transported from Glasgow he and the boy are both listed as being Church of Scotland faith, and Drover is an 'artificer and mechanic', maintaining his blacksmithing. John and his wife are not mentioned, nor are any other children. If William was holding down the business, it is likely that John had moved with his family to set up another blacksmithing business somewhere else again. Unfortunately there is a large gap in town records at this point so we do not have any more about this essential service or the people who carried it out.

²⁶⁷ SRNSW X465 - 39/8154 - 23 July 1839; 39 / 6789 – 25 July 1839.

²⁶⁸ *Glasgow Herald* 7.1.1831; 10.1.1831. The evidence in the trial was that Isobel's body was covered in bruises, William's defence being that she drank heavily and often fell down. Even though there was testimony that he was otherwise a kind and sober man, autopsy evidence suggested her death had been preceded by violent impacts consistent with bashing. The judge said in his statement that he was bound by the jury's verdict of culpable murder, i.e. manslaughter, but considered it had most likely been murder and so imposed the maximum sentence allowable.

3.9. Town Infrastructure and Organisation

3.9.1. Marulan's Status

In 1848 William Wells described Marulan as 'the second town of Argyle'²⁶⁹. Baker's *County Atlas of NSW* of about the same date depicted Goulburn as the largest, then Bungonia and finally Marulan as the three towns of Argyle. The town layout of Marulan is shown in Figure 3.9. Its surveyed town plan was smaller than Bungonia's but, because it was bypassed early on, Bungonia never grew to fill its surveyed limits.



Figure 3.9 - Layout of the towns of County Argyle
[from Baker's *County Atlas of NSW*, c. 1846]

During the mid-19th century the role of civic administration underwent a change²⁷⁰. In the earlier part of the century the role of rural towns had been downplayed, in part because of the costs to the colonial government in ensuring that they were properly

²⁶⁹ Wells 1848: 15.

²⁷⁰ Golder 2005.

serviced when there was no effective way of getting money out of those who stood to benefit from their presence. Where town-founding was necessary, as along the great roads, these provided logical places for police outposts, but most of the other civic functions remained in a parallel private realm. Churches and major land owners were largely responsible for ensuring civilisation came to the towns, and that civic order was maintained. Services like the post were contracted to innkeepers and contractors. Schools were private and based on parental subscription. Where a large service town such as Goulburn was nearby it was even harder to encourage the outlay of either public or private capital to create the town's civic core.

In the hierarchy of rural settlement Marulan was only one step above the isolated traveller's inn. It had the benefit of a town layout and the promise that came from important regional landowners investing in it, but it was hampered in growing by a number of factors. Firstly, there was the presence of Goulburn as the regional town one or two days' travel to the south. Then there was the limited trade that came along the road. There may have been seasonal peaks such as when the shearing was on, and even short-lived booms when gold was found in the southern goldfields, but these were not sustained. It was surrounded by large rural properties that had small workforces and their own supply networks that could completely avoid the town. Economically it remained marginal through its entire existence, and the population figures discussed above reinforce that it remained a small town reliant on traffic moving along the road, and only providing limited local services.

Even so, the small population did work hard to create the trappings of urban life, and these are discussed in the following section.

3.9.2. Official and Civic Functions

Post Office

A post office was established in 1838²⁷¹, superseding a contract mail service. Joseph Peters was appointed the postmaster on 3.4.1838, following some concern that the post office was going to be run out of the Woolpack Inn²⁷². The successive postmasters were Peters [from 18.3.1838], William Addison [28.3.1842], John Fulljames [by 1847 – refer to Section 6.12 below], James Moroney [1.1.1858], Francis McCarthy [1.1.1861] and John O'Neill [1.10.1866].

James O'Neale was the mail contractor for the Marulan – Bungonia run in 1836. On September 22 he came across the body of John Haydon lying across the road, with his throat cut. James Smith was arrested for the murder and hanged in November²⁷³. He had the distinction of being the first currency lad [Australian-born boy] to be hanged for murder.

²⁷¹ *Australian* 29.5.1838.

²⁷² Eddy 2000: 20.

²⁷³ R vs Smith NSW Supreme Court, 1836.

In 1871 Joseph Pallier had the mail contract for carriage between Mooroooolen, the new town formed around the railhead, and Marulan and between Bungonia and Marulan. So even after the train arrived the identity of the two towns was maintained for at least a while.

There was a gradual transfer of postal responsibility from old to new Marulan. The name Mooroooolen remained in use at this time primarily for postal purposes but, as recorded by Eddy, when in 1878 the Mooroooolen Post office needed a new stamp, it was decided to use the one from old Marulan. This effectively signalled the death of the old town in the eyes of officialdom at the same time as handing the name to the new town. The old Marulan Post Office had finally shut on 28.2.1874.

Transport

Connection with other towns was served well with Marulan being on the main southern route. Before the town was established the Goulburn mail service ran every Tuesday along the old road passing through Arthursleigh²⁷⁴. From the mid 1830s at least two coaches a week would pass through the town in each direction.

As well as the regular coaching routes there were also mail contractors and a large number of carters, such as bullock wagons, operating on the road. Just as there was a seasonal parade of bullock wagons laden with wool heading to Sydney, most of these would be hoping for any sort of paying load back to the country.

Churches and Religion

Churches were granted land in the town plan, but the funds to build a tangible church presence had to come from the townsfolk, and this sometimes took a long time to appear, if it ever did. Burton's 1840 account of religion and education in NSW records that the Anglican chaplain at Sutton Forest was responsible for all travelling duties as far south as Lake George, until the appointment of Mr Sowerby in early 1838. By 1840 Mr Sowerby was resident in Goulburn and took divine service there every Sunday, except for a circuit that included Bungonia on each sixth week. He also travelled and performed regular services at Tiranna and every fortnight at Towrang stockade. A more extensive twice yearly circuit included Lockyersleigh and Arthursleigh and other outlying settlements. Although detailed, Marulan was not mentioned in Burton's account and does not appear to have been serviced. The nearest church was the Anglican chapel present in Goulburn, with a Presbyterian chapel about to be commenced. The Roman Catholic priest had to come from Yass. An Anglican church was commenced in Bungonia, but the contract was cancelled early in its construction²⁷⁵.

²⁷⁴ 1835 Directory.

²⁷⁵ Burton 1840: 227, 231.

In May 1839 Bishop Broughton carried out a church service at Marulan in a rapidly built temporary church located in the Church of England cemetery at the junction of the Bungonia and the Southern Road, and its footprint is visible, enhanced by recent outlining in stone. This church / chapel was possibly called St Judes²⁷⁶.

The site of the Church of England church, parsonage and school were held by prescription, but had not yet been granted in 1841²⁷⁷. A chapel was in use by 1847, which may have been a private structure, with a Church of England School opening in 1866²⁷⁸.

The Catholic St Patrick's Church was built in 1859, and was dismantled and moved in 1939 to the Kenmore Catholic Cemetery, where it still remains.

While Marulan does not appear to have been an overly religious place there was at least some observance of the more festive aspects. William Summerville records his journey to the Kiandra goldrush in early 1860. Passing Paddy's River and entering County Argyle:

*From there, we had a splendid road all the way to Marulen. It being Saint Patrick's Day, there was a good deal of drunkenness amongst the people of Marulen, so much so that we deemed it advisable to keep watch all night again.*²⁷⁹

The incidental evidence is of a fairly even split between Catholics and Protestants, although Anglicans predominated. The Drovers were Church of Scotland but the Presbyterian cemetery was lost during the Hume Highway road widening in the late 1960s and 1970s, with an unknown number of interments.

Some of the town lots were owned by Jewish businessmen such as Benjamin and Moses, and the town of Goulburn had what was the third-largest Jewish population in Australia at the time. Of the prominent inhabitants, only Goodman Hart was Jewish and his observance is uncertain, although other local Jewish businessmen contributed to funding the construction of the Freemasons Tavern.

Cemeteries

As was routine in town planning at the time there were separate denominational allotments for churches and clerical residences and associated cemeteries. The creation of a collective cemetery with denominational sections came in later in the 1830s²⁸⁰.

²⁷⁶ Eddy 2000: 44, although Jervis states that this was the name only of the later Marulan church rather than a carryover from this initial one.

²⁷⁷ Governor Gipps 1841: 414-5.

²⁷⁸ Eddy 2000: 20.

²⁷⁹ Summerville 1860: entry for 17 March.

²⁸⁰ Jeans 1981.

The Church of England cemetery remains where it was originally located at the junction of the Bungonia and the Southern Road. The Catholic Cemetery is further east along the Southern Road, its earliest headstone surviving being 1865. The Methodist and Presbyterian cemetery was roughly opposite this but contains no evident remains.

'An old inhabitant of Marulan' in 1854 complained that the absence of priests more than once or so per year meant that not only burial rites were neglected, but that burials themselves were sloppy; '...the corpse is brought, I was almost saying lowered into the [grave], but far from it – it is thrown in, as anyone would carelessly bury a dog or any other animal.'²⁸¹

Courts

A court of petty sessions was established from 1.12.1847, and lasted for only a short time, ceasing on 12.1.1850. It is not clear if this was because of lack of demand from a law-abiding populace or an administrative decision. It was housed in a rented building, with a two-room hut at the rear serving as a constable's residence. It was at the corner of the Southern Road and Barber Street.

Bushrangers were very common on the Great Southern Road, and mentions of robberies are frequent in the newspapers right through the township period. The police presence in the town certainly grew from a single constable in the 1840s and 50s to a senior and ordinary constable in 1862. By 1870 it was reduced to a single constable again and closed to move to new Marulan in 1873²⁸².

Schools

Mary Ann Hawthorne acquired 2 acres at the beginning of Marulan's existence for the purpose of a schoolhouse. We can suppose that it was her husband, ticket of leave convict William Hawthorne, who was to be the main teacher. However, this school never appears to have begun operation.

By the time that the 1839 Post Office directory was prepared William Powning was being listed as a schoolteacher in Marulan, but whether this was his former or current trade is not clear²⁸³.

An 1850 advertisement mentioned the sale of an old schoolhouse, in section 2, opposite the Woolpack Inn. This appears to have temporarily stopped formal education at Marulan as in 1854 a letter writer 'with a large family' suggested that the church, which can only refer to the Anglican chapel, be used as a school²⁸⁴.

²⁸¹ *Empire* 6.5.1854.

²⁸² Eddy 2000.

²⁸³ Powning is also mentioned in the Woolpack Inn ledger.

²⁸⁴ *Empire* 6.5.1854.

A school was opened in September 1860, with Eliza Power as teacher. The schoolhouse used was an old store, and the discipline of students was poor. The school relocated, and Matthew Willock took over as teacher. The old school building / store had been owned by John O'Neil and he wished to relocate it to the new Marulan²⁸⁵.

By the late 1860s there were two schools – a Church of England and a government school at old Marulan and none at new Marulan. By 1872 there were 11 boys and 11 girls at the secular public school. Of these 7 were Church of England and 15 were Roman Catholic²⁸⁶. A year later the Council noted that '[t]his school has recently moved to a suitable building'. At the same time the even gender ration of the previous year changed to 7 boys and 17 girls. It is not clear if this reference to a new building is the shift to new Marulan, but it is likely.

Managing Livestock

John Fulljames was appointed as the pound keeper on 1.4.1847, at the same time as he seems to have set up as a local shopkeeper and operator of the post office. The pound was located on the Southern Road north of the Presbyterian cemetery²⁸⁷. The pound was an important fixture in rural towns, where disputes about stock ownership and trespassing cattle or even rustling had the potential to fracture a community.

3.9.3. Inns

There were three pubs or inns operating at Marulan's peak. In the period before the first of these, the Woolpack Inn, which is part of the archaeological investigation, there were a number of important legislative changes that strongly shaped the sorts of places that the pubs became²⁸⁸. During the early years of the colony pubs had developed into one of two forms – hostelries for travellers which also sold alcohol, and taverns, which were simply bars. Taverns were effectively outlawed in legislation of 1830, leaving sales to hotels, with their dual role of serving drinkers and providing rooms for travellers. As well as reducing competition it raised the general standard for the inns, although the accommodation requirement appears to have been a constant issue requiring continuing amendments of legislation to prevent cupboards being counted.

Legislation also required that the name of the licensee was displayed over the door, and that the inn provide a street lamp that operated through the night. In 1833 inns were required to stop selling other goods, and shops in turn were not allowed to sell drinks by the glass. Other legislative changes encouraged the separation of the tap room, eventually creating a bar counter within a single large bar-room and a parlour or room for residents and guests taking meals. Thus the essential functional layout of the inn had become standardised by 1835²⁸⁹.

²⁸⁵ Eddy 2000: 57.

²⁸⁶ NSWLC 1872-3 Report of Council of Education.

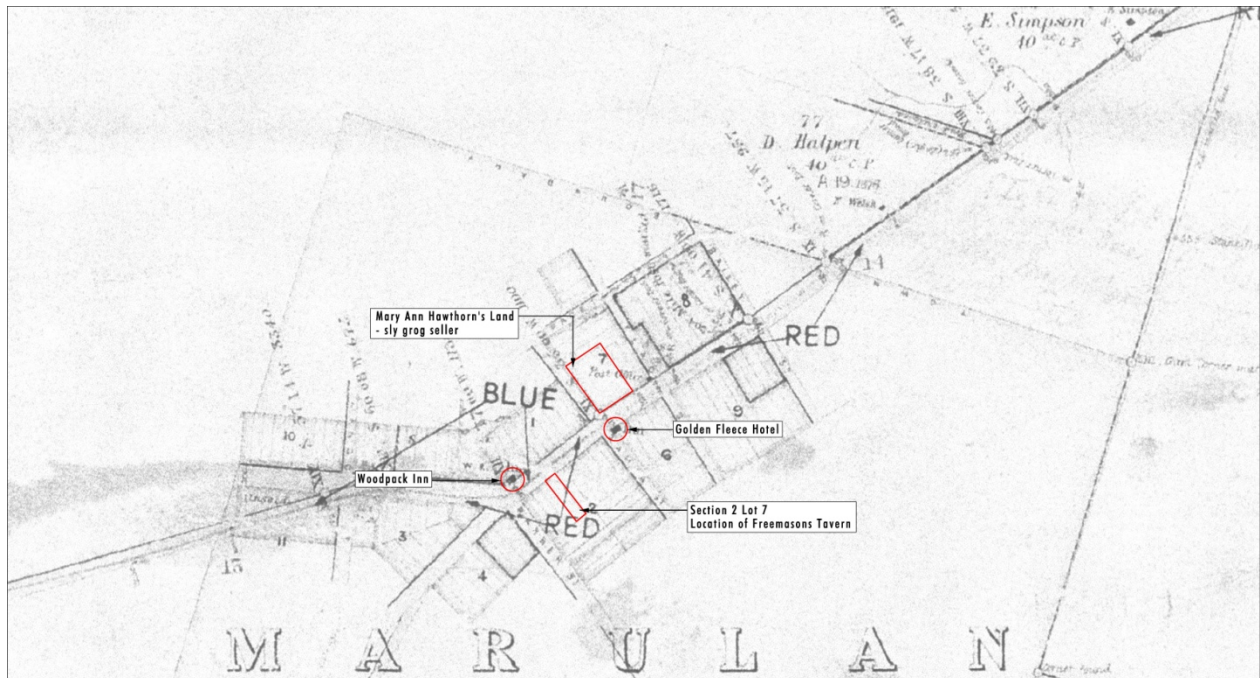
²⁸⁷ Eddy 2000: 21.

²⁸⁸ The following information is from Freeland 1966.

²⁸⁹ Freeland 1966: 55.

Despite this there remained considerable variation in the form of inns. Custom-built inns from this period tended to be of two storey, solid design, symmetrical in the standard Georgian style, and either a verandah along the front, and increasingly first floor balconies, which allowed guest rooms to be accessed externally. Others adopted the low hipped roof design, with out-shuts or travellers rooms at either end of a shortened front verandah.

The location of the inns is shown in Figure 3.10.



**Figure 3.10 - Where to buy a drink in Marulan. Stores also sold alcohol in bulk but were not allowed to sell by the glass or for consumption on the premises.
[base image – NSW LTO 824-1603 Deering 1868]**

Woolpack Inn

The main pub throughout the period was the Woolpack Inn. The Woolpack was located on the western side of the road in the Lots 1 and 2 of Section 1, which were granted to Joseph Peters in 1834 [refer to Figures 3.6 and 3.10]. Peters was also the publican – see his bibliographic entry above in Section 3.8.1.

There are no extant images of the Woolpack Inn and archaeological investigation confirmed its almost complete destruction from the widening of the Hume Highway. The most complete description comes from the 1843 sale notice which reads in part

... containing fifteen rooms, extensive stabling, brick kitchen, a stone store, and an excellent garden, the whole at present leased to Mr. George Wheatley, and two hundred and fifty pounds per annum, with about three and a half years of the lease unexpired²⁹⁰.

By 1848 an additional room had been added to the count. The court case between Hart and Wakeley heard that some renovations and repairs had been undertaken around mid-1846.

It contains sixteen pleasant rooms, adapted to all descriptions of visitors; store-room, kitchen, and extensive stabling. The whole very recently, and at considerable expense, underwent a thorough repair-making this property well worthy the attention of speculators, or parties wishing to embark their capital in a flourishing ready-money business of great profit, Marulan being one of the most rising towns in the colony.²⁹¹

The ledger book for the period 1837-1841 survives. It records the transactions of more than 300 people who were trusted enough to be given drink, food, lodgings and stabling on credit. Some of the names are recognisable from other sources as being local to the town, while many others are names that appear in the early history of pastoral settlement of Maneroo, the Goulburn Plains and the Murrumbidgee.

The ledger shows clearly the importance of pubs and inns in helping travel in the rural colony. They provided credit in an economy that was still dealing with a lack of ready currency, and where payment was largely in the form of orders or personal credit notes. They also served as contact points so that travellers could exchange news about the road ahead, local gossip and colonial doings. The tariffs charged for different services can be determined from the ledger. During 1844 the publican George Wakeley also acknowledged that the general depression meant he had to adjust his rates downwards. These prices give an indication of the overall level of costs incurred for travellers [Table 3.16].

Table 3.16 - Range of charges at the Woolpack Inn. [sources - a. Woolpack Inn ledger ML MAV / FM4 / 5366; b – SMH 17.2.1844: 1]

Charges For Services – Woolpack Inn Ledger 1837- 1841 [A]	Shillings / Pence
Stabling	3 / 0 – 6 / 0
Single day feed; Horse hay	2 / 0 – 3 / 0; 1 / 6 - 2 / 0
Port; Rum – per bottle	6 / 0 – 7 / 0; 4 / 0 - 6 / 0
Ale – per bottle and per glass	3 / 0 – 0 / 7 1/2
Lunch	1 / 0 – 2 / 0

²⁹⁰ SMH 14.9.1843: 3

²⁹¹ SMH 4.3.1848: 4.

Charges For Services – Woolpack Inn Ledger 1837- 1841 [A]	Shillings / Pence
Meals	2 / 0 – 3 / 0
Beds – standard not specified	1 / 0 – 2 / 0
Reduced Charges Offered In February 1844 [B]	Shillings / Pence
Stabling for the night with hay, and two feeds of corn	5 / 0
Single day feed	2 / 0
Port and sherry (excellent), per bottle	5 / 0
Draught ale And porter, per quart	1 / 6
Tea or lunch	2 / 0
Dinner	2 / 0
Artificers' dinners	1 / 6
Beds	2 / 0
Second class	1 / 0

The records of the publicans can be traced through the issue of Publican licenses²⁹². The first record for the Woolpack Inn is a license issued to Joseph Peters on 24.7.1833. The inn is listed as at Durreagh Forest Wollondilly, referring to the southern bank of the Wollondilly upstream of its junction with Uringalla Creek. Two licenses were issued for this location, and then from 28.1.1836 at 'Goulburn' and Marulan until his last entry on 19.6.1840.

By mid 1835 Peters was writing to the Colonial Secretary that he purchased 'at an exorbitant rate' 1.5 acres of land and had almost finished a large brick house at a cost of £400²⁹³. About six months later there is an advertisement in the *Australian* that there was a new inn operating at Marulan [refer to Figure 3.8]²⁹⁴. This was Peters' Woolpack Inn.

The licensee and ownership history of the Woolpack Inn is not entirely clear and has to be reconstructed from newspaper sources as much as archival documents. Confusion could arise because of the potentially separate roles of the landowner, the owner or lessee of the inn, and the licensee. All three positions were initially held by Joseph Peters, although it is not clear whether other unnamed parties held an interest in the land or building due to loans provided at different times.

In July 1841 an advertisement appeared offering the Woolpack for sale, as Peters was 'desirous to devote his undivided attention to another branch of his possessions'²⁹⁵. The notice was addressed from his Marian Vale farm, and mentioned the overseers of his

²⁹² SRNSW Reel 1355.

²⁹³ Peters to Col Sec date 20.6.1835.

²⁹⁴ *Australian* 19.1.1836

²⁹⁵ *SMH* 31.7.1841: 1.

Maneroo property, suggesting that he wanted to focus on pastoral interests²⁹⁶. A week later Weakley, as he spelled his name, placed his own advertisement in the paper, stating that he was leaving the Harrow Inn on Darby Murray's Flats at the northern end of Goulburn to take up the Woolpack Inn²⁹⁷. Wheatley / Weakly held the license from 28.6.1842 to 3.6.1844. A George Wakeley was present in town in 1839, based on the Woolpack Inn ledger, and there is some implication in the entries that he acted as Peters' manager, and may therefore be the same person. The only notable event in Wheatley's tenure is the holding of the first horse race in the district, hosted by the Inn in April 1844²⁹⁸.

In September 1843 the four allotments of Section 1 and the inn were placed on sale by an unnamed mortgagee²⁹⁹. It is not entirely clear this indicates that Peters had sold the land or the inn [or both] in 1841, and the 1843 sale was on behalf of an absentee owner or even Wheatley's mortgagee. There is no clear record of any sale by Peters in the land ownership titles for the Section 1 lots, and it is possible that Peters retained ultimate possession of the land as an unregistered mortgagee for Wheatley's purchase.

Wheatley leased the inn to Goodman Hart for three years at a rental of £170³⁰⁰. Hart was a professional publican, with two licenses issued in 27.6.1845 and 16.6.1846. Hart and Wheatley then had a falling out due to a loan of money, resulting in a court case decided in favour of Wheatley [refer to Section 3.8.2 above]. Some of Goodman Hart's background and further career is known – see the biographical sketch in Section 3.8.2. Following the 1846 entry there is a considerable gap in the publican license records. A record for a mortgagee sale in November 1847 includes Lots 1 and 2 in Section 1 on which the Inn stood, but the inn itself is not mentioned or seemingly included in the sale³⁰¹. Early the following year the inn itself was put up for sale. The sale notice indicated that it was 'Formerly leased to Mr. George Weakly, at £170 per annum; now occupied by Mr. Joseph Peters'³⁰². This can perhaps be read best as Wheatley having asked Peters to step in to take over the license following the acrimonious departure of Hart. The record is further confused when we find out that Peters bought the inn and the four lots of land at auction for £600³⁰³.

In 1852 the land was bought by James Kirwan, a successful publican in what was to become Cooma. He died later in that year and this may account for the gap in documentation that followed. The next record of a licensee is in the 1863 list of electors for County Argyle, where John O'Neil's residence is listed at the Woolpack Inn, and it is implied that he is licensee. An advertisement in 1866 offered a lease with immediate possession³⁰⁴. It is listed as an inn in *Bailliere's* gazetteer and road guide of 1870, with

²⁹⁶ SMH 13.4.1842.

²⁹⁷ SMH 19.4.1842.

²⁹⁸ SMH 13.4.1844: 2

²⁹⁹ SMH 14.9.1843: 3.

³⁰⁰ SMH 15.2.1848: 2.

³⁰¹ SMH 18.11.1847.

³⁰² SMH 4.3.1848: 4.

³⁰³ SMH 17.4.1848: 2.

³⁰⁴ SMH 6.4.1866: 8.

the clear implication that it remained in operation³⁰⁵. It does not appear in the 1871 *Greville's directory*.

There would have been a range of staff who worked at the inn. Peters advertised seeking firstly a 'steady, active and sober young or middle-aged man', and then a few months later for 'a middle-aged man and his wife' to manage an unnamed public house in the interior, which was probably the Woolpack. He sought people who could prove 'cleanliness, honesty and sobriety'³⁰⁶. The 1841 census records a large mixed household, although it is not clear how many were domestic servants and how many Peters' extensive family.

The Woolpack Inn ledger, which partly overlaps in date with the census, lists at least 38 people who worked for Joseph Peters in various capacities [Table 3.17]. Some were located at the farm, clearly helping in the construction of the Marian Vale house. The trades there included a painter and carpenter. There was also two bricklayers, sawyers, stockmen and other 'servants' and an overseer at the farm. Some of the trades likely to have been associated with the inn include hostler, cook, and blacksmith. The 'thrasher' may have been a specialist wheat or grain thresher working at the farm.

Table 3.17 - Employees, servants and contractors engaged to Joseph Peters.
[source – ML FM4 / 5366 Woolpack Inn ledger]

Ledger Page	Name	Description In The Ledger	Occupation	Location
222, 225	Barker	John Barker my cook	Cook / thrasher	JP farm
350	Brent	Wm Brent my Blacksmith	Blacksmith	
127, 129	Byrne	Mr Paterick Byrne overseer	Overseer	
190	Caine	J. Caine my Blacksmith	Blacksmith	
178	Cashman	John Cashman my servant	Servant	
297	Cavanah	Michael Cavanah the Sawyer - working for me	Sawyer	
266	Chard	James Chard my hired bricklayer	Bricklayer	
109	Connolly	Mr Connolly Carpenter at farm	carpenter	
165, 306	Dwyer	Stephen Dwyer my shepherd	Shepherd	
178, 256	Evans	Charley the Carpenter Charles Evans	Carpenter	
408	Haffingdon	James Haffingdon my overseer	Overseer	
178	Hayden	Patrick Hayden my hired shepherd	Servant	
350	Haydon	James Haydon my servant	Servant	
140, 150, 151	Hughes	David Hughes, bricklayer hired to me	Bricklayer	

³⁰⁵ Bailliere 1870: 339.

³⁰⁶ SMH 7.1.1836: 4; SMH 23.5.1836: 1.

Ledger Page	Name	Description In The Ledger	Occupation	Location
138	Jones	Mr John Jones my hired servant to do contract work	Servant	
122	Kelly	Thos Kelly my hostler	Hostler	
326	Kennedy	John Kennedy my servant	Servant	
157, 162, 166, 179	Kinsey [Kinsie]	George Kinsey my servant	Servant	
333	Lockhart	Joseph Lockhart my cook	Cook	
87	Maloney	John Maloney my servant	servant	
302	Martin	Wm Martin my hired stockman	Stockman	
246	McDonell	Wm McDonell the Hostler [to me]	Hostler	
178	Old Tom	My hired servant at farm [called by Mr Peters Old Tom]	Servant	JP farm
425	Paynter	Paynter the Plaisterer at farm	Plasterer	
156, 157	Pike	Thomas Pike my servant	Servant	
103	Poole	Thos Poole my servant	Servant	
178	Rork	John Rork my servant at Monaroo	Servant	Monaroo
184	Rowland	Mr John Rowland my hired servant	Servant	
313	Sculley	Thomas Sculley my servant	Servant	
236	Seares	James Seeres my servant	Servant	
280, 284	Smith	Charles Smith my overseer	Overseer	
398	Smith	Owen Smith my servant	Servant	
222	Thrasher	The Thrasher my servant	Servant	
122	Tingerby	Tingerby my sawyer + George	Sawyer	
112	Tyrer	Mr Tyrer Painter at my house Jerrara	Painter	JP farm
175, 176	Upton	Upton Thomas my servant	Servant	
158, 161	Ward	Thomas Ward my hired servant at farm	Servant	JP Farm
296	Whitehouse	William Whitehouse, my servant at farm	Servant	JP farm

Golden Fleece Hotel

This was a two storey stone building located on the eastern side of town³⁰⁷. It was built on the corner of the Great South Road and Zamia Street in Section 6, as shown in Deering's 1868 plan of the town [refer to Figures 3.10 and 3.11]³⁰⁸. From Temple's survey this appears to be represented by a substantial pile of stone and brick rubble and near MRNH 8 – the timber-lined well³⁰⁹.

³⁰⁷ A photo of the Golden Fleece, in fact the only one of any building from the town, is reproduced in Eddy 2000: 20.

³⁰⁸ NSW LPI 824-1603.

³⁰⁹ Temple 1981.

The Golden Fleece Hotel operated for a short time in the 1840s. The recorded licenses are issued to Jacob Halls from 4.8.1845 to 25.6.1846 and James Dwyer on 28.6.1847. Then the license was issued to Mr Wade on 22.12.1849.

This pub was still operating in 1871 under licensee Edward Corrigan but was not listed nine years later in 1880.

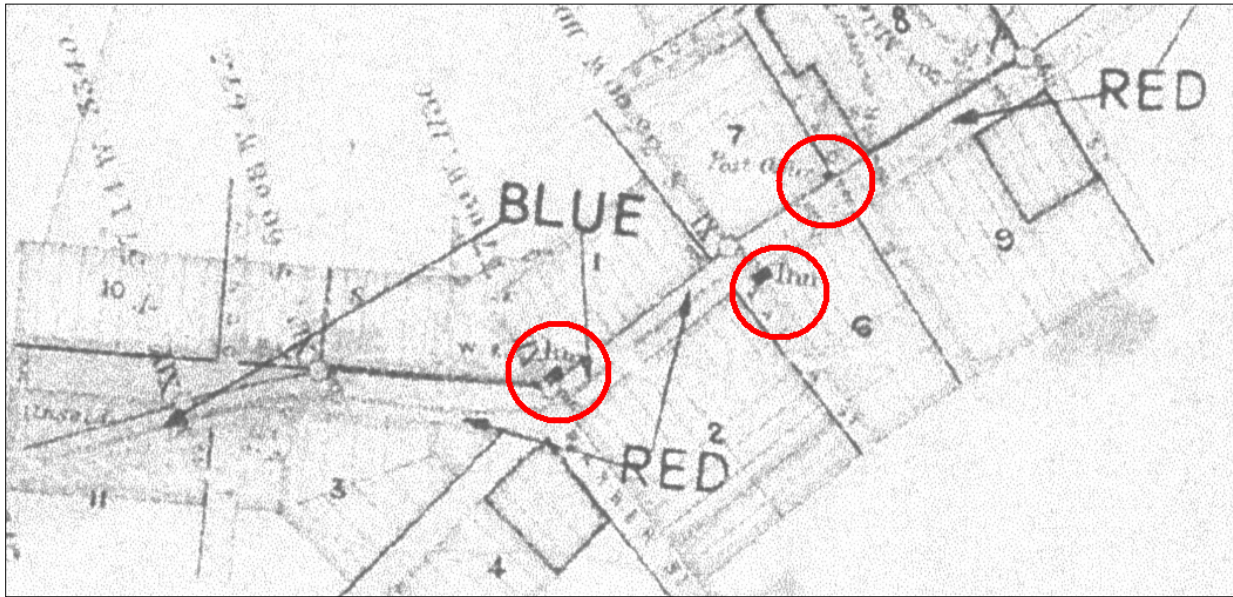


Figure 3.11 Detail from Deering's 1868 survey of the Great South Road, showing three marked buildings – the Woolpack Inn, Golden Fleece Tavern and post office. [NSW Department of Lands Map 824-1603]

Freemasons Arms Tavern / Inn

The pub was located on Section 2 Lot 7, on the eastern side of the road [refer to Figure 3.10]. It was built in 1848 by Goodman Hart, extending an earlier building erected by former landholder John James³¹⁰. Hart became bankrupt but became licensee for at least one year in 1850. The inn was placed for auction at the end of 1850. It was advertised again in 1854 as an insolvency sale.

The inn was funded by Goulburn and regional businessmen, all of whom were Jewish. These included the possibly related Abraham Hart [£124], Michael John Davies [£102], Maurice Alexander [£110], Nathan Mandelson, inn-keeper at Bungonia [£49], David Davis [£108], Joseph G. Raphael [£30] and John Moses [£160]³¹¹.

³¹⁰ SRNSW Reel 1167 Col Sec re Land – Joseph Newton – land at Section 2 Marulan. This also discusses the legal problems with the title.

³¹¹ Jim Webster, pers. comm..

It was estimated that Hart had spent £1500 on the construction of the inn, meaning that he put up the greatest part of the capital. There are detailed descriptions of the inn, taken from the 1850 and 1854 auction notices, at Section 3.10.

Sly Grog

As well as the licensed pubs there was at least one sly grog seller – Mary Ann Hawthorne – operating early in the town’s history [refer to Figure 3.10 and Section 3.8.3]. The problem of illicit sale of alcohol throughout the southern region is well-described by Lhotsky. ‘In such places, the convict stock-keepers, shepherds, runaways, bushrangers, &c. congregate, to dispose of stolen property, especially cattle, to some squatter or another...’³¹². It is not surprising that other landowners complained that they would report Hawthorne to the authorities if she did not desist. Presumably Joseph Peters would have been among these, suffering commercially by her actions.

Decline of the Pubs

In 1871 the hotels listed at Marulan are the Terminus Hotel, presumably being the one at the new railway station at Moorooloolen, the Duke of Edinburgh, also at Moorooloolen and the Golden Fleece Inn with licensee Edward Corrigan which was definitely in the old town³¹³. The Woolpack Inn was still occupied, judging from the artefact assemblage uncovered during the archaeological investigation [refer to Section 6.7.8], but had ceased operating.

In 1881-2 the Terminus Hotel in new Marulan is still operating, as is the Golden Fleece with Mary Carrigan as licensee³¹⁴. It is probable that she was in fact Mary Corrigan and the widow of Edward Corrigan, reflecting the gradual increase of female heads of households in old Marulan.

The Role of the Inn

The Woolpack Inn ledger makes it clear that the inn played a crucial role in providing credit and acting as a local bank. Credit provision was an important role and, in a town like Marulan, probably one that only the pub could achieve. The absence of a bank, a system of savings and secure means of transferring cash, and even the shortage of ready coinage was a constant problem in the bush. The inns filled the need to supply these. The quantity of credit given can be more readily imagined when we know that a land worker’s wages on a neighbouring station were £25 plus rations per annum³¹⁵ so Peters, and presumably most rural inns, was carrying credit equivalent to the payroll of a small factory³¹⁶.

³¹² Lhotsky 1834: 143.

³¹³ NSW *Govt Gazette* 1871 pt 2 p. 1955.

³¹⁴ IHR: NSW Publicans Licenses.

³¹⁵ NSWLC *V+P*1842 – Committee on Immigration – Major Lockyer’s evidence.

³¹⁶ See also a comparable study for a Chinese-operated country store at Bolong by Baker 1996.

Credit would only be extended on the say-so of the publican, as he wore the risk. It is not likely that he knew everyone who asked for it, but he must have been able to both size up character and keep a good gossip network to help him make judgements. And could he say no to a Sydney grandee, a big name from the north, who sadly had left his purse in his other carriage? Was the man even who he said he was? Criminal impersonation was rife, as was just forgetting to mention that you had once been [and may still be] a convict. And even if the gentleman told the publican that he had vast cattle and sheep runs in Maneroo and beyond, so of course his credit was good, the publican would know that these were unfenced, not legally secure in any way and completely contestable and claimable by others. How would this sort of awkward bar-room moment be managed, in an environment where class and status still counted for a great deal?

The absence of cash in rural Australia meant that bills were the common way of transferring amounts of money owing, along with payment in kind. By the 1830s this had settled down to a standard ratio of payment of two-thirds as bills and a third in kind, especially for wage payments. Farmer Fred, for example, would pay his labourers two thirds of their £25 for a years' work in cash, in the form of a promissory bill, which he signed and dated, for say £16, and would provide the rest in some commodity equalling £9 at a market rate, such as excess lambs from his flock. Payment in livestock was attractive to many rural workers hoping to build up their own small herds. Labourer Lionel could take his promissory bill to the Woolpack Inn and either credit the whole amount, and possibly spend the next two weeks drinking himself into a coma, or he could buy supplies, and perhaps receive some cash and the remainder as a promissory bill issued by Joseph Peters. Apart from inns there were few other stores that could have mustered the necessary cash to provide some liquidity to the credit holders. Peters, meanwhile, had the original promissory note and could collect the £16 from Farmer Fred in due course.

A number of banks had begun operation in the colony by the 1830s but in the small rural local economies the promissory note still dominated. Two distinct types of promissory notes had become established – the ones such as Farmer Fred's which acted much like a personal cheque does today, tied to a particular service and probably drawn on soon after issue where Fred and his personal worth were known, and more general ones that acted as currency as small shop-owners issued them in set round amounts, and these circulated effectively as privately issued bank notes. The state was not left out, with the government issuing its own payable on demand bills.

The promissory note system relied, as did so much else, on knowledge of the person who risked accepting it. Because they were handwritten, promissory notes were easy to forge and many shopkeepers would be reluctant to pay to someone they did not know or to pay on a note that they suspected was forged. They may also not have heard yet that Farmer Fred had gone broke on some unwise speculation and now his promissory notes were no longer worth the paper they were written on. As with the provision of credit for users of the hotel, the role of the innkeeper relied heavily on having a sound

judge of character and an excellent network of formal and informal contacts. Some innkeepers and others would manage their risk by only accepting bills on discount – paying perhaps 10% less than face value if slightly unsure, and reducing it even further if they thought the risk was very high. In our example, if Peters thought there was a chance that the promissory note may not be honoured when he presented it to Farmer Fred, he may have discounted it, giving only perhaps £13 value credit, so reducing his total risk.

The credit system, centred on the inns in towns like Marulan, formed the basis of people's ability to purchase goods.

Inn Customers

Some general observation can be made on the custom of the Woolpack Inn. It is not clear how general these observations are to other inns as, within even small towns, the pubs will develop very different clientele and types of custom.

Where did the customers come from? What were the proportions of town inhabitants, people from surrounding properties and beyond? Place names recorded in the Woolpack Inn ledger are surprisingly sparse, but offer a sense of the catchment of the inn, how far people travelled, and the relative busyness of the different routes. There are a number of specific addresses in Sydney [Brickfield Hill, Church Hill, George Street, Waterloo and Annandale]. Place names from around Sydney are sparse, although there are several mentions of Liverpool and Campbelltown; the two main towns along the southern route. Also along that route are Appin, Stonequarry [the later Picton] and Cowpastures. Surprisingly, there is only one mention of Parramatta and a few from South Creek. This probably reflects that people who had interests in the outer regions needed to position themselves along the main outward route because of the difficulty and expense of travel.

Moving down from Sydney towards Marulan there were a number of small localities, some of which passed as settlements – Bong Bong, Berrima, the Ploughed Ground and Sutton Forest. There were three separate lines of road heading south including the Great Southern Road, and there were customers from each. Most easterly were Bumballa [with many variant spellings], heading down the old Argyle road through Glenrock, then Inverary and Lumley and the general locality name Parramarrago, which was being replaced by Bungonia. Mitchell's line of road passed through Berrima and Paddys River, at the never-quite-got-there township of Murrimbah, then Wingello and finally Marulan. From there the road went to Goulburn, past the Towrang Stockade and via Darby Murrays Flats. Riley's Road following the eastern bank of the Wollondilly is only represented by Lockyersleigh, before it rejoined the main route at Towrang.

Heading south, there was a road that ran from Bungonia towards Lake Bathurst and Lake George, including property names Ajaymatong and Spring Valley, Gundaroo [possibly Gunday], Bungendore and Braidwood. Soon after Goulburn the road split into

two main routes near Brisbane Plains, both of which are mentioned. The road south towards the Maneroo [also Monaro and many other variant spellings] listed a few names along the way – proto-town Queanbeyan, Michelago and then geographical vagueness set in. The other way headed southwest, crossing the Great Dividing Range, with Yass being well represented in place names, but also further with the Murrumbidgee, Murray, and Port Phillip with its town of Melbourne.

The limited use of place names reveals two things. Firstly, there was no real need to describe where people lived. It did not form an important descriptor, and seems to have been used only to distinguish between potentially similar people. The second observation is just how much movement took place, with some of the distant visitors being regular customers, meaning not just travelling many miles on poor roads, but also doing it repeatedly.

It is argued elsewhere in this report that Peters would have targeted the better quality of traveller for his custom, rather than the more frequent shearers, farm workers and tradesmen. He did this because he could use these contacts to gather information that was useful to him both as a publican and as a property holder. Any analysis undertaken of the social status of the customers is obviously biased towards those who could be trusted with credit. However, there is a strong representation of known successful landowners and squatters among the entries. There are also plenty of farm managers, independent tradesmen and regular road travellers, such as 'Jerry Man with wooden leg' and 'Big Sam of Bumballa', but arguably there is at least indicative evidence that Peters' inn attracted the better class of traveller.

3.9.4. Stores

Buying Goods

In 1847 the town is described in a newspaper account as 'the village of Marulan which differs little in its features from the other villages of the interior, being a small cluster of houses, with two inns, a post office and three or four stores, procuring custom, nobody knows how'³¹⁷. The stores probably sold a great range of goods, although some may have had specialisations such as a bread bakery or butchery attached. Haygarth describes the interior of a typical bush store as 'The stock, in short, appears to have been formed by a contribution of all the shopkeepers in Sydney, and there is hardly anything which the owner of a bush store does not keep, or which he considers "out of his line"'³¹⁸. They would have needed to service a fairly small catchment of people plus travellers on the road. As Goulburn and Berrima were only a day away there were probably limitations on what they could profitably sell. Their prices were always much more than the towns, to the consternation of travellers³¹⁹.

³¹⁷ *SMH* 11.1.1847, quoted in Eddy 2000: 20.

³¹⁸ Haygarth 1848: 15-16.

³¹⁹ E.g. Andrews 1977: 82 for Lhotsky's observations.

Goulburn offered a much greater diversity of shopping and services, as recorded by Jevons, but even these stores were careful not to become over-specialised:

Nearly one half of the shops or stores (s) cannot be otherwise distinguished because they deal quite in two or three or many more branches of business. Drapery ironmongery and grocery are generally united in one store and in many cases the collection of articles is most miscellaneous. Hay corn, dairy produce, teamsters articles, ironmongery, fancy articles ware agricultural tools, machines etc are often seen together. In the smaller shops, bread, fruit, cordials, confectionary, small ware, milk are generally united. The only really distinct kinds of business indeed, seem to be those of Butcher, watchmaker, apothecary, shoemaker, confe[ctionary] cabinet maker & a few others.³²⁰

The role of the stores, much like the inns, was to supply information and credit as much as goods, and they were a place of social contact for women. Louisa Atkinson describes a fictional one, but clearly bases this on knowledge of similar ones further up the Great Southern Road from Marulan, jammed floor to ceiling with casks, sacks and boxes, and the mingled scents of 'salt herring, sugar, tobacco, cheese, bacon, onions, spirits, paint, oil, and tar'³²¹.

As the wealth of the colony increased, particularly among pastoralists, buying by mail order or by letter became common-place. Pastoralists who did not make regular trips in to Sydney usually had an agent with whom they had an account. They could order household goods of all sorts and arrange to have them shipped out, and the merchant paid from funds in hand. The shop shown below, with its very modern sounding sales pitch may have supplied some of the ceramics and glass found at Marulan [refer to Figure 3.12]. However, their stock relied upon regular shipments from Britain, and the availability of different wares, colours and decorative schemes would vary accordingly. Replacing one smashed piece of a dinner service with the same design may have been impossible. Ordering could have been as simple as '£5 worth of tablewares for a gentleman's house', the mere social rank saying quite clearly what would be expected in the types of settings and quality of wares, their decoration and modernity³²².

³²⁰ Jevons 1858: 49.

³²¹ Atkinson 1857: 39.

³²² Young 2004.

THE CHEAPEST HOUSE

IN
THE COLONY,
FOR
GLASS AND EARTHENWARE,

IS
JOSEPH GOULD'S,
75, GEORGE-STREET,
And the only House in the
TRADE,

WHERE
Goods are safely Packed,

AND
WARRANTED TO GO FREE OF BREAKING
TO
ANY PART OF THE COLONY.

J GOULD has just Received, per ships "Lotus," "Rachel," and other late arrivals, 300 Casks of EARTHENWARE and CHINA, and One Hundred Casks of Glass Ware of every description. A few small Casks on hand, containing Half Pint Tumblers, Wine Glasses, and Quart Decanters, those will be sold at 3s. per dozen, by the Cask.

Five hundred 9, 9½ and 10 Inch Shades, at 10s. each. One Thousand Square Cat Mustard, Pepper and Vinegar Cruets of various Patterns and Sizes.
Five Hundred Liqueur Bottles, various patterns and sizes.

•• Observe Two Large Jugs at the Door, with the number of the House on them.

Figure 3.12 - Bargains that could not be ignored.
[Sydney Gazette 17 December 1835]

Marulan Stores

In March 1836 James Hutton announced that he had opened the Marulan General Store opposite the Woolpack Inn. The store boasted a 'most extensive assortment of merchandise', and made particular emphasis on liquor and bottled porter of high quality³²³ [refer to Figure 3.13].

³²³ SMH 31.3.1836: 1

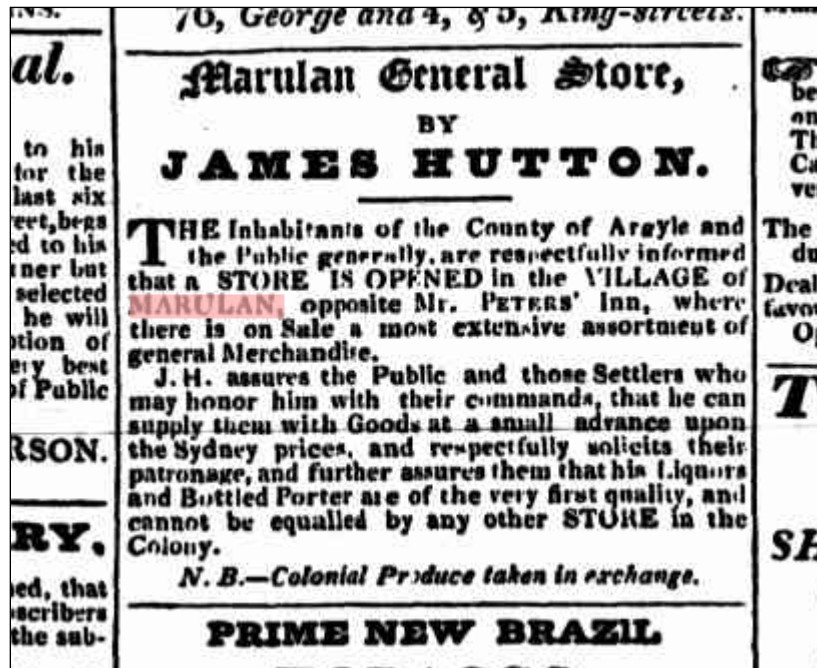


Figure 3.13 -Advertisement for James Hutton's store at Marulan
 [The Monitor,24.7.1836, p. 15]

This may be the same building described in detail as the Marulan Store in an 1847 advertisement, which shows how many different lines of business could be carried on from the same establishment:

*TO BE LET, or Lease, for three years years, or for Sale - Four allotments of Land, at Marulan, on which is erected a stone and brick dwelling, containing nine rooms, two-storey kitchen, detached stables, coach-house and other conveniences, at present known is the Marulan Store; there is also a wheelwright's and blacksmith's shop, likewise a stone and brick building, 34 feet x16, in two rooms; would answer tor any purpose of trade. Also, tan-yard, and other out-buildings &c, The proprietor going into business at Goulburn is his reason for wishing to sell or let the above properties. Possession can be had now or before the 1st of July next ensuing.*³²⁴

Thomas Nunn was listed as a storekeeper of Marulan on a marriage certificate, undated in the reference, but indicating an otherwise unknown business operator³²⁵.

John Fulljames was one of the storekeepers in town. It is possible that his store was the building later identified as the Post Office in Deering's 1868 plan located in Section 7 Lot 3, parts of which were uncovered during the Stage 2 excavation [refer to Figure 3.11 and Section 6.14 for more discussion of the probable post office building].

³²⁴ SMH 13.3.1847: 3.

³²⁵ Eddy 2000: 20.

A small store was also present in the late 1840s on Section 2 Lot 6. Its name or what it sold are not recorded³²⁶.

The initial sales advertisement for the Freemason's Arms Tavern [Section 3.10 below] noted that a store was under construction as part of the inn in 1850. It is not mentioned in the second, 1854, sales advertisement, so may have been under a separate lease.

Hugh Montgomery's name appears as a storekeeper in the 1860s in Marulan, but there is no certain association with any particular town lot.

Personal Possessions

It is hard to gauge what was available in Marulan in the routine shopping trip. One oblique indication is from selected insolvency records, which record money owed to merchants. Charles Burton was a miner and quarryman who came from Sydney to work at Barber's Creek on what seems like a very tenuous contractual arrangement. He was forced into insolvency after a period of family sickness that included the death of one of his children and the souring of his original work arrangements. His debts for a period of about 6 months included owing four suppliers in three locations [Wingello, Marulan and Barbers Creek and one unidentified] a total of £38 for groceries, two suppliers at Barbers Creek £24 for meat, Hugh Montgomery of Marulan less than £1 for bread and drapery bought from Campbelltown and Wingecarribee, probably meaning Berrima³²⁷.

Burton was not resident in Marulan itself, but it was the closest centre. He may have shopped around precisely because he had worked up unpayable debts with suppliers in different towns, but it also makes clear that for even relatively small purchases that folk in the town's hinterland were capable of going elsewhere. They certainly were not a captive market for Marulan's shopkeepers, who would have had the difficult task of deciding whether they would let someone keep accruing debt in the hopes of keeping a customer that would eventually make good, or get rid of them and potentially lose business.

3.9.5. Small Town Politics

The community consisted of a small group of business owners, absentee and locally resident land owners and tenants, as well as a number of travellers passing through along the road. There is a suggestion in the census and postal data that there was a high turnover in occupancy in the town, people not staying long and moving on when they had the chance, certainly in the latter part of the town's life.

There was never any formal administrative or political structure in the town. Initially the local magistrates, all prominent pastoralists, and resident landowners such as Joseph

³²⁶ SRNSW Insolvency file – Goodman Hart – Seq. 6/04/1848 – File 01756.

³²⁷ SRNSW Burton Charles Box 2/9174 File 7491

Peters would have had to influence the behaviour of townsfolk in various ways, such as the pressure placed on William Hawthorne to keep his errant wife in line. The gradually growing population and increasing local business may have made the focus more 'civic' in the sense that there were more residents to enforce behavioural norms, but there was never a municipal council or formally organised representation that had a separate status, and all town politics remained personal.

As with other aspects of the town's history we have little understanding of the inter-personal relationships that often define how towns work. Local politics could be muddied where prominent residents, such as Peters, were also land owners, businessmen and pastoralists with potentially conflicting interests. This would have also been the case in the debates leading to the Robertson land acts of 1861. An attempt to permit the selection of land by small-holders, the land acts were widely seen at the time as an assault on the interests of the land-owning class. It would have been less of an issue in the mainly freehold lands of Argyle, but was one of a number of potential fault lines along which the different interests in the Marulan community could have separated. Among other tensions in this period were the route of the railway that eventually missed Marulan altogether due to lobbying by some well-connected landowners, the costs of supporting an increasing social infrastructure of schools and police presence with its immediate higher taxation, and the cumulative effects of the gold rushes of the 1850s and 60s resulting in the loss of much labour and increasing wages for those who remained. Section 3.11.3 provides further information on this period of the town's development.

Another effect of the lack of an administrative structure was that decisions were made in Sydney, if made at all. The most significant were the creation and sale of additional town blocks in the 1840s and the maintenance of the Southern Road through the town. These would have taken place without reference to any real local involvement.

3.10. Townscape and Building

Using the available historical information, and the results of Temple's 1981 survey [refer to Section 4.1.1 and Attachment 2 to this volume] and the recent survey, it is possible to provide some sense of the structure of the town.

To order our results we can create a rough hierarchy of buildings that generally reflect the social class of the occupant. This is a common enough practice now, but one of its beginnings came with a young man who worked at the Sydney Mint, and who took long walks after work around the growing gold-fuelled Sydney. He was William S. Jevons and he was one of the first to look at the patterning of social classes and building types in urban settings. His manuscript description of Sydney in 1858, held in the Mitchell Library, also includes a map of Goulburn that is annotated on similar principles³²⁸. He uses residential classes A, B and C to describe respectively substantial houses, cottages

³²⁸ Jevons 1858.

and shacks of workers and more ephemeral structures and the dwellings of the urban poor. Provided that we use it cautiously it gives us a taxonomy that is both objective and also reflects how the people of the time would also have viewed their built environment and read its coded messages of class and status.

Residential A – substantial stone build dwellings – these survive as reasonably big piles of building rubble, all on the northern side of the road on higher ground, but to what extent is this an artefact of road widening and loss of the other side?

Residential B – cottages and more modest buildings – these were only reliably identifiable through archaeological excavation.

Residential C – which I think are ephemeral camp sites, with evidence of artefact refuse, fireplaces but nothing that looks like a building. These are on the approach road, and may be for drovers, itinerant travellers or even Aboriginal camps, which is unlikely.

Buildings known from any source are shown in Figure 3.14. There is definite clustering shown with the most substantial buildings close to the junction of the Goulburn and Bungonia roads and a scatter of Residential C buildings, perhaps camping by transient road users, to the western edge of town. The main observation to be made is that this zoning of residential types is not forced by the 1828 town planning regulations, which are entirely silent on creating any areas of common built form, or social grouping within the townscapes. The patterning shows zoned occupation in the town. This was entirely a process of social structuring by the town's occupants, which has taken place even in a small town of perhaps two hundred people.

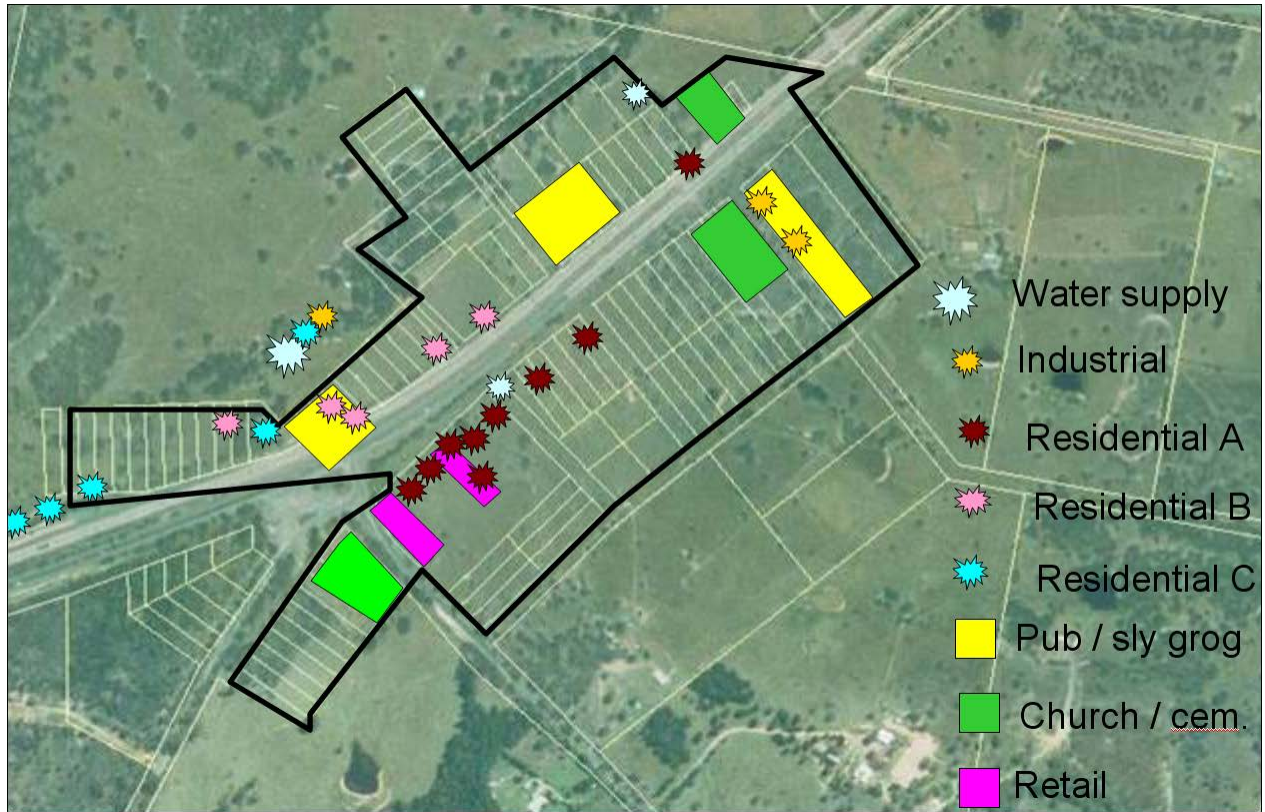


Figure 3.14 Marulan's built environment classified using Jevons's [1858] system.

As well as its residents, the town consisted of a physical environment that marked it out from the surrounding farmland. However, our information on the former buildings of Marulan is extremely limited. The town's layout on plan provides for side streets and even rear blocks, but we do not know how many of these were ever built upon. At its maximum extent Marulan ran for nearly a kilometre on both sides of the Southern Road. How much of this distance actually represented a townscape to a passing traveller? Of the 50 or so lots that front the road we would expect less than a third to have contained a residence, based on the fragmentary population record of the town.

The layout of buildings may have conformed to the 1828 regulations which required that houses were set back 14 feet from the road reserve boundary. Evidence on the western side of the Hume Highway has been obliterated by road widening but from the evidence of Temple's survey and the moderately visible material on the other side of the road it is likely that most houses kept at or reasonably close to this line.

There is one extant building on the eastern side of the road on private property. It is a simple, symmetrical colonial brick cottage and even though of later construction, it is likely to reflect the norm of rural buildings at the time of Marulan's operation.

The 1841 census collected information on what materials buildings were made from, as a measure of how well civic order and secure occupation was spreading through the colony. Only three entries survive from Marulan [see above]. The information collected on buildings shows:

- Joseph Peters stone or brick building
- William Drovers timber building
- James Strachan timber building

Other information collected is purely incidental and only confirms a general picture of Marulan as a typical Australian country town of the period with a mixture of masonry [brick and stone] and timber buildings, with a strong likelihood that there were other even simpler buildings, shut outs and even tents for less permanent dwellings. These would have been interspersed with vacant blocks, perhaps being grazed or cultivated.

When the post office closed in 1874 there were only four buildings remaining in Marulan – belonging to the postmaster, police constable, schoolteacher and Pallier the mail contractor³²⁹.

The best information for any building comes from a sale advertisement in 1850³³⁰, for a substantial dwelling in Section 2, on the southern side of the road. The property was to be sold with its improvements, consisting of a schoolhouse and kitchen, store, courthouse, blacksmith and wheelwright's shop. These were spread across a group of four allotments, opposite the Woolpack Inn in 'the rising TOWNSHIP OF MARULAN'. They were to be sold as either one or four lots. Note that these lots were not contiguous.

The description of the lots is informative, and gives a sense of the quality of buildings which could be found in the town:

*Property with improvements
Schoolhouse and kitchen
Store
Courthouse
Blacksmith and wheelwrights shop
in the centre of Marulan by Samuel Lyons on 28.2.1850*

Property of four allotments of Section 2 opposite Woolpack Inn and the properties of Messrs Barber and Hart 'in the rising TOWNSHIP of MARULAN.'

Sold as one or four lots

³²⁹ Eddy 2000:40

³³⁰ SMH 18.2.1850 p. 4

No. 3 Frontage 66 feet to Main Street
Depth 330 feet ' a most valuable piece of ground'

No. 8 frontage of 66 feet to Main Street, depth 330 feet.
Has the following substantial buildings thereon

THE AUSTRALIAN STORE AND DWELLING HOUSE

1	Front shop cedar counter, shelving &c. complete with fireplace and grate	21' x 12'
2	Sitting room	13'4" x 11'
3	Bed-room with fireplace	11' x 8'
4	Sitting room with fireplace	13'4" x 11'
5	Bedroom	11' x 8'
6	Parlour, with fireplace	11' x 12'
7	Bedroom	11' x 8'
8	Sitting room	11' x 12'
9	Bedroom	11' x 8'
10	Hall	4'6" wide

A kitchen, two storey stone built and stuccoed. Outside dimensions 20' x 14'6" with oven and chisel flagging
Back verandah, chisel flagging all around
Front verandah, chisel verandah and round nose coping
All fittings of cedar, including 13 panel doors

Stable for 5 horses and loft. Slabs, shingled with a shingled house for carriage or gig.

A garden and other conveniences. schoolhouse, built with slabs, and roofed with bark, boarded floors, brick chimney and a detached kitchen of same style.

No. 9 Frontage 66' by 330' deep

No. 10 Frontage 66' by 330' deep Corner block opposite church reserve.

Buildings - Courthouse brick on stone foundations, fitted out in cedar, plastered and stuccoed outside. Discontinued since 1 January.

Detached kitchen, slabbed and bark roofed.

38'6" x 14'6"

1st room 20' x 14'6"

2nd room 14' x 14'6" with fireplace, kitchen and stove

Three cedar panel doors

'A most lucrative business has been carried on at the store and similar prosperity would attend it under careful management'.³³¹

Two auction notes for the Freemasons Tavern appeared as it was sold twice in almost three years. The sale detailed below appears to have been unsuccessful.

"FREMASON'S TAVERN,"

WITH

THE STORE ADJOINING THERETO.

...

The "Freemason's Tavern" is a most extensive and costly building, and to be thoroughly and improperly appreciated must be seen. The range of buildings extend upwards of One hundred and Fifty Feet back from the main frontage. It comprises 15 most commodious rooms, with taprooms, kitchens, out-offices, stabling for 13 horses, coach houses, barn, storehouse, , with every other possible convenience, all finished in the best possible manner without regard to cost. The rooms are handsomely corniced and fitted up, stucco plastered, and every room is furnished with Venetian shutters. The buildings are all of stone and brick, and have scarcely been erected three years. A large and elegant verandah surrounds a considerable portion of the premises.

As a stand for business the situation is not to be equalled, being at the junction of the Bungonia Road ... and the Great southern Road ... In fact the whole of the immense traffic to the southward must pass by the door, ensuring a large, increasing, and highly lucrative business.

The fixtures, bar fittings, and entire furniture can be taken at a valuation if required.

The Store adjoining is a large stone building not yet quite finished, but is a very substantial erection, and when completed would command an undoubted safe and profitable trade.

There is a large garden, well laid out, in the rear of these properties; there are also extensive stockyards at command. ...³³²

The second advertisement was a forced sale as the result of Goodman Hart's bankruptcy.

³³¹ Largely paraphrased from the advert, except where items are in quotation marks

³³² SMH 14.12.1850. I am obliged to Phil Leighton-Daly for this reference.

First –rate Hotel and Premises at Marulan, on the Great South Road

MORT and CO. have received instructions from the proprietor, to sell by public auction at their rooms, Pitt-Street, THIS DAY, the 15th March, at 11 o'clock,

The following first-rate business premises, situate in the township of Marulan, on the Great South Road, between Berrima and Goulburn.

Lot 1. – The Freemasons' Arms Inn, standing upon an allotment of land containing half an acre, with a frontage of 66 feet to the main road by a depth of 33 feet.

The house contains the following extensive accommodations –

Bar, with fittings complete, and bar-parlour, with staircase leading to a bed-room, opening on to a balcony in the rear of the house over a back verandah

Two sitting rooms on the ground floor, and

Six bed rooms, opening out on a flagged verandah, 8 feet wide, fronting the yard, and on the front of the hotel, a convenient and well-finished verandah

Large kitchen, 17 x 16, with oven and other conveniences, adjoining which is a servants' room and 3 bed rooms above the kitchen.

In the rear of the kitchen are three rooms, adapted for the stores or other purposes, over which is a loft or granary.

There is also a capital range of tabling to accommodate 17 horses, with granary and hayloft above. Also a coach-house and the usual out offices for a large establishment.

In the rear of the premises is a fine garden, well fenced in with paling fence, and containing a variety of vegetables and gooseberry and currant bushes.

The premises are substantially built of brick, and are replete with every comfort and convenience for a first-rate road side inn. The premises are in full trade and doing a good business. Immediate possession can be given.

The above premises are generally well finished, and the carpenters' and joiners' work of a superior description.

On the western side of the property is a large two-story house, not quite finished, but well-adapted for a general store, having two entrances, and separated from the hotel by the road into the yard. The front portion of these premises are well finished with 6 parallel doors, sashes, and shutters, complete, but the back portion requires the roof to be finished.

Furniture and stock-in-trade, &c, to be taken at a valuation.

Marulan is well situated for a stopping place on the South Road, leading to the various gold fields, and here the roads diverge to Goulburn on one side and Braidwood on the other, thus commanding a first-rate business as a house of call, the profits of which would be greatly increased by the establishment of a general store.

*Immediate possession can be given.
Terms liberal, at sale.³³³*

What can be concluded from the limited information is that there were a range of building types in the town, and that these would have presumably reflected the status and wealth of the owner if they were resident. If they were an absentee they may not have bothered at all or may have only provided basic timber housing for their tenants.

3.11. Death of Marulan

3.11.1. Demographic Information

Turnover in Population

What happened to the population during the period following the opening of the railway line in 1868? The town residential information noted earlier [Section 3.7 above], preserved as census information, electoral rolls and postal directories can be used to profile the population before and after this impact. A full inventory of names, matching those present in more than one listing, is presented in Attachment 3.

In order to judge what effect the railway had it is necessary to observe how stable the population was in the period before the mid 1860s. We can use the name information in electoral rolls and post office directories to track this. It is possible to track individuals' arrivals in town and how long they lived there and get a sense of how stable the population was over a range of years.

³³³ SRNSW Insolvency records - Rossiter, John Box Box 2/8869 File 3194. Item is a newspaper clipping [source unidentified] dated 15.3.1854

As noted, the information that is available from the town's founding to the 1841 census is very patchy and does not give a very good idea of the town's population at all. Then there is a gap of more than 20 years to the first electoral roll of 1863. It is noteworthy that there are no names present in 1863 that can be also placed in the earlier known population. This implies a substantial population turnover in the town, although this may not seem so surprising in two decades that included the end of transportation and the first major gold rushes.

However, analyzing the 1860s evidence confirms the pattern. Of the 28 individuals who were identified in the 1863-4 electoral roll, only a few appear a decade later in the 1872 *Greville's directory*. Assuming that Joseph Pather was a misreading of Joseph Pallier and John Wade as being related to William Wade, we can conclude that there were nine family names that remained over the course of a decade. This means that more than two thirds of the families are likely to have been replaced in a period of about ten years. This represents a major demographic disjuncture, where most of the population is likely to have turned over in the town and surrounding area. Similar results are found in analysing the name lists for the 1870s. While there are some issues in the accuracy of the lists, identifying differently spelled names as the same person, and an assumption that the same surname represents a single family, the essential fact holds true – there was a population turnover of about 90% in a seven year period, or about 13% or 1 in 8 households per annum.

Taking the period from 1863 to 1878, that is both before and after the railway, the annualised turnover rate is never less than 10% of the population, and some of the time it is over 15%. This means that in a period of 10 years or less there is effectively a total change of the population, and this high rate of turnover is constant throughout the time for which we have data. In general very few households can be shown to stay more than 10 years, so there is not a large core of longer term residents counter-balancing a high turnover of short stayers.

We have a picture of rural Australia being stable relative to the demographic change that takes place in our cities. Towns like Marulan show that to be untrue in the 19th century. There was high mobility because much employment was based on skills needed on farms and, unlike the tightening rural sector today, farming was expanding in its overall extent. While mechanisation in the form of steam power and the railways helped to reduce the need for raw units of human labour they also allowed smaller farms to be established. Changes in the ability to buy land may provide some explanation for the startling population turnover that is revealed in the electoral rolls and directories. From the 1840s onwards the NSW government received much of its revenue from the sale of crown land and the trend was to cut them into smaller and smaller units. While mainly associated with the Robertson land acts of the early 1860s there were also earlier attempts to house the growing rural population, diversify farming and to create a counter-balance to the power of the large land owners.

These results for Marulan notably pre-date the arrival of the railways, so we cannot say, in Louisa Atkinson's terms, that the population was leaving because of the railway's impact. It has to be noted that the main pattern is not essentially of population decline but replacement. This changes only when Marulan enters its long terminal decline, making it a less attractive location for resettlement. It is difficult to determine what proportion of these people were town-based small-scale farmers. The research done to date shows there is considerable promise in using this readily available information to address the complex patterns of population mobility in late 19th century NSW. In the case of Marulan it adds to our understanding of the process of how the town declined, and has significant implications for the way the archaeological record is modelled.

The population replacement changes to one of a net loss with the arrival of the railway. What happened at Marulan is part of a larger transformation of the rural workforce during the 1860s and 70s, as mechanisation, not just the railways, but fencing materials, freezer works and abattoirs, steam power plant and other innovations, affected how rural labour was employed. This change was the trigger, Waterhouse argues, for the largely urban colonial writers creating a nostalgic image of the bush that eventually became the archetypal 'Australian legend'³³⁴.

Gender Imbalance

The second observation comes from the 1872 *Greville's postal directory*, five years after the railway came. By now the new Marulan [or Mooroowoollen] has grown to close to double old Marulan in population.

The mix of trades in the two towns is reasonably similar [Tables 3.10 and 3.11], given that one has a railway station, but what is dramatically different is that of the 30 old Marulan households, fully one third are headed by females. In Mooroowoollen of 52 households there are none headed by females. There is a dramatic contrast between the two towns from this single data source [Table 3.18].

Table 3.18 - Proportion of female household heads in old and new Marulan
[data source – *Greville's Directory 1872*]

	Marulan	Mooroowoollen
Households in town	30	52
Households out of town	10	13
Number of female household heads	10	0

³³⁴ Ward 1958; Waterhouse 2000.

There may be a variety of reasons to explain this disparity. For example the husbands are shearers or other farm workers going where the work is and were never home or the male household heads went to the gold rushes and didn't come back. None of these really should apply only to the old town and not the new, so other explanations must also be considered.

Consider old Marulan in the five or so years between the arrival of the railway up the road and the collation of the postal directory. Businesses would have relocated themselves to near the railhead, and were being followed by the civic functions, such as the school. Residents of the old town therefore had a choice – to stay, move up the road or, as seems clear from the previous discussion, to move even further in search of work.

Households with a male head probably had a much better chance to follow prosperity to a new town or district, simply because male labour was a sellable commodity in reasonably short supply during this period. While mobility should not vary according to gender there were practical considerations, such as the relative difficulty of moving if you had large numbers of children or elderly relatives. This may have been the reason that John O'Neil became the longest serving resident of Marulan, because he was looking after his mother and step-father, the alleged 'world's old married couple' [refer to Section 3.7 above]. As women's work did not pay much, female household heads may have opted or had no choice but to stay in the old town. The move to somewhere more prosperous would almost certainly have resulted in them paying a higher rent, so at least by staying in a dying town the rents were likely to remain low. Any women who were also landowners [there are none known in our sample] would also have seen their land's value plummet, worth only whatever it contained in possible second-hand building materials. Again, they may have found it difficult in such circumstances to viably sell and relocate.

It is likely, therefore, that as Marulan declined it would be the female headed households that found it more difficult to escape. These women therefore formed an increasingly important component of the town. Lack of income would have supported fewer shops or businesses. As perhaps one in every eight or ten households was leaving each year, there would have been fewer new families arriving to replace them. Gradually vacant houses and land would become more and more prominent and eventually dominate the townscape. This preponderance of female households at old Marulan seems to be a distinct marker of a town in irreversible decline.

Archaeological Implications

The turnover of population and the number of female households have several implications for the archaeological analysis. If we consider assemblages as being subject to a history of decisions that result in different patterns of retention, loss or discard of material, then we need to factor both of these phenomena into our interpretations. If frequent moves are the norm for many rural workers then it is likely

that they will develop behaviours that accommodate this. We may assume, for example, that a small farmer and his family will preferably carry those possessions that they need or are unlikely to be able to replace with them, and leave a quantity of other stuff behind, in the expectation that they will find more of the same at their next destination. In moving from Marulan they may just carry their more expensive or personally significant ceramics with them, leaving the broken sets and generic ware behind. These will become a pool of material that is then passed on to the next arrival in town. Possible mechanisms that allow this material to be re-used are to leave it as part of the house belongings for the next occupant, or contributing it to a church or social charity, an ancestor of the op shop, that the older women in the community would use to provide small comforts for the poorer people in the community³³⁵.

As well as the retention of material within the same house, despite a change of occupant, this model also suggests that new material will come in with each new resident. As the rate of population replacement can range from one every six to ten years, then new materials will arrive frequently as new residents move in. This presents a problem if the best resolution that we can get for dating is no closer than a decade. Even if we can date a residence and associated assemblage to say the decade of the 1850s this could represent one, two or even three distinct residential occupations, each leaving a mixture of ceramics they have taken over from previous occupants plus new material they have brought with them. This will tend to increase the minimum item counts [MIC] of more expensive or unusual wares, while the number of patterns of material in general use will stay static. The overall implication is that it weights the assemblage towards a higher proportion of more expensive, unique or higher quality items than was in fact the case.

Another consequence is the 'churn' of material within the townsite, as broken sets and individual vessels are likely to remain in use until broken. We may contrast the Woolpack Inn cesspit artefact assemblage recovered during archaeological excavation with its range of distinctive patterns that at least look superficially similar and match reasonably well, to others where there is a high variety of different types of decoration. Each decorative scheme may mean that a more complete set was present or that, when these people sat down to dinner, each plate was different and ultimately came from a different source. Such assemblages represent difficult challenges for interpretation.

As well as the ceramics, the general decline in the town's fortunes is likely to have affected the standard of living of those who remained. We may expect cheaper cuts of meat would be present in those assemblages post-dating 1867, as well as other evidence of living in tougher conditions. There may be evidence of the greater re-use of material, more repair and conservation of resources. Generally material will be older in date, with few newer additions to the assemblage. This is problematical as these new additions are necessary to allow a *terminus post quem* to be calculated and if people are so impoverished that they cannot buy new or replacement goods we may be underestimating the date of their assemblages by as much as one or two decades.

³³⁵ e.g. Gilmore 1934 talks about old ladies running the charity work in country towns.

Further analysis of the Marulan assemblages and other rural assemblages undertaken separate to this volume of reports could test these models.

3.11.2. Later Sales of Land

In 1854, before the railway was mooted, land was advertised as available at Marulan. This included:

Allotment 7 Section 7	1 rood 31.5 perches
Allotment 8 Section 7	1 rood 23.5 perches
Allotment 9 Section 7	1 rood 14 perches

The upset [i.e. reserve] price was £8 per acre. Allotment 9 was described as 'commencing ... at the westernmost corner of Mary Ann Hawthorn's 2 acres 12 perches.'³³⁶ It is not clear whether this comment refers to an original grants map or is evidence that Hawthorne still actively held and used her land. She certainly would have been remembered by the locals.

In 1847 legislation was changed to allow for more expedient sale of land³³⁷. Although it was mainly aimed at securing fixity of land occupation for those pastoralists who had squatted in the unsettled districts, it also made provision for the sale of smaller lots in the settled districts. Also, the sale of crown land was one of the major sources of revenue of the colony, which it needed to increase to support immigration. The change of legislation resulted in the survey and sale of a large number of blocks around the town in 1857 [refer to Figure 3.15]³³⁸. Many of these were taken up by a limited number of purchasers who were already known to be resident in the area, presumably as additional grazing land³³⁹. Few of these lots ever appear to have been built upon, although some formed the dispersed settlement of Tangryang to the southeast of the town that later flourished once limestone quarrying commenced at South Marulan.

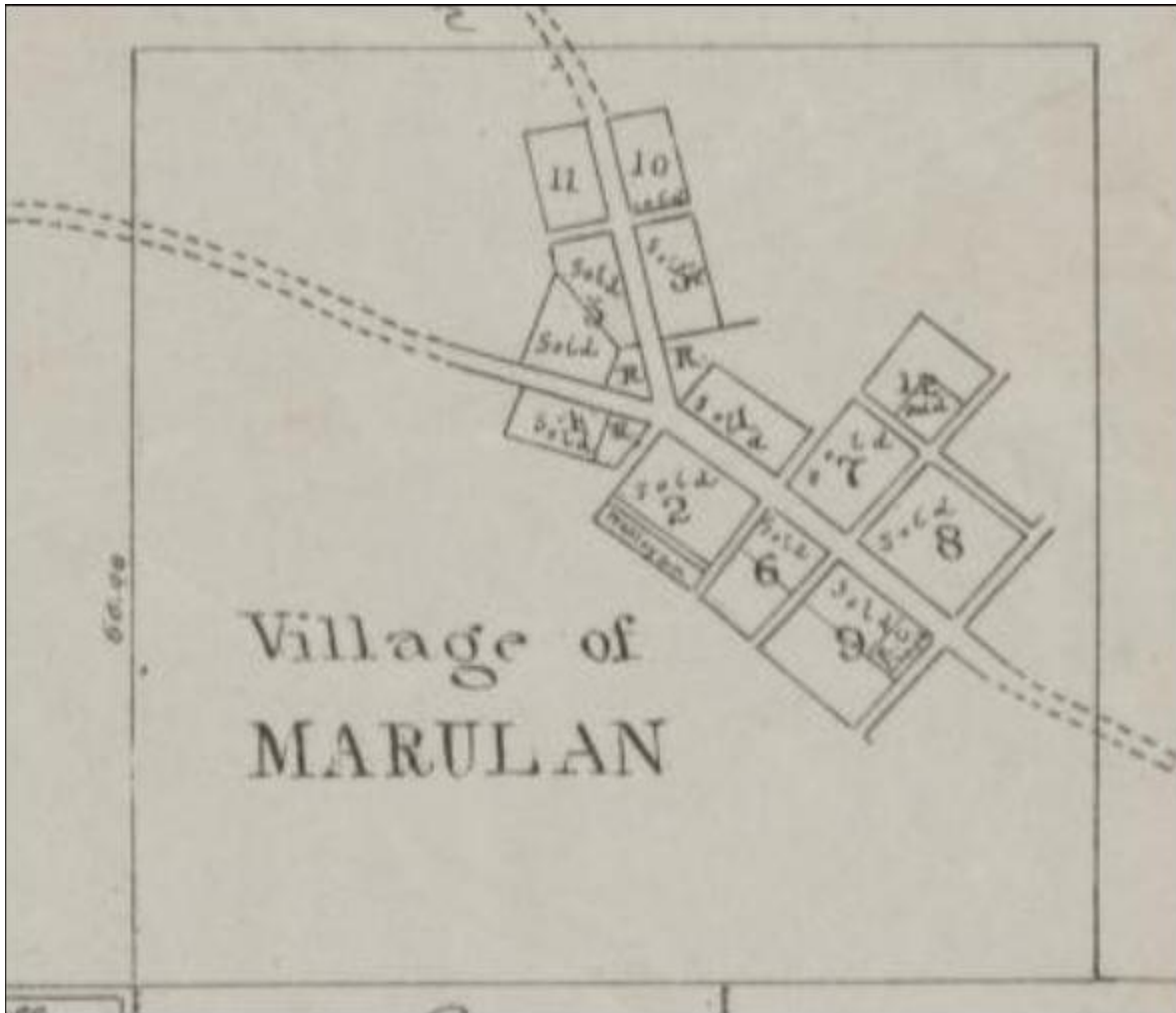
The same 1857 survey also shows the town, with information on which sections had been sold. Section 11 and parts of Sections 6, 9 and 12 remained unsold [refer to Figure 3.15].

³³⁶ NSW Dept Lands 1854

³³⁷ NSW 1847 Orders-in-Council. The act was an imperial law dated 1846, but procedures had to be specifically adapted and applied to the colony. See King 1957, pp. 50-57 for details.

³³⁸ NLA Map F832.

³³⁹ The main purchasers were John Morrice [10 lots], John Fulljames [14], William Lacey [8], and Elizabeth Feltham [7]. Other members of the Feltham and Ferguson families took up some of the blocks.



**Figure 3.15 - Marulan town sections in 1857, indicating land sold over the previous 22 years.
[image - NLA Map F832]**

The individual town lots also record later transactions relating to blocks in the study area [refer to Section 6.0 below]. Generally ownership consolidated into fewer individuals through time, which is typically a reflection of land reverting from township to rural ownership patterns. Even though by the early 1870s Marulan's death would have been clear the land continued to be sold.

At the same time as the arrival of the railway there was a hope that a route would be opened up from the Shoalhaven to Marulan. The inaccessibility of the coast as a result of the ruggedness of the Shoalhaven gorges has already been noted. A track was apparently available, though, running through Caoura estate, which lay to the east of Glenrock. This was not itself a significant communication line, but it did mean that timber-getters working in the gorges could get their produce through to Goulburn³⁴⁰.

³⁴⁰ SMH 28.11.1866

Although known about and used for a number of years the track passed through the Caoura property and had never been proclaimed. In the mid 1860s the then lessee imposed 'exorbitant demands' in the form of a toll. Despite discussion in parliament, the matter never seems to have been resolved and the route was never developed. While it is likely that the route would have shifted to the new town once it developed, the lack of action on this issue is indicative of the general apathy with which issues in this area were met.

3.11.3. Coming of the Railway

That Marulan died because of the railways is not in doubt; the only question is how much the railway was a cause in its own right or simply finishing off a process of decline initiated by other less visible impacts. As Louisa Atkinson observed, the railway's main effect was on the smaller new farmers who had begun to move in to Argyle following the various land acts³⁴¹. When the railway came the smallholders had already been heavily affected by drought and rust destroying their wheat crops. Some at least would have tried to farm land too small or marginal to provide a sustainable living. The irony is that the railway was promoted as being ultimately good for the economy and the farmers of Argyle. This section looks at what the railway promised and what it delivered.

The railway had an effect on Marulan long before the first spike was hammered in New South Wales. After railways were established in Britain it was only a matter of time before people began to consider how the technology could be brought to Australia. The colonials were well aware of the progress of railways and how they were transforming the British economy. The railways were celebrated in newspaper articles setting out their achievements, and also in more humble ways. A clay tobacco pipe bowl found during the excavations shows Stephenson's Rocket, the first effective steam passenger locomotive [refer to Figure 3.16]. Had the smoker ever seen a train or were they simply trying to appear modern or proud of British achievement?

The railways carried a greater promise than just fast transport and cheaper freight. Some saw them as a cleansing force of modernity that would obliterate the ways of life too closely associated with the old convict order. John Dunmore Lang thought that the railways would break down what he saw as an outdated and corrupted rural society, seemingly through putting bullockies out of work:

breaking up and destroying those nests of depredation and dissipation – the low public-houses on the wayside, to which the bullock-drivers at present resort on their journey with goods or produce either up or down – it will greatly promote moral welfare and advancement of the colony³⁴².

³⁴¹ Atkinson 1980.

³⁴² Lang 1852: 296.

Elsewhere Lang talks about his hope that the railway's 'new economical division of the country' will put paid to small rural towns, and specifically mentions Murrimba immediately to the north of Marulan³⁴³.



**Figure 3.16 - Stephenson's 'Rocket', portrayed on a clay tobacco pipe bowl recovered at Marulan
[Accession no. 0233 – surface find]**

³⁴³ Lang 1852: 293-4.

The first large public meeting in the colony to lobby for the establishment of a railway line took place on 29 January 1846³⁴⁴. It was chaired by James Macarthur, the son of John Macarthur, and this alone would also have unambiguously branded it, regardless of any other consideration, as being supported by the established grazing wealth of the colony. Many of the speakers discussed whether or not a railway would be a paying proposition or too risky, an important point, as at that stage all of Britain's railways were private companies funded by private investors. Some positive motions for action were passed, creating subcommittees to examine routes to the north, west and south but the meeting was essentially inconclusive.

A second meeting was held on 6 August 1846, where the only sub-committee to report was that looking at a southwestern railway. The meeting launched the Great Southern and Western Railway Company [GSWRCo], led by a provisional committee, to push for a railway line from Sydney to Goulburn. Many of the committee were members of the legislative council and it soon became evident that the railway interest was increasingly centred on what it could do for Sydney rather than the bush. One thing that the speakers lacked at that meeting was clear information on the possible cost of building a railway line beyond the confines of the Cumberland Plain. This required detailed mapping which had, to date, not been a priority for the Lands Department, who were still trying to define the courses of the main waterways and mountains with some accuracy beyond the Settled districts. As a result the costs and therefore the claimed returns were decidedly uncertain.

The subcommittee had tendered out the task of surveying the route. Thomas Woore, a naval officer who had taken up a grazing run near Goulburn, volunteered to prepare a survey for a route at his own expense. His two conditions were that his expenses were to be paid, and, if the route was taken up by the company, he would be paid a sum to cover his labour on preparing the survey³⁴⁵. Woore undertook his survey from June 1846 to January 1848. An initial survey was effectively a 'proof of concept' showing that viable routes existed, followed by a more detailed line survey to provide accurate quantities for costing the construction of bridges, culverts and tunnels. As a private company there was no expectation by the government that it would be involved in the initial route survey. Mitchell was still the Surveyor General, presiding over a department with shrinking funds, and unable to keep up with the demand for routine survey and land management, let alone major projects in support of private capital³⁴⁶. He did provide a surveyor from the department to investigate an alternative route to Woore's, and defended this line, which essentially followed the line of the Great Southern Road through Argyle. Mitchell's concerns were that the established towns on the route were already suffering from lack of road expenditure, and that locating railways away from them would be misdirecting expenditure. Particularly '[t]o twice cross the river Wollondilly, and avoid the long levels of the great road leading towards Marulan, which is carried clear of that river altogether is also in my humble opinion very objectionable

³⁴⁴ Lee 1988: 11.

³⁴⁵ Woore 1990.

³⁴⁶ Kass 2008: 91-94.

as far as concerns the general objects of local government in a new and unsettled land³⁴⁷.' The results of Mitchell's survey were dismissed by the company as they 'showed the impracticability of doing what Sir Thomas Mitchell was anxious to have done³⁴⁸.'

During this period the GSWRCo faced a succession of problems. Shares in the company were very slow in selling, largely because there were no sureties of any return on investment. In March 1848 the NSW Parliament convened a sub-committee to examine the issue of railway development. Chaired by Charles Cowper, it set important preconditions for further development of the railway. The company would be rewarded with a guaranteed return on investment of 6% per annum. These were effectively passed as resolutions by the Legislative Council and in October the Sydney Tramroad and Railway Company was founded with Cowper as its president, taking over from the GSWRCo. From the beginning they justified increasing governmental subsidies and support for this venture by arguing that the railway was a great public benefit.

The Goulburn residents were prepared, with Woore's strong urging, to go for the cheapest line possible, even accepting that it should operate as a horse-drawn tramway in the absence of imported rolling stock³⁴⁹. However no construction happened for several years as the Sydney Tramroad and Railway Company had to contend with issues arising from the gold rushes and the difficulty in getting the necessary expertise. A petition presented to the NSW Parliament in 1855 from nearly a thousand Argyle residents urged the government to get moving on the project. They cited that every year about 9,000 tons of goods, worth £100,000 travelled from County Argyle to Sydney, causing 'difficulty and expense ...arising from the absence of even a tolerable road'³⁵⁰. This public agitation and the government's feeling that the private companies were capable of prevarication to increase their profits provided the excuse for the NSW government to take over the Sydney Tramroad and Railway Company

In 1857 a select committee of Parliament considered the options that were developing for railways – between rapid and cheap and ultimately low capacity lines, versus more developed lines with greater capital outlay³⁵¹. Until this time there was no clear policy direction for how the different railway lines should be built. The railway literature of Britain and North America provided often contrary evidence about the merits of cost-cutting versus spending more to reap eventual profits. The increasing number of railway professionals, amateurs like Thomas Woore and parliamentarians who were often major investors and board members all grappled with the issue, trying to work out the underlying principles that seemed to be most relevant to Australian conditions.

³⁴⁷ Mitchell *SMH* 7.1.1847: 2-3.

³⁴⁸ *NSW LA V+P* 1858: 1063, q. 36.

³⁴⁹ Lee 1988: 13.

³⁵⁰ Petition from residents of the County of Argyle, *NSW LC V+P*, 1856-7: 729.

³⁵¹ 1857 NSWLC Select Committee – on the most advisable plan for securing the formation of the great trunk lines of Railway...

Woore's detailed mapping of the route identified some areas where any train line would need to pass. For example the Mittagong Gap was the only viable crossing point of the Mittagong Range, but in other locations he had to decide between a range of options involving a choice between more direct routes with greater engineering works or easier grades but greater distance. From his choices and later statements Woore preferred shorter routes, even when these meant that he avoided established population centres. He was later to criticise the railway establishment for their route selection across the Blue Mountains for what he saw as lavish expense and circuitous routes³⁵².

Woore's route into Argyle for the Southern Railway ignored Marulan entirely. From Mittagong the line followed closely the built line to Bong Bong and a crossing of the Wingecarribee; a station was to be located either at Bong Bong or Sutton Forest to service the cluster of wealthy farms in this area, ignoring Berrima only four miles away. It then closely followed the old road alignment, through Wombat Brush, past the Ploughed Ground and descending the Devil's Hole to cross Paddy's river. From there it passed to the west of the Wingecarribee, along the base of the Cookbundon Ranges until a short distance before Towrang, where it crossed to the east of the river. From there it is a short and relatively level trip to cross the Mulwaree Ponds and enter Goulburn township³⁵³.

The swing westwards on what was more or less the line of the old Argyle road was justified as being due to topography, yet this disguises other considerations that must have been in Woore's mind. It conveniently took his line right past Lockyersleigh, the main property of Major Lockyer. Lockyer was important to Woore in a number of respects and supported the establishment of a railway to Goulburn. At a public meeting in Goulburn in 1846 he moved the motion to set up a railway committee, seconded by Woore³⁵⁴. In such circumstances Woore was obliged by the codes of his day to propose a scheme that advantaged Lockyer and his property. When Woore undertook his work Marulan had been in existence for a decade, but did not rate as needing ready access to the railway. Woore would have known that this would probably have condemned Marulan to a marginal existence. Even his selection of stations indicates that he was less concerned about the way the land worked than assisting the land owners. Stations were proposed for either Bong Bong or Sutton Forest, near Paddys River and then at the Wollondilly, near Lockyersleigh. These were all distant from Marulan.

The politics of getting a railway line to Goulburn and then determining the actual route reveal the continuing effects of patronage and political influence. This was evident in Woore's initial work, the way he was later marginalised once the government took over the project, and then in the final route determination. Woore's survey was used in part, about 90 km of the total although, as he himself admitted, in some sections there was only one practicable route³⁵⁵. In 1858 he applied for his remuneration as set out in the original offer to the company. A select committee chaired by Sir Terence Murray, a

³⁵² Woore 1876.

³⁵³ Woore 1848.

³⁵⁴ *Maitland Mercury* 11.4.1846.

³⁵⁵ Woore *SMH* 22.11.1861.

major Goulburn-based landowner, considered the matter and supported it in 1858, but there was no follow through³⁵⁶. Woore later applied again in 1866 and again in April 1871, through the patronage of his friend Captain Onslow. After some acrimonious parliamentary debate he was voted £1500, but this was reduced to £1 in the budget estimates³⁵⁷. There had been opposition to his receiving any money on various grounds including the principle that Woore's arrangement with the company did not carry through to its purchase by the government, which was probably contestable. Some of the speakers recognised that Woore had friends and relations in the House and that this would predetermine the outcome. One member of the Legislative Council who opposed Woore's payment argued that Woore's contribution to the development of the railways was over-rated. 'He was evidently a man who, taken at his own valuation, had no equal in the colony, but of whom no one else could be found to speak in similar terms of approval.'³⁵⁸

The Sydney Tramroad and Railway Company had failed to control escalating costs resulting from changes as a result of a turnover of professional staff, switching the gauge and moving to a much more English model of substantial construction. In 1854, with more than half of their capital being a government loan and facing further costs of about the same amount again, the Company opted to dissolve itself and sell its interests to the government. This was a world first – the first government-owned railway line³⁵⁹ rather than a private enterprise. Following the takeover the Government appointed John Whitton to review the proposed route. In testimony for the select committee on Woore's overdue payment he indicated that no firm decisions had been made about the route of the line beyond Mittagong, where the landscape dictated the future line. Construction had by then reached Picton.

Right through the 1850s there was a debate in the colonies about the cost of railways, driven by the private investment model. Much effort was expended in trying to make operative railways that would be cheap to build. Engineering works such as tunnels or viaducts and bridges were seen as a hindrance to investment, and this influenced the routes chosen. In 1851, for example, one of the NSW exhibits in the Great Exhibition of London was for rails and trestle bridges from a NSW colonial engineer, attempting to both adapt standard railway design to local conditions, and to make use of cheaper local resources. Politicians and promoters could still suggest building railway systems that used horses rather than steam engines or wooden rails cut from the neighbouring forest. Using horse-drawn tramways was seriously considered, especially as it provided the possibility of a less centralised network that radiated from the smaller coastal ports into their hinterland³⁶⁰.

³⁵⁶ NSW LA V+P 1858

³⁵⁷ SMH 1.4.1871; *ADB* 6: 439-40.

³⁵⁸ SMH 22.2.1871.

³⁵⁹ Lee 1988: 23.

³⁶⁰ Lee 1988: 42.

Some argued that even this would not guarantee a profit. They said that that while rural goods could be freighted they were very seasonal and wouldn't pay revenue throughout the year, and were too dispersed to allow viable cartage around NSW³⁶¹. It was even suggested that Chinese labour could be used to help build the railways, but this provoked general opposition³⁶².

The 1857 Select Committee examined the section of the line from Picton to Goulburn, 81 miles [131 km] long, and costed at the time £1,520,000³⁶³. In the southern districts of the colony there was great concern at the growing Victorian and South Australian riverboat trade coming into NSW. In 1856 the NSW Surveyor-General John Thompson had had to visit the southwest of the colony to determine a route from Goulburn to Albury, so that NSW could continue to enforce its central control over that area in the face of Victoria's resurgent gold-funded encroachment³⁶⁴.

From 1860 Sir Charles Cowper took over the governorship. Cowper had been involved with the Sydney Tramroad and Railway Company in its early days³⁶⁵. He and his deputy John Robertson were heavily involved in reforming the land ownership system in NSW, resulting in the release of much land held by squatters for the use of small farmers. A network of railways would reinforce their reforms. The Engineer-in-Chief of the NSW Railways, John Whitton was asked to prepare a costing for the line to Goulburn. He said it could not be done for the funds estimated by Parliament, even for horse trams, but that a carefully engineered route 'by the adoption of better gradients than those on the existing roads' would deliver a viable steam railway with considerable economic benefit to the region³⁶⁶. Parliament approved the construction of the segment of railway line from Picton to Goulburn in April 1864³⁶⁷.

The construction of the line between Picton and Goulburn was the responsibility of George Cowdery as District Engineer, a former British colleague of Whitton³⁶⁸. A contract was let to construct the line from the railhead at Picton to Goulburn in 1864. It ruined the first three contractors engaged to build it but the fourth, Mark Faviell, successfully completed Section 7 – the line from Barber's Creek to Goulburn³⁶⁹. While Section 7 was under construction trains terminated at Mittagong station, which had opened on 27 February 1867. Faviell came from the third generation of a family of successful construction contractors. His grandfather had worked on bridges associated with canals, and his father, Mark Senior, contracted to many early British railway constructions. Mark junior and two other brothers had careers in railway construction, initially in Britain and then later on in India and Sri Lanka. By the time that Mark had arrived in Australia he had been associated with railway construction for many years³⁷⁰.

³⁶¹ *Sydney's Emigrant Journal and Travellers Magazine* Series 2 p. 125.

³⁶² *Civil Engineer and Architects Journal* 1854: 147.

³⁶³ Lee 1988: 41.

³⁶⁴ Lee 1988.

³⁶⁵ Lee 1988.

³⁶⁶ Lee 1988: 48.

³⁶⁷ *SMH* 20.4.1864.

³⁶⁸ ML MSS 1905.

³⁶⁹ Singleton 1969.

³⁷⁰ Skempton 2002.

The line required the first two large railway tunnels in the colony and six viaducts, one of which is located near Lynwood Homestead, and two others crossed the Wollondilly River. It was originally a single line of track, eventually being duplicated in 1913. When built, the original line used 75 lb iron rails in cast-iron chairs on split hardwood sleepers³⁷¹. The bankrupt Charles Burton worked briefly for Faviell, who seems to have had no qualms about cancelling contracts that resulted in extreme hardship for workers and their families [refer to Section 3.9.4].

Apart from the tunnels and viaducts, most of the land was relatively easy to construct upon. Even so, the three years for the section stretched to five. Only by late 1867 was a design for the Marulan Station being developed with an expected completion date of 4 March 1868³⁷².

An aside has Faviell marrying soon after the opening of the line to Goulburn. This took place at the home of Rev. John Dunmore Lang who, as seen above, was someone who placed an almost evangelical hope on the power of the railway to transform colonial society³⁷³.

The Railway Reaches Marulan

Queen Victoria's second son, Prince Alfred the Duke of Edinburgh had his birthday on 6 August 1868. Normally this would not have occasioned a major disruption to the days of Marulanites but probably they, like all the good citizens of NSW, were at once highly relieved that he had arrived home safely from his Antipodean tour and highly embarrassed that he had been the target of an assassination attempt while picnicking in Sydney. The attack by a deranged alcoholic loner was heavily played up by the Premier Sir James Martin and Henry Parkes to polarise sectarian feeling by claiming it was the result of 'Fenian' secessionists³⁷⁴. The shame of the attack, and possibly the way they responded to the aftermath, meant that Sydneysiders were even keener to please. Royal Prince Alfred Hospital was established in his honour, and the Premier called for a public holiday on the Prince's birthday. The holiday coincided very nicely with the ceremony marking the completion of the railway line as far as the [new] Marulan railhead.

At the time John Morrice was the owner of the Glenrock station through which the line passed in view of the homestead, and he was also a member of parliament. He had come to Australia in about 1834. He was born in Jamaica where his father probably owned a plantation³⁷⁵. He and his brother received a joint 1000 acre grant, provided by John Dunmore Lang as repayment for financial assistance, at Eling Forest, bisected by the Great Southern Road. He first entered politics as a councillor for the Berrima District in the early 1840s. He later became the Member of the NSW Legislative Assembly

³⁷¹ John Rae report – 1873

³⁷² *NSWLC V+P* 1866.

³⁷³ Goulburn Railway Centenary Committee 1969.

³⁷⁴ Travers 1986.

³⁷⁵ MTBA 2007.

[MLA] for Camden in December 1860, serving for three terms until February 1872³⁷⁶. He bought Glenrock at the same time as being elected to Parliament.

Once in Parliament Morrice seems to have lobbied to get the route of the Southern Railway to run through his property. For a short period there was even a siding on Morrice's land³⁷⁷. From 1862 he allowed the development of railway related buildings on the edge of his property. This became the nucleus of Mooroooolen, supposedly the name being his choice³⁷⁸. An advertisement in the *Sydney Morning Herald* in late 1867 promoted 36 building allotments in the new railway town. There were already temporary buildings on some of the lots, plus evidence of an already thriving small town servicing the railway construction workers. Hatfield's Store, Wade's Accommodation House, Bakery and oven are mentioned³⁷⁹.

Three special trains were laid on to run to Marulan on 6 August, filled with politicians, public servants and, in the third, paying members of the public. All travelled to the new little cluster of buildings around the rail head. One correspondent was perhaps trying to be positive when he said 'The best thing the Ministers found at Marulan was the luncheon.'³⁸⁰ The opening of the Marulan station briefly made the old town, and the new railhead a few miles up the road, an important local transportation hub. This only lasted for less than a year, until the opening of the Goulburn terminal station.

Even so, during that period the Marulanites had a surfeit of vicarious royalty and pomp. In September 1868 the Governor of NSW, the Earl of Belmore and his wife passed through the town on a visit to Goulburn, Yass and Albury with the Premier, Sir James Martin. A gushing London *Times* correspondent noted that everything 'that these places could do to demonstrate their respect to the Queen's representative was done'³⁸¹.

The party left Sydney on the train at 9 am and arrived at Mooroooolen by 3 pm, making a trip roughly twice as long as present. From the diary kept by the Countess of Belmore, once they arrived they moved into two buggies and continued by road to Goulburn³⁸². If they noticed Old Marulan at all, they made no mention of it.

The next vice-regal brush came nearly a year later in May 1869 when the Earl of Belmore, the new premier John Robertson and a large entourage travelled to Goulburn to celebrate the completion of the line. Once the Goulburn terminus was open Mooroooolen lost its status as the rail head and became just another station *en route*, but the impact of the railway continued to affect the lives of the locals. From the first, travel times were reasonable – the first published timetable for the line in May 1869, after completion of Goulburn Station, had the southbound train leaving Central Station

³⁷⁶ NSW Parliament 1905.

³⁷⁷ Singleton 1969.

³⁷⁸ Barnett 1981

³⁷⁹ *SMH* 4.12.1867

³⁸⁰ *Times* [London] 6.10.1868

³⁸¹ *Times* [London] 8.9.1868 p. 8

³⁸² Belmore 1868: entries for September.

at 9am, arriving at Marulan at 2.25pm and Goulburn 50 minutes later. By comparison the current Sydney service takes just under three hours³⁸³.

3.11.4. Marulan Dies

Despite whatever impact rust and changing rural demographics may have had, it was the non-arrival of the railway that really killed Marulan. At first it created a rival town that was able to compete for the same moderate local business with Marulan, and then it cemented that advantage with the transfer of all of the civic functions to the new town over a period of a decade. How did this situation come to be?

The Southern Highlands had seen this sort of thing before a number of times. Early, poorly supported proto-town settlements at Bong Bong, Sutton Forest and Inverary were bypassed by Mitchell in his planning of the Great Southern Road as if they did not exist. Mitchell's directive to construct a great road meant that towns were subsidiary to the road, not the other way around. While he justified the benefit of his overall line as having lopped a number of miles from the length of the existing twisty and unplanned roads that it replaced, it also meant that it passed through areas away from the existing settlements. In the case of both the northern and western roads it resulted in a steep climb to get onto the sandstone plateaus, and relatively fast travel thereafter, but through a landscape devoid of people, places to stop or good grazing and water. In the case of the Great Southern Road new towns were needed as staging posts and village reserves were set aside and, in some cases, developed into settlements.

The 1860s would have been a difficult time for many rural towns. The disruption of the gold rushes was still continuing, resulting in the loss of population. The rural labour force would, to some extent, have been dropping as a result of mechanisation, with stationary and mobile steam engines beginning to be used on farms, and transport by rail presumably impacting on the number of bullockies, general carriers and transport merchants. Affluence was still not a guaranteed outcome for rural living, with many smaller farmers and townsfolk still not counting as wealthy and definitively not rich in material goods. The retail world was still likely to be limited in both old and new Marulan, with trips to Goulburn and Berrima for more special commodities. At the same time, there is a shift from agents shopping on behalf of squatter families to a greater reliance on mail-order catalogues, which offered speedy delivery of almost every imaginable commodity by rail and carrier.

One essential part of this change was the ability to shift money in a way that was not possible before. The promissory note system effectively ends at this time, as the supply of currency increases in circulation to allow cash transactions to take place. The banking system, boosted by the gold rushes, becomes more reliable for smaller customers and the telegraph would eventually allow small banks to manage large credit requirements. In such a setting the role of the railway station and post office becomes central to the viability of the town. It is not surprising that Marulan's businesses

³⁸³ Singleton 1969.

relocated, but the time over which it took to shift all of the functions perhaps shows non-responsiveness by centralised authorities, who also did not want to invest in new buildings.

Soon after the opening of the railway one newspaper correspondent described its impact on old Marulan and dwelt upon the qualities of its citizens.

Marulan is a curiosity in townships. At one time it was a thriving and busy place, but now the buildings are going to decay, and there seems little prospect of improvement, unless the road from Braidwood should be made to pass that way. This has been talked of, and is not beyond the bounds of possibility; but one thing is abundantly clear, that if the railway, when completed, is properly managed, it will clear the road of the bulk of its traffic. Marulan has a Public school, a Roman Catholic Church, and a Church of England schoolroom, which is also used for the purposes of public worship. At the time the Hon. Colonial Secretary was passing through last week, a number of children were obsequious in their attentions to an old man who was riding through the town apparently on a mission of charity of which he himself was to be the recipient. If an eye witness were to describe the place after the fashion of some modern tourists he would probably say that the inhabitants have a peculiar mode of regarding strangers, which consists of enlarging the organs of vision and letting fall the lower jaw; that the sages of the place ride about in square cases drawn by asses, the youthful members assembling to do them honour. The sages, however, are taciturn, and do not receive the ovation with much courtesy³⁸⁴.

Another commentator writing about the same time was about as equally flattering about the town's setting as the former had been about the occupants.

'Uncle Ned' paid a flying visit to Marulan on business, and does not appear to have been very favourably impressed with that locality, which he describes as a wretched dreary spot without one thing to recommend it to the traveller, but Mr Garrett Kelly's comfortable inn, about a couple of miles from the Railway Station. ... In Old Marulan, rather grandly called the 'township' there are a few poor dilapidated houses and a hideous wooden church, that at a few yards distance looks not unlike a slaughter-house or stable. Strangers arriving at Marulan are often observed to become suddenly thoughtful, as if speculating upon the possibilities of an immediate departure therefrom³⁸⁵.

³⁸⁴ SMH 12.5.1868: 5.

³⁸⁵ SMH 14.6.1869: 2.

As people and services moved northwards to become part of the new town, Marulan's population dwindled. Town lots were sold and aggregated so that they became farm land. We do not know clearly what happened to any of the buildings – whether they were simply abandoned, remained tenanted or pulled down and material sold off. The assemblages excavated during the 2007 archaeological investigation seem to indicate that at least some of the main buildings remained occupied, which is also confirmed by the scanty documentary evidence.

One final record in 1911 comes from historian Frank Walker. In an article on the history of the Great South Road he mentions the old town.

*Old Marulan consists of about half a dozen ruined and tumble-down houses, in the centre of which is a substantial deserted building of stone of two stories, with the roof calmly reposing on the first floor.*³⁸⁶

Louisa Atkinson talks about the deserted towns, victims of rust and the railway. The change to her familiar landscape was dramatic, and she wrote of it with a resounding sense of loss. Many of these towns were perhaps only viable in an artificial economy, where the cost of transport was made extreme by the poor roads. However, they do represent a large number of people who tried to build lives based on these towns, and a greater number who relied upon them. The loss of Marulan was perhaps offset by the establishment of Mooroooolen up the road, but in many other cases there was no compensation. The hold of Sydney, as the centre of the colony, exerted itself over these small peripheral towns and their demise was not remarked.

3.12. Rural Marulan from 1870

3.12.1. What Happened After The Town Moved?

We do not know what happened after the mid 1870s [refer to Figure 3.17]. Some indication comes from the fate of the Catholic Church which was dismantled and moved³⁸⁷. It is likely that other buildings were either deliberately demolished and their salvageable materials re-used in the new town or they fell victim to neglect, fire and age.

³⁸⁶ Walker 1916: 383.

³⁸⁷ Eddy 2000.



Figure 3.17 - Section of a map prepared in the early 1870s and published in 1873, showing the towns of Marulan and Mooroowoolen. [detail from Joubert 1873]

Temple's survey of the southern side of the town documents a substantial amount of intact remains compared to the northern side³⁸⁸. The surviving remains are compatible with selected salvage having taken place.

One trend that is evident from the history of land ownership is the gradual consolidation of the lots into larger units. This took place when town allotments were placed on sale, with purchasers trying to buy contiguous blocks. Although data is missing from the lots held by the Barber estate, there was a major purchase of blocks by John Hogg in the 1870s, comprising at least 12 blocks in sections 1 and 5. In 1885 a survey of stock ownership found that a J. Hogg had 900 acres at Marulan, with 20 horses, 26 head of cattle and 225 sheep. This could have been either of the brothers James or John Hogg. Robert Nimmett at 'The Kilns' had 135 acres, with 2 horses and 7 cattle³⁸⁹.

Following the 1885 survey the majority of blocks come into the ownership of Feltham, Wells and members of the Riley family. Most of the land in the development area was owned by the Felthams immediately before its purchase by Holcim [refer to Attachment 3]. This gradual consolidation of land ownership suggests the use of the land for grazing. Some of the elements present on site, such as the exotic trees, drainage line and dam, may be best explained at present as relating to the grazing period.

³⁸⁸ Temple 1981.

³⁸⁹ *JNSWLC* 1885: Goulburn District returns.

The only substantial new use came from the establishment of lime burning in the town limits by Mr Hogg and his two sons, John and James. Hogg had lime kilns at Parramatta, using limestone from Mudgee and elsewhere and was obviously interested in another source of limestone accessible by rail³⁹⁰. Once the railway reached Marulan Hogg lived in one of the abandoned hotels, either the Freemasons Tavern or the Golden Fleece. His works were at South Marulan, where he had three kilns of 20 tons capacity, each of four furnaces, and a workforce of 80 men. There were two more similar furnaces within the township, visible from the Catholic cemetery, as well as a round kiln of unique type³⁹¹. The town kilns were fired when wet weather made the road to South Marulan impassable. The cost of freight was cited as the main reason for the marginal nature of the industry, soaking up more than 40% of total operating costs. The works, possibly only the quarry, were still in operation in 1891 when an accidental gunpowder blast killed a worker, 'a portion of his skull being blown off and his brains scattered 30ft around.'³⁹²

By 1900 the only residents listed in old Marulan were John and James Hogg. John was listed as a potato grower and James as a grazier³⁹³. The kilns in town may have ceased operation by then, but this is not clear. There are many later references to lime burning at Marulan, but these may all refer to work at South Marulan itself, which connected directly to the Main Southern Railway with its own branch railway line.

There are only sketchy details of owners post-dating c.1867. There are a number of gaps where either old system title remained in operation or land transfers were not fully registered. What can be determined from the titles and other sources is presented below [Table 3.19]. Excluding owners, including the estates of the deceased John Hillas and George Barber, that owned blocks bought during the town's existence there are 26 later new owners identified before Holcim began purchasing the land. Of these Artlett, Astill, Baxter, Clark, Cousins, Dignam, Guymmer, Harris, O'Neil, Smart and Wilkie all owned from one to four contiguous or separated lots, and can be considered insignificant landowners in the former town. Even so, they may have lived on their property or made active use of it but there is no reliable evidence for or against this. Of the remaining 15 owners Brown owned 11 lots but sold them within five months to Augustine Betts, a Goulburn solicitor, who retained them for less than two years. The significant land owning families in terms of both size of holdings and duration were therefore:

Feltham	Sections 1, 5	17 lots	1915 – 2006	
Franki	Sections 7, 12	12 lots	1877 – 1925	
Grose	Sections 7, 12	12 lots	1925 – 2006	
Hogg	Sections 1, 5, 8	22 lots	1875* – 1935	*possibly earlier
Phillips	Sections 5, 8	17 lots	1984 - 1991	
Jones	Section 8	14 lots	1851 - 1875	

³⁹⁰ *SMH* 16.12.1868: 8; *SMH* 7.1.1877.

³⁹¹ Hume 1954.

³⁹² *Brisbane Courier* 29.10.1891: 4.

³⁹³ *Yewen's Directory* 1900: 181.

Riley	Sections 1, 5, 8	32 lots	1951 – 2003
Wells	Section 5, 8	24 lots	1935 – 1951

Note that this includes only lots on the northern side of the highway. On the southern side of the road W.E. Riley, James Wells and Mary Jones also owned land as initial grantees and John Feltham and John Hogg and probably others on this list bought additional land. In the case of the Jones, Feltham and Riley families there are at least two generations involved. They and the Hoggs also had other holdings in the immediate vicinity. Although James Hogg died in 1886 his estate was probably inherited and maintained within the family for another fifty years.

Some sense of the town's longer term decline is also seen in the gradual loss of integrity of the original plan. At this stage it was mainly affected by the widening of the Hume, but there were also partial sales of former road reserve lands, and while the old lots were sold as parcels it was probable that at some time they would become consolidated again into hectare-sized or larger blocks.

Table 3.19 - Details on ownership of lots in study area – 1867 – 2005.
[source – LTO land title databases].

Name	Land held	Dates held	Comments
Artlett, Francis Arthur	Section 1 Lot 8	1882 – 1915	Born London, came to Australia 1857, aged 6. Worked as upholsterer and lived in Parramatta during this period. Unlikely to be resident on land ³⁹⁴ .
Astill, Dennis James	Section 5 Lots 2-4	1963 – 1985	No details available.
Barber, George - estate	Section 1 Lots 5-6, 9-10	1835 – pre 1917	No details available.
Baxter, John	Section 10 Lot 10	1903 – 2006	Goulburn resident.
Betts, Augustine	Section 7 Lots 2-6, 9; Section 12 Lots 1- 5	1877 - 1878	'Solicitor', Goulburn.
Brennan, Thomas	Section 7 Lot 1	1877 – 1883	'Freeholder'.
Brown, Thomas	Section 7 Lot 2-6, 9; Section 12 Lots 1-5	1875 – 1877	'Farmer'.
Clark, Henry Marcus	Section 1 Lot 7	1895 – pre 1917	British-born. Draper, established shop in Sydney that eventually developed into Marcus Clark and Co. Non-resident.
Cousins, John	Section 1 Lot 7	1885 – 1895	No details available.

³⁹⁴ Manwaring family history: Caroline Manwaring pers. comm.

Name	Land held	Dates held	Comments
Dignam, Philip	Section 1 Lots 1-4	1871 – 1877	Dignam is a local land-owning and farming family. Thomas owned 40 acres at Wingello in 1885.
Fahey, Francis	Section 1 Lot 7	1880 – 1882	Land agent, Sydney.
Feltham, J. and S.	Section 1 Lots 1-10; Section 5 Lots 2-10; Lot 11 DP 111641	1989 - 2003	Son of George, Grazier. Resident in former township area. Owns other land in area.
Feltham, Elizabeth	Section 1 Lot 8	1915 - 1948	Felthams owned land in area from at least 1857.
Feltham, George	Section 1 Lot 8	1948 – 2006	Son of Elizabeth, Grazier. Resident in township.
Franki, James Peter	Section 7 Lots 1-6, 9; Section 12 Lots 1-5	1877 – 1925	'Superintendent' at time of purchase, but became prominent engineer and ship-builder ³⁹⁵ . Non-resident.
Fulljames, John	Section 7 Lot 2-6, 9; Section 12 Lots 1-5	1847/51 – 1876	Resident in old Marulan.
Galland, Michael Bernard	Lot 11 DP 111641	1979 – 1985	Solicitor, Goulburn.
Grose, Percival Joseph	Section 7 Lots 1-9; Section 12 Lots 1-5	1925 - 2006	'Railway ganger', resident at Hilltop.
Guymer, Frank	Section 5 Lots 2-4	1936 - 1963	Auctioneer, Goulburn.
Harris, James	Section 1 Lot 7	1882 – 1885	No details available.
Hillas, John - executors	Section 5 Lots 2-4	1847 - 1935	No details available.
Hogg, James	Section 1 Lots 1-4; Section 5 Lots 5-10	1877 – 1935	Hogg developed lime burning in town in c.1868 as well as being local landowner and town resident.
Hogg, John	Section 1 Lots 5-7		Noted as a potato farmer, also as 'merchant' in land titles. Resident in the town.
Jones, Catherine Elizabeth	Section 8 Lots 2-15	1861 - 1875	Initial land title listing as 'spinster', then married as C.E. White [undated]. Her relationship to Mary Jones, 'widow' of Joseph Jones who owned contiguous blocks with hers is not clear, but probably daughter.

³⁹⁵ ADB 8: 527-528.

Name	Land held	Dates held	Comments
Kirwan, James	Section 1 Lots 1-10	1852 – 1871 +	Date of sale of Lots 5-10 unknown. James was Irish-born convict transported in 1826 for 7 years. Family became prominent in Monaro. Kirwan established inn on later site of Cooma. Died in October 1852 ³⁹⁶ . Also possibly it is his son, also James. Not resident.
O'Neil, Eleanor Mary	Section 7 Lot 2-3	1875	Listed as 'married woman'. Possibly related to John O'Neil – final Woolpack Inn occupant.
Phillips, Thelma Garrie	Section 5 Lots 2-4	1985 - 1991	No details available.
Riley, Christopher Edward.	Section 1 Lots 1-10; Section 5 Lots 5-10; Lot 11 DP 111641	1984 - 2003	Fitter and turner, [new] Marulan. Son of Walter E. Riley.
Riley, Walter Edward	Section 1 Lots 1-10; Lot 11 DP 111641	1951 - 1989	No details available. Presumed resident of [new] Marulan.
Smart, Thomas Ware	Section 1 Lot 8	1839 – 1882	Colonial-born politician and businessman ³⁹⁷ . Not a resident. Died 1881.
Storier, William Thomas	Section 7 Lot 1	1855 – 1877	Possibly Storrier. Listed as 'Trustee for sale'.
Tegg, James	Section 1 Lot 7	1839 – 1880	London-born, Sydney-based publisher and bookseller. Non-resident. Died 1845 ³⁹⁸ .
Wells, James Edward	Section 5 Lots 1-10	1935 – 1951	'Farmer'. No details available.
West, Henry Isaac	Section 10 Lot 10	1865 - 1870	No details available.
Wilkie, Thomas	Section 10 Lot 10	1870 - 1903	Goulburn resident.

The only other notable activities that took place on the site were the widening of the highway [discussed below] and the installation of two PMG / Telecom [now Telstra] coaxial cable lines through the site immediately north of the road reserve. A concrete repeater station is located in section 8 for the coaxial cable.

³⁹⁶ Monaro Pioneers: James Kirwan

³⁹⁷ ADB 6: 138-139.

³⁹⁸ ADB 2: 504-505.

3.12.2. Highway Development

Mitchell's Great Southern Road was renamed the Hume Highway in 1928 with the joint declaration by the NSW and Victorian governments to commemorate the explorer. With most travel between Sydney, Canberra and Melbourne happening by rail due to low car ownership the naming did not herald a major change in the road's layout. In late 1931 about 8 km of road pavement in reinforced concrete was laid by contractors Lane and Peters, centred on Marulan. This pavement was 20 feet [6.25 m] wide, making it extremely narrow. No changes were made to the alignment of the road, and its meanderings reflected horse traffic³⁹⁹. A section of this road surface still survives at the site of the Wingello stockade between Marulan and the crossing of Uringalla Creek, having been later bypassed.

In 1936 the triangular block between sections 1 and 5 [Figure 3.6] was reserved for use as a resting place, although it was most likely intended as a water reserve and access for travellers to the creek from the initial layout of the township⁴⁰⁰.



Figure 3.18 - Cattle being moved on the hoof between Goulburn and Marulan in c.1880-1940 [source – State Library NSW At work and play collection 05374]

It was only following World War II, with increasing amount of road transport and personal ownership of cars, that the condition of the Hume Highway became a scandal in Sydney. It was a regular 'beat-up' by the newspapers, who would greet the latest death in a car accident with a general item about how this road remained stuck in conditions suited to horses and wagons. A study in the early 1960s identified only 12 miles [19.3 km] of the Hume as being of an acceptable standard⁴⁰¹.

Starting from about 1960 the NSW Department of Main Roads [DMR] appears to have begun to escalate its works on the road from general maintenance to incorporate significant capital expenditure, including widening the road, realigning some of the more problematical sections. Probably not coincidentally this began at the same time as the

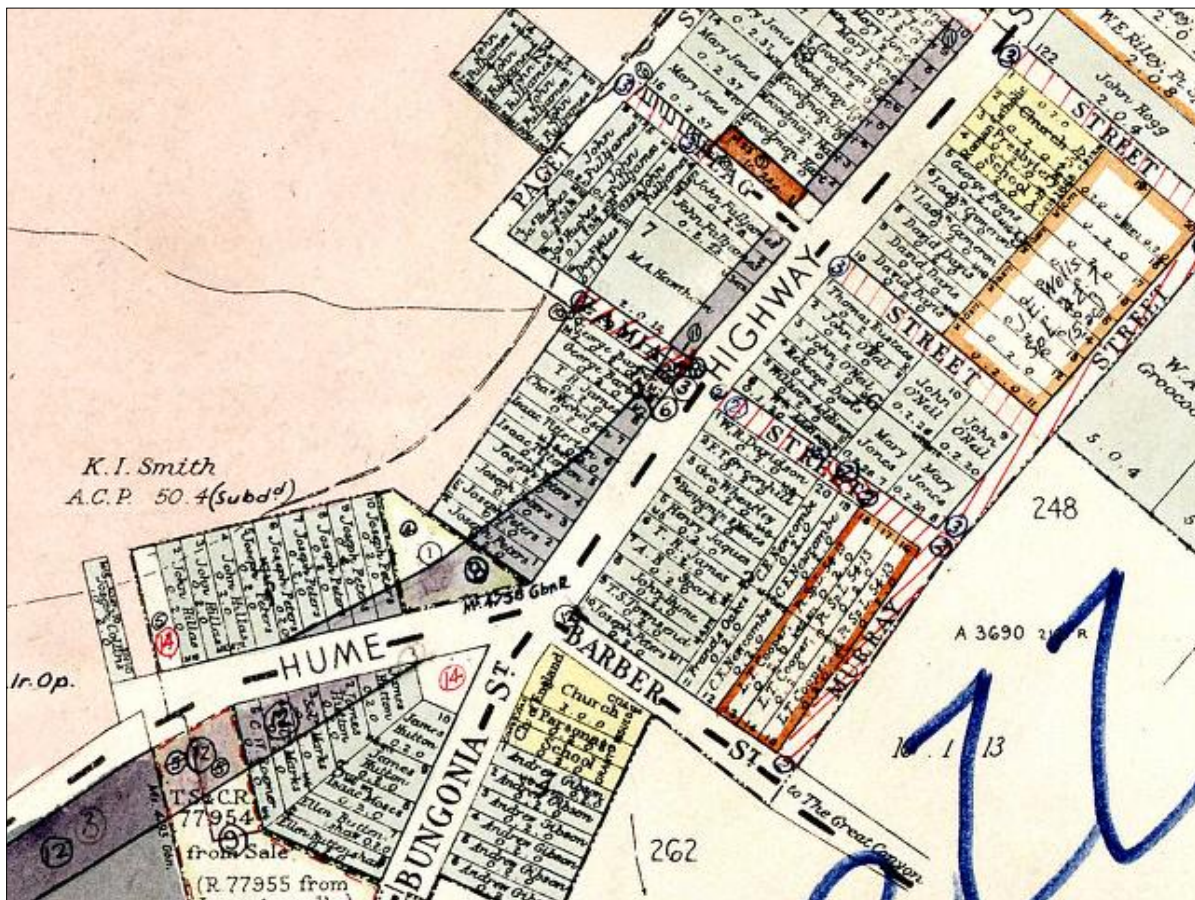
³⁹⁹ DMR 1931.

⁴⁰⁰ Marulan Parish map 9th edition.

⁴⁰¹ SRNSW 13/9809 - RMS file 2/75.1102 Pt 1 - collection of news clippings.

election of Thomas [Tom] Lewis as the Liberal Member for the seat of Wollondilly. Later to become the Minister for Lands and Minister for Mines, and briefly Premier, he was a continual critic of the quality of the Hume Highway within his electorate. DMR files attest to his active involvement in arguing for the priority of road expenditure along the Hume Highway route and critiquing the department's design solutions⁴⁰².

Land within the town was resumed for road widening by the DMR. This was gazetted on 2 August 1963⁴⁰³. Road widening took place in 1964-66, when funding became available to widen the road pavement south of new Marulan. The works record in the available files only list 'widening and improvement to alignment 1965-66', without any details of the transactions that would have been needed to carry this out, such as purchase or resumption of the blocks on the western side of the road⁴⁰⁴. As can be seen from the parish map [refer to Figure 3.19] the widening sliced off a substantial portion of the western blocks bordering the road reserve.



**Figure 3.19 - Marulan parish map 9th edition [undated], showing the provisions made for widening the Hume Highway.
[NSW Dept of Lands image 13618001]**

⁴⁰² SRNSW 13/9821 – RMS file 2/297.121.

⁴⁰³ Information on HO files – courtesy of Fiona Leslie.

⁴⁰⁴ DMR 13/9809 File 2/75.1102 Pt 1. No relevant property acquisition files were found in NSW State Records, but they may still exist.

By 1966 the new road had been widened from 20 to 24 feet, with additional 10 feet wide shoulders, and was designed to accommodate 60 mph speeds throughout⁴⁰⁵. This work was designed with the eventual intention of creating a dual carriageway, which was eventually constructed in 1974⁴⁰⁶.

Two culverts were placed as part of this work, one being 2' x 1'6" and the other 2'6" x 1'6". These are located within the development impact area. One discharges within the road reserve immediately upslope of the Dam / depression identified as OMF 20 [refer to Section 6.5]. The other is located near the shallow drainage point that is marked by the drainage lines and exotic trees – OMF 42 [refer to Section 6.13 below].

In the early 1980s Marulan was bypassed, with the dual carriageway swinging to the east of the town and eventually reconnecting with the original line of road just to the south of the twin service centres.

3.12.3. Marulan as a Historic Site

The NSW Heritage Act was passed in 1977 carrying provisions for the protection of historical relics that post-dated 1900. These relics provisions were included in response to the growing feeling within professional, academic and legislative circles that although Australia had a relatively young written history, the physical evidence of that history was under threat from unregulated development. At the time the recognition and inclusion of archaeological evidence as a separate category of site that required protection through consent procedures separate to other aspects of the planning system was innovative and brave.

Soon after its proclamation, the act's relics provisions were tested when a permanent conservation order [PCO] was placed over the Old Marulan township. The PCO was prompted by proposed development within the town curtilage. Following protests from affected landowners a Commission of Enquiry was held under the Heritage Act to determine whether the declaration of a PCO was merited. The enquiry heard from academics, departmental and consulting archaeologists. All affirmed the importance of Marulan, identifying its intactness and lack of subsequent development, the potential it had for telling us about Australian history through archaeological investigation, and its rarity as a type of site. The Department of Planning's archaeologist, Helen Temple, prepared a detailed inventory of the archaeological evidence of the site, although focussing on the eastern side of the road, and historian Pam Barnett placed the site into context. Objections were heard from landowners who would be affected by the declaration of the PCO. They claimed that it effectively sterilised development on the site. The owners also questioned the intactness of the site, confusing its archaeological integrity [the basis on which the Government sought the PCO] with its apparent lack of any buildings or visible surface evidence.

⁴⁰⁵ DMR 1966.

⁴⁰⁶ DMR 1974.

The Commissioner, Mr Gilpin, found unequivocally for the Government and the Department of Planning, agreeing that Marulan was a rare example of its type and that its intactness made it a significant archaeological resource. He noted that the evidence presented on the archaeological intactness of the site was sufficient to ensure its importance, despite the concern of owners that the village had been obliterated above ground. The PCO was therefore able to be placed and came into effect in June 1982. When the Heritage Act was amended in 1997 all PCOs were converted into listings on the NSW State Heritage Register. Marulan was given SHR number 0127 on 2 April 1999 [refer to Figure 3.20]. It has retained this legislative control since.

RMS have also entered Marulan on its statutory s.170 register, which is prepared to meet the provisions of the NSW Heritage Act. They have ownership of three lots within the township, as well as the road reserve.

A boundary fence marking the road reserve was erected in 1982 following approval by the Heritage Council⁴⁰⁷. They required that any road widening did not affect the archaeological site, but there is no indication whether this was supported by archaeological assessment or oversight.

An optical fibre cable was installed in 1985. The Heritage Council approved installation provided that there was no impact on archaeological remains. However, in a letter of 21 May that year the Heritage Office noted that damage was likely to have occurred⁴⁰⁸. No archaeological survey or monitoring appears to have been undertaken as part of the work.

⁴⁰⁷ Information on HO files – courtesy of Fiona Leslie.

⁴⁰⁸ Information on HO files – courtesy of Fiona Leslie. Letter from HC to DMR 2 May 1985.

THIS IS THE PLAN REFERRED TO IN ~~INTERIM~~/PERMANENT CONSERVATION ORDER No. 127
 N S W GOVERNMENT GAZETTE No 77 OF 11-6-82
 SUBJECT LAND SHOWN THUS

Heritage Council of New South Wales PLAN

Under the Heritage Act, 1977

Description PART OF THE TOWN OF MARULAN
 (SITE OF OLD MARULAN TOWN)
 Mun/Shire/City MULWAREE Locality MARULAN
 Parish of MARULAN County of ARDELE

Scale 1:5000

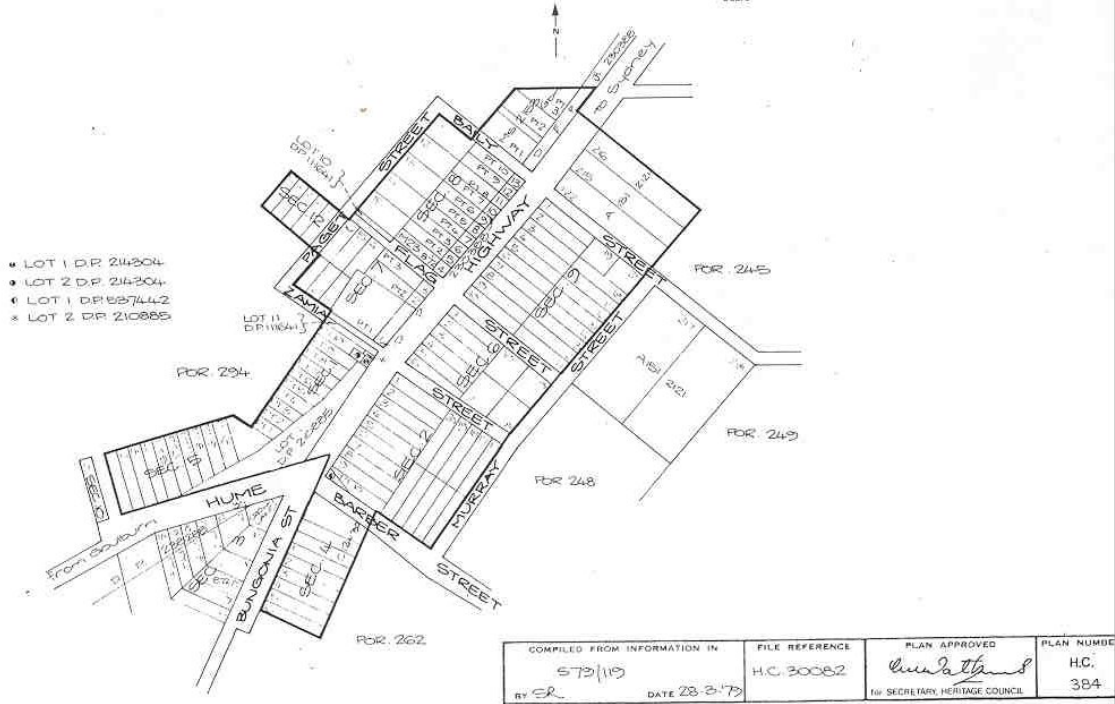


Figure 3.20 - PCO Plan Number 127 [Heritage Council of NSW].



SECTION 4.0

Archaeological
Investigations

4.0 Archaeological Investigations

4.1. Previous Field Surveys and Context

4.1.1. Temple's Survey 1981

Helen Temple's archaeological survey was undertaken in 1981 in support of the O'Connell commission of enquiry⁴⁰⁹. It was focussed on the southern side of the highway, where development was proposed, and where extant remains were most clearly visible.

Temple was able to conclude that, apart from the impact of the highway widening, which included bulldozing the Woolpack Inn site, the township remained remarkably intact. Its significance resided in its rarity as a town from this period that was not developed in the later 19th century. Temple cited Carrington [the Australian Agricultural Company's town at Port Stephens] and Boyd Town at Twofold Bay as two comparable examples, albeit private company towns. Marulan was also established as a government town with the expectation of permanence, which was not always the case with Australian bush towns, especially those that relied upon mineral wealth. She cited Hill End, Joadja and other mining towns as having a high level of civic structure, but which were ultimately reliant only on the continuation of wealth.

The results of Temple's survey are summarised in Table 4.1. Temple's report is included as Attachment 2 – this volume.

Table 4.1 - Sites identified in 1981 survey
[source – Temple 1981]

Site	Section	Lot	Temple's Description
1	2	10	Raised rectangular mound associated with brick rubble.
2	2	9	Small scatter of brick rubble.
3	2	8-9	Line of stone and brick rubble, possibly along a boundary fence. Clump of trees planted as a screen also on this line.
4	2	8	Clearly defined rectangular foundations of a house. Associated with a large scatter of brick, some cement rendered. Row of rose bushes on the street edge and apple tree nearby. The building may have stood until relatively recently.
5	2	7-8	Large climbing rose bush.
6	2	7-8	Unidentifiable non-native plant, part of a garden layout.

⁴⁰⁹ Temple 1981.

Site	Section	Lot	Temple's Description
7	2	7	Mound at northern [street] end of timber post line [refer to Site 8], with base of masonry wall.
8	2	7	2 depressions about 1.5 metres diameter. Northern one may be a robber trench. Southern filled with timber planking, and stone, possibly a small well.
9	2	7	Line of vertical timber posts at regular intervals, boundary line of two lots. Structure 7a.
10	2	6	Large bramble bushes covering mounds of stone rubble. Foundation lines visible and scattered with brick.
11	2	6	Raised mound running east to west. Has traces of vertical timber planks and coursed rubble foundations.
12	2	5	Large rectangular depression at eastern end of block. Raised mound 8m x 4m, with associated scatter of brick and stone rubble. Bricks measure 6 x 10 x 22cm.
13	2	4	Small circular depression about 1m diameter. Uncertain if deliberate or from tree removal.
14	2	3	A loose scatter of stone, some roughly shaped.
15	2	2	Very shallow rectangular depression. Roughly 2 x 4m. Located behind gum tree – no evidence of rubble.
16	2	1	Large cluster of brambles – possibly covering disturbance.
17	2	1	Rubbish dump, roughly circular depression c. 2m diameter. Artefacts of different periods. Deposit includes metal, glass, ceramic leather, glass etc. Bricks of rough puddled clay with no frog.
18	2	11	Large rectangular depression near dam.
19	2	6	Series of mounds of brick and stone rubble marking structures. Bricks with diamond frogs.
20	2	5	Two large timber posts set vertically in ground SE of substantial rectangular well. Timber-lined and reinforced with mass concrete.
21	2	5	Rectangular depression, possibly representing remains of a timber slab structure.
22	2	4	Mounds of stone rubble defining a rectangle aligned with site 18. Site of a stone building or stone foundations.
23	2	3	Slight mound with brick and stone rubble aligned with sites 18, 20. Probable base of fireplace and possibly slab hut.
24	2		Rectangular depression with concentration of brick and stone at north and south ends, probably chimney bases. Aligned with sites 18, 20 and 21. Bricks have diamond frogs.

Site	Section	Lot	Temple's Description
25	2	2	Directly behind 22, small area of slag with wrought iron. Possible site of blacksmith's forge.
26	2		Slight depression running NE-SW, parallel to Lot 1. May represent the course of Flag Street.
27	9	5-8	General scatter of domestic debris, including glass, metal and ceramic, and scatter of brick.
28	9	1-4	Cemetery with standing tomb stones.
29	9	A151 2121	Two high mounds. NE mound partially demolished brick structure, possible domed top. Brick with inner faces vitrified. SW – semicircular feature built primarily of stone, inner face of hardened mud. Brick arched flue enters SW side.
30	9		Deep rectangular depression, probably small water reservoir
31	9	122/125	Scatter of brittle calcium carbonate – possible lime kiln site
32	7		Mature vegetation forming a hedge
33	DP2108 85	1	Considerable concentration of transfer printed ware ceramic [TPW], bottle glass and broken brick. Identified as inn site
34	4	1	Small concentration of broken brick rubble close to cemetery boundary
35	outside town		Standing cottage – Murray and Barber Streets. Post-dates town. Stone rubble to 1.5 m, then brick of variable bonding

Thirty five individual sites were identified on the southern side of the road. In contrast, on the northern side, subject of this investigation, the only evidence noted was mature plantings in Section 7, a bramble bush covering a possible structure site in Section 5 and artefactual material on the surface of the road reserve in the vicinity of the former Woolpack Inn. No remains were located within the remainder of Sections 1 and 3.

Temple's survey piqued interest in the potential of the town site for archaeological investigation in the small historical archaeological community then working in Sydney, but no further work was ever undertaken as a result of the development being stopped and a permanent conservation order [PCO] being placed on the site.

4.1.2. Umwelt Survey 2005

Umwelt undertook a survey of the town and the broader development area as part of the environmental impact statement [EIS] that accompanied Holcim's development application⁴¹⁰.

⁴¹⁰ Umwelt 2005 Non-indigenous archaeology assessment – proposed Lynwood Quarry, Marulan, in Umwelt EIS, Appendix 12.

Umwelt identified a series of archaeological sites related to historic settlement. These were:

Table 4.2 - Sites identified in 2005 Umwelt survey of the Lynwood quarry development area [source – Umwelt 2005]

Identifier	Name	Comment
MRNH1	Circular sheep dip	This is within the SHR area but is discussed further in Volume 3 of this report as part of the post-township rural heritage of the area.
MRNH2	Stone-lined cistern / well	This is within the SHR area.
MRNH3	Grave sites [potential]	These were identified with information from a local informant. They are just outside the SHR area. They are, in this report's opinion, unlikely to be graves.
MRNH4	Stone line	This is outside the SHR area. It is discussed further in Volume 3 of this report as part of the post-township rural heritage of the area.
MRNH5	Lynwood Homestead	Further discussed in Volume 3 of this report. The main elements in this are: <ul style="list-style-type: none"> • the cottage • shearing shed • yards • sheep dip and front bath • meat house • pise building • windbreak
MRNH6	Brick clamp	MRNH 6 and 7 occur together. They are discussed in Volume 3 as they are unlikely to relate to the town's history.
MRNH7	Clay pits [potential]	These have been confirmed as clay pits and are associated with MRNH 6.
MRNH8	Timber-lined cistern / well	Within the Hume highway road reserve in the SHR area. Described in detail in Volume 3.
MRNH9	Sheep dip	Further discussed in Volume 3 of this report.
Old Marulan township		Not surveyed in detail, apart from enumeration of specific elements noted above.
Potential stone quarry		This is not considered to be anything other than a natural outcrop with normal fracturing processes.

Within the township Umwelt noted the sheep dip [MRNH1], which relates to the post-township rural use of the landscape, water supply evidence [MRNH 2, 8] and the potential graves.

4.2. Archaeological Research and Compliance Program [Stage 1 And 2 Investigations]

4.2.1. Preliminary to Stage 1

A new archaeological survey of Sections 1, 3 and 5 was undertaken in May 2006 as a +preliminary to the development of the research design. This survey was aimed at identifying all previous ground disturbance, artefact scatters and older exotic plantings that may be indicative of the below-ground archaeology.

The survey was undertaken by Denis Gojak of Banksia Heritage + Archaeology and Julian Travaglia of Umwelt. Severe drought conditions prevailed and regular cattle grazing provided excellent survey visibility. However, we now consider that the extreme dry conditions distorted our view of the landscape by accentuating the visibility of even minor variations in the topography and vegetation cover, without our being clear about what the natural pattern of variability looked like in these conditions. As a result some of our possible 'sites' have since been reconsidered as part of the natural range of variation in the landscape. This has also been assisted by subsequent excavation where we were able to examine the features in context.

The results of the survey were initially reported in the Archaeological research design⁴¹¹.

The survey covered an area from the western edge of the Holcim-owned land, slightly to the west of the town's gazetted extent, to the maximum likely eastern limit of works on the proposed interchange. This took in Sections 10, 1 and 5 and some of Section 7 of the town.

All identified cultural remains were flagged and described and allocated one or more M series numbers. This included clusters of stones that were not at the time considered to be natural outcrops, all scatters of 19th century artefacts [more than 2 within a 5 metre radius counted as a scatter], any exotic plants, all soil depressions and mounds that were not related to current highway or service installation. A total of 45 features were identified. These were surveyed in and the cadastre was overlain to indicate within which lots each feature was located. M series numbers represent points at the centre or extremity of a feature representing landscape modifications such as levelling or a pit. The full list of identified features and survey points is shown in the following tables and figures.

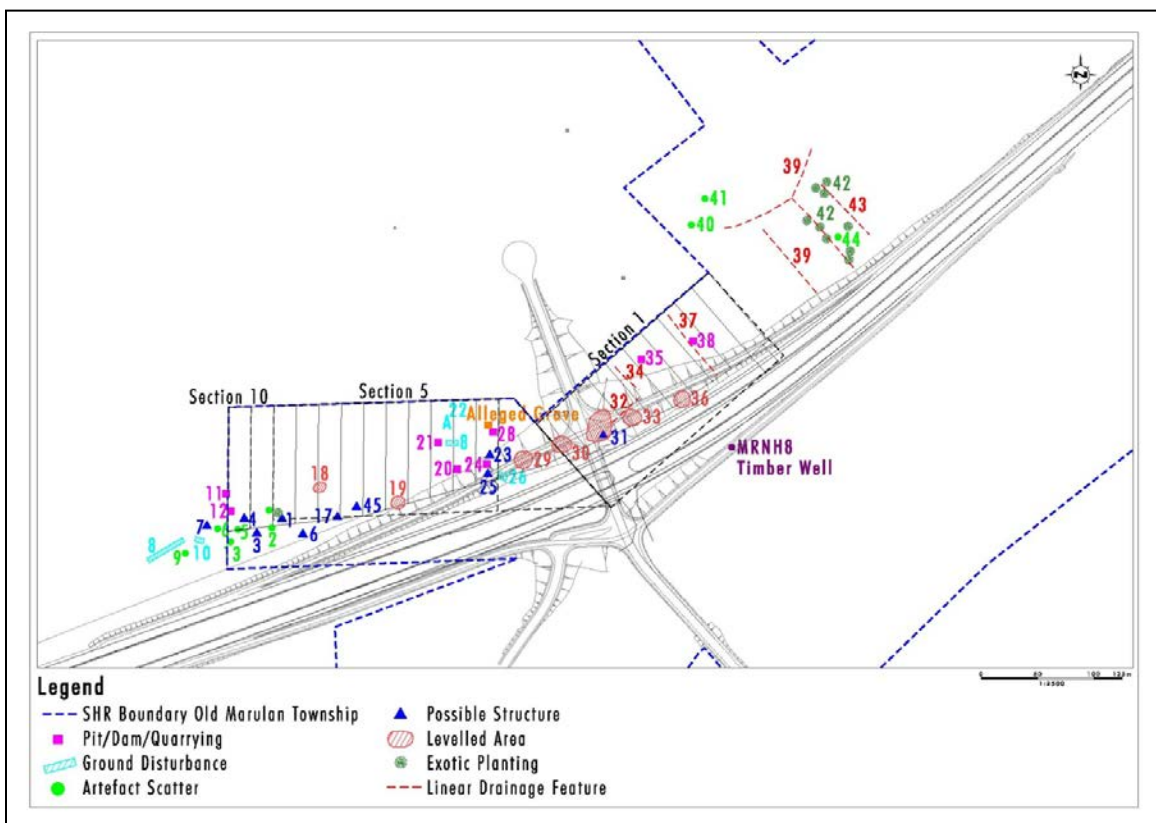
⁴¹¹ BH+A Sept 2006 – Archaeological research design.

Table 4.3 - Features identified during Stage 1 survey of the Old Marulan site

Feature	Flag No	Feature name	Cadastral
OMF 001	M001	Possible structure	Sec 5, Lot 1
OMF 002	M002	Artefact scatter	Crown reserve
OMF 003	M003	Possible structure	Road reserve
OMF 004	M004	Possible structure	Sec 10, Lot 10
OMF 005	M005	Artefact scatter	Sec 10, Lot 10
OMF 006	M006	Artefact scatter	Unalienated land
OMF 007	M007	Possible structure	Unalienated land
OMF 008	M008, M009, M025	Ground disturbance	Unalienated land
OMF 009	M010	Artefact scatter	Unalienated land
OMF 010	M011	Ground disturbance	Unalienated land
OMF 011	M012, M013	Pit / depression	Unalienated land
OMF 012	M014	Pit / depression	Sec 10, Lot 10
OMF 013	M015, M016	Artefact scatter	Road reserve
OMF 014	M017	Artefact scatter	Crown reserve
OMF 015	M018	Exotic planting	Sec 5, Lot 1
OMF 016	M019	Possible structure	Road reserve
OMF 017	M020	Possible structure	Sec 5, Lot 3
OMF 018	M021	Levelled area	Sec 5, Lot 3
OMF 019	M022, M023	Levelled area	Sec 5, Lot 6
OMF 020	M024	Dam / waterhole	Sec 5, Lot 9
OMF 021	M026	Pit / depression	Sec 5, Lot 8
OMF 022	M027	Isolated find	Sec 5, Lot 8
OMF 023	M028	Possible structure	Sec 5, Lot 10
OMF 024	M029	Pit / depression	Sec 5, Lot 10
OMF 025	M030	Possible structure	Sec 5, Lot 10
OMF 026	M031	Ground disturbance	Sec 5, Lot 10
OMF 027	M032	Alleged grave	Sec 5, Lot 10
OMF 028	M033	Quarrying	Sec 5, Lot 10
OMF 029	M034, M035	Levelled area	Reserve
OMF 030	M036, M037	Levelled area	Sec 1, Lot 1
OMF 031	M038, M039	Structure / levelled area	Sec 1, Lot 1
OMF 032	M040, M041	Linear drain feature	Sec 1, Lot 3
OMF 033	M042	Levelled area	Sec 1, Lot 4
OMF 034	M043, M044	Linear drain feature	Sec 1, Lot 5
OMF 035	M045	Pit / depression	Sec 1, Lot 6
OMF 036	M046	Levelled area	Sec 1, Lot 6

Feature	Flag No	Feature name	Cadastral
OMF 037	M047, M048	Linear drain feature	Sec 1, Lot 8
OMF 038	M049	Pit / depression	Sec 1, Lot 8
OMF 039	M050, M051, M053-55	Linear drain feature	Sec 8
OMF 040	M052	Artefact scatter	Sec 8
OMF 041	M056	Artefact scatter	Sec 8
OMF 042	M057 - M065	Exotic planting	Sec 8
OMF 043	M066, M068, M069	Linear drain feature	Sec 8
OMF 044	M067	Building material scatter	Sec 8
OMF 045	M070	Possible structure	Sec 5, Lot 4

As can be seen from Figure 4.1 there is a concentration of items to the southwest beyond the subdivided limits of the township, and another to the north, although this latter group represents an extensive grove of exotic trees and drainage ditches. These areas were outside the impact area and have therefore not been subsequently heavily investigated. Within the development impact area there are 22 separately identified features, mainly levelled areas, drainage lines and possible structures. The distribution of different features of Old Marulan is shown below, with those inside the impact area and those close to it [generally less than 25 metres from impact edge].



**Figure 4.1 - Location of features identified in the 2006 town survey – refer to Table 4.4 for feature identification.
[base image – Umwelt / Holcim]**

Table 4.4 below indicates the types of features identified and how their locations relate to the proposed area of development impact.

Table 4.4 - Features Identified in 2006 Town Survey and How They Relate To Development Impact

Feature Type	Total	Impact	Close
Alleged graves [MRNH3]	1	0	0
Artefact scatter	8	0	0
Building material scatter	1	0	0
Dam	1	0	1
Exotic planting	2	0	1
Ground disturbance	3	0	1
Isolated find	1	0	0
Levelled area	6	5	0
Linear drainage feature	5	3	1
Pit / depression	6	1	2
Possible structure	9	2	3
Quarrying	1	0	0
Structure / levelled area	1	1	0
Well [MRNH8]	1	1	0
Totals	46	13	9

Based upon the results of the 2006 survey it was possible to develop an archaeological research design and from that a staged archaeological investigation strategy. These are described in the following sections.

4.2.2. Aims and Results of Stage 1 Excavation

The overall aim of the excavation was to recover as much archaeological evidence that would allow the history of the town to be reconstructed and to answer the specific archaeological research design questions [refer to Section 5.0].

The aim of Stage 1 was to provide sampling information, both on the likely nature of the archaeological resource and on the features to be investigated. Elements for investigation were therefore chosen to represent the different types of archaeological evidence identified as occurring on the site. The types of preservation likely to have occurred differed between the features and this needed to be understood in order to develop appropriate assessments for a more comprehensive Stage 2 investigation. As well as sampling different types of elements, the method of testing was designed to sample within each element so that, if further information was required, sufficient

archaeological deposit remained for controlled manual excavation to take place in the main Stage 2 excavation season.

All element types identified within the impact area, apart from exotic plantings and the large well on the eastern side of the road, were sampled [refer to Table 4.5 below].. Examples of each element type were chosen for investigation, with an emphasis on covering the range of variation likely to be present.

Table 4.5 - Elements sampled in Stage 1 investigations

Feature Type	Sampled – Stage 1	Not Sampled
Dam / waterhole	OMF 020	-
Exotic planting	-	OMF 042
Ground disturbance / Levelled area	OMF 019	OMF 026
	OMF 029	OMF 033
	OMF 030	OMF 036
Linear drain feature	OMF 032	OMF 037
	OMF 034	OMF 039
Pit / depression	OMF 024	OMF 035
	OMF 038	
Possible structure	OMF 023	OMF 016
	OMF 025	OMF 017
		OMF 045
Structure / levelled area	OMF 031	-
Well	-	MRHN 8

The results of the Stage 1 excavations are presented in Section 6.0, integrated into the overall discussion of the archaeological evidence. A summary follows in Table 4.6 below:

Table 4.6 - Actions Undertaken on Investigated Features

No.	Feature	Action Undertaken
OMF 19	Levelled area	Feature recorded. Two 0.5 x 0.5 m test-pits excavated in the two levelled areas that make up the element.
OMF 20	Dam	Feature recorded. Sectioned with excavator.
OMF 23	Possible structure	Feature cleared and recorded. Determined to be unlikely to be a structure – not further investigated.

No.	Feature	Action Undertaken
OMF 24	Pit / depression	Feature recorded. Sectioned with excavator.
OMF 25	Possible structure	Feature cleared and recorded. Lies just outside impact area and not further investigated.
OMF 29	Levelled area	Feature surveyed and recorded. 12.5 x 2 metre trench laid out and scraped to base of topsoil with excavator.
OMF 30	Levelled area	Feature surveyed and recorded. 11 x 2 metre trench laid out and scraped to base of topsoil with excavator.
OMF 31	Structure / Levelled area	Feature surveyed and recorded. 14 x 2 metre trench laid out and scraped to base of topsoil with excavator.
OMF 32	Linear drain feature	Sectioned with excavator. Profile recorded.
OMF 34	Linear drain feature	Sectioned with excavator in three locations. OMF 34A encountered a probable structure and trench expanded to 1 x 1 metre test pit. Profiles and plan recorded.
OMF 38	Dam / depression	Feature recorded. Sectioned with excavator. Profile recorded.

These excavations allowed us to draw the following conclusions regarding the archaeological resource.

The prevailing natural soil stratigraphy was shown to be generally consistent, although there was considerable localised variation. No definite complete natural topsoils were encountered in the excavation. The soils were podsollic, with a dark A1, lighter A2 and then a sharply contrasting, abrupt B horizon. This would allow for a clear differentiation between cultural and natural deposits during excavation, particularly if features had been cut into the subsoil.

Generally the depth of the archaeological component of the different features investigated was very shallow. The topsoil of the two levelled areas [OMF 29 and OMF 30] investigated was about 50-75 mm, including later soil development following site abandonment. This shallow depth contained probably all of the artefact material found in these locations, with a few pieces impressed into the top of the B horizon.

There is no evidence of either systematic or incidental disturbance of the deposits to any significant extent. No evidence of ploughing that may have damaged buried structures or scattered artefact material was found in the excavation.

The bulk of the artefact material from the main occupation sites [OMF 29, OMF 30, OMF 31] is consistent with the known occupation dates for the village, with material that dates from c.1835-1870 only being present. The material found away from the levelled areas is either more modern, representing farm discard or has been redeposited from further up the slope. Black glass predominated in the scrapes, followed by a wide variety of typical mid-19th century ceramics.

An attempt was made to divide identified elements into those of township date and those of probable later construction during pastoral use of the land, based on the results of the Stage 1 excavations [refer to Table 4.7 below].

Table 4.7 - Correlation of archaeological features with occupation history

No.	Feature	Phasing and Interpretation
OMF 19	Levelled area	Probably township period – living area
OMF 20	Dam	Probably pastoral occupation
OMF 23	Possible structure	Not a structure
OMF 24	Pit / depression	Probably pastoral occupation
OMF 25	Possible structure	Not a structure
OMF 29	Levelled area	Township period – exterior activity area
OMF 30	Levelled area	Township period – contains part of a structure
OMF 31	Structure / Levelled area	Township period – exterior activity area
OMF 32	Linear drain feature	Probably pastoral occupation, not confirmed it is for drainage
OMF 34	Linear drain feature	Structure identified as OMF 34A – township period or slightly later Pastoral occupation
OMF 38	Dam / depression	Probably pastoral occupation

4.2.3. Excavation Strategy for Stage 2

The main excavation season [Stage 2] was informed by the results of the Stage 1 testing. The testing showed that some of the identified features could be excluded as being of low archaeological potential.

For Stage 2 all identified features within the impact area would be further investigated unless excluded as a result of Stage 1 work [refer to Table 4.8 below].

Table 4.8 - Proposed further action on specific features before Stage 2.

Feature type	Feature No.	Work in Stage 2
Dam / waterhole	OMF 020	No further action
Exotic planting	OMF 042	Species identification
Ground disturbance / Levelled area	OMF 019	Full excavation
	OMF 026	Full excavation
	OMF 029	Full excavation
	OMF 030	Full excavation
	OMF 033	Full excavation
	OMF 036	Full excavation
Linear drain feature	OMF 032	Section the alignment
	OMF 034	Full excavation of OMF 34A Section the alignment
	OMF 037	Section the alignment
	OMF 039	Section the alignment
Pit / depression	OMF 024	No further action
	OMF 035	Test trench
	OMF 038	Test trench
Possible structure	OMF 016	Test excavation
	OMF 017	Test excavation
	OMF 023	No further action
	OMF 025	No further action
	OMF 045	Test excavation
Structure / levelled area	OMF 031	Full excavation
Well	MRHN 8	Full salvage

Further excavation would be limited to the impact footprint, apart from expanding the feature exposed as OMF 34A with the aim of minimising the impact to the overall archaeological resource. Based on the comprehensive historical research and the results of Stage 1 it was felt that the sites within the impact area were capable of representing the archaeological resource within the remainder of the town sufficiently so that it would provide enough data to provide a response to the research design. Excavation of OMF 34A was needed because as the only structure identified, other than OMF 31, it was felt necessary to provide evidence of construction. The amount of artefact material, particularly clay pipes, associated with OMF 34A suggested that it would be able to provide a linkage between artefact and structural evidence, which is essential to any meaningful analysis.

The research design was modified [refer to Section 5.0 below] to reflect a better understanding of the archaeological resource. This indicated that controlled manual excavation was still required, and that spatial control was necessary to provide data. The histories of individual lots were likely to be different, so that all remains needed to be considered in their cadastral context. The historical research did not reveal much specific material on buildings but there could be other documentary and map evidence forthcoming.

The broad approach would therefore be:

1. Establish a grid for spatial control to allow for integration of evidence from the impact footprint and other sources such as maps and survey of the remainder of the township.
2. Conduct controlled manual excavations on those sites most likely to reveal structures and occupational evidence. This included the extension of OMF 34A and the levelled areas near the road reserve, particularly the structure OMF 31.
3. Once a sufficient sample of the high potential areas was investigated to be able to generalise about natural versus cultural features then tightly controlled mechanical excavation may be attempted.
4. As much of the impact footprint was to be cleared as possible under archaeological control.

4.2.4. Consents and Permits

The initial excavation permit was issued as a s.60 permit. This was extended with a modified permit for the Stage 2 works, based on the results of Stage 1.

A detailed discussion of compliance with this permit is included in Volume 1.

4.3. Stage 2 Archaeological Investigation – Methodology

4.3.1. Spatial Control

Spatial control of excavation information was obtained by establishing a Cartesian grid over the site using metres as units. This allowed any point to be described in whole and decimal units based on metre measurements as XY coordinates, e.g. 254.43 / 604.22.

For hand excavation purposes a grid of 2 x 2 metre squares was established, and these were designated by their SW coordinate, e.g. 238 / 580. For mechanical excavation provenance was generally recorded in 10 x 10 metre squares, again using the SW corner coordinate.

The initial baseline and other reference points on the grid were established by a land surveyor. These marks were used to establish subsidiary offset grid lines. The spatial control is generally considered to be good, with measurements expressed in the XY grid being accurate to within less than 0.1 metres.

The origin point of the grid [000, 000] is located outside the original town reserve.

4.3.2. Height Control

All reduced levels are expressed as metres above sea level on the Australian Height Datum [AHD]. Relative heights were established through a series of datum points at different locations around the site [Table 4.9].

Table 4.9 - Heights and Positions of Datums Used During Archaeological Excavation

Datum No.	Location	Easting MGA 56	Northing MGA 56	Elevation
1	Concrete post at base of road reserve fence post	E 223403	N 6152666	AHD 654.90 ASL Relative elevation 100.00
2	Survey peg in flat immediately downslope of OMF20	E 223448	N 6152814	AHD 651.74 ASL Relative elevation 96.837
3	On north-east corner of Telstra pit cover at western end of fence line forming northern boundary of town lots below interchange overpass	E 223522	N 6152738	AHD 652.34 ASL Relative elevation 97.439

The nearest State survey mark is a benchmark near the Cemetery on the corner of Jerrara and Marulan South roads [SSM 30569, E 772961.24, N 6152755.95 MGA 55] at 655.33 m AHD.

4.3.3. Excavation Process

Excavation was a combination of controlled removal of stratigraphic units using hand-tools and bulk clearance and exposure of deposits using machine excavation.

Hand excavation

Hand excavation was undertaken using a standard stratigraphic method of excavation, where identified soil and cultural units are identified and removed in reverse order of deposition or construction. A stratigraphic unit can include a natural layer of soil, an artificial subset of a soil layer, e.g. spit or partial excavation, a bulk sample sondage or test pit, a structural element such as a footing, a negative interface like the cutting for a pit, and a positive interface, being a surface against which other deposits built up⁴¹². The principles for stratigraphic excavation are not standardised within Australian archaeology, but many different schemes have developed from a common basis originally codified as part of the Port Arthur Conservation Project⁴¹³.

In the context of Old Marulan hand excavation included detailed trowel work, as well as excavation using hand tools such as mattocks and spades, depending on the nature of soils, the risk of impact to artefacts and objectives for recovery.

All units were recorded on standard pro forma recording sheets that provided space for major descriptive categories, an annotated sketch plan and comments. Units were completed as excavation progressed. In addition, each square had a pro forma Square record sheet, that summarised the salient information for all units in the 2 x 2 metre square, such as stratigraphic relationships. Major units that occurred across the site were provided with a master unit recording sheet that was compiled during the course of the excavation. This applied to the main soil layers occurring across the site, being unit [1] – turf and root mat, unit [2] – A1 topsoil, unit [3] - A2 subsoil and unit [66] – B horizon natural soil. Additional observations relating to the appearance of these layers within the excavation area were also recorded.

A single master list of unit numbers [which are also called context numbers by some archaeologists] was maintained, to prevent inadvertent duplication. All units in hand excavation were differentiated by grid location so that, for example, all artefacts from Unit [2] were bagged according to the 2 x 2m grid from which they derive. This was considered to allow for sufficient spatial control to allow for broad pattern and density mapping.

The master copies of annotated and occasionally corrected unit sheets are found in Volume 6.

⁴¹² Harris 1979.

⁴¹³ Davies and Buckley 1987.

Generally the turf layer was removed by spades, shaving off the grass and the thickest section of root mat with any adhering dirt. Any artefacts identified during this time were removed and placed on the top of the underlying unit, as Unit [1] was generally not sieved or further processed. Once [1] was removed the square was cleaned by trowelling or scraping with a spade blade or hoe and the underlying units identified and numbered. Excavation commenced following photography and taking spot heights, using trowels and occasionally spades or mattocks where harder soils were encountered.

For each unit excavated a separate artefact bag or tray was commenced. Artefacts from each unit were either pulled out during excavation or sieving and collected together. Where excavation of the same unit and square took place over successive days the same finds bag was used. At the completion of excavation of the unit the finds bag was delivered to the Artefacts Analyst who gave the bag a Field recording number and began the process of cleaning and preliminary sorting of finds.

The experience of the field team was highly variable. Most had some previous excavation experience, but not many had the combination of areal and stratigraphic excavation, particularly on historic sites. As a result teams were formed under the most experienced excavators who acted as trench or area supervisors, and who were responsible for ensuring that note-taking and other tasks were maintained at a high standard. These supervisors were all people with extensive local and international archaeological experience. Crew were rotated between supervisors and areas to maintain their interest and share different types of duties. Opportunities arose for less experienced archaeologists to develop practical experience by working with trench supervisors and developing skills in excavation technique, recording, use of survey equipment and other archaeological work.

Mechanical Excavation

During the second half of the main field season mechanical excavation was used. This allowed for a much greater degree of exposure, but with a loss of detailed observation.

The machines used were rubber-tired backhoe loaders with flat-bladed buckets [‘mud buckets’] between 1 and 2 metres wide. Each machine was partnered with one or two archaeologists who would monitor the scraping and stop the machine if any sign of artefacts, building material or soil discoloration was noted. Monitors would also use hoes to do a final cleaning of areas scraped to identify or clarify any features exposed by the blades.

The scraping was undertaken in two passes. The first pass tried to take off the turf and root mat only, with a minimum of adhering soil. This was easier towards the east of the site, where there was little stone in the soil, allowing for a clean scrape. Following rain in the last week, however, the adhesion of the subsoil made it harder to do a ‘clean’ scrape. The second pass removed the remainder of the A1 horizon, which was the

darker topsoil, exposing a lighter red-brown A2 horizon. The A2 predates European occupation, so any features that were cut into it or the lower natural soil should have been cut through from the surface of the A2 or the A1 topsoil.

As grading progressed large areas where igneous stone outcropped close to the surface were encountered. This included much of the knoll at the rear of the Woolpack Inn. The bedrock exposures varied from large rocks or floaters, highly fractured outcrops that crumbled into loose stone, decayed stones that had completely decayed *in situ* and were present as red-orange patches of crumbly soil. Further to the east the soil was very stony but without outcropping bedrock. It is possible that stone was manually cleared and removed from some areas to improve the quality of the soil.

Aboriginal Artefacts

One Aboriginal artefact was identified during the Stage 1 testing on the site. During the main Stage 2 excavation season Aboriginal artefacts were again recovered due to the more extensive surface clearance.

The normal procedure was that during mechanical scraping or excavation any possible Aboriginal artefacts were kept in situ and a GPS reading taken on their location. The artefacts were individually bagged with a record of their location, or a square / unit provenance if found during hand excavation or sieving and then transferred to Umwelt specialists for analysis as part of the Aboriginal Cultural Heritage component of the project. All Aboriginal material recovered during the archaeological investigation was done so in accordance with the methodology approved in the s87/90 Aboriginal Heritage Impact Permit [AHIP]. The recovery of Aboriginal material during the Stage 2 excavation season was undertaken as Stage 2C Aboriginal archaeological subsurface testing.

Stage 2C Aboriginal archaeological subsurface testing (i.e. archaeological terrain unit [ATU]: OM) and salvage within the Old Marulan site area occurred during the period 26 November to 21 December 2007 under s87/s90 AHIP # 1077294 as part of the Stage 2 excavation season. A return visit was also made to the area on 2 and 3 April 2008, so that the excavated deposit that had been respread across the area at the end of the Stage 2 excavation season could be checked for exposed artefacts. A total of 760 Aboriginal artefacts were recovered during these works with a potential silcrete knapping event also identified.

In addition to the 760 recovered artefacts, one additional artefact (quartzite core) was recovered from the site of the Old Marulan Township within the Hume Highway road reserve. Works within this road reserve were approved under Condition 5 of s65A permit #2009/s65A/13 (being a variation to the original s60 permit #2006/S60/082) and in accordance with s87/s90 AHIP #1077294.

Prior to the Stage 2C Aboriginal archaeological subsurface testing works, Aboriginal archaeological subsurface testing was also carried out at two locations (ATU: X, and ATU: R) north of Marulan Creek and one location within the north-west portion of the Old Marulan site area (ATU: U) as part of the Aboriginal Cultural Heritage archaeology investigation program for the whole quarry development site (i.e. Stage 2B works conducted under s87 AHIP #1077225). Subsurface testing at these three locations only recovered a total of nine artefacts in total.

Aboriginal artefacts recovered from within the Old Marulan site area were dominated by broken flakes, flakes, flaked pieces and cores. Retouched flakes and backed artefacts were also recorded. Artefacts were predominantly manufactured from silcrete, with artefacts manufactured from quartz, quartzite, and chert also identified. Three possible artefacts manufactured from glass were also recorded.

For detail on the Aboriginal archaeological subsurface testing and salvage works associated with the Old Marulan site area refer to:

Umwelt, 2013

Stage 3 Salvage Report – Lynwood Quarry Project Area, Marulan NSW.

4.3.4. Site Layout

The archaeological work base was located near the creek, immediately to the west of the line of the road that will lead to the Lynwood Quarry. The camp consisted of a number of prefabricated site sheds, a shipping container, portaloos and generators. As artefact processing took place in the vicinity it is possible that there is a small scatter of modern deposition of excavated material.

The sieving station was established nearby, and also outside the impact footprint. Sieved soil has been used as backfill on the excavation but there may similarly be artefacts present in this area that have been brought in elsewhere from the site.

Site access was via a vehicle gate at the western end of the Holcim land, although other vehicles used a track that passed the occupant John Feltham's house and followed the southern bank of the creek to the site. Pedestrian access was by a new gate cut into the road reserve fence at the northbound lay-by near the road junction.



SECTION 5.0

Research Design

5.0 Research Design

5.1 Introduction

The value of the archaeological resource is largely based on what it can tell us about the past. The purpose of the research design is to identify what the known and potential archaeological resource of Marulan township can tell us, and how this information should be recovered. This feeds back to the assessment of the archaeological significance, so that a place that can tell us more about the past ranks higher than a place that tells us less. When we consider what it can tell us, it is useful to consider three questions posed by Bickford and Sullivan. These are:

- What can the site tell us that no other site can?
- What can the site tell us that we cannot find from other sources?
- Is the information useful and relevant to current archaeological discussions and research?¹

These three questions are based around an understanding of what evidence is likely to be present, based on a detailed history, site survey and comparison with other sites. In addition the initial testing stage allowed us to refine the research design. The following section sets out the evolution of the research design into its current form.

A response to the research design that seeks to answer the research questions is presented in Section 8.4.

5.2 Research Questions

The background to the selection of research questions is set out in the initial research design and the Stage 1 report².

Table 5.1 sets out the specific questions, including those that were discarded after the Stage 1 testing, and new ones developed as a result of investigations. These form the basis for the Stage 2 research and the analysis presented in the following section.

¹ Bickford and Sullivan 1984.

² BH+A 2006, 2007a, 2007b.

Table 5.1 – Research questions proposed in old Marulan archaeological assessment [from BH+A 2006]. The comments were added following the Stage 1 work. Research questions deemed to be unanswerable due to data limitations or no longer relevant are grey shaded.

Q	Research Questions	Response Following Stage 1
1	How closely does the planning and layout of the town follow the 1829 regulations?	Front of blocks lost. May be able to reconstruct some lot boundaries from fencing and drainage lines.
2	How closely does the evolution of the town remain within the bounds of the 1829 regulations? What was the nature of the changes made in the town's life time?	The probable informal structures in the western part of the town are outside the impact area. Survey outside the town limits, on other side of the creek to the north of the impact area, indicates some remains present. Question remains valid.
3	Can we see evidence of the broader impress of authority or the encouragement of town growth in the town's evolution or was it essentially left to its own devices following establishment?	May not be possible to measure this directly through archaeology. Historical information is equivocal on this.
4	Do the structures that exist outside the confines of the occupied blocks, which appear to represent camping, reflect temporary use or do they reflect a more permanent presence of an underclass or fringe camp.	Not resolved through excavations undertaken. The sites that address this question are outside the impact area and therefore not able to be excavated under the permit as issued.
5	What was the range of material that the occupants of Marulan were able to buy or bring with them?	Excavation revealed wide range of cheap and popular ceramics, as well as glass. Evidence appears likely to survive where not disturbed.
6	Did this differ among different residents and can these differences be attributed to social status, income, background or other known factors from the individuals?	Superficial differences in material excavated in OMF 34A and levelled areas indicates that this may be testable.
7	How does the range of material culture compare to exactly contemporary assemblages elsewhere in Australia?	Detailed comparison not undertaken. Superficially similar, but possibly restricted range of patterns. Larger sample required.
8	Is there evidence of lag or conservatism relating to purchase and use of material goods because of the distance from the centre?	Not from sample. Larger sample would provide valid test population.
9	Was living in rural Australia comfortable or different to life in urban Australia?	Only likely to pick up residential information for servants and itinerants, so question can only be partially answered.

Q	Research Questions	Response Following Stage 1
10	Is there evidence of recycling, extended use or conservation of goods because of the distance and cost of transport of these items?	No evidence from excavated sample.
11	Do records such as the Woolpack Inn accounts ledger duplicate information from archaeology or, if not, what insight does it reveal about town life and material culture?	Not examined for Stage 1.
12	Role of within-class, status and other social groupings, particularly specific religious ideologies. This has not been investigated in Australia but Quirk has begun to examine the role of Victorian moral reformism at Paradise in the Queensland goldfields.	Unlikely to be able to be clearly tested from an expanded sample.
13	Control of landscape and declaration of status as expressed in the placement of buildings and items. The best Australian example of this was produced by Burke for Armidale, NSW, but for a later period in the 19 th century.	Due to loss of lot frontages unlikely to be able to test this.
14	What was the pre-European environment within the town site?	Question remains valid.
15	Does environmental impact and change coincide with town establishment or does it precede European arrival?	Question remains valid.
16	What vegetation succession took place within the town limits?	Examined pits / depressions were not conducive to retention of pollen and biological information. Reliable biological evidence unlikely to survive.
17	Did the pattern of use of lots result in sedimentary erosion or is this mainly attributable to later grazing?	Question remains valid.
18	How was surface drainage and stormwater controlled, and was it harnessed at all?	Investigated drainage lines appear to post-date town so question remains open for 19 th century.
19	Was the creek the main water supply for lots backing onto it or did they also have other tanks and cisterns?	Not investigated for Stage 1. No additional cisterns or wells identified.
20	How did the cistern / well MRNH 8 operate, and when was it built?	Not investigated for Stage 1.

Q	Research Questions	Response Following Stage 1
21	What building materials were accessed or made locally? Can the bricks from the clamps known elsewhere on the Holcim project area be used for dating or interpretation?	Plenty of building fabric samples available for comparison.
22	Does the town have an ecological footprint within which it exploited local resources and is this a useful model for interpreting past environmental information?	Not investigated for Stage 1.
23	What use was made of local food resources such as native animals or plants?	Bone and plant evidence appears to have reasonable survival in buried soil conditions, but not systematically tested.
24	Did environmental management result in proliferation of weed species or pest animals such as rats and rabbits?	This type of evidence may not be recoverable.
25	What evidence is there of back-yard farming, soil improvement and deliberate agriculture?	This question remains valid and may be answerable.
26	What does the evidence for grazing and pastoralism [sheep dips, farm house, fencing] reveal about changes in land management in the later 19 th and 20 th centuries?	Not investigated for Stage 1.
27	Can palaeomagnetism and oxidizable carbon ratio [OCR] dating provide a relative dating tool for structures and soil formation processes on the site?	Not investigated for Stage 1.

Additional research questions were prompted by the Stage 1 excavation [refer to Table 5.2].

Table 5.2 – Additional research questions prompted by results of Stage 1 excavation [BH+A 2007a].

	Research questions	Rationale
28	Is the restricted range of material goods, especially short-term consumables, real, and if so does it suggest importation in bulk?	Picks up on identification of identical clay tobacco pipes in OMF 34A.
29	Can the difference between <i>ad hoc</i> site occupancy and discard from adjoining sites be distinguished archaeologically?	This refers to OMF 29 and whether the artefact material is from its use or spill over from adjoining sites.
30	Does the placement of OMF 34A reflect a general site limit within the town, ie a 'back street' line of <i>ad hoc</i> buildings along the rear of the blocks	
31	Do the ratios of different glass and ceramic type reflect other factors of site occupancy?	



SECTION 6.0

Results of the
Archaeological Survey
and Excavation

6.0 Results of the Archaeological Survey and Excavation

The archaeological survey conducted for the preparation of the research design, the Stage 1 excavation and the Stage 2 major season of excavation all produced information about the history of Marulan that expanded what could be said from only the historical record. Additional archaeological remains were also identified during the works as we became familiar with the broader landscape setting of Marulan.

Section 6 sets out the results of the archaeological investigations, ordered in groups of town lots under common ownership, in order from west to east. This includes for each area a description of the setting and ownership history, archaeological evidence and its interpretation. Relevant material from the specialist analyses is incorporated here to aid in analysis. This approach is aimed at providing a clear story that is most relevant to the Marulan township period. Following the abandonment of the town and the gradual aggregation of land under fewer owners the narrative is less clear, but also less detailed.

Section 7 takes the results of the individual areas and generalises them, to identify broader site patterning and structure within the archaeological record. As the research questions are broad in nature the archaeological results require some level of synthesis before they can directly address the issues they ask.

6.1 Archaeological Description

This section discusses results in areas that are based on ownership during the Marulan township period. Because individuals bought a number of adjoining town lots and used them together it is important to keep this association between archaeological remains spread over several parcels of land. It also assists in interpreting the archaeological evidence. The discussion is grouped according to the following areas, and is ordered from west to east, as below and in Figure 6.1.

- 6.2 Section 10 Lot 10
- 6.3 Mango Street road reserve and Section 5 Lot 1
- 6.4 Section 5 Lots 2-4
- 6.5 Section 5 Lots 5-10
- 6.6 Crown reserve and the creek
- 6.7 Section 1 Lots 1-4 – the Woolpack Inn, including land in road reserve
- 6.8 Section 1 Lots 5-6
- 6.9 Section 1 Lot 7
- 6.10 Section 1 Lot 8
- 6.11 Section 1 Lots 9-10
- 6.12 Zamia Street road reserve
- 6.13 Section 7 Lot 1
- 6.14 Section 7 Lots 2-3

- 6.15 Section 7 - remainder

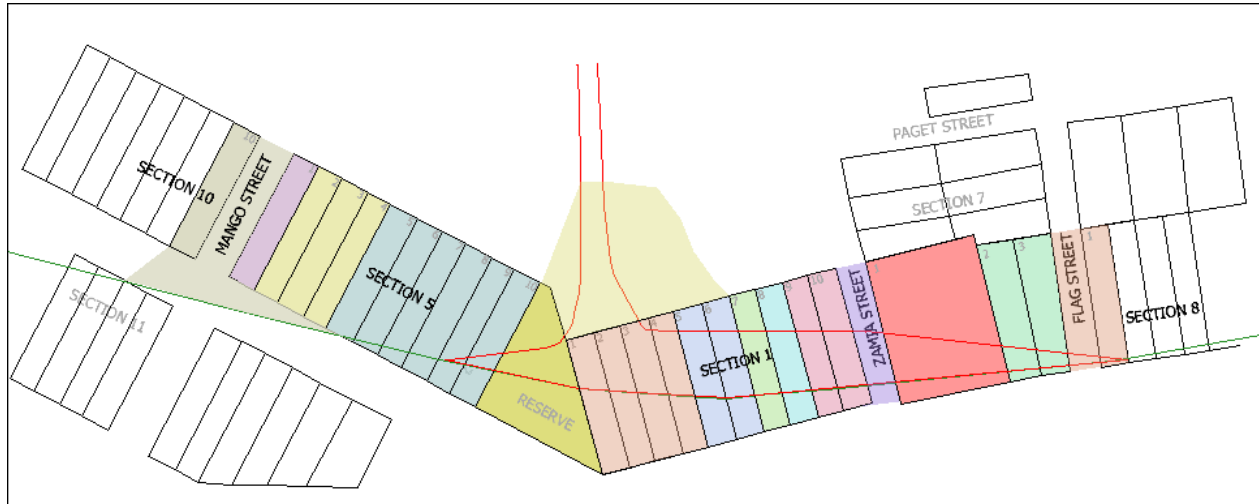


Figure 6.1 – Old Marulan town layout showing grouping of lots for discussion in archaeological results. Development footprint in red outline.

During the archaeological investigation it is important to differentiate between discrete archaeological entities. In the recording phase, represented in this report by the initial survey, Stage 1 and Stage 2 investigations, there is a distinction between evidence on or in the ground and its possible meaning. The initial survey therefore recorded what was visible on the ground in discrete areas, identifying where possible whether there was overlap. During excavation we recorded all soil layers and other stratigraphic evidence individually.

It is only in the analysis stage that we begin to combine these discrete components together into features, which is an interpretative method that is used to translate our abundant archaeological observations into meaningful human terms. For example, a posthole gets its own stratigraphic unit number, but two lines of postholes that probably defined a building also should be grouped together because the people on the site were concerned with the building and the shelter or storage it represented, not the posts stuck into the ground for its initial construction. Likewise other groups of archaeological stratigraphic units or survey evidence are aggregated as features.

Features are numbered OMF 01 onwards. The initial series [originally designated OM01] was identified as part of the initial survey, and has been extended as a result of the excavation and further survey.

The features identified to date are summarised in the following table [Table 6.1].

Table 6.1 – Features identified in the archaeological area during the 2006 survey, Stage 1 and Stage 2 excavations.

Alleged grave	OMF 27
Artefact scatter	OMF 02, OMF 05, OMF 06, OMF 09, OMF 13, OMF 14, OMF 40, OMF 41, OMF 59
Brick clamp	OMF 60
Building material scatter	OMF 44
Dam / waterhole	OMF 20
Exotic plantings	OMF 15, OMF 42
Garden beds	OMF 52
Isolated find	OMF 22
Levelled area	OMF 18, OMF 19, OMF 29, OMF 30, OMF 31, OMF 33, OMF 36
Linear drainage feature	OMF 32, OMF 34, OMF 37, OMF 39, OMF 43
Pit / depression	OMF 11, OMF 12, OMF 21, OMF 24, OMF 35, OMF 38
Possible structure	OMF 03, OMF 04, OMF 07, OMF 16, OMF 17, OMF 23, OMF 25, OMF 45, OMF 61
Post holes – building[s]	OMF 54, OMF 55, OMF 56, OMF 57
Quarrying / ground disturbance	OMF 08, OMF 10, OMF 26, OMF 28
Refuse dump	OMF 50
Stone feature	OMF 48
Structures	OMF 01, OMF 31, OMF 46, OMF 47, OMF 49, OMF 51, OMF 53, OMF 58

6.2 Section 10 Lot 10

[*current title – Lot 10/10 DP 758653*]

6.2.1 Occupational History

Land in Sections 10 and 5 are located on the northern side of the branch of the Great Southern Road leading from Marulan to Goulburn. The fronts of these two sections were meant to define the road line but early in the town's history the road veered further to the south, leaving a wedge of land between the front of Section 10 and the actual road. Section 10 was not part of the original town layout but appears during mapping in the 1840s. As it accessed the head of the town creek it may have been used as a casual stock reserve or camping place. Later, after Section 10 was marked out, the vacant land between it and the road seems to have been used as a 'no man's land' camping place.

Lot 10 within Section 10 is outside the development impact zone [refer to Figure 6.1]. It is the sole lot sold within Section 10, but presumably Marulan's needs never required further land sales. The land slopes gently down from the road towards the head of the creek, where it first begins to transform from a drainage line into a cutting in the

paddock surface. Field stone is abundant, both as outcropping bedrock and loose stones

An application was made to purchase Lot 10 by J. Walworth in 1848. This lot was paid for by deposit, but an annotation on a plan held in the Land Titles Office indicates that the deposit was forfeited and the lot became available for re-sale³. Lot 10 was first granted in 1854 to Joseph Collins⁴. This was almost 20 years after the town was established and it is possible that the block or at least land was used casually before that time. Collins retained ownership until 1865, when it was taken over by Henry Isaac West⁵, and then Thomas Wilkie in 1870⁶. Then it is transferred to John Baxter in 1903⁷, and it remained within that family's ownership until recently⁸. It has since been purchased by the Crown⁹.

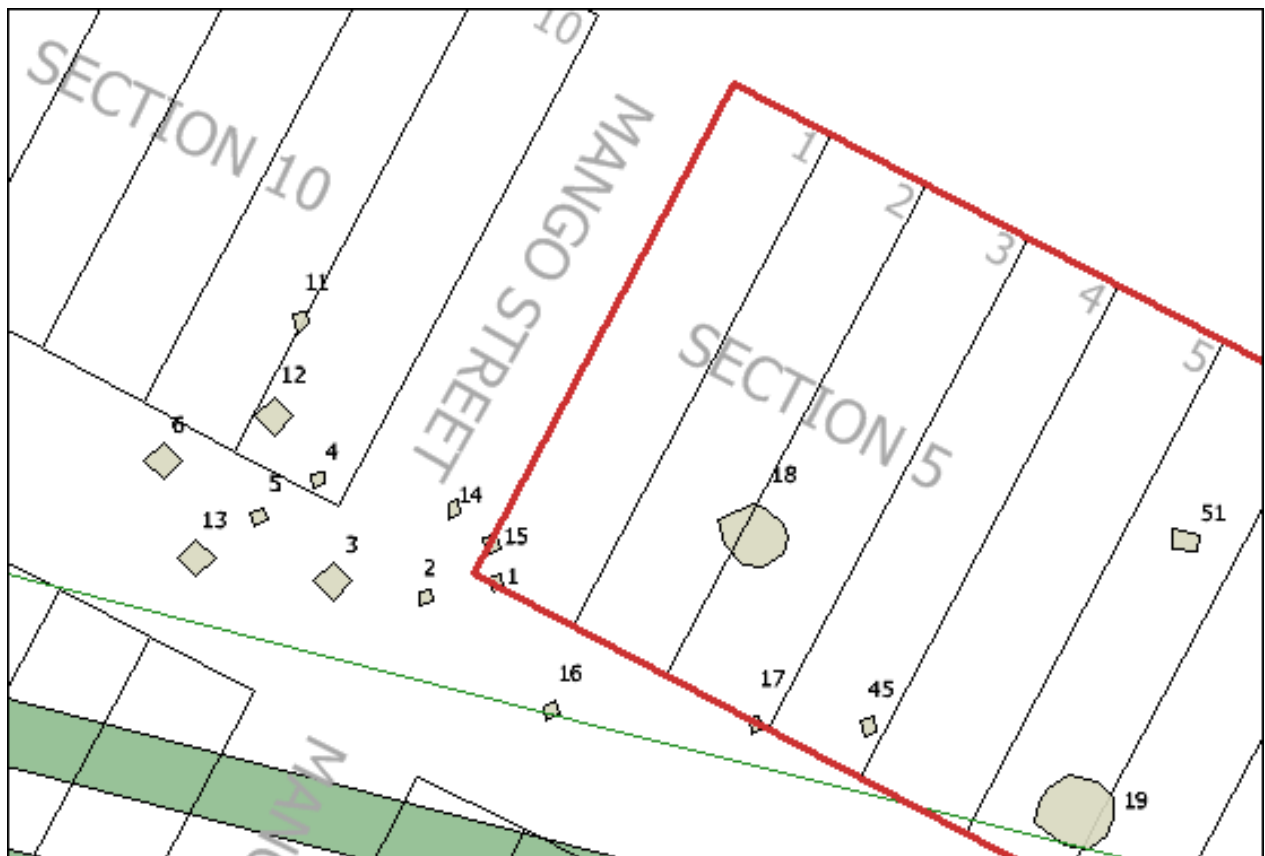


Figure 6.2 – Section 10 Lot 10 and Section 5 Lots 1-5 – archaeological features identified during survey. The impact area lies further to the east. The red line shows the SHR listing boundary.

³ LTO County Argyle 15-872.

⁴ LTO Serial 246, page 17 -Grant 4.9.1854.

⁵ LTO Book 96 No. 878 – 30.11.1865.

⁶ LTO Book 119 No. 912 – 30.5.1870.

⁷ LTO Book 718 No. 86 – 28.2.1903.

⁸ Steve Mansour – S&L Searching Services, pers. comm.

⁹ Richard Savage – Holcim, pers. comm.

6.2.2 Survey

The archaeological evidence in and around Section 10 Lot 10 consists of six separate features identified during the initial survey [refer to Figure 6.2 and Table 6.2].

Table 6.2 – Features located in Section 10 Lot 10

Feature	Feature type	Comments
OMF 4	Possible structure	
OMF 5	Artefact scatter	
OMF 6	Artefact scatter	
OMF 11	Pit / depression	
OMF 12	Pit / depression	
OMF 13	Artefact scatter	Extends into road reserve

Disturbance caused by the laying of possibly several buried telecommunications lines is evident within Lot 10. The disturbance occurs close to the southern boundaries of the lots in this area and can generally be followed by eye. The communications trenching has cut through buried features containing artefacts. The artefact material is concentrated on the front of the lots and even into the road reserve. Visible artefact densities were higher here during the initial survey than even in the centre of the town. This may be a combination of topography and grazing with the added exposure caused by the communications trenching. It nonetheless indicates that there are remains in this vicinity which were only poorly expressed on the surface.

OMF 04 [possible structure] is a roughly square scatter of field stone, about 4 x 6 metres being visible. Adjacent to it is an area with more stone but disturbed by rabbits. No artefacts are visible.

Artefacts noted from OMF 05 and OMF 06 [artefact scatters] include black bottle and opalesced glass and 1 white earthenware piece. The artefacts are consistent with the remainder of the township occupation and especially the slightly later commencement of ownership of Lot 10. OMF 13 is a slightly larger artefact scatter, on a slightly raised mound measuring approximately 5 x 2 metres, and partly defined by field stones. It contains purpled and emerald glass, and a rifle cartridge. These would be placed at the end of the town's historical period or in the post-town period.

OMF 11 [pit/depression] consists of two adjoining circular depressions, each about 2.5 metres in diameter, with a depth of c.0.75 metres in the centre. Both contain rocks embedded in the surface.

OMF 12 [pit/depression] is a large pit now covered in blackberries and rabbit burrows. It is 3 metres across and 1 metre deep at its centre. Its function is not evident.

6.2.3 Stage 1 Excavation

As the area sits outside the development impact area no further archaeological work was undertaken here in Stages 1 and 2.

6.3 Road Reserve and Section 5 Lot 1

[Current title - Lot 1/5 DP 758653]

6.3.1 Occupational History

A road reserve, now owned by Holcim, separates Sections 10 and 5 [refer to Figure 6.2 and Table 6.3]. This was the unformed Mango Street. The adjoining Lot 1 of Section 5 was surveyed but never granted.

6.3.2 Survey

Although the road reserve was never formed and town lot Section 5 Lot 1 was never purchased there were indications of archaeological occupation.

Table 6.3 – Elements located in reserves and Section 5 Lot 1.

Feature	Survey markers	Feature type	Cadastral location
OMF 01	M1	Possible structure	Lot 1 Section 5
OMF 02	M2	Artefact scatter	Crown reserve
OMF 03	M3	Possible structure	in road reserve
OMF 14	M17	Artefact scatter	Crown reserve
OMF 15	M18	Exotic planting	Lot 1 Section 5

The two possible structures are a line of 8 stones running for about 5 metres with a slight build-up on the upslope side [OMF 01] and a slight mound c.2 x 3 metres with three large stones on its northeastern side [OMF 03]. Some artefacts immediately to the west of OMF 03 may be in disturbance caused by the telecommunications trench.

The exotic tree [OMF 15] is a small hawthorn. It does not appear to be of any appreciable age.

Two artefact scatters [OMF 02, OMF 14] contain black, light and dark green bottle glass, transfer printed ware with blue and black designs. OMF 14 is the more extensive of the two.

The presence of the artefact scatter and possible structures may imply casual semi-permanent camping in the area. This was not uncommon in the vicinity of established inns and settlements. Itinerant workers and families would have stopped where they

could as close to an inn. With the Woolpack Inn immediately to the east of the site, a creek and a 'no man's land' of unalienated land next to the road provided a suitable camping place.

6.3.3 Stage 1 Excavation

As the area sits outside the development impact area no further archaeological work was undertaken here in Stages 1 and 2.

6.4 Section 5 Lots 2-4

[Current title – Lots 2/5, 3/5, 4, 5 DP 758653]

6.4.1 Occupational History

This group of contiguous lots is fairly level but with a slightly steeper southern end near the road reserve boundary. There is a light covering of fairly young trees, but is mainly quite open. Field stone continues to appear but less frequently than to the west or east.

The land was applied for purchase in 1839 by John Drover, who appears in the 1839 Post Office Directory as a blacksmith [refer to Section 3.8.4 above], along with six other lots outside the study area¹⁰. The application was rejected.

Following the failure of Drover's application the land was granted to John Hillas later in 1839¹¹. Hillas was a large regional landowner, with a property at Taralga, outside Goulburn. The ownership of this property following his purchase is complex. Hillas died in January 1847 and the property passed through his two sons, both of whom also eventually died and passed it on to their heirs, complicated by remarriages and deaths without issue. Eventually the property was sold outside the Hillas family line in 1936 to Frank Guymer¹², then in 1963 to Dennis Astill¹³. Later transactions moved more rapidly, to Thelma Phillips in 1985¹⁴ and to John and Shirley Feltham in 1991¹⁵. The Felthams consolidated ownership of much of the property within the study area by late last century. The land was purchased in 2003 by Holcim's Lynwood Quarry Development project.

6.4.2 Survey

These lots are outside the development impact area but within the SHR listed area and contain the following features [refer to Figure 6.2, Table 6.4].

¹⁰ LTO County Argyle 10-872.

¹¹ LTO Serial 208, pages 63-65 – 23.12.1839.

¹² LTO Book 1764 No. 307 – 27.10.1936.

¹³ LTO Book 2663 No. 972 – 17.7.1963.

¹⁴ LTO Vol. 15342 Folio 113 – 7.5.1935.

¹⁵ LTO A/C 15342-113 – 25.2.1991.

Table 6.4 – Features located in Section 5 Lots 2-4.

Feature	Survey markers	Feature type	
OMF 16	M 19	Possible structure	Road reserve
OMF 17	M20	Possible structure	Section 5 Lot 3
OMF 45	M70	Possible structure	Section 5 Lot 4
OMF 18	M21	Levelled area	Section 5 Lot 3

The features here are concentrated again near the road edge or in the reserve. Three possible structures, consisting of formed clusters of unshaped stone blocks were identified. These may be structure bases or fireplaces associated with tents. Again they show the likely presence of camping and informal occupancy adjoining the inn.

The three possible structures are similar in type. OMF 16, OMF 17 and OMF 45 are all small [<2 metres maximum dimension] flat clusters of field stones. The fourth feature [OMF 21] is a circular levelled area cut into the slope. It is about 2 metres in diameter.

6.4.3 Stage 1 Excavation

As the area sits outside the development impact area no further archaeological work was undertaken here in Stages 1 and 2.

6.5 Section 5 Lots 5-10

[Current title – Lots 1-6 DP 797340]

6.5.1 Occupational History

These lots are well-wooded with both young and older eucalypt regrowth. The land steps in tiers from the road reserve northwards towards the river, with a large outcrop of bedrock about half way down the length of the lots. By now the creek is a substantial eroded channel. About a quarter of the total area of the lots was lost through the widening of the Hume Highway [refer to Figure 6.3 and Table 6.5].

The land was granted to Joseph Peters in 1838¹⁶. He retained ownership only until 1842, when it was transferred to Joseph Walford¹⁷. This coincides with Peters' sale of the Woolpack Inn and transfer to Marian Vale. Walford transferred it ten years later to James Kirwan¹⁸. Kirwan was, like Peters, a former convict and had established a successful inn on what was to become the townsite of Cooma. The land was sold to Kirwan in March 1852, but he was accidentally killed later in the same year¹⁹. There is a gap in the records at this point and the next record held by the Land Titles Office relate

¹⁶ LTO Serial 203 pages 195-200.

¹⁷ LTO Book 1 No 638 – 2.8.1842.

¹⁸ LTO Book 22 No. 570 – 17.3.1852.

¹⁹ Monaro Pioneers: James Kirwan.

to its transfer from the deceased estate of James Hogg, who died in August 1886, meaning that he had gained possession from Kirwan's estate [either directly or via other intermediate owners] in the period 1852-1886²⁰.

Hogg was a major landowner in the former town site. Hogg's estate transferred it to James Wells in 1935²¹. Wells transferred it to Walter Riley in 1951²², who then transferred it to Christopher Riley in 1954²³. John and Shirley Feltham held ownership from 1989²⁴ and it was bought in 2003 by Holcim.

6.5.2 Survey

The archaeological remains within this block of lots are extensive and diverse. The main archaeological remains are a levelled area [OMF 19] and two possible structures [OMF 23, OMF 25]. The levelled area is extensive, being greater than 8 x 6 metres, and possibly includes a retaining wall on its lower side. The possible structures are similar to those elsewhere within the study area – they are clusters of field stones in a roughly elliptical spread covering about 2 metres length and width.

Table 6.5 – Features located in Section 5 Lots 5-10.

Feature	Survey markers	Feature type	Proximity to impact area
OMF 19	M022, 23	Levelled area	Outside
OMF 20	M024	Dam / waterhole	Close
OMF 08	M025	Ground disturbance	Outside
OMF 21	M026	Pit / depression	Outside
OMF 22	M027	Isolated find	Outside
OMF 23	M028	Possible structure	Close
OMF 24	M029	Pit / depression	Close
OMF 25	M030	Possible structure	Inside
OMF 26	M031	Ground disturbance	Inside
OMF 27	M032	Alleged grave	Outside
OMF 28	M033	Quarrying	Outside
Located in 2007			
OMF 53		Residential building	Outside

²⁰ Steve Mansour – S&L Searching Services, pers. comm..

²¹ LTO Book 1729 No. 802 – 12.9.1935.

²² LTO Book 2177 No. 857 – 23.6.1951.

²³ LTO Book 3611 No. 430 – 20.12.1984.

²⁴ LTO Title 13-14/797340 – 20.1.1989.

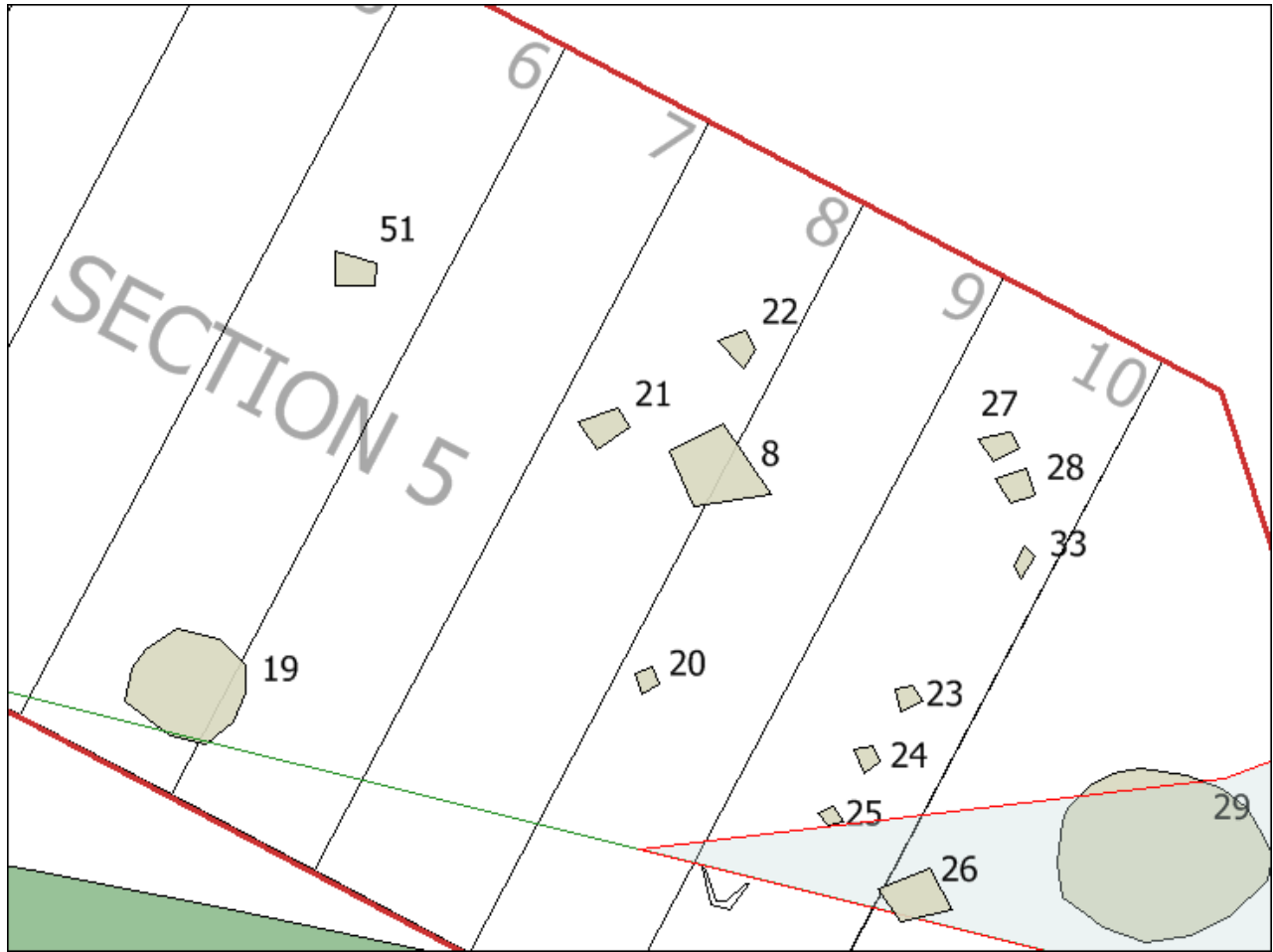


Figure 6.3 – Section 5 Lots 5-10 and reserve – archaeological features [OMF prefix] identified during survey within or close to development impact [red line bounding light grey shading].

During Singleton's 2005 survey of the site she was shown three piles of stones [OMF 27] and rough depressions which were asserted to be 'convict graves'²⁵. Singleton remained equivocal about their status but noted that there was some circumstantial evidence that would support such identification, such as relatively easy digging in that location, availability of stone, proximity to the road and known practice. The identification of the features as graves is considered to be highly unlikely. Considerations that would point against these being graves are the location of piles of stone immediately next to large stone quarrying pits, the location of the convict stockades [Wingello until 1839, then Towrang], the town reserve being established before the road was built, the availability of a gazetted cemetery from 1839 and so on. As they will not be disturbed by the development they were not considered for investigation to confirm or disprove this claim.

²⁵ Umwelt, EIS, Appendix 12, p. 2.9.

There are several depressions which may be quarrying pits or may have acted as dams. OMF 21 is a depression in a largely level area on the river flat. It is about 3 metres in diameter. OMF 24 is smaller, at about 2 metres diameter. More convincing as a dam is OMF 20, which is 6 metres in diameter and about half a metre deep in the centre. This dam may be associated with the culvert running under the current road, which discharges at the edge of the road reserve. It appears to periodically fill with water. Also probably related to the road widening is a depression adjoining the road reserve fence [OMF 26]. This includes a rough scatter of stones cast up from a small excavation. Ground disturbance related to the laying of the Telstra communication line runs through the site [OMF 8]. This has not been able to be fully mapped, although there are occasional concrete route marker pillars. In some areas it appears that there are multiple excavations which were trenched.

One isolated find [OMF 22] was noted, being a piece of cast iron buried and barely visible on the surface.

During the main excavation season a further structure was identified and designated OMF 53. This appears to be a residence as there are artefact scatters and remains of a constructed hearth. It is located further back from the road than previously identified features, making access to the creek feasible. Artefact material associated with OMF 53 is of Marulan township period.

6.5.3 Stage 1 Excavation

Five features were excavated in Stage 1. These were identified for investigation on the basis of being representative examples of the different feature types, and their excavation would inform the results of the archaeological survey and significance assessment of the site. These features are discussed below.

OMF 19

OMF 19 is a levelled area with at least two distinct levels, partly formed by cutting back into the slope and levelling out with spoil. A number of stones that may be parts of a structure were visible in the down-slope area.

Excavation consisted of the placement of two 0.5 x 0.5 metre test pits, one on each level. Test pit 1 was placed in the higher level and Test pit 2 in the lower level [refer to Figures 6.4 and 6.5].

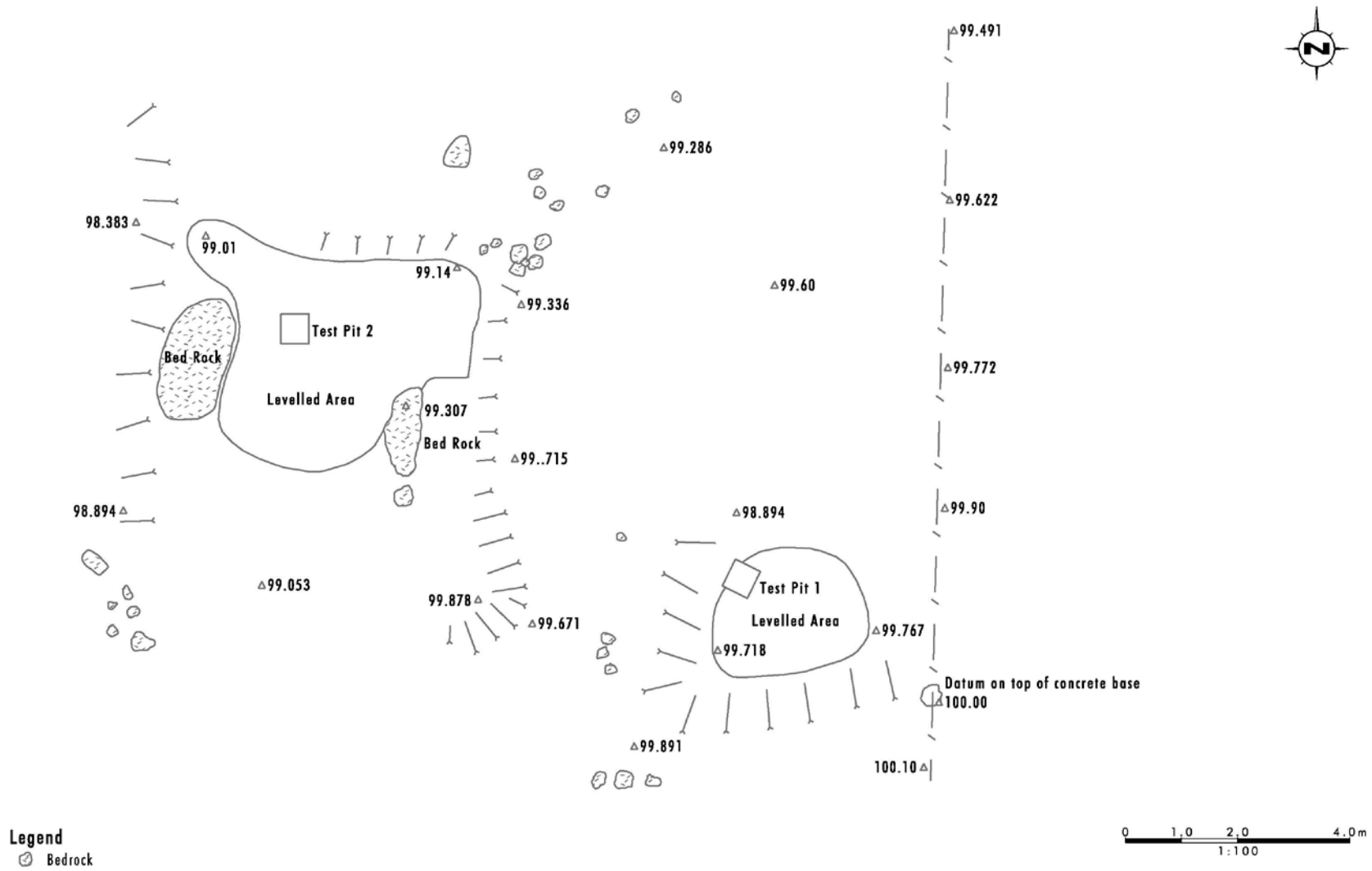


Figure 6.4 – Plan of OMF 19, showing the location of visible features and trenches.



Figure 6.5 – OMF 19 – Test pit 1, north section, showing probable compacted clay surface [arrowed].

OMF 19 - Test Pit 1

The uppermost deposit [removed as Spit 1] was a thin mid-brown-grey loam with vegetation material and shallow roots. It rapidly came down on to light grey granular unstructured gravels in silty soil. No artefacts were found in Spit 1.

Spit 2 was a light grey silty and gravelly soil. This was excavated to a depth of about 50 mm. No artefacts were found.

Spit 3 was unstructured light coloured clay that contained small gravels similar to Spit 2. No artefacts were found [refer to Figure 6.5]. It was a thin layer, maximum 30 mm deep, of material that appears to have been deliberately placed there rather than inwash.

Spit 4 was a mid-grey soil. It underlay the clay level [Spit 3]. The mid-grey soil was similar to natural soil from elsewhere in the site. No artefacts were found.

OMF 19 - Test Pit 2 – Lower Level

Spit 1 was natural vegetation and root material, as for the upper level. This overlay Spit 2 which mainly consisted of compacted gravel, which was probably introduced to create a terrace. It most probably derived from material cut from the upper slope. No further excavation was undertaken below Spit 2 into natural soil levels. No artefacts were found.

OMF 19 – Interpretation

The interpretation of Test pit 1 is that Spit 4 represented a truncated natural soil profile, with the upper natural slope being cut back to form a level platform. This was overlain by a deliberately placed clay packing to form a probable level floor surface [Spit 3]. This unfortunately contained no artefacts. Above this were sediments representing inwashed soil. Test pit 2 had deposit consistent with material from the cutting of the upper level being deposited, possibly with a retaining wall, to form a lower terrace.

There was no artefact or contextual evidence to suggest a date for the structure.

Further investigation of the structure was recommended as part of Stage 2 excavation works, but was not proceeded with as the impact footprint was further clarified and OMF 19 was no longer under threat.

OMF 20 – Dam

Original town lot – Section 5 Lots 8, 9. Original purchaser – Peters 1838

OMF 20 is a dam located about 20 metres from the road reserve boundary, in a very shallow drainage line that leads from a modern road culvert. The dam itself is circular, with a slightly raised embankment on all sides. The dam interior is very dry with a formerly muddy surface heavily trampled by stock. The date of the dam is not clear, but it may have been present on a 1953 aerial photo [refer to Appendix 2].

A 20 metre transect was excavated using a 600 mm wide mechanical bucket [refer to Figure 6.6]. This revealed a simple stratigraphy of a heavily disturbed mud-clay layer [now solidified] with a sharp junction to the natural red-orange clay. Biological activity was present throughout the profile above the clay, making it not suitable for preservation of organic samples of any integrity.

No further investigation was recommended.



Figure 6.6 – OMF 20, facing west, showing backhoe trench.

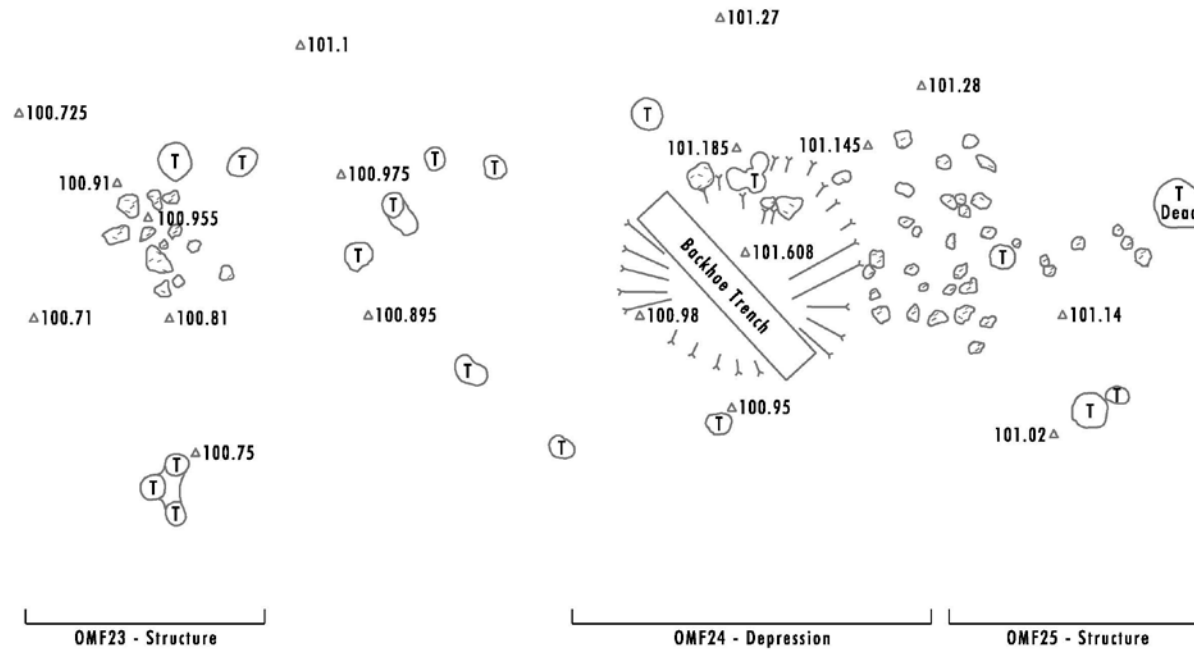
OMF 23 – Possible Structure

Original town lot – Section 5 Lot 10. Original purchaser – Peters 1838

Covering soil and leaf litter was cleared by hand down to a compacted surface. Despite earlier impressions during the initial survey there was no consistency to the placement or orientation of stones visible. They do not appear to form either a collapsed structure or a cache of stones ready for other uses.

OMF 23 was determined not likely to have been a structure. The visible stone may have been placed there during the excavation of the adjoining pit OMF 24 [refer to Figures 6.7 and 6.8].

No further investigation was recommended.



- Legend**
- ⊗ Bedrock
 - Ⓢ Tree

Figure 6.7 – Plan of OMF 23, OMF 24, OMF 25.



Figure 6.8 – OMF 23, showing clusters of surface stone.

OMF 24 – Pit/Depression

Original town lot – Section 5 Lot 10. Original purchaser – Peters 1838

The pit is within a lightly treed area, adjoining OMF 23 and OMF 25. The pit is about 2 metres across and 1 metre deep prior to excavation [refer to Figure 6.7].

A trench was excavated through the pit, on a grid North to South alignment. The trench was excavated about 600-750 mm wide, and about 2.5 metres long. The fill of the pit that was exposed consisted entirely of loose leaf litter and decayed natural organic material, overlying a stony natural deposit in a light grey matrix.

The excavation revealed that the pit was not substantially larger when originally dug and that there was no apparent long-term accumulation and decay of material in its base, as all of the humic material still contained well-formed leaves and twigs identical to ground mulch elsewhere in the immediate vicinity.

Interpretation of the feature is:

- [a] It is a relatively recently dug pit, possibly to extract stone, which has then been abandoned and gradually filled up with leaf litter. A maximum date of 50 years seems reasonable given the state of the infill deposit.
- [b] Alternatively the pit was originally dug for an unknown purpose, possibly to extract stone, some considerable time ago. More recently it has been re-dug and all older accumulation of material has been taken out. This scenario is less likely but still stands as no contradictory evidence was found.

No artefactual material was found in association with the pit. The contents of the pit may have contributed to the illusion of OMF 23 and OMF 25 being structures.

No further investigation was recommended.

OMF 25 – Possible Structure

Original town lot – Section 5 Lot 10. Original purchaser – Peters 1838

As with OMF 23 the initial survey of the site identified that this was a possible structure, based on the appearance of regularity in the placement of stones visible among the leaf litter.

Upon removing leaf litter it became clear that the visible stone was part of a more extensive outcrop of naturally occurring stone. Being immediately adjacent to the pit OMF 24 it is likely that excavation disturbed and added to the stone on the surface [refer to Figures 6.7 and 6.9].

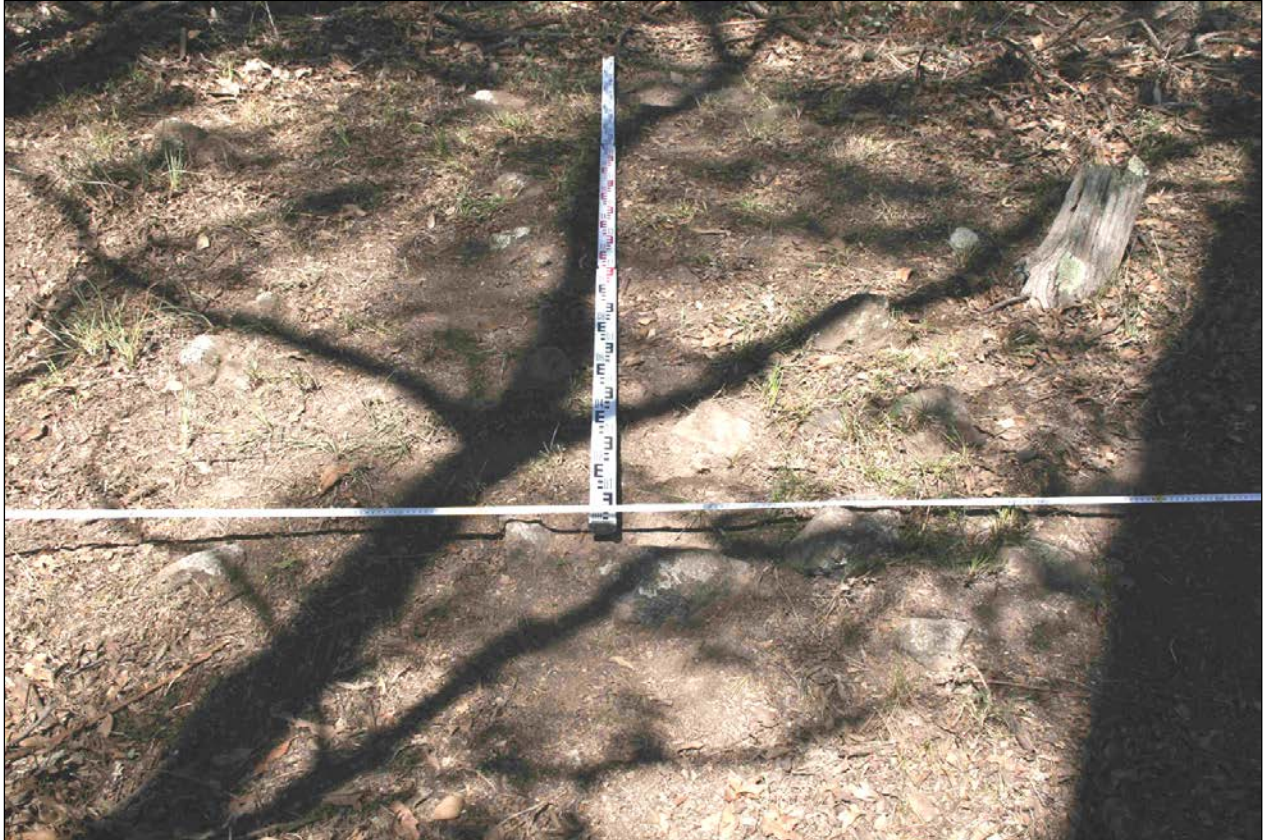


Figure 6.9 – OMF 25 – surface scatter of stones.

As no clear or reasonable evidence of deliberate placement of stone could be demonstrated it was deemed to have not been a structure.

No further investigation was recommended.

6.6 Crown Reserve and the Creek

[Never granted. Current title for Crown reserve – Lot 7002 DP 1025604]

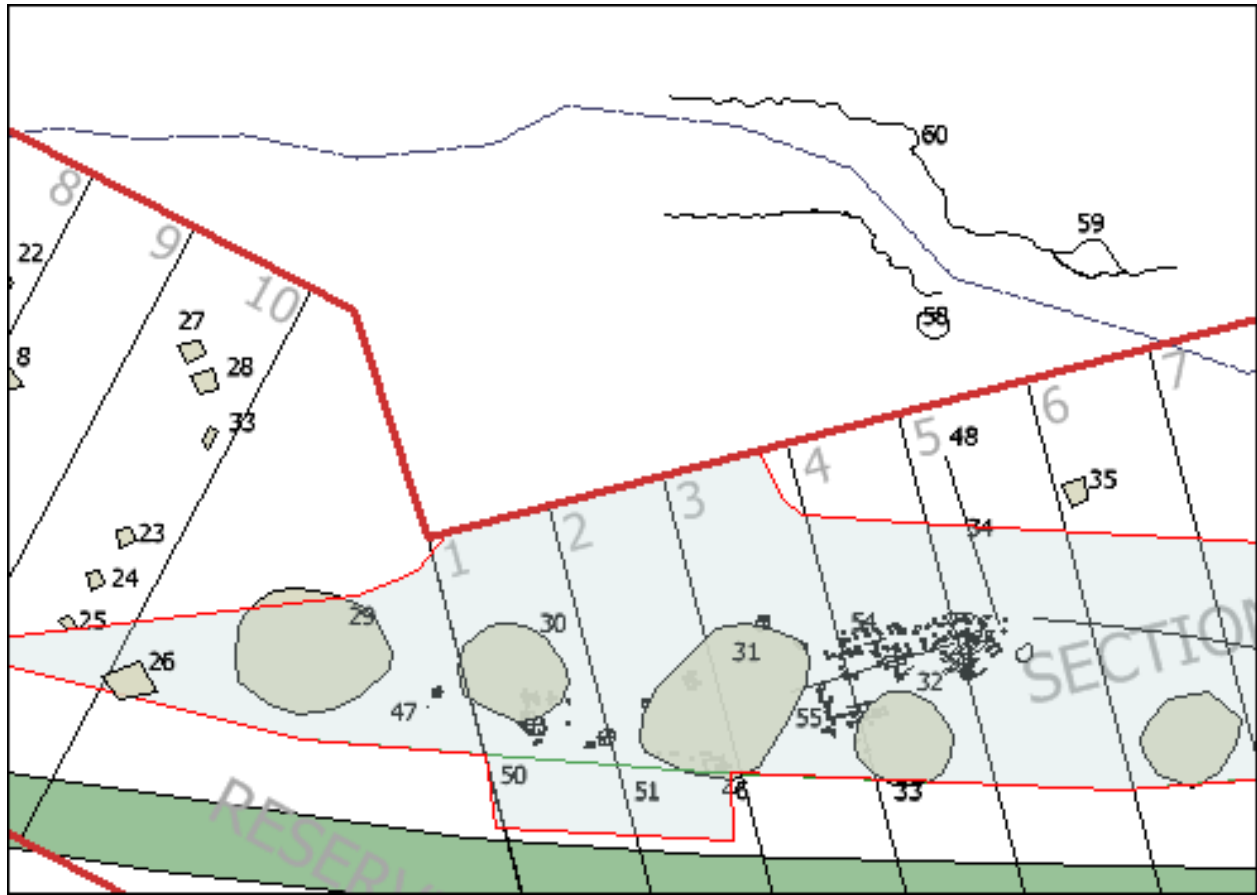


Figure 6.10 – Crown Reserve and archaeological features in immediate vicinity and across the creek [centre of creek shown by blue line].

6.6.1 Occupational History

The Crown Reserve is a purposefully formed public watering place, and this became Crown reserve R65894, gazetted in 1936²⁶. The reserve was established as part of the original layout of the town and appears to have always been intended to serve as a public use place, being marked as a water reserve in Deering's 1868 plan showing the township [refer to Figure 3.11]. By implication this allowed stock to be moved off the road reserve and onto this area, and giving them access to the creek. A question that arises is whether the original chain of ponds formation of the creek would have been a suitable watering place for large numbers of stock, as such ponds were generally surrounded by soft muddy ground that would have been unsafe for stock.

The reserve was greatly reduced in size as a result of the widening of the highway. It is presently largely cleared, although there are re-growth trees on the western and northern margins. The southern end of the lot is close to the highest point on this side of the road, and slopes gently northwards, with occasional ground-level exposures of stone. The ground then drops steeply, coinciding with a much greater amount of visible

²⁶ NSW *Government Gazette* 20.3.1936.

stone, including boulders and a number of shallow pits. At its northern end it is part of the creek terrace, becoming flat and sandy.

Most of the creek and its immediate floodplain was never alienated, although the second round of town lots released for purchase in Sections 7 and 12 did span the creek line.

6.6.2 Survey

The area was surveyed in good conditions with high visibility. A single feature was identified, occupying the southern end of the Crown reserve, at its uppermost point [refer to Figure 6.10].

Table 6.6 – Features located in former Crown Reserve during initial survey.

Feature	Survey markers	Feature type	Proximity to impact area
OMF 29	M034, 35	Levelled area	Inside
OMF 26	M031	Ground disturbance	Inside

The reserve contains a large levelled area, now partly buried in slope wash and later erosion or digging. In several locations where there is thin grass coverage there appeared to be evidence of stone laid to form a level surface. It is not known if this covered the entire 10 by 10 metre area or is purely local. There is a scatter of artefacts associated with the levelled area. Items noted include blue transfer printed ware, tobacco pipe stem, black bottle glass and fresh small mammal bone, possibly rabbit.

During the later stages of the archaeological research further investigation identified other features alongside the creek that were most likely related to the township period [refer to Figure 6.10].

Table 6.7 – Features located in former Crown Reserve during later stages of archaeological research.

Feature	Feature type	Proximity to impact area
OMF 58	Structure	Outside
OMF 59	Artefact scatter	Outside
OMF 60	Brick clamps	Outside

On the southern side of the creek, outside the rear line of the Section 1 town lots there is a small cluster of stones which appear to be part of a chimney butt or other construction [OMF 58]. These are outside the impact area and so were not further investigated [refer to Figure 6.10].

To the north of the creek, and immediately to the east of the line of the road leading from the interchange to the Lynwood Quarry site is a level creek flat with shallow mounds of brick rubble covering an area of about 50 x 40 metres and being truncated by the eroding creek bank [OMF 60]. This is interpreted as being an area where bricks were manufactured and fired in clamps [refer to Figure 6.10]. The evidence consists of several discrete hummocks ranging from about 100-200 mm in height above the natural trend of ground. These are composed of extremely friable brick fragments, most of which do not cohere into sizes greater than a quarter brick. They are largely covered with soil and grass and brick is visible only where there has been some loss of ground cover. All accessible fragments of brick were examined and none showed evidence of frogs. The general colouration, surface finish and absence of frogs is very close to those found in the excavation of the Woolpack Inn cesspit [OMF 46 - refer to Section 6.7.7 below].

The area was investigated with ground penetrating radar, which produced a plan interpretable as the footprints of several discrete brick clamps [refer to Figure 6.11]. An adjacent area of the creek bank is likely to have been deliberately excavated to win clay for making the bricks, as it presents vertical walls from the ground surface to a depth of 1-2 metres, but does not indicate that this is from erosion and is not oriented consistently with creek flow, making it less likely that it is primarily a scour feature [refer to Figure 6.12].

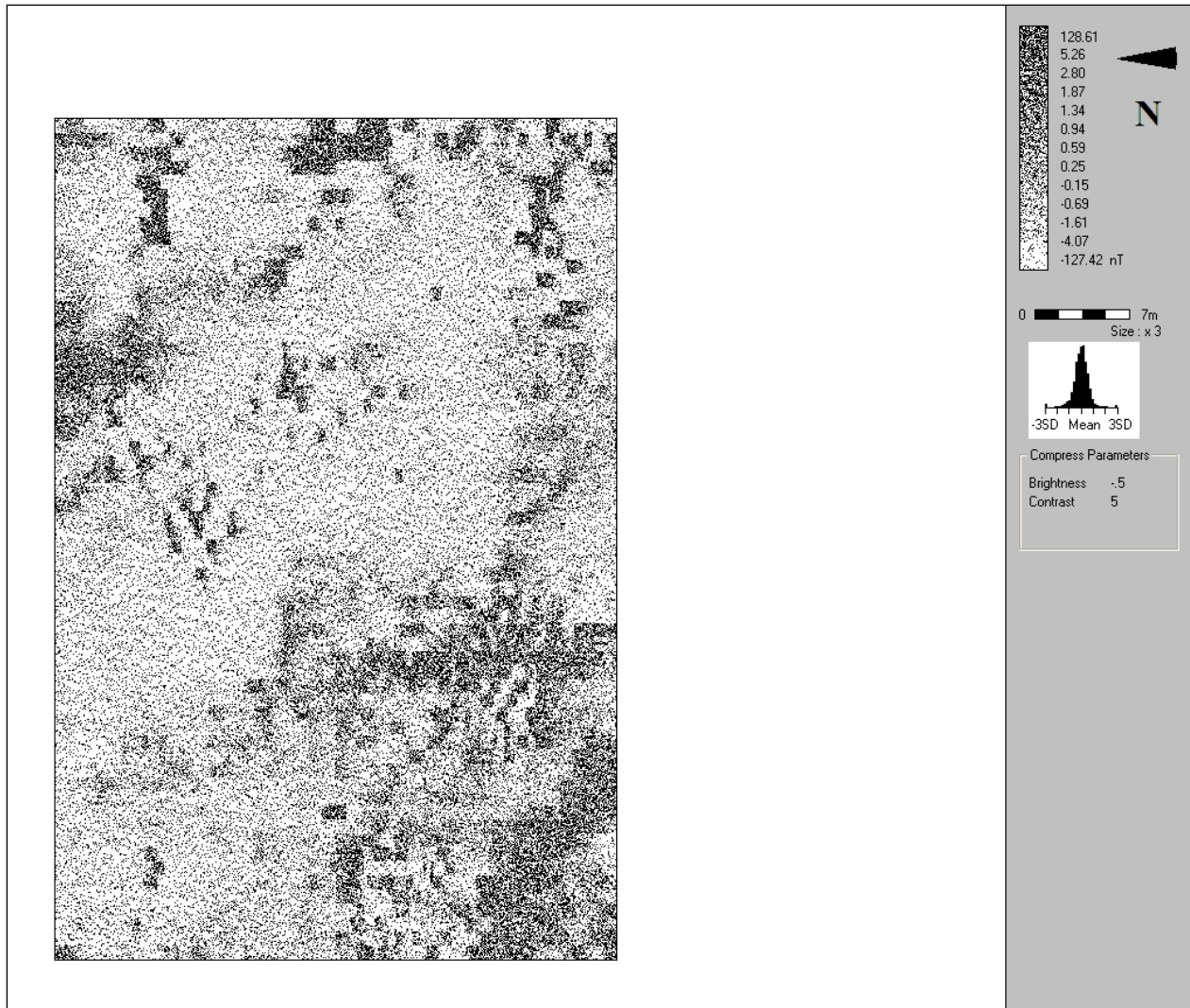


Figure 6.11 – Magnetometer scan of the brick clamps [Feature OMF 60], showing areas of higher magnetisation resulting from intense fires as darker tones.



Figure 6.12 – Area of the creek which was probably used to excavate clay for brick-making.

Along the creek bank immediately west of the clay pit there is a discrete artefact scatter consisting primarily of black and green bottle glass. When examined in cross-section along the creek bank this sits on top of the brick clamp material, indicating that it is of later date. Although not much material is visible what can be seen is consistent with the township period, and is indicatively later in that period due to the amount of lighter shades of green glass. This appears to represent camping immediately next to the creek. Almost no evidence of glass or other material is found more than 5 metres back from the current creek line, suggesting that the scatter was focussed on the creek line, and some of its original distribution may have been lost through erosion.

Because of the position of the clamps close to the Woolpack Inn, the clear use of bricks in that building and the similarity of the bricks found in the Woolpack Inn cesspit [OMF 46] it is considered very likely that the OMF 60 brick clamps date to the early part of the town's history and the building of the Woolpack Inn in the early 1830s. The overall extent of the clamps is bound to the south and east by the creek, to the northeast by the clay pit and a change of slope to the north. The westward extent was investigated with GPR into the Lynwood Quarry road alignment but no clear evidence of it continuing there was found. The artefact scatter post-dates the clamps and is indicatively late in the township period in date. It is yet another example, along with the roadside artefact scatters, of casual camping in unalienated land close to the inn.

6.6.3 Stage 1 Excavation

OMF 29 – Levelled Area

OMF 29 was the first of three levelled areas that were investigated. It immediately adjoins the break of slope that exposes rock outcrops, and is bordered on the southern and western margins by disturbed ground which possibly includes pits to retrieve stone.

A 12.5 x 2 metre wide trench was laid out, oriented parallel to the road reserve boundary. Mechanical excavation removed a layer of topsoil and root material [Spit 1] revealing topsoil material interspersed with underlying soft silty light-coloured soil [Spit 2] [refer to Figure 6.13]. Artefacts were collected from the spoil during excavation and afterwards.

Spit 1 – Vegetation and surface material removed down to root level. At the northern end there was a thin scatter of road gravel material underlying the surface vegetation. This spit was about 50 mm deep. Reddish and brown nodules represent boulders of natural rock decaying *in situ*. Small field stones occur throughout the deposit.

Spit 2 – Lower topsoil overlying a light grey silty soil. On the western margin of the trench a denser scatter of artefact material began to appear, in a looser matrix, although this may have been a result of mechanical excavation.

At the base of Spit 2 there were a number of decaying nodules of stone in the subsoil matrix [refer to Figure 6.13].



Figure 6.13 – OMF 29 facing south, showing the contrast between topsoil and subsoil colour.

Artefacts – OMF 29 Spit 1

A small quantity of artefacts was recovered from both spits. Compared to the adjacent levelled areas [OMF 30, OMF 31] the quantity is small. Although none of these deposits were sieved the relative densities are likely to reasonably reflect what was in the ground. Spit 1 is comparable to Units [1] and [2] from the Stage 2 excavation, while Spit 2 is comparable to Unit [3] [refer to Section 6.7.5].

OMF Spit 1 artefacts consisted of:

- 7 pieces black bottle glass
- 1 piece case bottle
- 1 piece clear bottle glass
- 4 pieces blue Transfer printed ware [TPW]
- 7 pieces white bodied ceramic

OMF 29 Spit 2 artefacts consisted of:

- 20 pieces black bottle glass
- 1 piece clear flat sided bottle glass
- 18 pieces blue TPW
- 15 pieces white earthenware

Interpretation

The levelled area appears to have been formed by the removal of some of the topsoil although this is not as apparent as in adjoining parts of the site. The surviving topsoil was thin, and it is possible that it was a mixture of removal and compaction of deposit. The density of artefacts indicates that it was less heavily occupied than the adjoining lots, which is consistent with its status as a Crown reserve. It is not clear whether the artefacts were part of the overflow of discard from adjoining lots or from camping on the reserve. All of the artefacts were consistent with activity during the town's effective occupation [1835-1870].

Further controlled archaeological investigation during Stage 2 was recommended, based on the potential to compare artefact frequencies between public and private lots within the township [refer to Section 6.6.4].

6.6.4 Stage 2 Excavation

Most of the surviving portion of the crown reserve falls within the development footprint. Based on the results of the Stage 1 excavations it was not considered to be a priority area as it was seen as being less likely to contain intact archaeological remains outside the identified levelled area near the road. The adopted sampling strategy therefore was to undertake a limited amount of hand excavation, as a continuation of the Stage 1 testing, close to the road reserve boundary [refer to Figure 6.14]. Unless remains were uncovered during hand excavation, the remainder of the area would be cleared by monitored mechanical excavation.

Hand excavation took place in a series of contiguous 2 x 2 metre squares that extended from the adjoining large open area excavation, discussed in Section 6.7.4 below [refer to Figures 6.15 and 6.16].

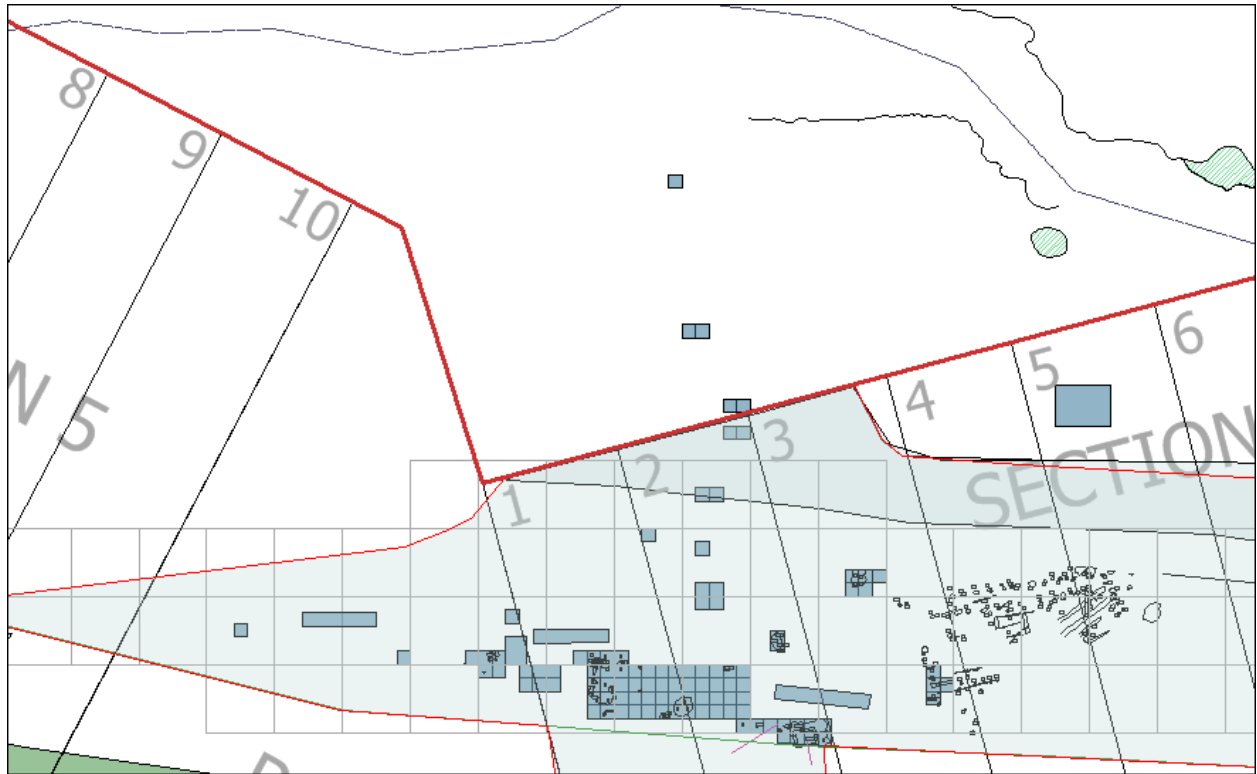


Figure 6.14 – Trenches and features in Crown reserve. The dark blue squares were excavated by hand while the shaded area was mechanically excavated. The grid represents 10 x 10 metre squares.

The general sequence of deposits mirrored that in the main excavation area [main excavation area discussed in Section 6.7.4]. Unit [1] – turf layer, overlay [2] – topsoil which overlay [3] – compacted deposit. Within and below [3] were stratigraphic units that may or may not have been cultural overlying Unit [66] – the natural subsoil A2 horizon.



Figure 6.15 – Typical interface between shallow soil and field stone



Figure 6.16 Further excavation reveals possible alignment of field stone and bedrock. It remains unclear how much of this is purposeful and whether it is part of OMF 47

The excavations undertaken in the crown reserve identified Features OMF 47 and OMF 61. These consisted of ten discrete post holes, structural elements, pits and possible structural stones. As any superstructure had been demolished and disturbed, only limited connection between these features could be identified or proposed.

The Harris matrix for these elements is shown in Figure 6.17.

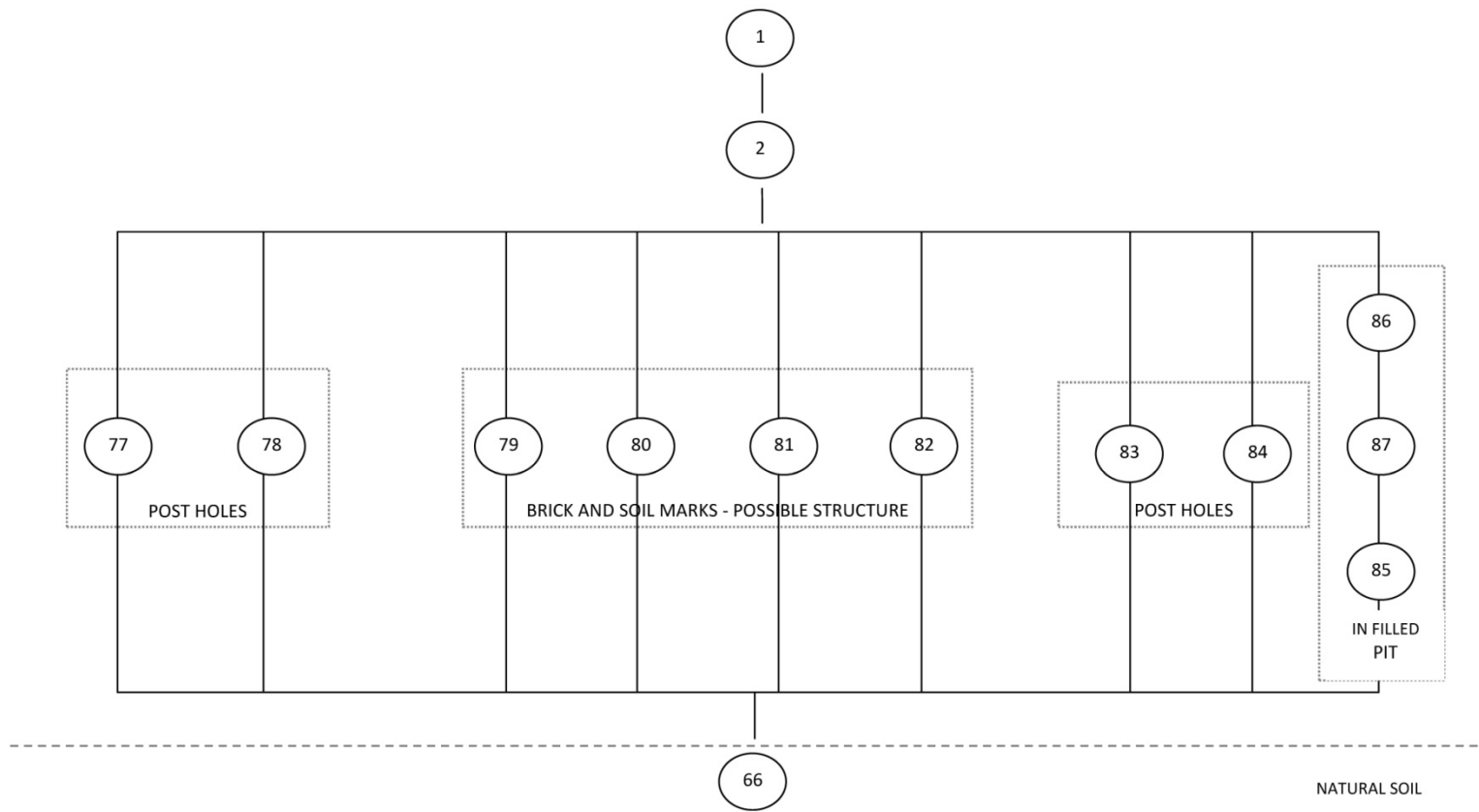


Figure 6.17 – Harris matrix – Crown Reserve identified archaeological units.



Figure 6.18 – Excavation of structures in the Crown reserve area

OMF 47 – Structure

This was exposed as a number of shallow depressions and lines filled with light brown sand, and associated brick fragments. The structure was close to that of the boundary between the Crown reserve and Section 1. The orientation of the surviving structural elements was nearly parallel. If all of the remains were part of a single structure, and their placement and orientation suggested this is so, then it was a reasonably substantial building measuring about 6 x 7 metres.

Areas of stone that, on exposure appeared to present purposeful alignment were noted. While field stones are irregular, some of the bedrock exposures reveal rectilinear cracking, which may have been enhanced or supplemented with placed stone. Units [31] and [32] represent potential components of the structure of OMF 47 [refer to Figure 6.16].

[79] was a shallow line measuring about 2.4 m long and up to 140 mm wide. This ran NNW, or close to the alignment of the adjacent lot. [79] was filled by a light brown sand with fragments of brick.

[80] was a linear depression running about 1.0 m long and of variable width, maximum 190 mm wide, which contained four half bricks or brick fragments.

[81] was a feature of three abutting bricks. These formed a near continuation of [79]. About a metre to the south of the bricks a shallow discolouration was also observed during mechanical excavation.

[82] was an alignment of bricks with a corner or return [refer to Figures 6.18 and 6.19]. There were five half-bricks or large fragments represented. The bricks had been set into [66] natural soil.

Most of these units were uncovered during the initial stage of mechanical excavation but were cleared by hand and their continuation tested carefully. The absence of intervening sections of wall alignment appears to reflect past erosion or removal of deposit, and there were no artefacts directly associated with the feature. The bricks were of the same form as those found in the cesspit fill and elsewhere on the site, but were not otherwise readily dateable. They are presumed to be part of the foundational phase of Marulan history, but could well be secondarily used later. No artefacts were found in direct association with the features of OMF 47, but surface material was all consistent with the township phase of site occupation.



Figure 6.19 – Feature OMF 47 during excavation, showing ephemeral lines of brickwork

OMF 61 – Fence Line

A single post hole - Unit [88] - was identified about 0.5 m from the western boundary of the Crown reserve. This was possibly a fence post for the Crown reserve boundary. It was offset the same distance as the other fence post – Unit [78] on the eastern side of the reserve.

[77] was a possible post hole, roughly rectangular, measuring about 300 x 280 mm. The fill was not assigned a context number.

6.6.5 Interpretation

The Crown reserve contained a building, most probably built during the Marulan township period, located on the eastern side of the reserve, adjoining Joseph Peters' Woolpack Inn land. This is surprising given the strong tradition of such reserves being available for travellers and stock. It is possible that it may have been associated with the Poundkeeper, which was an important role within the community [refer to Section 3.9.2]. In the later township period the Pound was located at the other end of the town, but this arrangement may have changed through time.

6.7 Section 1 Lots 1-4 – the Woolpack Inn

[Current title Lots 7-10 DP 797340, Lot 1 DP 210885]



Figure 6.20 – Identified archaeological features in Section 1, Lots 1-4. Grey shapes are features identified in Stage 1, blue shading represents excavation in Stage 2.

6.7.1 Occupational History

These blocks are in open ground, falling northwards towards a well-defined creek flat that is about 30 metres wide. The highest point on the site is just within Lot 1, with the land falling gently for about 30 metres northwards towards the creek, then becoming noticeably steeper until it reaches the creek flat. There is occasional exposed field stone and natural outcropping bedrock present, mainly around the edge of the flatter area around the knoll.

These lots were owned by Joseph Peters and form the rear of the Woolpack Inn site. They were bought in two sets – Lots 1 and 2 in 1834, and Lots 3 and 4 in 1838²⁷. Together they created a lot of 2 acres in size immediately north of the road junction and adjoining the public reserve.

Peters owned the land until he sold all the lots to James Kirwan in 1852²⁸, the blocks in Section 5 were sold earlier to Joseph Walford, who then eventually also sold these to Kirwan. Although Peters owned the land he could license the inn and the land to someone else. Kirwan retained ownership until 1871 when it was transferred to Philip Dignam²⁹ and then James Hogg in 1877³⁰. Hogg also owned lots in Section 5 which were purchased from Kirwan or others before Hogg's death in 1886. The block was owned by James Wells from 1935³¹, Walter Riley in 1951³², Christopher Riley in 1984³³ and John and Shirley Feltham in 1989³⁴. The 20th century pattern thus follows a process of gradual consolidation of ownership among the lots and sections. Holcim bought the lots from John Feltham in 2003.

We know little about the Woolpack Inn's set up. Peters wrote to the Colonial Secretary in mid-1835 claiming to have built a 'large brick house' costing £400. Peters is listed as the Woolpack's publican until 1840, and then George Wakeley is publican from 1842, followed by Goodman Hart. This seems to mark the change of residence for Peters, who moved to Marian Vale at around this time. Some clues are found in the 1841 Census which gives details of the people who lived there [refer to Section 3.7]. Peters is listed as the head of a household that contained 15 people. He had seven daughters by that stage and the remainder of the household may have been workers at the inn. In the Woolpack Inn ledger there are also a large number of people recorded as working for Peters, although some of them are tradesmen building his house at Marian Vale and others are farm workers elsewhere. However, some would have been employees and possibly residents of the inn [refer to Section 3.9.3].

²⁷ LTO Serial 37 pages 77-78 – 2.1.1834, Serial 202 pages 227-228 – 3.3.1838.

²⁸ LTO Book 22 no. 831 – 21.4.1852.

²⁹ LTO Book 124 No. 230 – 24.3.1871.

³⁰ LTO Book 174 no. 971 – 19.11.1877.

³¹ LTO 1729 No. 802 – 12.9.1935.

³² LTO 2177 No. 857 – 23.6.1951.

³³ LTO Book 3611 No 430 – 20.12.1984.

³⁴ LTO Titles 7-10 / 797340 – 20.1.1989.

The Woolpack Inn register does not provide any clues about how the inn operated beyond confirming that it supplied food, lodgings, drink, stabling and supplies, as well as providing credit. A loose note dated 1843 slipped into the register however states 'Took carpenter to my house [the Woolpack] to measure and plan for additions to be made to the House. I asked Wakeley the tenant if he had any objections who replied I might do it when he had done with it...'³⁵ This implies that Peters had moved out by 1843 and that Wakely was occupying either a separate house or quarters in the inn.

We do not know what the Woolpack Inn looked like. There are no detailed descriptions, no survey plans or illustrations. Our direct knowledge is very restricted. The only features found in the 2007 archaeological excavations relating to the Inn were a substantial cesspit [OMF 46] and a cobbled surface near the cesspit [OMF 51]. Associated with the hotel on the original and two adjoining blocks Peters bought were more ephemeral structures, evidence of farming or gardening and extensive surface scatters of artefacts, but these shed no light on the construction.

Here is what we know about the Woolpack Inn from historical and documentary evidence.

- Peters refers in a letter of complaint about indecision in finalising the road route that he spent nearly £500 on the brick hotel³⁶.
- A notice in *The Australian* newspaper describes it being opened for business and being a 'substantial building' with 'well-appointed accommodation'³⁷.
- The cesspit found during the excavation was a rectangular structure set into the ground at the road reserve boundary. It was the outermost outbuilding, but it was not immediately clear whether it was a separate building or connected to the main body of the inn. It was subsequently confirmed to have been a detached structure. It was excavated into natural soil, lined with split or roughly dressed porphyryite [extremely hard igneous stone] blocks, and had a brick superstructure.
- To the west and north of the cesspit there was a cobbled surface. This consisted in part of natural stone outcropping of the site, broken down to a level surface, and supplemented with pieces of local stone embedded in a clay deposit. It was a rough, non-decorative, and somewhat uneven surface presumably aimed at providing a hard-wearing surface that did not generate much mud when wet. It was diffuse and did not extend more than 2 metres from the cesspit walls. The solidity of construction for the cesspit suggests that the main building would be of at least equal robustness.
- Anecdotal evidence³⁸ is that machine operators recalled removing large blocks of stone during the 1970s work in the area of the Woolpack Inn.
- Town planning regulations of 1829 prescribe the arrangement of lots in the towns, and specify a 14 feet [4.5 metre] building line. All evidence to date is that the town planning and construction conformed to these requirements.

³⁵ ML FM4 / 5366, Woolpack Inn ledger, microfilm frame 431.

³⁶ SRNSW 2/44935 Col. Sec. letters re roads – Southern Road 1827-45 Letter Joseph Peters to Col Sec 20.6.1835.

³⁷ *The Australian* 26.1.1836.

³⁸ Owner of lot on opposite site of highway – pers. comm.

- The depth of cutting to the current road bed is about 1.5 metres below the ground surface at the cesspit. The cutting commences about 7 metres in from the fence line, behind a row of trees. This leaves about 5 metres of ground remaining at original elevation.
- The road alignment survey carried out by Surveyor Deering in 1868³⁹ shows a probably stylised building marked 'INN' located in Lot 1 immediately adjacent to the [then] road reserve. Some other buildings known to be extant in 1868 are not shown suggesting it was shown as an indicative building only.

Here is what we can reasonably assume based on the evidence above and comparison with other sites.

- There are two main styles of roadside inn built during this period – single storey, with a central verandah and flanking travellers' rooms [eg. examples at Hartley Historic Site], and massive, usually two storey 'box' constructions [eg. White Horse Inn, Berrima]. It is likely, based on the amount Peters spent in construction and his own continuing development of social relationships with the rural elite, that he went for the large type of construction. This was typically a roughly symmetrical plan, with a central hall leading to public rooms along the front, dining and office rooms at the rear, and accommodation upstairs. The owner may have lived elsewhere on the site or at some remove from the hotel. Peters built a new home at Marian Vale for himself and his family in 1839, and probably lived off-site from then onwards.
- From the current site boundary at the cesspit to the original road frontage is 50-60 metres, making it possible to construct a building within a maximum footprint of 40 metres across by 40-50 metres deep, assuming town planning regulations were adhered to.
- The material on the surface of the road reserve is likely to be directly associated with the Woolpack Inn, but has been bulldozed out of context. It likely overlays any intact deposits and structures. There is no evidence indicating that the road verges were directly impacted by bulldozing.
- There is no clear evidence of a terminal date for either use of the inn, except that it was extant in 1863 and had ceased operation before 1867, nor for the demolition of the building.

The functions of an inn are well understood, and as well as providing drink and lodging for travellers they required stabling for traveller's and their own horses [often hired, exchanged or left as collateral by travellers], stores for goods and stock feed and possibly accommodation for staff.

³⁹ NSW Department of Lands LPI Map 824-1603 'Plan of the Main Southern Road from Goulburn to Marulan' Surveyor Deering.
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6.7.2 Survey

The initial survey identified three levelled areas – OMF 30, OMF 31 and OMF 33 [refer to Figure 6.20]. These were poorly defined and it was difficult to establish where their boundaries were. All appeared to be reasonably circular in shape, and were more level than the natural contours of the ground. At the time of survey, which followed prolonged drought, OMF 30 appeared to be about 10 by 10 metres, and OMF 33 about 5 by 10 metres. OMF 31 was at least 20 by 12 metres, making it the largest levelled area noted in the survey. OMF 31 also contained the only definite substantial structure noted in the survey, which was located right next to the boundary fence [the cesspit OMF 46]. There were also associated artefacts dating to the early-mid 19th century located near the structure and along the fence line. A drainage line identified running roughly East to West was designated OMF 32. It started at the edge of the levelled area OMF 31 and ran towards another drainage line [OMF 34] but did not appear to connect with it.

Table 6.8 – Features located in Section 1 Lots 1-4.

Feature	Survey markers	Feature type	Proximity to impact area
OMF 30	M036, 37	Levelled area	Inside
OMF 31	M038, 39	Structure / levelled area	Inside
OMF 32	M040, 41	Linear drain feature	Inside
OMF 33	M042	Levelled area	Inside

Later visits to the site showed that the boundaries of the three levelled areas as shown in Figure 6.20 are unlikely to be static. The pattern of close cropping of the grass probably relates more to the drought and grazing activity than was originally realised. It is now considered likely that the three are, in fact contiguous, but with some areas of rougher ground, which tends to correspond with exposures of the natural bedrock.

Mention needs to be made in this section about the archaeological deposit within the road reserve [Lot 1 DP210885]. During the initial survey and Stage 1 and Stage 2 excavations this area was known to contain surface scatters of artefacts and potentially some of the remains of the main Woolpack Inn buildings, especially as the cesspit was immediately adjacent to the road reserve. Based on the evidence collected during the Stage 2 excavation it remained open whether the rearmost part of the Inn's main building was located in the reserve or further south, and therefore lost during road widening.

Excavation in early 2009 within the road reserve showed that the cesspit was a stand-alone building and was not connected to any other structures. No structural remains of the main inn building or other substantial remains were found in the road reserve. Only evidence of a single ephemeral structure and some artefact material was identified, and this was overlain by demolition rubble and road construction fill. The visible surface

artefact material was confirmed as having been redeposited as a result of widening of the Hume Highway in the 1970s.

6.7.3 Stage 1 Excavation

OMF 30, OMF 31 and OMF 32 were identified for testing in the Stage 1 excavation program.

OMF 30 Test Excavation

OMF 29 and OMF 30 were adjacent levelled areas with no clear boundary line. The distinction made during survey probably reflects surface conditions reflecting drought and grazing patterns which were no longer apparent during later visits. A trench measuring 2 metres x 11 metres was laid out, running parallel to the road and set back about 10 metres from it. The majority of the trench was laid out within the Crown reserve, partly to see if there was a significant drop-off in artefact density across the lot boundary. No visible surface features were noted prior to excavation. The trench was dug with a mechanical excavator.

Spit 1 was a thin layer of topsoil and root material, revealing an underlying layer of soft light coloured silty soil [refer to Figure 6.21]. The contrast between the topsoil and the silty soil A2 was very clear and sharp. The silty soil was unconsolidated and very dusty, which was exacerbated by drought conditions.

At the completion of removal of topsoil the base of Spit 1 revealed a possible structure in the southwest corner. This was not exposed further, but appears to have been a hearth built of angular field stone, measuring about 1 x 1 metre. Adjoining it was remnant topsoil, probably filling in a depression. Elsewhere in the trench fragments of brick were exposed impressed in the surface of the subsoil. Subsequent examination of this location during Stage 2 showed that it was likely to be a natural rock exposure, with any regularity being coincidental.

Artefacts recovered included black and green bottle glass, a heavily corroded square shafted nail, and seventeen pieces of ceramic. An Aboriginal artefact – a flaked piece of fine siliceous stone – was identified in the spoil heap.

The test trench indicated that this was an open area with a reasonable density of artefact material. Apart from the presumed hearth, which in Stage 2 was revealed to be consistent with natural rock outcrops that occur elsewhere on the site, there were no *in situ* features. The nature of exposure of the bedrock, with consistent straight-sided fracturing and subsequent rounded weathering produced a number of possible masonry structures that could only be discounted after close examination.

OMF 31 Test Excavation

The boundary between OMF 30 and OMF 31 was not readily discernable. Although they appeared as discrete entities in the survey and Stage 1 works, it was not possible at a later date to pick a clear line, and most of the intervening space also appeared to have the same characteristics. A trench measuring 2 metres x 14 metres was laid out, roughly parallel to the road reserve and set back 7 metres from it. No visible surface features were present apart from the brick structure located near the road boundary [the cesspit OMF 46].



Figure 6.21. OMF 30 after removal of Spit 1. Width of trench is 2 metres. Red patch in foreground is bedrock decaying *in situ*



Figure 6.22. OMF 31 facing west during excavation of Spit 2.

Two spits were excavated. As with OMF 29 and OMF 30 these consisted of Spit 1 being topsoil and root material, with Spit 2 being the A2 horizon of the topsoil profile. No structural evidence was revealed by the excavation [refer to Figure 6.22].

The artefacts recovered from the trench were consistent in types of material and their relative proportions from Spit 1 to Spit 2. These included a preponderance of black bottle glass, mostly cylindrical and case [square] bottles followed by an array of green tinted bottle glass. Ceramics were noted, dominated by blue willow pattern, then other blues and minor representation from other colours.

The artefact evidence from OMF 31 matched that from OMF 29 and OMF 30. The main contrast was the greater quantity of black case bottles for spirits. This is reasonably expected as a result of the association of the location with the Woolpack Inn. All of the artefacts, apart from two pieces of beer bottle and one piece of modern plate glass, were consistent with the town occupation dates.

No structural evidence was revealed in the trench.

OMF 32 – Test Excavation

This linear drainage feature ran roughly parallel to the road reserve. It was diffuse and less readily apparent than when first identified in 2006.

A 400 mm wide trench was cut perpendicular to the line of the drainage feature. This was effectively a shallow scrape as natural soil – the silty soil – was found no deeper than 200 mm. In section the base of the topsoil raises and dips slightly but there is no evidence of any digging into the soil to form a drain [refer to Figure 6.23]. Only four artefacts were recovered, three pieces of black bottle and one piece of blue TPW, all from the topsoil.

The origin of this linear depression could not be determined. Later excavation along its entire extent did not indicate that there was ever a cut to formalise a drainage line. It is possible that it formed a path that led to the rear of the Woolpack Inn, but as can be seen from the later excavation its line overlay structures defined by post holes. It is therefore likely to have been post-township and may even be reasonably recent.

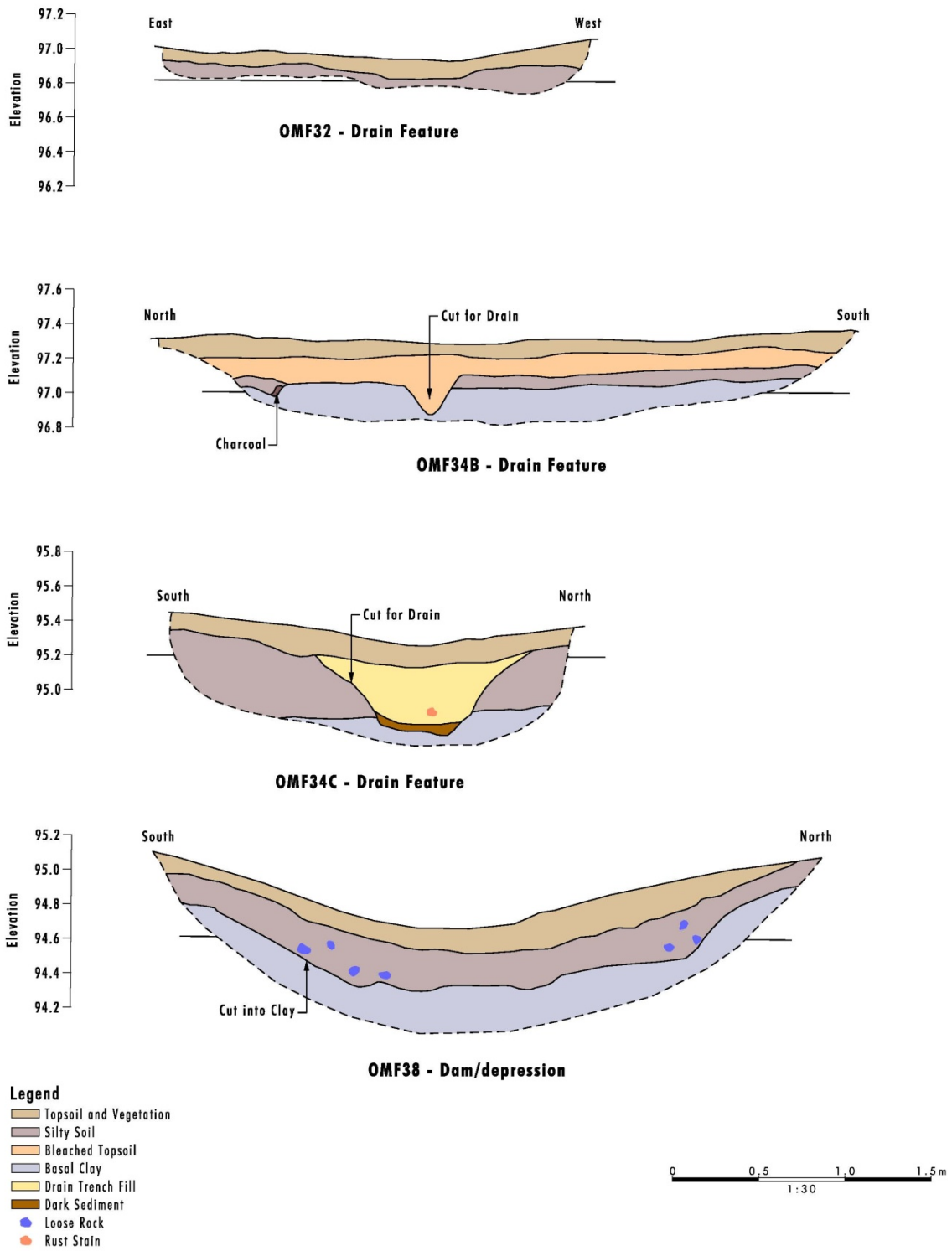


Figure 6.23. Section through linear Features OMF 32 and OMF 34 and Dam OMF 38.

6.7.4 Stage 2 Excavation – Overall

The Stage 2 excavations included hand excavations in the 'Big Rectangle' that tested an area measuring 24 x 8 metres, with additional excavations to the sides extending into areas considered to show promise [refer to Figures 6.24 to 6.28]. Following this work there was also monitoring of mechanical clearing. These excavations exposed the previously known structural feature, which proved to be a cesspit, designated OMF 46, and an adjacent made surface, OMF 51, consisting of natural and added stone.

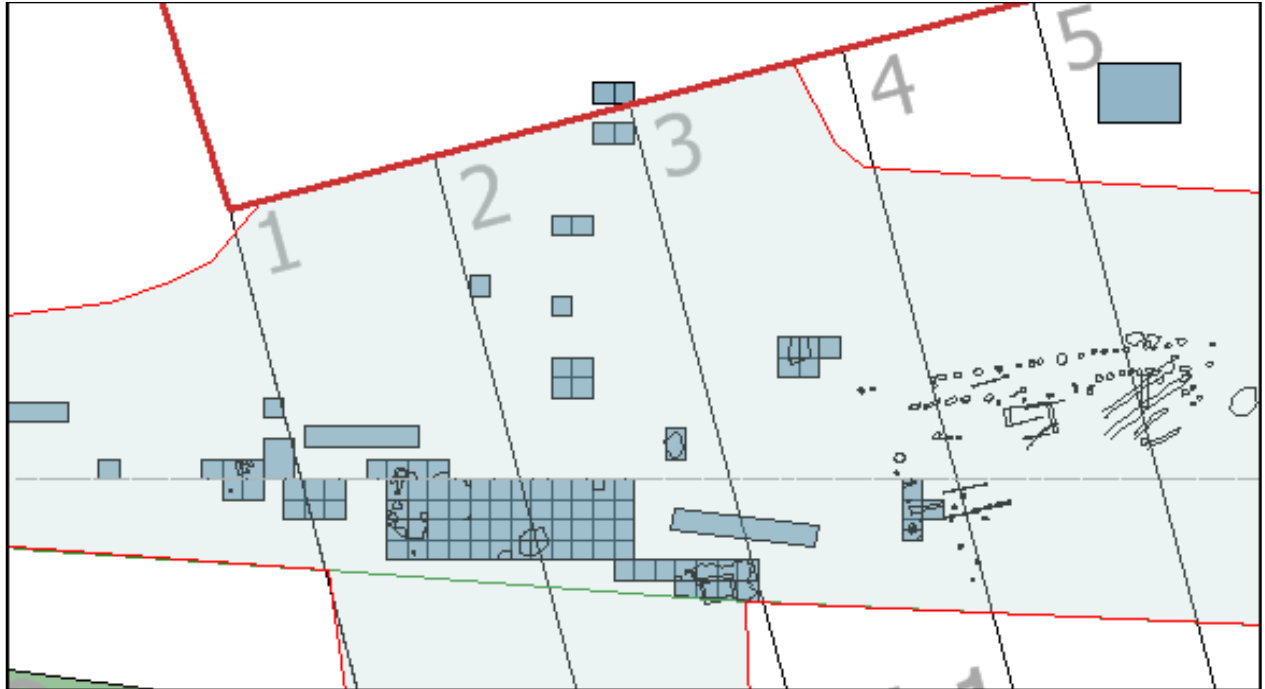


Figure 6.24. Excavation trenches and archaeological features identified during Stage 1 and 2 excavation.



Figure 6.25. Excavation of the 'Big Rectangle' area

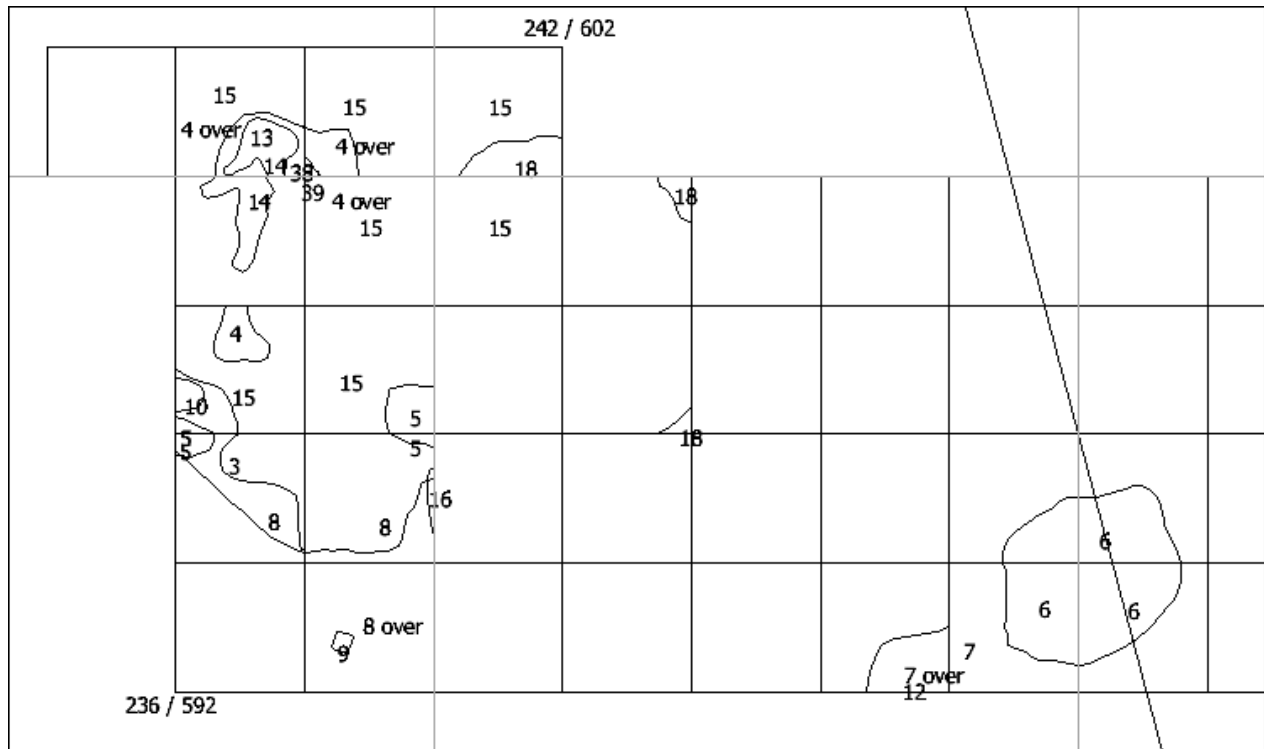


Figure 6.26. Archaeological units identified during excavation of the 'Big Rectangle' in Section 1 Lots 1 and 2 [western end] overlying Unit [3]. The grid interval is 2 metres

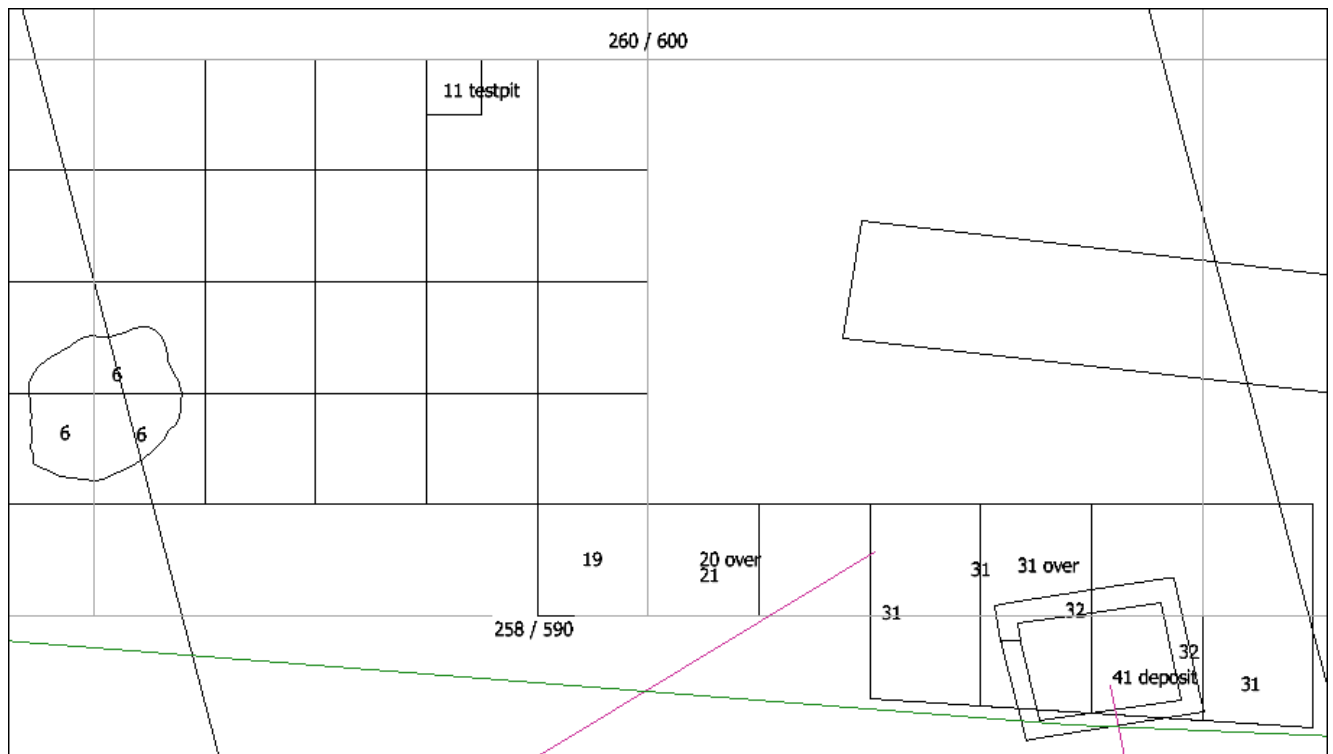


Figure 6.27. Archaeological units identified during excavation of the 'Big Rectangle' in Section 1 Lots 1 and 2 [eastern end] over Unit [3] and natural soil [66]. Grid interval is 2 metres

As this was the most complex area of the excavation it is necessary to provide a clear narrative of the results of the excavation. Section 6.7.6 discusses general soil sequences, both natural and human-influenced, and the results of testing in different parts of the site. Section 6.7.7 discusses discrete features that contained structural or land use evidence, and Section 6.7.8 discusses artefactual deposits.

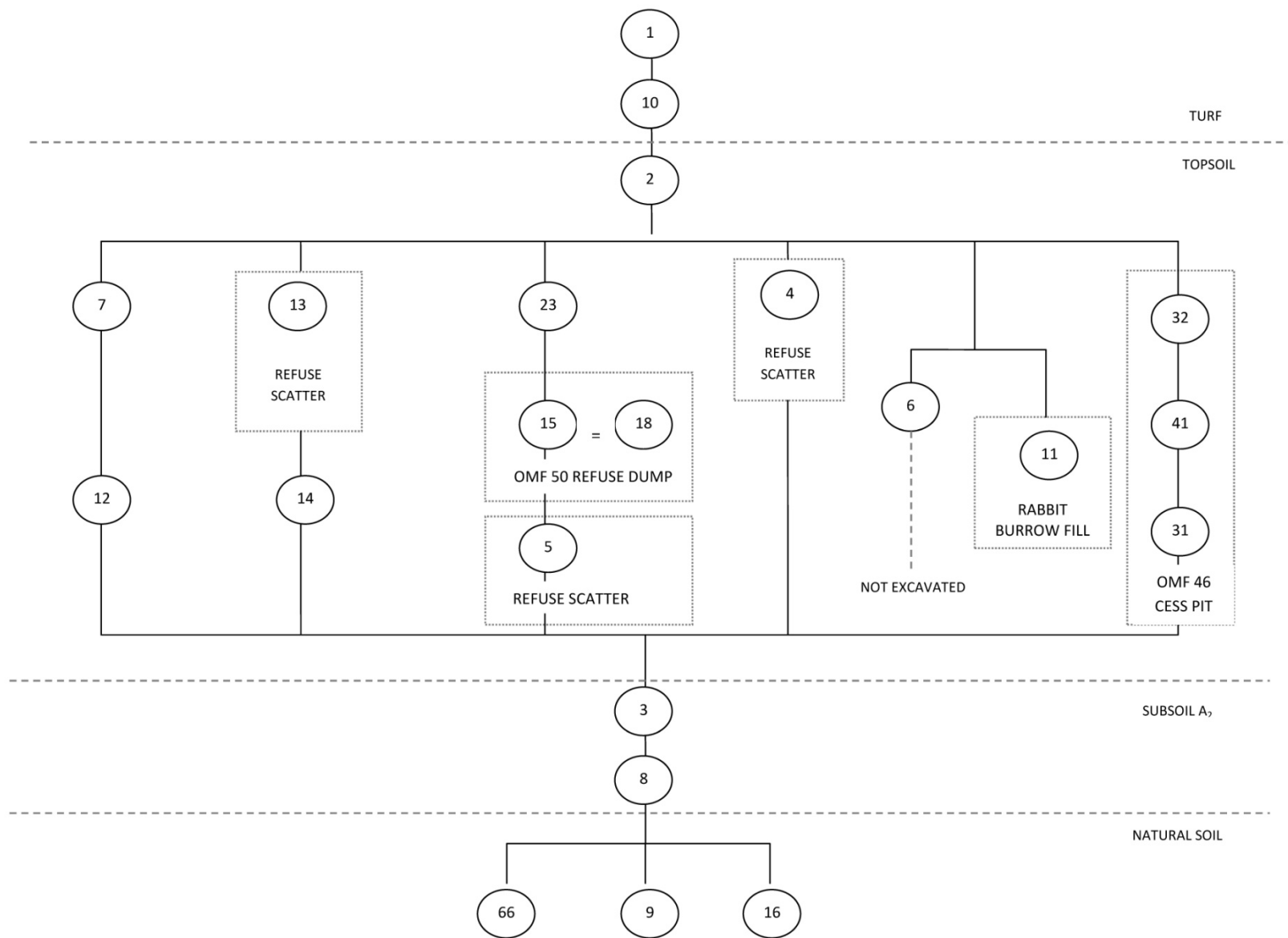


Figure 6.28. Harris Matrix for 'Big Rectangle' excavation area

6.7.5 Road Reserve Investigations

The area of excavation was restricted to a frontage of about 43 metres, representing town lots 1 and 2 of Section 1. These were chosen as historical evidence indicated that Peters had constructed the Woolpack Inn on one or both of these lots. Town lots measured 1 chain [c.20 metres] wide by 5 chains deep, for an area of 0.5 acres. The width of the road reserve in this location was about 8.0 – 8.5 metres from the fence line to the top of the embankment formed by the cutting in of the current road bed. This space includes a number of mature acacia trees. Consent to investigate within the reserve was provided by the Council and the work was undertaken following consultation with RMS.

The stratigraphy revealed conformed to what was expected. A modern loosely compacted fill deposit overlay a modern destruction interface which overlay or truncated town-period deposits and the natural soil profile.

Provisional unit numbers have been assigned to the deposits, within a [500+] series to distinguish them from previously excavated deposits. Units are shown in Figure 6.32 and discussed below.

[501] Modern [1970s+] fill deposit consisting of redeposited soil, varying from excavated B horizon soils to former cultural deposits was designated as [501]. Loosely compacted, with occasional areas of more densely compacted deposit. Contains localised extensive subsurface natural material including rounded and angular igneous bedrock.

Artefact material is randomly scattered throughout the deposit. It is a mixture of town period [19th century] and modern [Plastic Age] material. The material is scattered throughout the deposit at a fairly low density, not evidently any greater than found during the 2007 topsoil excavations further north. There is no evidence of a high concentration of artefacts such as would have been found if a dump or similar deposit was redistributed. Increased densities of material in the removed deposit would have been quite obvious and stood out from the background rate of exposure. The removed deposit does not contain any greater concentration of demolition rubble such as masonry stone, sandstock brick or set mortar than generally present throughout surface deposits elsewhere on site.

The deposit was partly disturbed by extensive rabbit burrows along the crest of the road reserve, as well as root action from the mature acacia trees along the centre line. At the westernmost end there is a concentration of blue metal aggregate mixed in with the deposit which is indicative of the road working.

The deposit is consistent with the bulldozing of surface deposits, resembling those of the 2007 'Big Rectangle' excavation immediately to the north of the road reserve, being pushed up and over the top of the ridge. The artefact material in content and density appears to resemble general field scatter rather than demolition or concentrated refuse deposits. Once deposited it does not appear to have been compacted or disturbed apart from later action of burrowing animals. As the current ground surface, it has also accumulated modern refuse and prang material which has entered the body of the deposit through rabbit burrowing.

[501] unconformably overlies an interface of destruction [502].

[502] Interface of destruction, representing one or more episodes where earlier deposits have been removed. This is most evident at the northern and southern ends of the excavation area, where there is a distinct unconformity between natural soil and overlying [301] deposit and no clear evidence of either topsoil or other deposits exists. Where examined it generally came down on to A2 soils, ie the lower lighter grey silty soil layer within the podsolic topsoil.

In the central section of the site the interface is either absent or consists of removed superficial deposits overlying in situ township features.

The date of the removal of deposits cannot be securely demonstrated, but is most likely to be directly related to the Hume Highway widening works of the mid-1970s, and took place immediately before [501] was deposited.

[502] truncates township period deposits [503] and natural soils [69].

[503] This is a general unit covering all remaining town period deposits. These were exposed only to the south of the cess-pit and in the central area of the road reserve. Specific features within [503] are [504], [505] and [306].

[504] Around the cess-pit the scatter of brick demolition rubble gradually tapered out to occasional sparse bricks within about 3 metres of the cess-pit wall. This correlates with previously excavated [031]. While some of the brick rubble material was intact and probably overlays township surface, a lot of it appears to have been impacted by previous mechanical disturbance, leaving the brick fragments in a loose matrix of dark soil, different from the undisturbed deposits found in the main excavation. As this lay at the far end of the road reserve this is interpreted as disturbance of *in situ* brick demolition rubble deposit, taking place as part of the 1970s works, but leaving the potential for undisturbed deposits underneath.

This is correlated with the main cess-pit brick demolition layer [031], but possibly disturbed by later road activity.

[505] To the southwest of the cess-pit there was a shallow but distinctive layer of scattered hydrated lime nodules that covered an area of about 2 x 2 metres. Where encountered, it varied from about 15 mm in thickness to ephemeral white flecks that smeared the base of mechanical blade scrapes. This is interpreted as being of township period, and representing a construction feature, as quicklime is only hydrated [mixed with water and undergoing a chemical change] immediately before it is needed, and this would normally be done as close to the worksite as possible. The quantity of material is not large and may possibly have been the lime used in the mortar to lay the cesspit bricks.

However, there is no secure evidence that the lime does relate to the township period. In this location there was either no interface of destruction [502] or it retained some earlier deposits. As such it is possible that the lime was prepared at some later stage, before the Hume Highway works were undertaken, but this is speculative.

[506] The main feature identified as belonging to the township period comprises evidence of a structure or structures exposed in plan in the centre of the road reserve and set back about 1.5 metres from the fence. The evidence consists of a patch of light yellow-brown soil that is visually distinct from both the overlying [501] and surviving natural soil of [503]. It occupies an area of about 1.5 x 1.5 metres immediately to the west of the lime scatter [505] [refer to Figure 6.29]. It was not possible to say which was earlier, but appears to be stratigraphically later than [505].

The soil feature is bounded by a series of stones buried within the deposit. Those to the west appear to be deliberately placed, while those on the east seem more natural. However, as established during the main excavation it remained extremely difficult to distinguish natural and reused stone and often natural stone exposures were incorporated into formed surfaces.

Above and around the structure were found the only evidence of nails encountered in the road reserve. About six were identified, all lying flat on or near the light yellow-brown deposit. All were square-shafted, none had been clenched [bent over] or showed signs of use. This makes their attribution as part of a former timber building less certain. Also found in concentration notably higher than elsewhere during the road reserve excavation were large animal bones – including metacarpal / metatarsals and teeth. This increased frequency only relates to about 6 bone pieces total so is only a relative concentration.

Once this feature had been recorded it was covered over and [501] deposit in the centre of the reserve was removed. This revealed further stones set into the presumed original ground surface, with the natural soil flecked with ash and fine charcoal. Some artefacts – willow pattern ceramic, black bottle glass – lay flat on the surface. No postholes or other structural framing evidence was identified.

This evidence is interpreted as a single structure with an uneven stone floor, represented by some or all of the identified stone, and the light yellow brown soil as a probable internal floor deposit. A fireplace or open hearth may have been located in one area. From the nails it may have had a timber superstructure, although this is not conclusive. If the evidence of animal bones is indicative of activities that took place, possible explanations would include a shelter for hanging carcasses before butchery, with the cranial and feet elements being indicative of basic butchery, the removal of the lower value items. Alternately it may be a place where hides from butchered carcasses were dressed. There was no sign of gnawing by dogs or rodents on the bone.

[069] Natural soil – undifferentiated demonstrably natural soil profile from A2 to stone bedrock. The majority of natural soil exposure that is evident as a result of scraping [502] has exposed basal A2 and B horizon of the soil profile.

The Harris matrix for the Road Reserve area is shown in Figure 6.30.



Figure 6.29. Archaeological remains exposed in Road Reserve area – Unit [506]

The road reserve investigation confirmed that the cess-pit was a single stand-alone building, and was not connected to other buildings.

As well as the main substantial Woolpack Inn buildings, there are likely to have been remains of more ephemeral buildings constructed. One of these is likely to have been encountered during the Road Reserve works. As discussed above, it consists of a scatter of definitely placed local field stone, and possibly some natural stone, associated with a deposit of differently coloured soil, square-cut nails, and areas of ashy soil. This area is probably associated with a larger than usual number of uncut animal bones. This is interpreted as being the footprint of a timber structure containing a small fireplace or hearth, and possibly used for animal processing, eg dressing down carcasses or processing hides from slaughtered animals.

The cess-pit and the ephemeral structure represent the only two buildings found within the footprint of the surviving section of Peters' original two lots. Both represented possibly foul-smelling activities and may have been placed away from other buildings. If so, there could reasonably be some distance between them and the other inn buildings.

Following the Road Reserve works in the vicinity of the cess-pit, it was considered unlikely that any substantial archaeological remains survived in the unexplored section of road reserve. This was based upon the following observations:

- the remaining area unexcavated was 40 metres long x 2.5-5 metres, making it extremely narrow
- the eastern and western ends of this area have been cut back to below original ground level and all township period deposits are likely to have been lost
- substantial buildings are unlikely to be able to be concealed in an area this size
- substantial buildings are likely to have been oriented to the original lot boundaries and road, making oblique wall exposures likely [ie they are set at an angle to the current road reserve alignment and more likely to stick out the sides of the unexcavated area]
- no structural evidence is visible in the face of the road embankment
- there is no demolition rubble such as building stone, brick or mortar indicative of any masonry structures being present; in contrast the cess-pit demolition rubble created a distinct broken brick and mortar zone of about 10 metres diameter
- the bulldozed fill deposits are likely to derive from the immediate south of the road reserve, and these contain no clear demolition rubble.

The area investigated in the vicinity of the cess-pit appears to represent mainly additional yard deposit, containing at least one structure. It may represent a foul smelling area – toilet and building associated with carcass butchery or hide processing – and this would explain possible distance from other buildings.

Abandonment of the Woolpack Inn is dated from the cesspit contents at c.1880, later than the general decline of the town, but coinciding with the death of John O'Neil, the last known occupant.

It is not known when the Woolpack Inn was finally demolished, and no evidence of a demolition episode has been found. Given the size of the building, brick construction, mortar and internal plastering should have left abundant and distinctive evidence of the demolition process. The absence of any such material strongly suggests that the main building was some distance away, but completely within the highway construction zone.

In June 2011 the archaeological monitoring of final site clearance of the road reserve area was undertaken. No archaeological features or deposits were uncovered during works. The area had been considerably disturbed by tree roots and extensive rabbit burrowing [refer to Figures 6.30 and 6.31].

The stratigraphy consisted of the previously identified road reserve fill [501] above natural deposit [069]. The road reserve fill [501] consisted of disturbed redeposited 'topsoils' mixed with natural material including subsoils and bedrock. No archaeological features or deposits, areas of demolition rubble or structural remains were exposed and no concentrations of artefactual material were uncovered. Any artefactual material present was of a very low density and comprised mixed material with no archaeological integrity.



Figure 6.30. Road Reserve area following removal of trees in 2011



Figure 6.31. Road Reserve area in 2011 showing typical stratigraphy. Note tree root and rabbit burrow disturbance

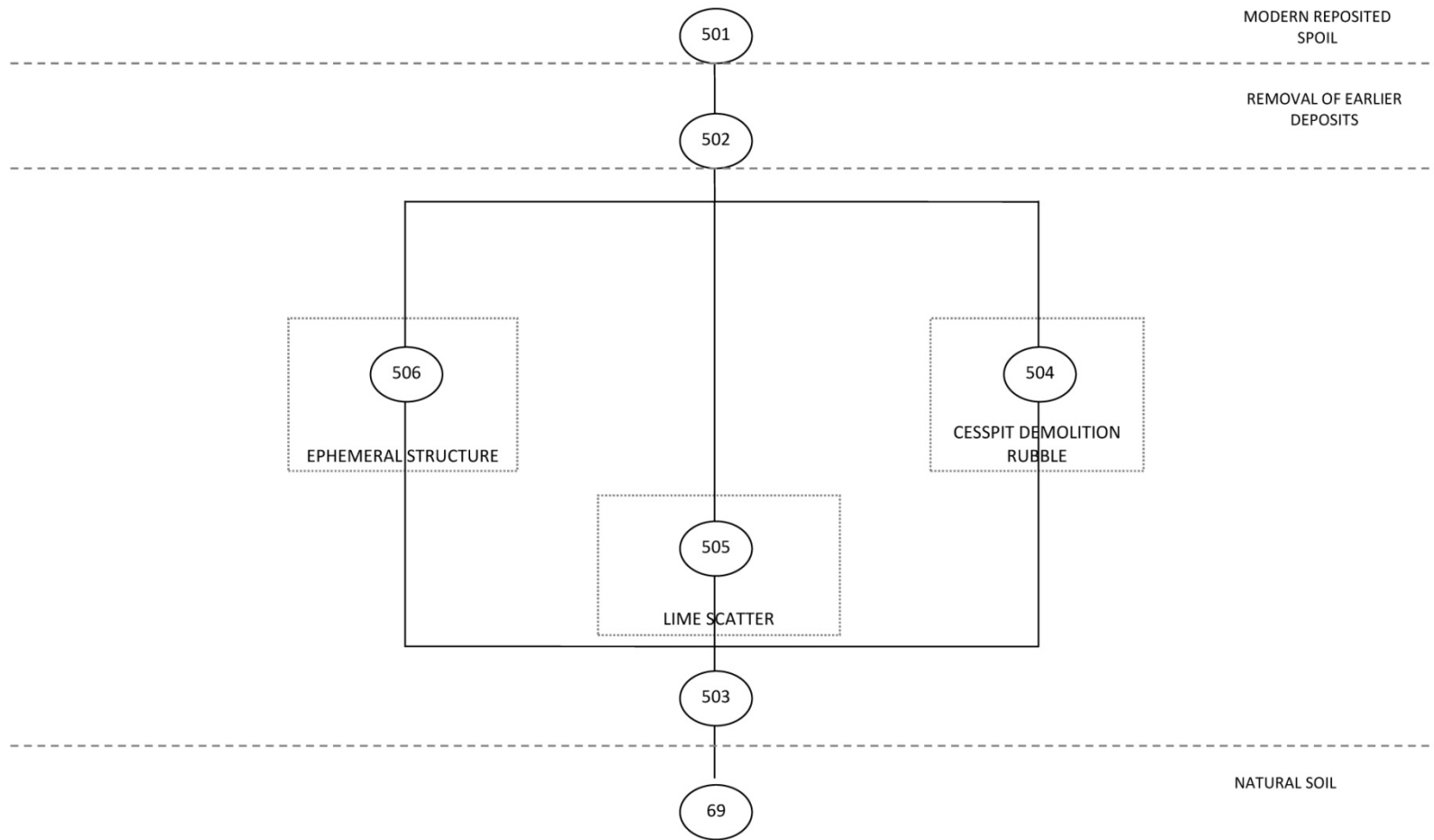


Figure 6.32. Harris Matrix for Road Reserve area

6.7.6 General Examination of Soils and Associated Archaeology

General Surface Deposits

As found during Stage 1 the topsoil across the site consisted of two contrasting layers of a podsollic soil. Unit [1] was taken as the turf and adhering root material within a crumbly light yellow-brown soil. Beneath this Unit [2] was a light-mid yellow-brown sandy soil, with variable amounts of organic material and occasional prominent stone fragments to gravel size or larger. Generally [2] was easy to dig and sieve even when compacted or wet as it had little constituent clay. It overlay Unit [3] which was the lower A2 component, being a light coloured silty textured soil. This contrasted strongly with [2] in colour and texture, with a sharp transition between the two. Generally artefacts occurred in the top part of [3] but were also found throughout. Unit [3] overlay [66] which was the natural B horizon clay. More detailed description of the soils and their characteristics are found in the Soil Scientists report [refer to Volume 4].

Unit [2] overlay Unit [3] across the entire site. The concentration of artefacts in [2] varied with the densest areas being squares 236/594 to 238/600 [with 4525 artefacts, representing a minimum of 187 distinct artefacts [expressed as Minimum Identification Counts or MICs], squares 246/592 to 248/598 [with 1874 artefacts or 133 MICs], squares 256/592 to 258/592 [with 2718 artefact or 117 MICs] and squares 286/594 to 286/598 [with 1699 artefacts or 279 MICs].

Artefacts within Unit [2] were generally only broadly dateable, and much of this relies on general date ranges. Taken as a whole, [2] was broadly dateable to the 19th century, with artefacts represented being those in use prior to a notional end date for the town of c.1875. This includes evidence such as all window glass being crown glass, which was being used until c.1870, although obviously much of it was still present in windows well after then. A NSW Police button has to date to after 1862, when the force was established. Later items include the shotgun cartridges, a key and button, indicating continued possibly casual visitation or occupation of the site into the 20th century.

Dateable finds from Unit [2] are listed in Table 6.9 below.

Table 6.9 – Artefacts from Unit [2] dateable by manufacturer [from Harris report tables 4.1, 4.2 – refer to Volume 4].

Shape	Manufacturer or product	Begin Date	End Date	MIC
Pipe, tobacco	McDougall	1810	1967	3
Pipe, tobacco	Hugh Dixon	1839	1904	1
Stopper	Lea & Perrins	1845	1910	1
Bottle, alcohol	Cooper & Wood	1859	1928	1
Shotgun shell	Winchester Repeating Arms Company	1866	1932	1
Shotgun shell	Union Metallic Cartridge Co	1867		1
Police uniform Button	David Jones & Co	1867		1
Key	Clum MFG Co,	1914		1

The functional analysis of Unit [2] was able to determine that 78% of the artefacts found were attributable to 11 different functional categories [refer to Figure 6.31 below].

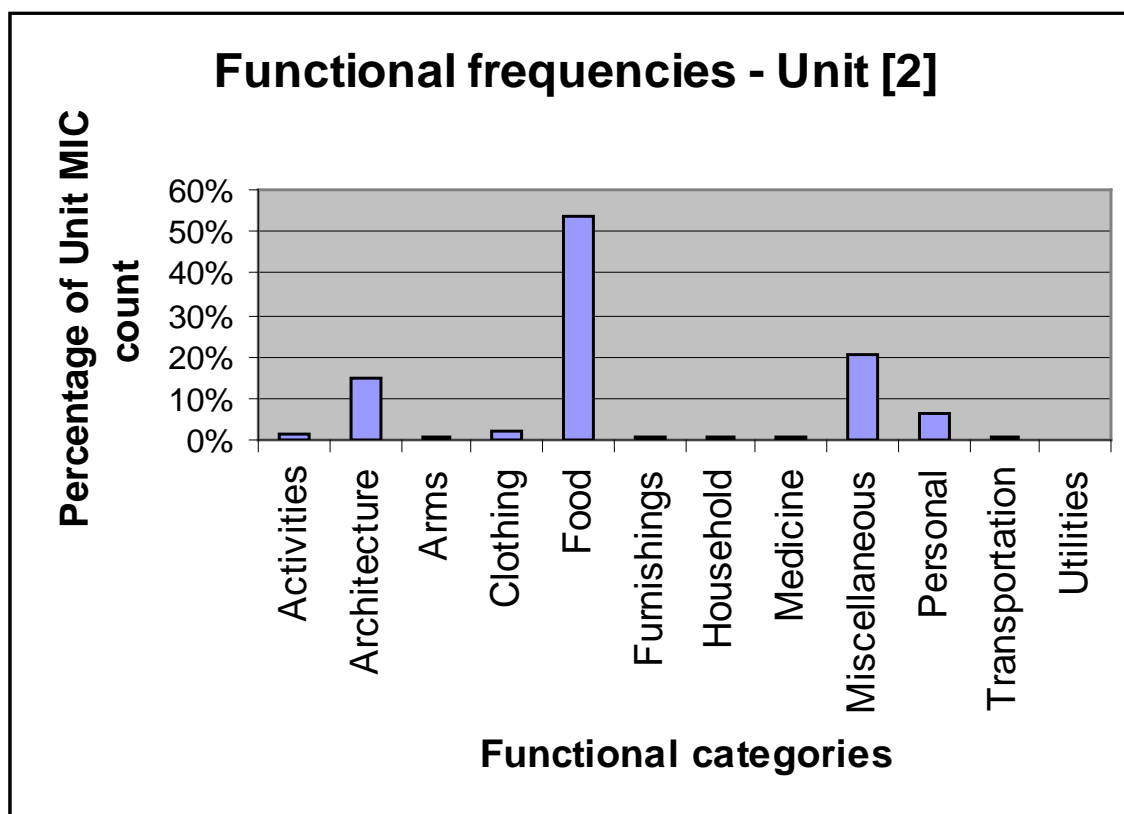


Figure 6.33 – Relative frequencies of Functional Groups from Unit 2 [percentages are presented in Table 7.1].

Food-related items dominated with 337 MIC [53% of total], followed by architectural items [14%]. The majority of the food-related items were plates, cups and saucers, while serving platters and jugs were also represented. Glass tableware was also present. There were a range of different bottles represented, mainly beer / wine, champagne and other alcohol [152 MIC], while other specialised body forms for aerated waters and condiments accounted for 16 MIC.

The architectural remains were predominantly nails, followed by window glass and brick. In the specialist artefact analysis report prepared for this excavation, the analyst, Jeanne Harris, makes the point that window glass and nails could represent repairs but this material is more likely to represent demolition material⁴⁰.

The other categories of finds reinforce the sense of casual and occasional use, and the likely processes of abandonment, scavenging of materials and deliberate and accidental building collapse that would have increasingly taken place.

⁴⁰ Harris 2009 – see Volume 5 – Specialist reports.

Unit [3] was not excavated in all squares. Once it became clear that removal of Unit [2] should have exposed any archaeological remains relating to the Marulan township period only selective removal of [3] was carried out where further historic deposits were indicated. Unit [3] contained 4471 artefacts comprising 491 MIC, of which nearly half came from squares 236/598 and 240/598.

As with Unit [2], the dating information from Unit [3] resulted in a range of possible use dates that broadly mirrored the town's occupation. Specifically dateable artefacts, however, did tend to suggest an earlier median date than Unit [2]. These included four marked tobacco pipes [refer to Table 6.10] and a marked vinegar bottle dated to the 1840s. There was also a vulcanised rubber comb, which must date to after 1844, the initial patent date for the manufacturing process. Tumblers and glass stoppers found also dated to after 1830 and 1840 respectively.

Table 6.10 – Dateable clay tobacco pipes from Unit [3].

Manufacturer/Merchants	Country	Date Range
Hugh Dixson – merchant	Australia	1839 - 1904
T. H. White – manufacturer	Scotland	1832 - 1864
McDougall - manufacturer	Scotland	1810-1967

The proportions are generally consistent with those for Unit [2], being dominated by food [53%] and architecture [19%]. As in [2] the food function was dominated by alcohol bottles. Architectural material included nails, bricks and mortar, but little window glass, suggesting that Unit [3] was associated with utilitarian outbuildings that lacked window glass. Alternately it may reflect that [3] accumulated while there was little breakage, suggesting that buildings were occupied and maintained to a greater extent than the later period represented by [2]. Ceramics from [3] included Willow and Rhine patterns, which are very common designs, but neither formed a dominant part of the cesspit [OMF 46] assemblage.

The individual items represented in Unit [3] include personal items, such as tobacco pipes, pencils, some generic medicinal vessels, a toothpaste pot lid, perfume bottles and one bead and the vulcanite hair comb.

Harris's conclusion is that this is representative of 'a typical back yard or garden assemblage of artefacts' [refer to Figure 6.32]. The deposit has an earliest end date to after 1840, which is broadly consistent with the commencement of occupation of the town. Unit [3] appears to have contained a steady accumulation of artefacts that were discarded over a period of time, with two denser places representing sites of more intense dumping. It is likely that it represents deposition from the commencement of town occupation in 1835, and has continued to receive material through the 1840s and perhaps 1850s. Regular accumulation does not appear to continue to the 1860s.

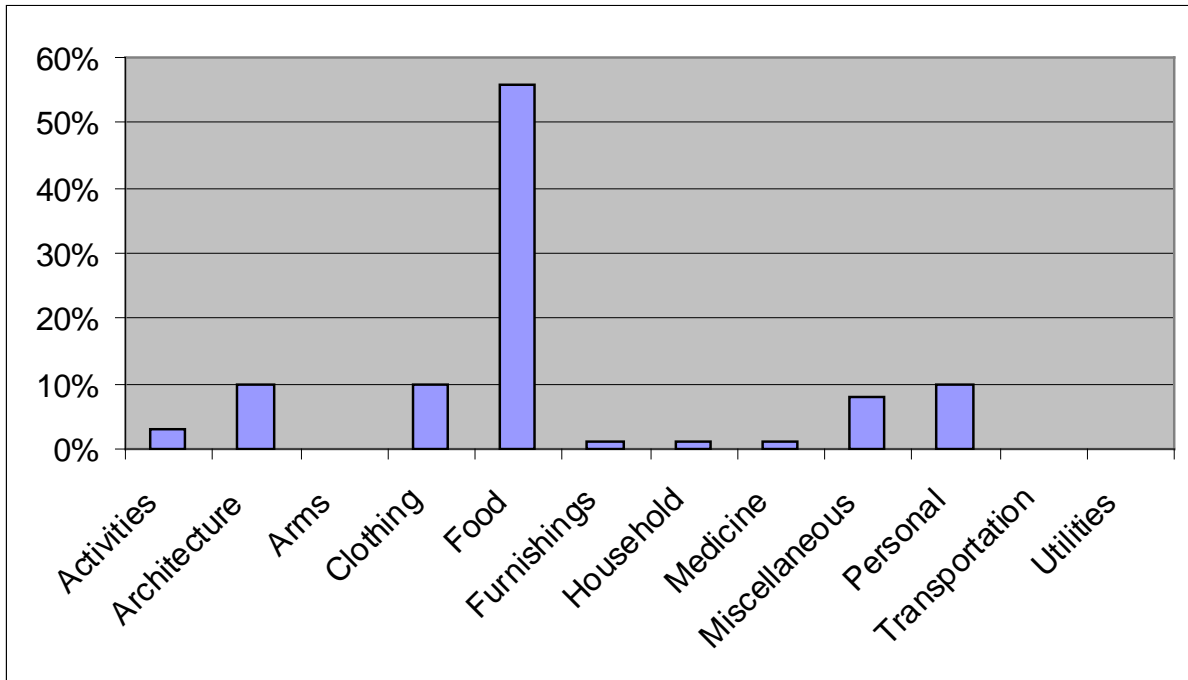


Figure 6.34 – Functional analysis of artefacts from Unit [3].

Test Trenches along Proposed Access Road Line

A series of small excavations were carried out along the approximate centre line of the proposed quarry access road, heading north from the town site towards the proposed quarry. These were located within the excavation grid at the positions indicated in Table 6.11 below. They were placed to test different components of the landscape. Two trenches, located at squares 256 / 633 and 256 / 637, were placed to straddle the rear fence of the town lots, to see if this boundary resulted in substantially different patterns of land use.

Table 6.11 – Results of test excavations in rear of town lot and along proposed quarry road line towards creek.

Square [south-west corner]	Size [m]	Setting in landscape	Artefacts recovered [No./MIC]	Artefacts per m ²
248 / 670	2 x 2	On creek terrace	1 / 1	< 1
250 / 647	2 x 4	On edge of creek terrace	24 / 12	3
256 / 637	2 x 4	Slope above terrace – immediately north of rear town lots boundary	3 / 2	< 1
256 / 633	2 x 4	Sec. 1 Lot 2 – immediately south of rear town lots boundary	16 / 8	2
252 / 624	2 x 4	Sec. 1 Lot 2	2 / 2	< 1
244 / 618	2 x 2	Sec. 1 Lot 2	413 / 49	100+
252 / 616	2 x 2	Sec. 1 Lot 2	- / -	-
252 / 608	4 x 4	Sec. 1 Lot 2	38 / 7	2.5

The general trend was for the rapid reduction in artefact count away from the proposed road, when considering the density of the artefacts in the 'Big Rectangle' excavation. Square 244 / 618 contained a discrete dump event filling in a natural or made hollow – units [85] and [86]. In the other excavation areas the artefacts were all found within units [2] and [3]. The type of material recovered from these deposits is primarily contemporary and consistent with the Marulan township period, but there is a small admixture of more modern material such as brown beer bottle glass.

The density of material away from the proposed road reduced rapidly from the northern edge of the levelled areas [OMF 29-31], suggesting that there are clear differences in the use of the levelled areas compared to the rear of the lots. Based on observation of the movement of materials on the site it is likely that many of the artefacts in the rear of the lots were originally deposited further south and have come to their present position through natural erosion processes, exacerbated by grazing cattle.

The two trenches set on either side of the rear boundary of Section 1 – 256 / 633 and 256 / 637 – were placed to test any differences in land use or behaviour. There was a slightly higher density of artefact material present on the southern side of the fence, but the overall quantity is small. This suggests that any difference may be the result of naturally eroding artefacts being caught on the southern side of the fence to produce a slightly higher density of material.

6.7.7 Structural Evidence

OMF 46 – Cesspit

The cesspit was the only structural element of the Woolpack Inn that fell within the excavation area. As discussed, the remainder of the building was formerly located at an unknown distance southwards, outside the study area, and was likely removed during the widening of the Hume Highway in the late 1960s and 1970s, as no evidence was found during the excavation of the road reserve. The cesspit structure was labelled Unit [31] which was a rectangular pit, lined with roughly squared porphyryite field stone boulders set in random courses. There was no mortar present between the stones. It was oriented roughly east to west along its long axis and appeared to be parallel to the lot boundary. The cesspit measured 2.60 x 1.78 metres, and was about 0.85 metres deep internally [refer to Figures 6.33 to 6.35]. The walls were about 300 mm thick and consisted of a single thickness of stone. As the ground slopes towards the east Unit [31] varied from 50 to 150 mm above ground level. The top of the cesspit was level, and there was a residual course of bricks set in mortar remaining along the top, representing the superstructure. In the east wall, at the base, there was an opening measuring 250 mm across by 320 mm high. This penetrated the wall thickness. It did not appear to continue naturally into a channel, and probably acted as a natural seep, although it would have discharged into quite dense decayed bedrock with negligible permeability.

The cesspit lay beneath a partial covering of collapsed brick fragments – Unit [32]. There were a large number of reasonably intact and salvageable bricks in the rubble, suggesting that it did not collapse for some time until after low-fired clay bricks ceased to be useful for construction. There was little to no covering of brick rubble over the cesspit itself, suggesting that there was access at some time after the building became abandoned. There was some evidence of rabbit burrowing amongst the brick rubble of [32].

The dimensions of a sample of the most intact bricks removed from [32] were measured. They were generally well-fired sandstock hand-moulded bricks without frogs. There was little variability in the dimensions between bricks. The majority measured 230 x 110 x 60 mm. Variations of ± 5 mm were common, but ± 10 mm or greater rare. The bricks were reasonably uniform in colour and finish, none being observed with >10mm variation on opposite edge lengths, suggesting competent brick makers firing sufficient bricks to remove misshapen ones. No evidence of clinkering, glazing or other common misfiring evidence was observed. The bricks closely resemble those found in OMF 60 [refer to Section 6.6.2], the brick clamps on the northern side of the creek, in colour, surface and interior texture and absence of frogs. It is considered likely that OMF 60 was the manufacture location.

The deposit filling the cesspit was removed as [41]. This was a light grey-brown silty clay deposit with a very high proportion of artefact material. There was no internal stratigraphy discernable within the cesspit, and artefacts were randomly oriented. The upper section appears to have been disturbed. Rabbits were observed occupying the rubble during earlier fieldwork and evidence of their burrows was found in excavation.



Figure 6.35. Excavation of OMF 46 – Cesspit



Figure 6.36. View of the interior of the emptied cesspit



Figure 6.37. Vertical view of the emptied cesspit

OMF 51 – Cobbled Surface

The excavation of the southeastern corner of the Big Rectangle identified natural stone outcrops that broke the surface, but had clearly been deliberately broken down closer to the natural land surface. This natural surface, labelled [66] but which does not differentiate natural bedrock or natural B horizon soil, extended across Squares 256/592, 256/594 and 258/590 at their most visible. Further east in the area beside the cesspit was a manufactured surface [OMF 51], that was more properly 'cobbled', in that it had pieces of broken local free stone embedded in clay.

This cobbled surface was clearly an attempt to create a durable weatherproof surface at the back of the cesspit. In part it was made from fist-sized and smaller pieces of rounded stone set in clay, with the remainder of the surface made by levelling the exposed bedrock. Although the surface remained quite uneven, it would have been a very serviceable surface and does not appear to have eroded or been damaged. Above it, near the cesspit, was a shallow layer of dark red-brown clayey soil that contained a dense scatter of artefact material, all lying flat as if bedded in the surface, and broken into small fragments through treadage.

OMF 54, OMF 55 – Posthole Structures

Post holes and other related subsurface features are revealed when the overlying soil is removed. As the subsoil at Marulan generally contrasted markedly with the upper levels, a feature of podsoils, there was usually a clear demarcation of where the subsoil had been disturbed by excavation. This disturbance may have been as simple as a mixing of the darker topsoil with the generally lighter and redder subsoil, or could have been much more elaborate. Digging even a small hole to put in a fence post can result in a complicated archaeological signature. Features often found include the post hole [the cavity that is dug out to place the post] and the remains of the post itself [either as sound wood, a decayed post mould or completely eaten out by termites and rot leaving a post pipe, which is often filled with sediment]. Once the post is set in place, the dug out spoil is returned to the hole as post hole fill. There may be a long period between the digging of a hole, filling it and the inwash of surrounding material, so it is necessary to identify exactly where within this sequence any artefacts are found, so that a date can be assigned to any part of the feature.

At Marulan several areas were uncovered with dense post hole remains which require considerable interpretation. In some cases there was discoloration from material either cut into or laying on the ground. The first step in the interpretation of the remains is to accurately plan the post holes in relation to each other, in order to identify alignments. These alignments may consist of precisely placed post holes in a line at regular intervals. They alternately may be two post holes at either end of a line with one or more intermediate post holes that stick reasonably close to the overall line. Other things that lead to identifying related lines of post holes are where they are placed at right angles to each other, or parallel to features such as property boundaries.

Post holes would have been dug for most vernacular buildings at Marulan. Even though the inns and some of the private buildings were of brick [‘First and second class residences’ in the terminology of Walker⁴¹], there would have been many that were made of post construction. This type of building required a post at each corner, and usually a pair of posts on either side of the doorway and any openings for windows and chimneys. The infill between these posts could have been split timber slabs, sheets of bark, fragments of brick packed in as brick nogging, weatherboards or even just a canvas cover. The archetypal Australian timber slab hut is a version of this post construction, the slabs serving no structural purpose, they just fill in the wall panels. The only non-timber part of the building was usually the chimney, and this could be entirely constructed above the floor level, so that no trace of it remained. Where timber slab walls were built they were either let into bottom plates with a channel cut into them or simply laid in a narrow trench in the ground⁴². Both of these can survive under good conditions archaeologically. A typical bark or slab hut measured about 24’ x 12’ [approximately 7.5 x 3.8 metres], with two slightly uneven sized rooms, the larger having the central front door, coming off a front verandah. The rear could have another verandah, used as an extra sleeping area, a separate kitchen or additional rooms.

It should also not be thought that slab huts were as vulnerable to the weather as they typically appear now, a century or more of abandonment having taken place. Many were extremely snug, the best having weatherboard cladding externally and about 100 mm of internal mud mortar insulation that was then covered with calico and wallpaper, forming a well-insulated, thermally efficient house suited to Australian temperature conditions. Almost all of the materials in a basic slab cottage could come from within a few kilometres. As the builder’s affluence grew they could buy nails, joinery, good quality doors and windows⁴³. Some or all of these could be made by carpenters and blacksmiths especially for the client, or certainly obtained from no further than Goulburn.

As well as residential buildings, posts were also used for outbuildings. These include dunnies [cesspit structures], barns and sheds, stables, animal pens and a host of other uses, as well as fences, yards, pens, corrals and chicken runs. All of these will leave a variety of remains, made more complicated as successive generations demolish and rebuild new and different outbuildings and enclosures. The analysis of the postholes therefore focuses on finding which ones are related and can be said to have been dug for a common purpose.

Within Section 1 Lots 3 and 4 machine monitoring revealed a dense scatter of post holes and linear marks that fall within Lots 3 and 4 and also, surprisingly, into lot 5. These formed two main clusters that were designated as structures OMF 54 and OMF 55 and as separate evidence of garden beds [OMF 52], further discussed below. Lots 3 and 4 were owned by Joseph Peters and bought by him in 1838. Isaac Titterton, a Sydney

⁴¹ Jevons 1858.

⁴² Gojak forthcoming.

⁴³ eg Atkinson 1826: 95-7; Cunningham 1827: 265-6 says £8 would pay for a serviceable hut; Townsend 1849: 70-1 records £20 for a hut.

businessman and land speculator bought Lots 5 and 6 at the same time and on-sold them to the daughters of George Barber in 1842. There is no evidence that the activities represented by OMF 52, OMF 54 and OMF 55 were not continuous across the boundary between lots 3, 4 and 5. There are two equally probable explanations, neither of which is entirely satisfactory. One possibility is that Peters leased land from Titterton, whose block otherwise appears to have remained vacant. Alternately, as also indicated for the Crown reserve, it is possible that the actual lot boundaries were mis-surveyed, and that Feature OMF 34, the drainage line, represents the observed line between lots 4 and 5. There is almost complete absence of postholes to the east of OMF 34, so this would mean that the actual cadastral boundary was about 6.5 metres west of the observed line. This appears too large a discrepancy to have been maintained in a roadside location where other key landmarks were clearly visible.

To make sense of the range of post holes a series of indicative lines [designated P1, P2 and so on] have been identified and overlain on the feature plan [refer to Figures 6.36 to 6.38]. These are described in Table 6.12 below. Each line consists of two or more postholes and may also incorporate linear features. Some of these lines are parallel or perpendicular to each other or to the road and lot boundaries. As well as the descriptive information the likelihood that each line is likely to have represented a single alignment is also ranked from low to high, based on a detailed review of the individual posthole recordings.

Table 6.12 – Details of posthole alignments identified in Section 1 Lots 3, 4 and 5 as part of OMF 54, OMF 55 [refer to Figures 6.36, 6.37].

Line	Total length	Units	Comment	Likely alignment
P1	12.7m	[243], [244], [245], [246], [247], [248], [249], [250], [340]	Continuation of P7 Parallel to road frontage	High
P2	>12.7m	[244], [327], [345B] - linear	Continuation of P8 line	Low
P3	11.11m	264], [326], [327], [328], [329], [330]	Continuation of P8 line Parallel to road frontage	Medium
P4	>11.0m	[315] – linear, [316], [317], [325] – linear		Low
P5	7.60m	[36], [301] – linear	Parallel to P6 and P11 line Perpendicular to road frontage	High
P6	9.7m	[331], [332], [303], [305], [306] [313] – linear	Parallel to P5 and P11 line Perpendicular to road frontage	High
P7	8.4m	[236], [238], [239], 240], [241], [242], [243]	Continuation of P1 line Parallel to road frontage	High
P8	7.48m	[254], [255], [256], 257], [258], [259], [263]	Continuation of P3 line Parallel to road frontage	Medium
P9	5.97m	[220], [223], [224], [233], [235], [327]	Perpendicular to garden beds	High
P10	5.24m	[222], [224], [327]		Low

Line	Total length	Units	Comment	Likely alignment
P11	>1.0m	[58], [333], [334] – linear	Parallel to P5 and P6 line Perpendicular to road frontage	Medium
P12	6.8m	[247], [322] - linear	Perpendicular to P1 and P13 lines	Low
P13	5.95m	[322] – linear, [323] - linear		Low
P14	>6.5m	[322] – linear, [323] - linear		Low
P15	>1.0m	[264], [266], [346] – linear	Continuation of P1 and P7 line	Low
P16	5.44m	[35] – linear, [36], [57], [58]	Perpendicular to P5, P6 and P11 line Parallel to road frontage	Medium

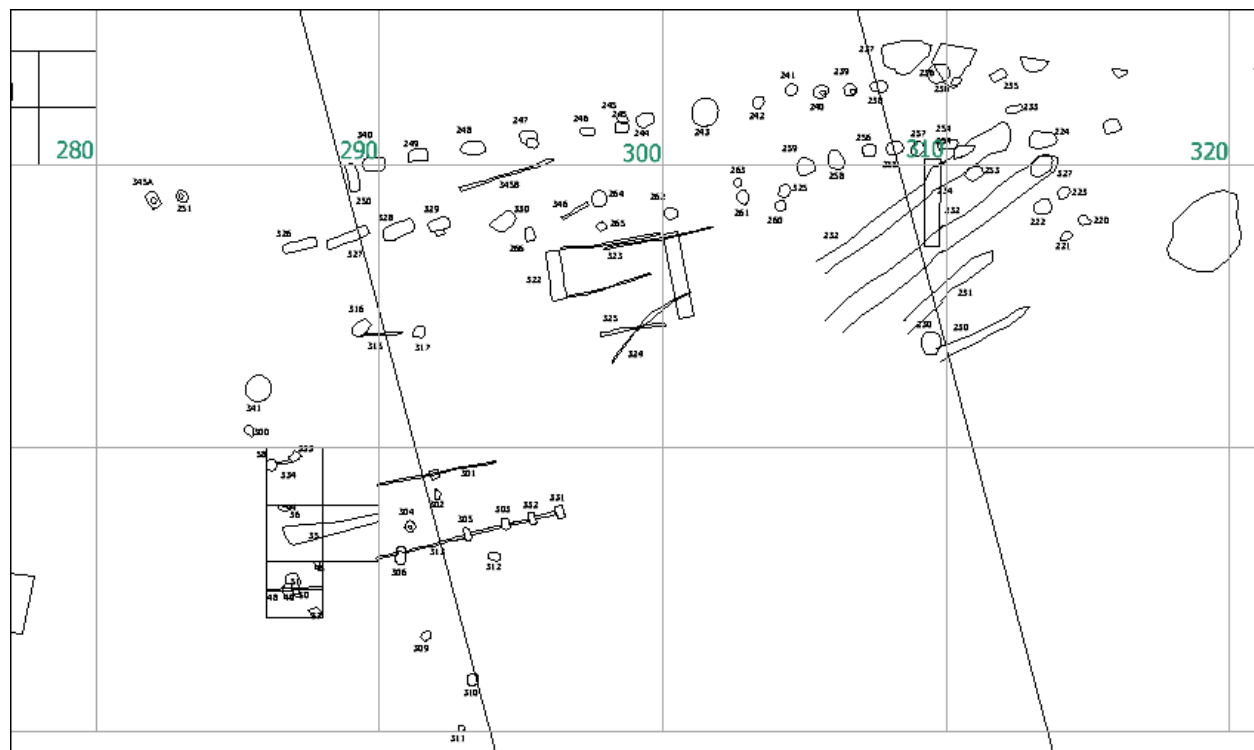


Figure 6.38 – Postholes identified in Section 1, Lots 3-5. Grid interval is 2 metres.

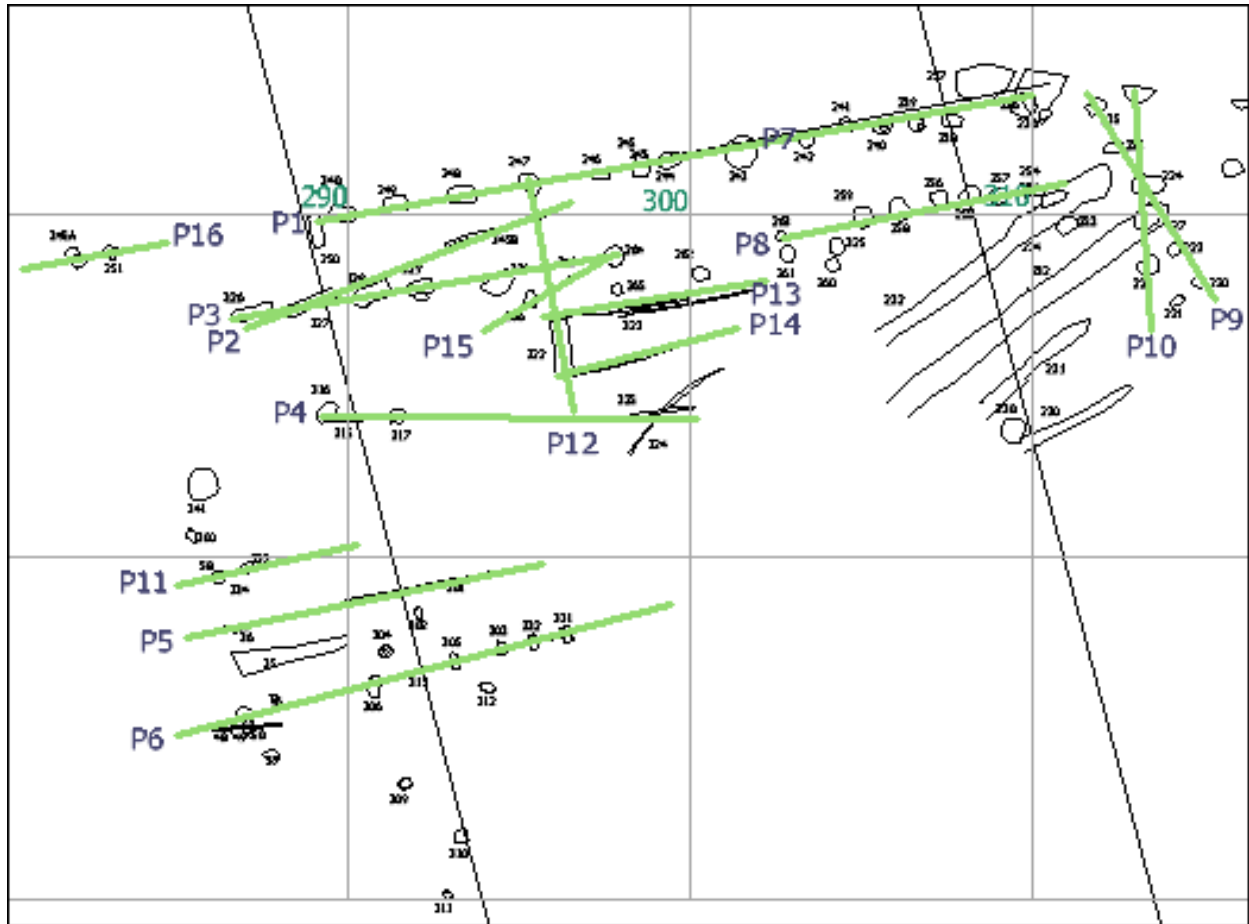


Figure 6.39 – Posthole alignments identified during Stage 2 excavations of Section 1 Lots 3-5.



Figure 6.40 – Stringing up postholes in the field to identify possible alignments.

Alignments P5, P6 and possibly P11 and P16 describe a rectangular structure oriented close to the lot boundaries [refer to Figure 6.37]. The minimum dimensions of this structure are 5.5 m x 9.63 m [18 ft x 31.5 ft], which is larger than the standard small colonial hut. The line P6 is the only secure line, with a linear soil feature [313] cut through by regularly placed rectangular post holes.

The other most convincing alignments are two parallel lines described by alignments P1 / P7 and P3 / P8 [refer to Figure 6.37]. These vary from 2.4 - 2.6 metres [7.8 – 8.5 ft] apart. The overall length of the lines is about 21 metres, with an apparent break making two unequal halves measuring about 10.5 metres [34.5 ft] for P1 / P7 and about 8.8 metres [28.9 ft] for P3 / P8. It is not clear whether this represents a single structure, two in a line or a fortuitous combination of post holes.

OMF 52 – Evidence of Gardening

The grading of the area to the east of the cesspit, within Section 1 Lots 3-4, which were later additions to Joseph Peters' property, revealed a series of parallel, broad and very shallow features filled with darker soil material. There were four that were clearly delineated, and further ephemeral traces of two more that were lost as a result of clean-up after rain. The longest continual section of parallel shallow features was 10.2 metres long, with the features spaced about 1.5-2 metres apart. They were cut through by the post holes of structure OMF 54. While structures OMF 54 and OMF 55 were built

parallel to the road and the lot boundary these were oriented about 30 degrees anticlockwise.

The features are interpreted as the base of gardening or planter beds. It cannot be determined whether they represented the pathways between raised beds, lowered by the drawing up of material to raise deeper soil, or part of a depressed 'trough' used to create better water-holding properties. All of the raised sections between the identified beds were lost. The original extent of the beds also cannot be determined, but is it likely that further evidence would have been seen if they were extensive.

The posthole alignment P9 was oriented perpendicular to the alignment of the garden beds and at their end. It is considered likely that this represented either a section of perimeter fence or possibly supports for a trellis line.

Roy Lawrie's soils analysis for a location near the garden beds confirms the possibility of prior cultivation, although in an area where no garden beds were observed directly. He notes that the removal of loose stones in this area of the topsoil is consistent with agricultural use. There were reduced levels of organic material at the P3 location, possibly indicating depletion through cropping, compared to other tested locations in the site. There was no evidence of artificial pasture enhancement through fertilising⁴⁴.

An analysis of soil pollen evidence by Mike Macphail focussed on trying to identify whether any evidence of what was grown in the garden bed area was preserved. Samples 6, 7 and 8 derive from the garden bed trenches. There was no evidence of cultivars preserved in the samples and all contained substantial amounts of agricultural weeds, suggesting that there was extensive clearing and gardening associated with the garden beds rather than just the small amount currently surviving. Sample 7 contained evidence of vegetation such as ferns that favour perennially damp conditions. It is not clear how this would be achieved in the garden bed itself. Potentially it represents watering of the bed, having been taken from a permanent pond source⁴⁵.

The garden beds generally indicate an initial stage of site occupation, one that was probably quite extensive compared to the limited surviving evidence. It was bounded on its eastern side by a fence or trellis, and was not oriented carefully to the road or lot boundaries. As with the structure OMF 54 it extended into the adjacent Lot 5 from Lot 4. There is no clear indication of what was being grown, but contemporary sources suggest that the possibilities included vegetables, but these were not popular. Just as likely were grapes, tobacco, corn or other stock feed. Unfortunately the conditions are not right for preserving the relevant evidence.

⁴⁴ Lawrie 2008 – see Volume 5 – Specialist reports.

⁴⁵ Macphail 2009 - - see Volume 5 – Specialist reports.

6.7.8 Archaeological Deposits

OMF 50 – Burnt Tree Dump

OMF 50 is the designation for a dump of material centred on a burnt out tree stump located at the western end of the Woolpack Inn lots, and close to the northwestern corner of the 'Big Rectangle' excavation area [refer to Figures 6.26 and 6.39]. It consisted of two units – [4] and [15] which together contained 13,000 artefacts, representing more than 900 items or about a quarter of all artefacts recovered during the archaeological investigations. The tree stump or tree throw comprised an extensive cavity left by the natural or assisted removal of a burnt out tree.

Unit [4] was a deposit that filled in the upper part of a depression that was ultimately caused by a burnt out tree. This was burnt *in situ* leaving an extensive depression over an area about 2 metres in diameter. The deposit was not burnt and clearly filled in the voids created by the fire, and possible decay of the tree root system. The tree may have been alive until shortly before it was burned, which could have been either a deliberate act to remove the stump or accidental. There was no evidence of any structural burning such as may have been caused by a bushfire, so that is excluded here as a cause. Atkinson suggested that the best way of ridding properties of the native cat, which was a predator of chickens, was by removing stumps from a distance around properties⁴⁶.



Figure 6.41 – Unit [4] – a dense deposit of refuse in the hollow left by a burning tree

⁴⁶ Atkinson 1826: 23.

The deposit, Unit [4], filled the cavity and overtopped the edges of the disturbed soil. It contained 4893 artefacts representing 362 MICs. Dateable artefacts included a broad range of material from the mid 19th century, including material that places its date at between 1860 and 1900 [refer to Table 6.13 below].

Table 6.13 – Dateable artefacts from Unit [4], part of Feature OMF 50.

Shape	Manufacturer	Country	Material	Begin date	End Date	Qty
Bottle, beer/wine	Cooper & Wood	Scotland	Glass	1859	1928	2
Pipe, tobacco	McDougall	Scotland	Ceramic	1810	1967	1
Plate	Ralph Hammersley	England	Ceramic	1860	1905	1

Functional analysis identified that 40% of the artefacts related to the food function, including a high proportion of food service ceramics and alcohol bottles and glasses [refer to Figure 6.40]. Architectural items represented another 40% of the assemblage, mainly because of nails, which were predominantly cut nails, although about a fifth were wire nails. The high proportion of nails suggests the demolition or dismantling of structures took place here.

The assemblage has evidence of toy marbles and school slates, suggesting children were present on the site. The ceramic was very fragmented, with only willow pattern decoration being identifiable. Blue TPW decoration was only slightly more common than black.

Harris's conclusion is that the deposit is consistent with a secondary rubbish deposit, which means that refuse was generated elsewhere and dumped into a defined space, formed by the upper part of the shallow trough left by the burnt out tree stump. It could not have accumulated before 1860, which places it at the end of the town's life. We do not know when the Woolpack Inn was finally vacated or demolished, but John O'Neil was living there in 1863, probably with the world's allegedly oldest married couple [refer to Section 3.7 above]. The date is consistent with his continued occupation with a family. The high proportion of alcohol bottles suggests that the inn remained operative rather than being a private home.

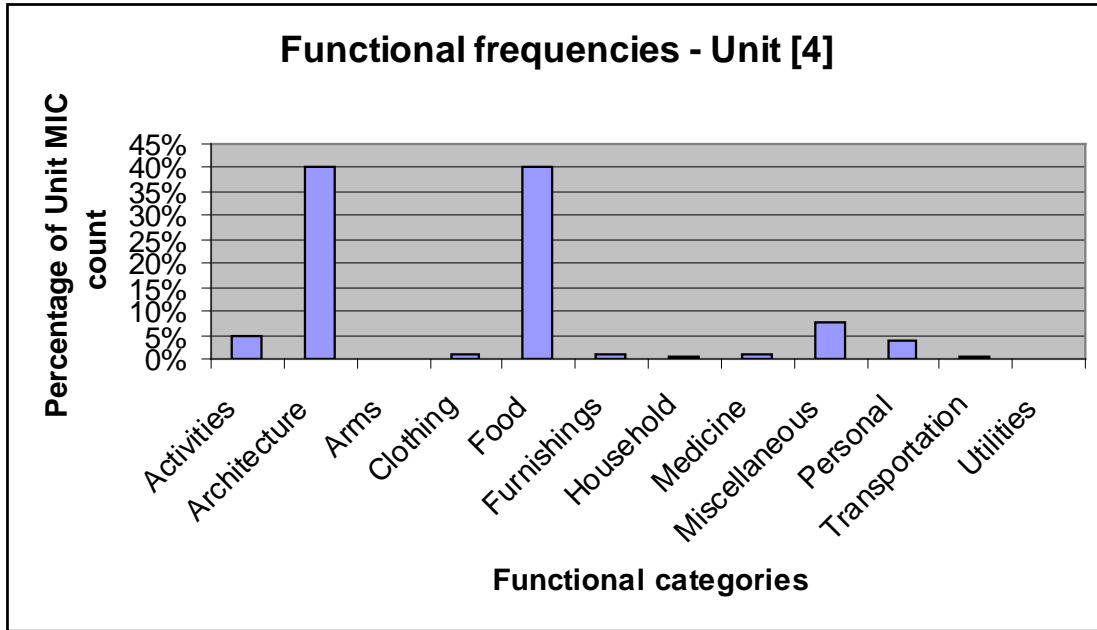


Figure 6.42 – Functional analysis of Unit [4] artefacts [Harris artefact analysis – Volume 4 – Fig. 4.3].

Unit [15] was part of OMF 50. It was identified as being distinct in colour from surrounding deposits, including [4]. Like [4] it was a generally dense concentration of artefact material varying in thickness and filling in what appear to be natural hollows. Only two artefacts displayed burning suggesting that, like [4], they were discarded into an already burned hollow formed from a tree stump. Unit [15] contained 8095 artefacts that consist of 583 MICs.

Dating evidence included a shilling coin of William IV, dated 1835 and a Gosnell's toothpaste pot with a young Queen Victoria image, post-dating her 1837 coronation. Also within this assemblage was a plate marked Ralph Malkin, Fenton, England. This firm operated in the period 1863-1881. All nails represented in the deposit were wire, which dates them almost certainly to the period after 1865, when their use rapidly became common. The suggested dating is therefore 1860s-1880s, which compares closely with [4]'s 1860-1900.

There were moderate differences with [4] in functional artefact frequency. This deposit contained 54% food-related items [refer to Figure 6.41]. The proportion of alcohol present – 58 MICs from 69 beverage bottles – is consistent with a household assemblage. Architectural items included the cut nails, which suggest building demolition, supported by the finding of screws and brick fragments.

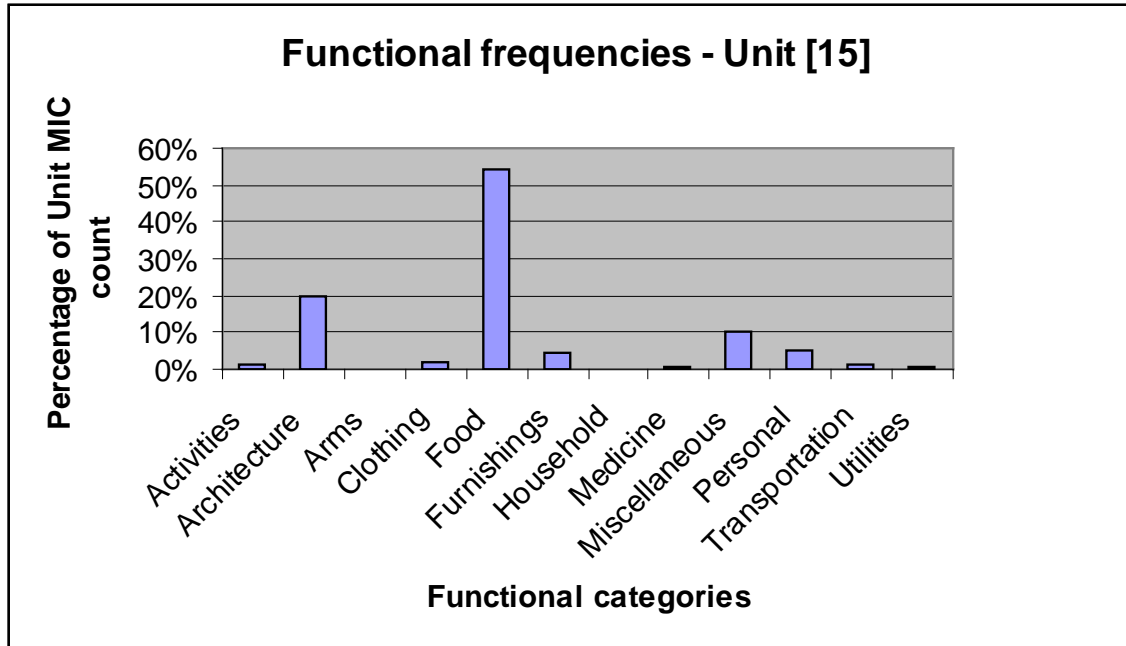


Figure 6.43 – Functional analysis of Unit [15] artefacts [Harris artefact analysis – Volume 4 – Fig. 4.5].

Apart from the two dominant functional groups the less heavily represented functions provided insight into the origins of the deposit. Harris reports that:

Many are small personal items such as a jew's harp, hair combs, a jewellery part, a school slate and tobacco pipes that reflect day-to-day activities. There are clothing fasteners, such as buckles and buttons. In the variety of buttons most are common four-hole sew through trouser buttons. Of note is one button stamped HYAM & Co / 86 OXFORD ST - a suit company from London from the mid to late 19th century. A black button with ornate moulding suggests the wearer followed the fashion trend established by Queen Victoria after the death of Prince Albert in 1861. Castor oil bottles give insight into the health concerns of the site's occupants. There are a variety of hygiene items including combs, toothpaste pot lids and chamber pots that demonstrate a sophisticated concern for hygiene in this frontier community⁴⁷.

The overall impression is of a household assemblage, and entirely consistent with that shown for [4]. If the deposit dates to the 1860s-1880s period then it quite possibly represents John O'Neil and his nonagenarian step-father and octogenarian mother, but also shows the presence of children. Some evidence of higher than expected social status or aspiration is indicated by the artefacts. Slate pencils indicate schooling and literacy and as Harris says 'the individuals associated with this deposit were literate, well dressed individuals that were particular about their appearance and hygiene. They

⁴⁷ Harris 2009.

followed the latest fashion trends, wore imported clothing and were concerned about their hygiene and health.'

The ceramics found were fragmented but Willow and Rhine patterns form the majority of identifiable pieces, along with Albion, Blond and Cable.

Unit [15] is directly comparable to [4] and probably reflects the same gradual process of discard from the same household. It was a secondary refuse deposit, brought to the site from elsewhere.

Unit [5] Artefact Scatter

Unit [5] was a scatter of artefacts to the south of OMF 50 units [4] and [15] [refer to Figure 6.26]. Like other scatters it filled in shallow depressions that were left by the removal of vegetation or loose field stone. It contained 929 artefacts representing 62 MICs. The deposit was a crumbly mid-brown soil that was distinct from unit [2]. The friability of the soil suggested admixture of another material, and ash and small flecks of charcoal were visible within the matrix. The way that [5] sat within [2] suggested that it was a purposeful filling event, rather than a gradual accumulation. It is possible that a large object was removed, leaving an uneven depression which was then backfilled in a short period. Unlike [4] it had clear limits and the artefact material did not show dispersal.

Dating of this assemblage was based on the likely use range of artefacts, as there were no marked or distinctly dateable items recovered. There were no wire nails, suggesting the deposit predated 1860-65, but pressed glass also places an earliest possible date of 1830. Dating cannot be refined more closely than 1830-65, which covers the entire township period.

There were 62% food-related artefacts, comprising food service, alcohol and food storage functions [refer to Figure 6.42]. The other material consisted of cut nails, with other specific artefacts being a part of a shoe, a toothpaste pot-lid, castor oil bottle and clay tobacco pipe stems, one decorated with a thistle pattern.

Harris considers that this represents a secondary deposit, comprising refuse generated elsewhere. The prevalence of food service items suggests kitchen refuse, which is consistent with dumping mixed with ash and charcoal. The nails may have been from timber off-cuts that were used for firewood, although this is unlikely and they are more likely to be secondary refuse from a distinct activity. The ceramic was, again, heavily fragmented, but was all of blue TPW decoration, excluding one other sherd. Unusually for the site, and especially in comparison to all other assemblages analysed from the site, there was no Willow pattern present. This absence makes it a notable and distinct deposit. It also makes it less likely to be, as was thought during excavation, an extension of the same dumping episode as created Unit [4] – Feature OMF 50. The dating of 1830-65 also makes it distinct from [4], but this could be a by-product of the smaller sample size not representing the full range of dateable artefacts.

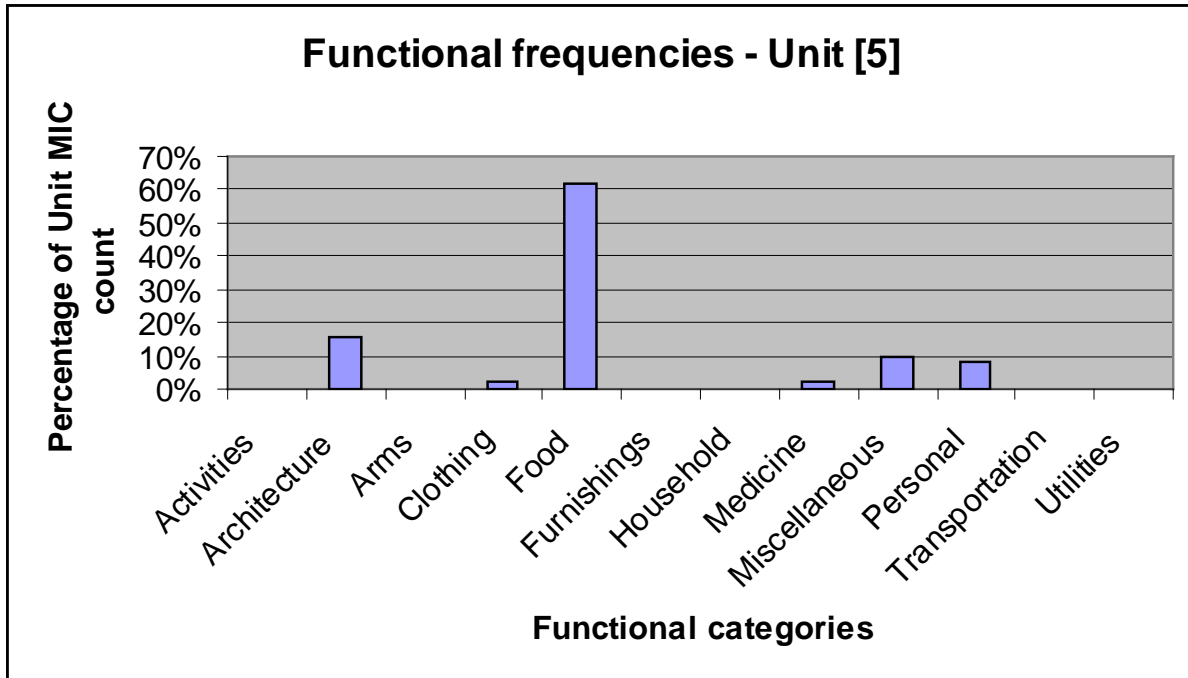


Figure 6.44 – Functional analysis of artefacts from Unit [5] [Harris artefact analysis – Volume 4 - Fig. 4.4.

OMF 46 – Cesspit

The Cesspit structure Unit [31] was a rectangular pit, lined with roughly squared porphyryite field stone boulders set in random courses [refer to Figures 6.34 and 6.35]. It was oriented roughly east to west along its long axis and appeared to be parallel to the lot boundary [refer to Figure 6.27]. It measured 2.6 x 1.78 x 0.85 metres deep internally. There was little to no covering of brick rubble over the cesspit itself, suggesting that there was access at some time after the building became abandoned. There was some evidence of rabbit burrowing amongst the brick rubble of [32].

The deposit filling the cesspit was removed as [41]. This was a light grey-brown silty clay deposit with a very high proportion of artefact material. There was no internal stratigraphy discernable within the cesspit, and artefacts were randomly oriented. The upper section appeared to have been disturbed, possibly by rabbit burrowing. This has been confirmed by the pollen analysis [Macphail 2008 – in Volume 4], which indicates the presence of pine pollens which are likely to represent modern exposure.

Deeper in the deposit there is:

[h]igh relative abundance of relative abundances of cereal pollen and low to trace numbers of pollen from the pea and cabbage are typical of assemblages recovered from other Colonial cesspits although the diversity is low (see Table 4). The data provide evidence of diet that included legumes and coarse breads during the early to middle 19th. century⁴⁸.

Grass pollens are inconsistent with other evidence of plants favouring bare ground and hornworts and liverworts which grow in damp conditions. It is possible that grass was used as toilet paper.

Cesspit deposits can accumulate artefact material in different ways, from casual loss by users to deliberate infilling to close the chamber. The cesspit contained 3718 artefacts, representing 661 MICs, less than some other dump deposits on the site but characterised by some very large pieces. Harris interprets the high proportion of complete [23% of total MIC] and near complete items [20%] as reflecting that there was a deliberate clearing out of some items of stock. Such 'inn clearance assemblages' are relatively common in the archaeological record⁴⁹. If the cesspit was either abandoned or not required for its intended use then it would form a convenient space for dumping of material. This is an important consideration in interpreting what was easily the richest deposit encountered in the archaeological work.

The dating of the material in the cesspit has to accommodate the idea that there was a large scale dumping event. The ceramics formed an extensive range of use dates, including pearlware that could date as early as the late 18th century through to mid-late 19th century graniteware. The glass bottles generally dated in popularity from the 1820s through to the 1850s. The great majority of nails were cut, so date to before 1865.

Table 6.14 – Dateable manufacturers [all except final four entries] and distributors [final 4 entries] on artefacts in Unit [41] [Harris artefact analysis – Volume 4 - Table 4.7].

Shape	Manufacturer	Country	Begin Date	End Date	MIC
Bottle, beer/wine	Cannington Shaw & Co.	England	1875	1915	1
Bottle, beer/wine	Cooper & Wood	Scotland	1859	1928	2
Bottle, beer/wine	H. Rickett	England	1820	1920	1

⁴⁸ Macphail 2009.

⁴⁹ Boothroyd and Higgins 2005; Pearce 2000; Vince *et al* 1981.

Shape	Manufacturer	Country	Begin Date	End Date	MIC
Bottle, beer/wine	R. Cooper & Co,	Scotland	1868	1928	3
Bottle, castor oil	York City Glass Co.	England	1860	1900	1
Bottle, medicine	York City Glass Co.	England	1860	1900	1
Bottle, stout	Port Dundas Pottery Co.	Scotland	1850s	1932	1
Dish cover	Copeland Late Spode	England	1850	1867	1
Pipe, tobacco	Charles Crop	England	1856	1924	1
Pipe, tobacco	McDougall	Scotland	1810	1967	3
Pipe, tobacco	Thomas White	Scotland	1832	1864	1
Pipe, tobacco	William Murray	Scotland	1830	1861	1
Plate	Francis Morley (& Co.)	England	1845	1858	11
Plate	Ralph Malkin	England	1863	1881	1
Plate, small	Francis Morley (& Co.)	England	1845	1858	1
Platter	J R Ridgway	England	1841	1855	1
Platter	Mellon & Venables & Co.	England	1834	1851	1
Platter	Reed & Taylor	England	1840	1856	1
Saucer	Alfred Shephard & Co.	England	1864	1870	1
Bottle, aerated water	J. H. Schwappe & Co.	Australia	1884	1920	1
Bottle, schnapps	Udolpho Wolfe's Aromatic Schnapps	Netherlands	1848	- *	2
Pipe, tobacco	Hugh Dixson	Australia	1839	1904	2
Ointment pot lid	Josephson's Ointment	Australia	1866	1900	1

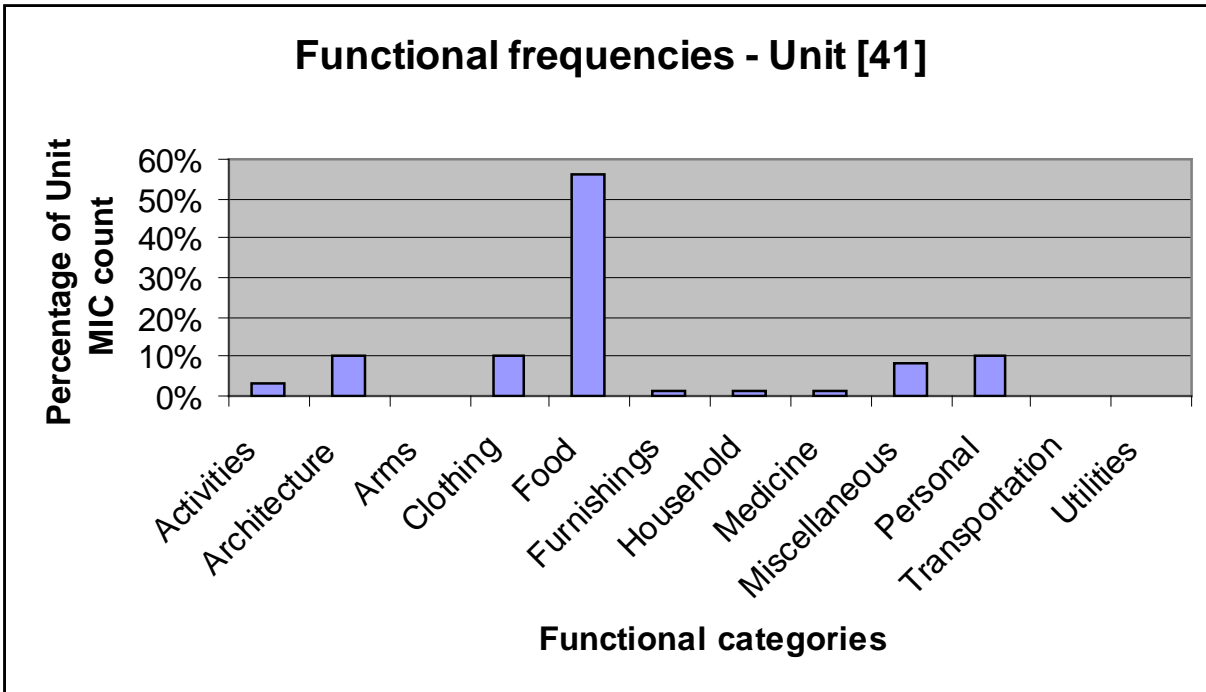


Figure 6.45 – Functional analysis of artefacts from Unit [41] [Harris artefact analysis – Volume 4 - Fig. 4.6].

Food-related items comprised 56% of the total artefact assemblage. These are listed below:

Table 6.15 – Proportions of food service items in Unit [41].

Function	Qty	Percentage
Alcohol	145	39.2
Beverage	28	7.6
Food preparation	2	0.5
Food service	150	40.5
Food storage	35	9.5
Miscellaneous	10	2.7

There was a great contrast between the food service items – 150 individual items including large platters and dish covers – but only two food preparation items, which were a milk pan and a cooking pot. The food service items consisted mainly of individual setting items, such as 27 cups, 41 plates and 18 bowls. Glassware included tumblers and stemware. The ceramic was predominantly refined white earthenware [87 MIC], a high proportion of pearlware [34 MIC] which went out of fashion around the time that Marulan was settled, and 2 pieces of graniteware. Porcelain items included plates and an egg cup.

Transfer-printed patterns were used on 75% of all food-service items. The most common was the Aliwal pattern, possibly commemorating the 1846 Battle of Aliwal in the First Anglo-Sikh War. A similar pattern, Clarendon, was also represented. The full list of transfer printed decorative patterns present, where known, is:

- *Aliwal*
- *Clarendon*
- *Willow*
- *Wreath*
- *Rhine*
- *Blonde*
- *Vienna*
- *Pevane*
- *Medici*
- *Duncan Scenes*
- *Chantilly*
- *Cable*
- *Byzantium*
- *Beforte Castle*

The majority of these were printed in flow black TPW. Examples are shown in Figure 6.44.



Figure 6.46 – Representative ceramics recovered from Unit [41], the fill of the cesspit.

As well as the individual setting items the cesspit assemblage was marked by the presence of a number of large serving platters, along with bowls and jugs. These had a great variety of decoration, and were in blue TPW, including Willow, and Rhine, Medici and Chantilly, which are superficially similar in appearance.

The single 'best' piece was a dish cover manufactured by Copeland [Late Spode]. It was a copy of a scene commissioned in 1849 as part of the Duncan Scenes series. This service was considered to be indicative of high social ranking⁵⁰.

There were a large number of alcohol bottles - at least 75 beer/wine MICs, 37 champagne type, 16 gin/schnapps, 4 stout, a flask and 9 unspecified alcohol bottles. By comparison there were 25 beverage bottles, mostly aerated waters, and one ginger beer stoneware bottle.

⁵⁰ Jenny Winnett [pers. comm..] identified an identical dish cover in the dining setting of a Scottish laird at Orkney, near Skara Brae.
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The architectural category included nails, hinges, brackets and spikes, along with window glass. This suggests structural maintenance and repairs. Personal items included 21 slate and graphite pencils, a lined writing slate and an ink bottle. There were 29 clay tobacco pipes, as well as combs, a perfume bottle and a chamber pot. A full description of the remainder is presented in the Artefact analysis report [refer to Volume 4 of this report series].

The functional analysis confirmed that this assemblage was of the type that should be expected in an inn [refer to Figure 6.43]. There were high frequencies of alcohol bottles, clay tobacco pipes, condiment bottles, food remains and undecorated ceramics. There were also typically low frequencies of medicine bottles, personal, clothing and furnishing related items and juvenile and child items. The one inconsistency is marked. Normally the preferred hotel wares consist of undecorated ceramics, yet the assemblage had a very high proportion of transfer printed ware. It is possible that this marks the intention of the Woolpack to mark itself out to its customers by providing a higher 'class' of ceramic.

Typically undecorated wares were, until relatively recently, considered to be the cheapest form of ceramics, and any decoration on the basic body incurred a cost that demarcated them, possibly eventually reflecting a customer who was willing to pay more⁵¹. The cost of ceramics in relation to their decoration was highly nuanced, and does appear to reflect an ascending scale of class. The higher the social standing, the more important it is to be seen to be eating off plates that reflect your status. Material goods in the 19th century, like at any other time, were used to demarcate social and class boundaries, and to reflect the users' and owners' relative worth⁵². Blue TPW seems to have been quite ubiquitous among most Australians of the mid-19th century judging by the distribution of sherds. Even a sawyer living in a bush hut near the Shoalhaven escarpment could boast 'a couple of common cracked blue earthen-ware plates'⁵³.

Customers visiting an inn would have received a range of experiences, which distance and circumstance often did not allow them to avoid. Even a modest inn provided its terrors. Again, Atkinson describes her character Gertrude's overnight stay at a bush inn, 'The chairs, and the earthenware which was spread on the table, were equally dilapidated, and suggestive of warfare'⁵⁴. A well-kept inn, offering unmarked, modern, high quality tableware and kitchenware for its guests would be offering a particular service. It is not too difficult to suggest that the pattern was set by Joseph Peters, who was demonstrably reliant upon maintaining good relations with the surrounding rural elite, and who promoted his new inn as offering beds and drinks 'unequalled in the colony'. It is clear that he aimed to attract and maintain custom with the rising class of wealthy squatters, and the purchase of good quality decorated ceramics was part of that strategy.

⁵¹ Miller 1980.

⁵² Brooks 2005.

⁵³ Atkinson 1857: 64-65.

⁵⁴ Atkinson 1857: 252.

The assemblage from cesspit fill [41] represents material spanning the period from 1830 to the 1880s. This is beyond the range of the town's existence, but it is possible that the initial shopping for food preparation and serving items was undertaken by Peters when he had his Durrah Forest inn in 1833. There are other indications such as the pearlware that there were purchases made in the 'early' township period. Additions were made in the late 1840s or 50s, witnessed by the Aliwal and Duncan Scenes patterns. Peters took over the operation of the inn from Wheatley in the late 1840s. Although dating evidence is limited it appears that there are two major components to the ceramic collection. The first is material that could be attributed to the initial purchase by Peters in c.1833-5, either for his Durrah Forest inn or the Woolpack's move to Marulan. This consists of the pearlwares, which would have been possibly cheap at this stage as they were going out of fashion, and a range of mixed but superficially similar serving pieces, such as jugs and platters, in blue TPW. The second major purchase occurs in very late 1840s or the 1850s, when we do not have a known innkeeper, but after Peters had re-purchased the inn. These purchases are also aimed at good quality ceramics with the latest scenes. Flow black was 'the' look, or at least conspicuously contemporary and clearly distinguishable from the older blue TPW which, as we have seen, everybody in the bush seemed to own. This phase perhaps coincides with the gold rushes, which did not heavily affect Marulan locally, but the biggest rush in southern NSW was the Kiandra rush in 1860-1 in the foothills of the Snowy Mountains, about 200 km south from Marulan⁵⁵. Notably, no major additions were made by Goodman Hart, professional publican in the early 1840s, who we consider less likely to have steered the inn towards a particular market than ran down existing stocks.

Peters' reinstatement as publican during the middle of the century probably aimed at keeping the inn in its originally intended role. The final phase has to be the discarding of the ceramics in perhaps 1880, using the final common use date. John O'Neil was still registered to vote in 1878-9 [refer to Section 3.7], but by then would have been in his mid 70s. His parents, 'the world's oldest married couple', had died in the 1860s. There is evidence that a family lived in the Woolpack Inn, with children, possibly O'Neil's grandchildren. Perhaps the clearance came as a result of his death soon afterwards. The fill of the cesspit represents a snapshot of material in use at the time of deposition, although it was built up throughout the life of Marulan, mainly through Peters' buying for the inn.

6.7.9 Comparison and Sequencing of Deposits

In her comprehensive artefact analysis Harris considers how the different 'dump' deposits – OMF 50, the burnt tree dump, the separate Unit [5] and the large deposit in the cesspit – OMF 46, and the general dumping within surface soils reflect different activities that all took place within the confines of the rear of the Woolpack Inn over the space of a few decades.

⁵⁵ Later minor rushes took place to the south of Bungonia, Captains Flat and Mongarlowe, among others.

Harris's conclusions are as follows. The interested reader is referred to her comprehensive specialist report in Volume 4, where the extract below can be seen with its supporting arguments and evidence.

The deposits in cess pit, rear garden deposits of the Woolpack Inn [Units [2], [3], [5]] and the burned tree throw [Unit [15] of OMF 50] are all contemporaneous with the main occupation of Marulan. Ceramic pattern analysis indicates that sheet midden areas [Unit [2] and Unit [3]] were associated with the inn. These deposits represent distinct activity areas within the Woolpack Inn property. Items in the cess pit generally represent large used, broken and/or discard items associated with food-service at the Inn. The completeness of the ceramic vessels allows for interpretation of what manner of table service was used at the inn. The rear garden deposits denote the scatter refuse disposal of smaller items, as was the practice at the time. A localised area might have been a favourite dumping spot for the inn's kitchen rubbish or possibly its sweepings, which can explain the fragmentation of ceramic vessels.

While the artefacts recovered from the burned tree throw [ie. OMF 50] are contemporaneous with the main occupation of Marulan, its association with the Woolpack Inn is not confirmed. The dominant printed tableware patterns are the same, but the small finds and variety of functional representation may serve to indicate that this rubbish resulted from the [innkeeper's] household rather than the inn itself.

The low filled area [Unit [4] of OMF 50], post-dates Marulan's main occupation. The high relative frequency of architectural debris suggests it is secondary deposition of some nature. The distinct differences between decorated ceramic vessels from this context and those other in the vicinity indicate that the table service was not the same and that the artefacts in this context, which again indicates its disassociation with the inn.

Thus we can begin to structure the deposits into some sort of time sequence. In order of creation, an idealised sequence of the deposition of the deposits associated with the Woolpack Inn can be ordered as follows:

Early Marulan Township – 1835 to 1840s

Unit [32]	OMF 46 - Cesspit constructed
Unit [51]	OMF 51 - Cobbled surface constructed
Unit [5]	Possible start of dumping
Unit [41]	Purchase of initial ceramics
Unit [3]	Accumulation of sheet midden
OMF 53	Garden used, then abandoned
OMF 52	Post structure built

Middle Marulan Township – 1840s to 1850s

- Unit [41] Purchase of flow black and other ceramics
- Unit [3] Material accumulates in sheet midden deposit
- Unit [5] Possible main period of dumping

Late Marulan Township – 1850s to 1860s

- Unit [2] Material accumulates in sheet midden deposit
- Unit [5] Completion of dumping
Associated evidence of building demolition

Post-Township – Mid 1860s +

- Unit [41] Completion of deposition of material into cesspit
- Unit [31] Collapse of cesspit brickwork
- Unit [2] Material accumulates in sheet midden deposit
- Unit [4] Dumping of material as part of OMF 50
- Unit [15] Dumping of material as part of OMF 50
Associated evidence of building demolition

6.8 Section 1 Lots 5-6

[Current title Lots 11 and 12 DP 797340]

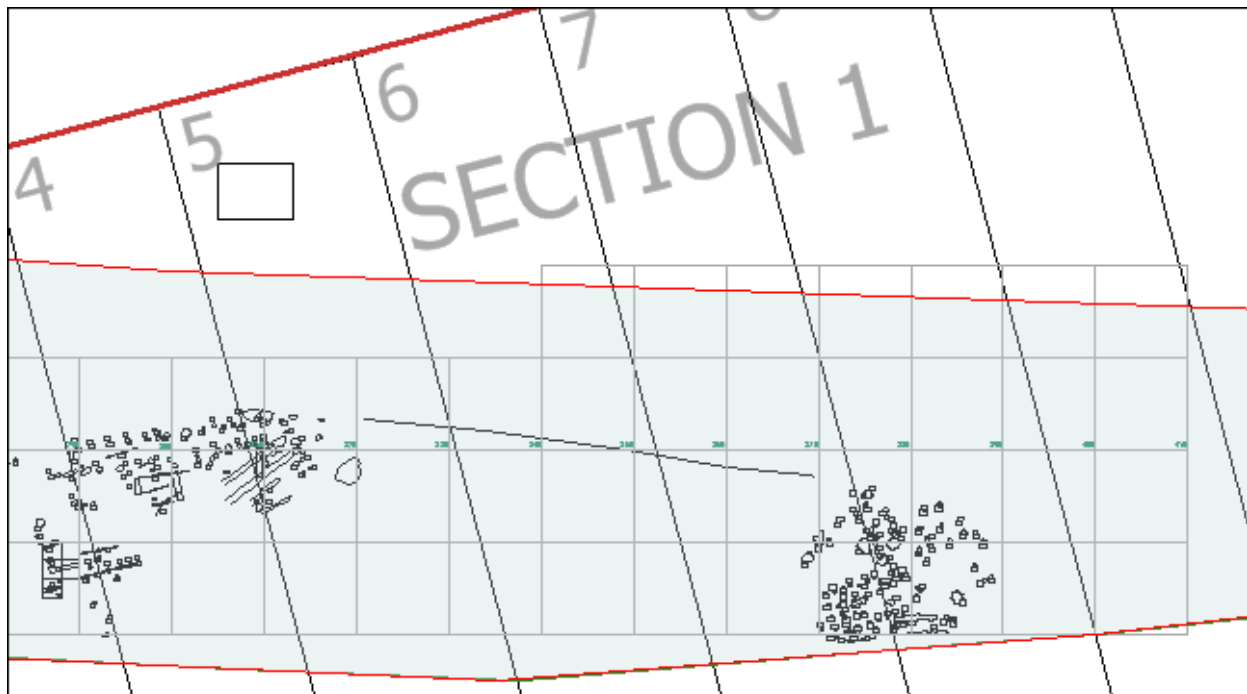


Figure 6.47 – Archaeological features identified in Section 1 Lots 5-10. Grid interval is 2 metres

6.8.1 Occupational History

This land slopes gently towards the creek and to the east. At the time of initial survey it was covered in a low grass cover offering little visibility. In contrast to the knoll immediately to the west there were no evident eruptions of bedrock, and only occasional small loose field stones on the surface.

Lots 5 and 6 were granted to Isaac Titterton in 1838⁵⁶. Titterton was a small businessman, who was involved in land speculation, commerce, had coaching interests and a range of other activities. Shortly after purchasing this land he also took over Mary Anne Hawthorn's 2 acre lot further to the east as one of the trustees of John Richards estate [refer to Section 6.13 below]. He sold these lots to Ann Barber [Lot 5] and Mary Romaine Barber [Lot 6], the daughters of George Barber, in 1842⁵⁷. No further information is available on these lots until mention is made that they were sold from the estate of John Hogg, who died in 1886, to James Wells in 1935⁵⁸. Once in Wells's ownership the pattern that is followed is the same as for most of the lots – to Walter Riley in 1951⁵⁹, Christopher Riley in 1984⁶⁰, John and Shirley Feltham in 1989⁶¹ and then Holcim in 2003.

Widening of the highway in the 1970s resulted in the loss of 32-40 metres from their frontages.

6.8.2 Survey

Table 6.16 – Features located in Section 1 Lots 5-6.

Feature	Survey markers	Feature type	Proximity to impact area
OMF 034	M043, 44	Linear drain feature	Close / Inside
OMF 035	M045	Pit / depression	Close
OMF 036	M046	Levelled area	Inside

The archaeological evidence consisted of three features. A small levelled area [OMF 36] about 5 by 5 metres was located near the road reserve edge, with some associated field stone.

OMF 34 was a linear drainage feature, running east-west, perpendicular to the road. It may have connected with another drain [OMF 32] but the physical connection was not seen during the survey. It ran towards the creek but did not join with it. It was defined

⁵⁶ LTO Serial 202 pages 196-197 – 3.3.1838.

⁵⁷ LTO Book 2 nos 705, 706.

⁵⁸ Title searching of different sources failed to find any evidence of property transactions between 1842 and 1935 [Steve Mansour S&L Searching Services pers. comm.]. LTO Book 1729 No. 803 – 11.9.1935.

⁵⁹ LTO Book 2177 No 857 – 30.6.1951.

⁶⁰ LTO Book 3611 No 430 – 20.12.1984.

⁶¹ LTO Titles 11-12 / 797340.

as a drain in the upper section, while the lower section was initially seen as a rough line of rocks.

OMF 35 was an oval-shaped depression about 8 by 4 metres and almost a metre deep. It could have been a dam or pond or a quarrying pit. Several stones were visible in the base of the pit.

6.8.3 Stage 1 Excavation

OMF 34 - Linear Drain Feature

This linear drainage feature ran roughly perpendicular to the current highway and roughly parallel to the lot boundaries. It was sectioned in three places with a mechanical excavator and the sections recorded, designated OMF 34A-C. Trench OMF 34A encountered a possible structure, so mechanical excavation ceased and a 1 x 1 metre trench was laid out to examine the archaeological evidence. Trenches OMF 34B and 34C intercepted drainage cuts and were recorded archaeologically.

Initial bladed bucket scraping revealed a high density of artefact material and possible *in situ* stone. Mechanical excavation was suspended and a 1 x 1 metre trench was laid out to examine the deposit. Removal of topsoil [Unit 1] revealed scattered stone set in a dark humic matrix, different to normal sub-soil with further artefact material exposed. The artefacts were of mid-19th century date and consistent with Marulan township occupation.

The strata examined were:

OMF 34A – Unit 1

Grass and topsoil, removed down to base of root mat. Sparse artefact material consisted of three pieces glass fragment, clay tobacco pipe fragment and nail head.

OMF 34A – Unit 2

Unit [2] was a lighter soil on western side of test pit that overlay a dense layer of stones. Contained sparse artefact material. Unit [2] was excavated.

Table 6.17 – Artefacts recovered from OMF 34A Unit [2].

Fabric	Type	No	MIC	Comment
Glass	Black bottle	12	1	
	Clear vessel	9	2	
	Clear flat	1		very thin 19 th century style
Ceramic	Blue TPW	1	1	
	clay tobacco pipe	4	2	one fluted and wreathed bowls with spurs 1 frag. plain bowl 2 stems

OMF 34A – Unit 3

Slightly darker soil in western side of test pit than Unit [2]. This contained closely packed small stone pieces and could be traced across the backhoe cut to the eastern side of the trench [refer to Figure 6.46].

The closely packed dense stonework was interpreted as likely to be flooring, with artefacts being *in situ* or largely undisturbed discard.

OMF 34A – Artefacts

Artefacts were removed with the initial blade scrape. This deposit was sieved once it was realised an occupation deposit may have been dug into.

Table 6.18 – Artefacts recovered from OMF 34A Unit [3].

Fabric	Type	No	MIC	Comment
Glass	Black bottle	25	1	
	Green tint	4	1	
	Clear vessel	22	2	
	Clear flat	10		all very thin 19 th century style
Ceramic	Blue TPW	2	2	
	Brown TPW	2	1	
	Black TPW	1	1	
	White earthenware	1		
	Clay tobacco pipe	26	3	two fluted and wreathed bowls with spurs 1 fragment of plain bowl No manufacturers marks
Metal	Ferrous	1		3 mm diameter x 150 mm
	Lead	1		Melted piece
Stone	Limestone [?]	1		Partly smoothed unshaped piece



Figure 6.48 – OMF 34A, facing north, showing top of Unit [3] and telecommunications trench disturbance on right

OMF 34A – Interpretation

The limited exposure at the time of Stage 1 excavation hindered possible interpretation, but the evidence strongly suggested a structure with a packed stone floor, or possibly a fire place. Most of the artefact material was consistent with the town's occupation period, but there was a higher proportion of clear glass than is usual for mid-nineteenth century sites, which may suggest a later occupation. The contrast between the artefacts found here and the general assemblage found in the levelled areas strongly suggests that a different form of activity was taking place.

More extensive excavation of OMF 34A was recommended for Stage 2. This is described below in Section 6.8.4.

OMF 34B

A 4 metre long trench was cut across this linear drainage feature. This cut was located about 10 metres from the road reserve boundary, near the easternmost visible end of the feature. At this point the drainage line was a narrow V cut through the silty subsoil and basal clay, with the channel filled in by overlying topsoil. The drainage channel cut was V profile, 300 mm wide and 200 mm deep. The cut was infilled with loose soil. This layer was notably lighter than the topsoil, being a mid-grey [Munsell 7.5YR 6/1] with very small gravel inclusions [<5mm diameter]. As found elsewhere on the site the trench cut through a very light-coloured [Munsell 5YR 8/1] silty almost structureless B

horizon, measuring about 350 mm thick, before coming down onto a clayey subsoil. This contrasted in colour with the subsoil, being Munsell colour 10YR4/6 with mottles of 5YR 5/6. This was a very friable light to medium clay, which broke into small angular fragments.

A charcoal lens was seen during mechanical excavation at the top of the clay. It was likely to be burnt *in situ* tree-root, but fell apart upon excavation.

Limited artefact material was recovered. There were two large bones, probably cattle, a piece of strap iron and some cemented ferrous rust-clusters of uncertain identification.

OMF 34C

A 2.4 metre long trench was cut perpendicularly through the centre line of the drainage feature.

The trench sectioned the drainage ditch, and revealed a squarish deep cut, measuring 1.3 metres across and 400 mm deep, with the main cut measuring about 650 mm across, and about 400 mm deep below probable ground surface line. This was cut through the silty B horizon soil found elsewhere on the site, about 400 mm thick, and then into the C horizon clay. A thin dark band of soil less than 30 mm thick was present along the base of the cut, and may represent a remnant vegetation and sediment layer from when the ditch was open. Over this lies a fill of loose rocks and soil. A metal strap and rust stains were visible in section. This strongly suggests that the fill is of relatively recent [20th century] date.

OMF 34C – Artefacts

The finds recovered from the drainage trench fill included five pieces of bone belonging to a medium sized mammal, possibly sheep or goat. Artefact material that was recovered included four pieces of black bottle glass, 2 pieces of clear glass, a piece of strap iron and a base fragment of a Chinese container jar. Five small lumps of lime, which may have been slaked, were also found.

These are, to some extent representative of the artefacts found generally away from the rear of the Woolpack and are reflective of the later rural use of the site. The Chinese container jar is possibly a ginger jar, which were often found in non-Chinese homes as well.

Interpretation of OMF 34B and OMF 34C

Drainage line OMF 34B and OMF 34C is later than Feature OMF 34A as the drainage line cuts through the feature. It is possible that as well as being a drainage line the ditch also served to demarcate, albeit inaccurately, the portion boundary that divided Hogg's land [Section 1 Lots 1-4] from its neighbours [Lots 5-6]. Hogg later took ownership of these lots, so any demarcation must predate his death in 1886, which is our first

evidence of ownership. This would put the drainage ditches approximately into the period between 1860 and 1885, which is consistent with their artefact content and general condition, but would assume a greater degree of obliteration of earlier signs of land ownership such as fences than seems likely.

The drainage cut runs down the slope from near the crest of the ridge to the edge of the creek terrace. From its profile, being a narrow V near the top and broader and rounder towards the bottom it was designed to remove large quantities of surface water. As it does not correspond to a lot boundary it is probably later than the township site. The artefacts contained within the fill are consistent mainly with rural use and the addition of material from earlier surface discard and slope movement.

Remote Sensing

A limited program of remote sensing was undertaken between Stages 1 and 2. A particular focus was determining whether the extent of the floor of OMF 34A could be established. A ground penetrating radar scan of the site showed the surprising result that the central disturbance to OMF 34A, which had been thought to come from the initial impact by the backhoe, was actually an otherwise unknown buried service line [refer to Figure 6.47]. This service is not indicated in other service diagrams and its status, including whether it is operative, remain unknown.

6.8.4 Stage 2 Excavation

Stage 2 archaeological excavation in Lots 5 and 6 was focussed on two objectives. The first was to expand the test pit OMF 34A that showed what appeared to be structural remains at the northern end of Lot 5. Further examination of the surface showed that the drainage line OMF 34 B and C appeared to bisect the levelled surface of OMF 34A, and so there was potential for chronological differentiation of deposits. The second objective was to mechanically excavate the impact area to determine whether or not features were present.

OMF34A – Stone Pavement/OMF 48 – Stone Features

As discussed above OMF 34A was identified during Stage 1 excavations and was to be explored further in the Stage 2 works. However, remote sensing identified the presence of a previously unknown buried service of unknown origin. As a result and after consideration of the topography a fairly substantial area measuring 8 metres east to west by 6 metres north to south was laid out to the north of the original test pit. The southwestern coordinate and trench designation is 305 / 635. This placed the trench near the northwest corner of Lot 5. The continuation of the drainage line OMF 34 ran through the western end of the trench, although in this location it has become very broad and shallow.



Figure 6.49 – Ground penetrating radar survey of area of OMF 48 [OMF34A]. The stonework is poorly revealed but there is an otherwise unknown East to West buried feature and part of the buried telecommunications line shown in the bottom right. [North is to left of image]

Following the Stage 2 archaeological work the feature of which OMF 34A was the first identified part, was redesignated OMF 48 – stone feature. This recognises that it was a far more complex, and enigmatic, feature, reflecting more successive changes through time than had been supposed. The archaeological results are presented below, along with a preferred interpretation of their meaning.

The surface was surveyed prior to excavation. The trench had a fall of about half a metre from south to north over six metres but was otherwise uniform with no visible evidence of any archaeological remains.

Removal of grass and topsoil [1] and [2] revealed [45] a layer of dark grey humic soil containing a large amount of stone fragments. These included pieces of limestone and sandstone as well as compacted conglomerate. None of these is present naturally at the site. Although largely well-rounded some of these stones did exhibit evidence of fracturing or mechanical breakage. It also contained a large concentration of fragments of clay tobacco pipe fragments. There were about 45 MIC represented, and about 42 of these were represented equally by two types of pipe – one plain bowl with spur, and the other with a finely ribbed bowl and spur. Unfortunately neither of these has any associated manufacturing marks or other evidence of their origin or exact date. The remainder of the pipes were a plain thick-walled navy pipe, parts of an effigy pipe [with a bowl modelled as a face], and part of a standard plain cutty pipe.

Several fragments of the main two pipe types were also collected as part of units [2] and [67] and [68], but were probably only minor residuals from [45].

Removal of [45] in the eastern area of the trench exposed a roughly circular bank of limestone, sandstone and conglomerate fragments with a depression in the centre, defined by the absence of stone. This appeared to have been a deliberately formed structure and was designated as [63]. It measured about 3 metres across east to west from its outer edges. The highest points of the stone formed a rough ellipse measuring 1.7 to 2.2 metres across. The inner, stone-free, 'ring' was about 450 mm in diameter. It rested directly on Unit [66] – the natural soil. This stratigraphy was confirmed by the excavation of sondages.

A separate circular area of stone was attached to [63] on its northern side. Designated [68] it was a smaller roughly circular pile of stonework with orange-yellow clay lumps in the matrix. It could not be determined whether [68] was a later addition or part of the same construction event.

Immediately to the west of this, and closer to the original OMF 34A, in the northwest corner of the trench, was a markedly different scatter of stone material, Unit [61], which was very similar to the compacted cobbled surface of OMF 34A. Unit [61] consisted of rounded pieces of limestone and occasional sandstone and a very small quantity of heavily fragmented sandstock brick. Immediately to the south of Unit [61] was Unit [62] – a gritty soil with a large proportion of orangey yellow clay around stone that appeared to be gathered in small clusters.

The largest stratigraphic unit in the western part of the trench was Unit [64], which was another stone rubble pile. Unit [64] was roughly L-shaped in plan but unlike [63] was predominantly made of sandstone pieces, with a smaller proportion of limestone. It was underlain by [65], which was another densely packed cobble surface. It differed from [61] in containing much larger cobbles or chunks of stone. Testing of the contact between [61] and [65] showed that the former appeared to run under [65], which was either a later addition or the intended surface of a complex cobbled structure.

The majority of artefacts within OMF 48 were recovered as part of Unit [45], with 1904 artefacts representing 215 MIC. The high count for Unit [2] – 614 artefacts, probably reflects a substantial inadvertent pick up of material from the underlying [45] before this was demarcated as a separate unit. The collection was dominated by the clay tobacco pipe fragments discussed above. Unfortunately these are not dateable. The artefact analysis identified that the artefact material was consistent with the Marulan township period. The one closely dateable artefact found was a 1799 farthing, which does not provide useful dating evidence due to the longevity of coinage circulation in the 19th century. Three wire nails, a small ratio compared to the cut nails found on the site, 'indicates that the structure associated with this context was constructed during the first three quarters of the nineteenth century and that the wire-drawn nails represent late-nineteenth century maintenance or repair to a possible associated structure'⁶². Harris also noted a single brick fragment that was much closer in form to early colonial brick types in being only 60 mm deep, as opposed to the more regularly proportioned ones found in the Woolpack Inn.

Although there was a high concentration of charcoal noted in the matrix, and many of the artefacts coming from [45] were stained with a black and greasy finish, only 3% of artefacts exhibited actual signs of burning or heat alteration. None of the nails was heat affected, suggesting there was neither a structure burned down or reused timber being used for fuel.

Of the artefacts with identifiable functions 30.2% related to food, and 37.2% related to architecture, including the cut and wire nails. An additional 24.2% were identified as personal, and 6% as miscellaneous. This is broadly comparable to the overall functional distribution on the site. However, the detail reveals that there were also associated beads and jewellery generally indicative of the presence of women on the site, and a child's toy dishes. Harris's overall conclusion is that the Unit [45] deposit was not a casual accumulation of rubbish, but more likely to be a secondary deposition where refuse was accumulated in a primary context and then dumped elsewhere. The dumping of a large number of uniform clay pipes and also whole cut nails suggested that these were part of a clearance deposit, where material stored for use or discard was dumped in a single event.

⁶² Harris 2009: 64.

The presence of limestone and sandstone, which are not found within several kilometres of the site, as well as conglomerate and clay which could have been excavated locally, requires explanation in any interpretation.

There appears to have been a clear sequence of events taking place on the site. These are, in order:

- | | |
|------------------|---|
| Most recent | Accumulation of topsoil [2] |
| [Late township] | Soil deposition [45] – associated with clay pipes |
| | Stone features [63] [64] [68] – could be simultaneous or sequential |
| [Early township] | Cobbled surface [65] overlies and is possibly a repair of poorly preserved cobbled surface [61] |
| Earliest | Natural soil [66] |

Each of the events represents a clear and discrete event, although there is some relationship between them. Non-local stone was brought in and used with locally available freestone to construct the cobbling and then later in different sizes for the construction of the structures. The cobbling, as far as could be tested with sondages, extends beneath the structures, suggesting they were not the intended purpose for the initial work on the site. The function of the stone structures remains unclear.



Figure 6.50 - OMF 48 during excavation showing cobbling, organic staining and introduced stone



Figure 6.51 - OMF 48 during excavation showing cobbling, organic staining and introduced stone

OMF 48 – Interpretation

A range of interpretations has been offered for the sequence of evidence found in this feature, none of which is entirely satisfactory. The presence of the non-local stone has suggested that the area was used for processing construction materials, but all examined remains in the township make use of either the local igneous stone or dressed sandstone blocks.

The first clear event was the creation of a cobbled surface [refer to Figures 6.48 and 6.49]. This was in the lowest point of the block, and the closest to the creek. It may have been to consolidate boggy ground or to create a workable wet area, as it clearly sloped towards the north. In the absence of information about whether the lot was ever occupied it is difficult to understand what such a wet area would achieve. If it was part of the inn, then possibly drawing water, laundrying, some cooking and even brewing could be arguably seen as useful functions to take place close to a creek. The lack of other identifiable remains on this lot makes it difficult to understand what such a well-constructed surface would have achieved if it was associated with a more modest occupancy.

The second event was the construction of at least two and possibly three discrete stone structures, also constructed largely from non-local stone. When initially dug up there were two operative options. The first was that they were accumulations of stone for construction, with the sandstone being chips from shaping ashlar masonry blocks, and the lime for burning into hydrated lime, ie quicklime. The other was based on the presence of [45], which was extremely dark and clinging matrix. This initially looked and felt like the residue of fire ash mixed with fat, such as in rendering down or where carcasses are cooked on a spit. The stone features could have carried cauldrons or cooking pots.

The evidence gathered during the excavation and analysis does not support these interpretations, as the stone does not appear to be shaped consistently with masonry debitage or quarrying for limestone fuel. Neither does [45] relate to the operational use of the stone features. Careful excavation indicated that it is later in date. Therefore the circular structure [63], the smaller one attached to it [68] and the L-shaped stone pile [64] post-date the cobbling and may represent a completely different function. The shape of [63] and, to a lesser extent [68], imply some sort of large fire structure on which a try-pot or cauldron could sit, but there was no ash or charcoal definitely associated with them. It may be that the shape is entirely a matter of chance, and that these are piles of stone refuse dumped in the lowest, furthest away point on the lot or even dumped from the adjoining block.

The final event was the accumulation of [45] as a refuse deposit representing likely male, female and child residents. Again, the absence of evidence from the front of the lot makes it difficult to interpret the source of this material. As it was likely to have been dumped from elsewhere within the site there is no certainty that it relates to any of the earlier functions on the site. Its dating suggests accumulation during the main part of the Marulan township period, although the wire nails may either imply it was dumped post 1860, or that there was some sort of timber structure nearby that was renewed at this time. As it was close to the lot boundary the nails may represent fixing of the fence but this is entirely conjectural.

The dumping of [45] shows that if there was some active function for the stone piles, then that had been abandoned by the time the dumping took place. While the time of dumping cannot be surely determined, it is more likely to have happened during the township period than later, once it had declined.

In summary Feature OMF 48 remains a mystery, as it did during the excavation. The three successive events described above do not necessarily relate to each other. They represent different uses of the area – starting with the initial creation of a hard wearing stone cobble surface, perhaps to create a usable wet area close to the creek. Then stone from off the site was dumped, possibly to do more repair work on the boggy ground or the start of a completely different group of structures. Parsimony suggests the former is more likely to be correct. The third event was dumping of domestic refuse from elsewhere on the site onto the piles of stone.

The Harris matrix for Feature OMF 48 is shown in Figure 6.50.

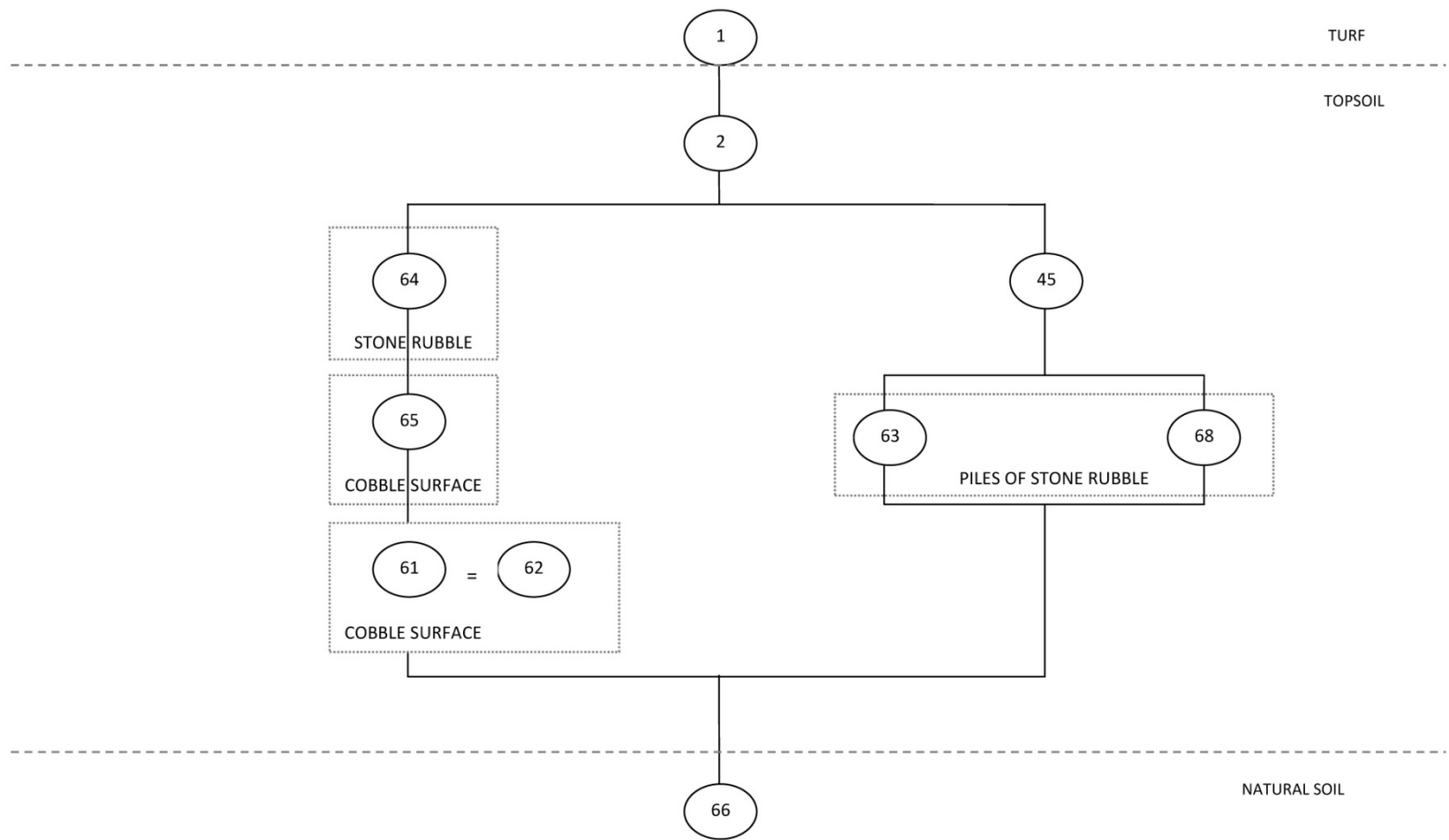


Figure 6.52 – Harris Matrix for Feature OMF 48.

Continuation of OMF 52 and OMF 54

OMF 54 was a cluster of postholes and other soil markings that was mainly present within Lot 4 [refer to Figure 6.45]. It extended into Lot 5 with no indication of any transition or changes that may indicate altered ownership or abutted structures on either side of the property line.

There are several possible explanations for this unexpected result. Firstly, this could be the result of a surveying error of about 6.5 metres on the ground, where the lot boundary was incorrectly placed [as discussed in Section 6.7.7]. This seems unlikely given the proximity to the road and the otherwise quite rigorous adherence to property ownership shown in the records. However, drainage lines OMF 34 and 37 were also offset from the boundaries of Lots 5 and 7 in Section 1 by about 4.5 metres. These almost certainly post-date the town, but may reflect an earlier incorrect fence alignment.

A more plausible explanation is that Peters or a later Woolpack Inn publican leased the adjoining blocks to provide additional land to support the inn's activities. This is intuitively reasonable but given the absence of structures in the rear of Lots 1-4 it is uncertain why the expansion eastwards was preferred to building to the north.

6.9 Section 1 Lot 7

[Current title - Part Lot 7 Section 1 DP 758653]

6.9.1 Occupational History

This lot was granted to Charles Nicholson in 1838⁶³. Nicholson only held the block for 20 months and then sold to James Tegg at the end of 1839⁶⁴. Nicholson would later rise to prominence as a landowner, merchant and senior NSW politician but his association with the block was very brief. Tegg was a publisher and was responsible for producing a successor to the *General Post Office Directories*. He had been well-versed on the controversy surrounding the proposed realignment of the Great Southern Road⁶⁵. Tegg transferred the block to Francis Fahey in 1880⁶⁶, who passed it to James Harris in 1882⁶⁷. Harris sold to John Cousins in 1885. At some stage after this it was bought by John Hogg, and then by Henry Marcus Clark. Henry was a draper who migrated from Liverpool to Victoria in 1880. His son Reginald became a prominent merchant and store owner⁶⁸. These transactions are not registered and only appear in the later conveyance information of James Wells, purchaser in 1935⁶⁹. Walter Riley owned the site in 1951⁷⁰ and Christopher Riley received title in 1984⁷¹. The site is currently owned by Holcim⁷².

⁶³ LTO Serial 202, page 209 – 3.3.1838.

⁶⁴ LTO Book 6 No. 555 – 31.12.1839.

⁶⁵ Tegg 1842 contains a short commentary on the agitation for a shorter route that frustrated Mitchell and Peters.

⁶⁶ LTO Book 208 No. 967 – 5.10.1880.

⁶⁷ LTO Book 252 No. 991 – 21.8.1882.

⁶⁸ *ADB* 8: 11-12.

⁶⁹ LTO Book 1729 No. 803 – 11.9.1935.

6.9.2 Survey

No surface archaeological evidence was noted.

6.9.3 Stage 2 Excavation

Mechanical removal of topsoil revealed a cluster of postholes contained within Lots 7 and 8, designated OMF 56. The postholes were grouped in the southeastern corner of Lot 7 and included some distinct and definite alignments. The patterning of the postholes distinctly changed across the lot boundary, strongly supporting the fixed boundary being accurately placed and demarcated between adjacent owners. No increased density of artefact material was noted during the monitored excavation.

In Lot 7 there were a number of alignments that could be grouped together [refer to Table 6.19 and Figures 6.45, 6.51 and 6.52]. P22, P23, P24, P25 and P26 outline a rectangle measuring 4.38m [14ft 4in] north to south by 6.82m [22ft 4in] east to west, taking the measurement to the alignment of P34. However, P26 continues unbroken beyond the lot boundary, so this may not reflect a single structure [refer to Figure 6.52].

⁷⁰ LTO Book 2177 No. 857 – 23.6.1951.

⁷¹ LTO Book 3611 No. 430 – 20.12.1984.

⁷² Richard Savage – Holcim pers. comm.

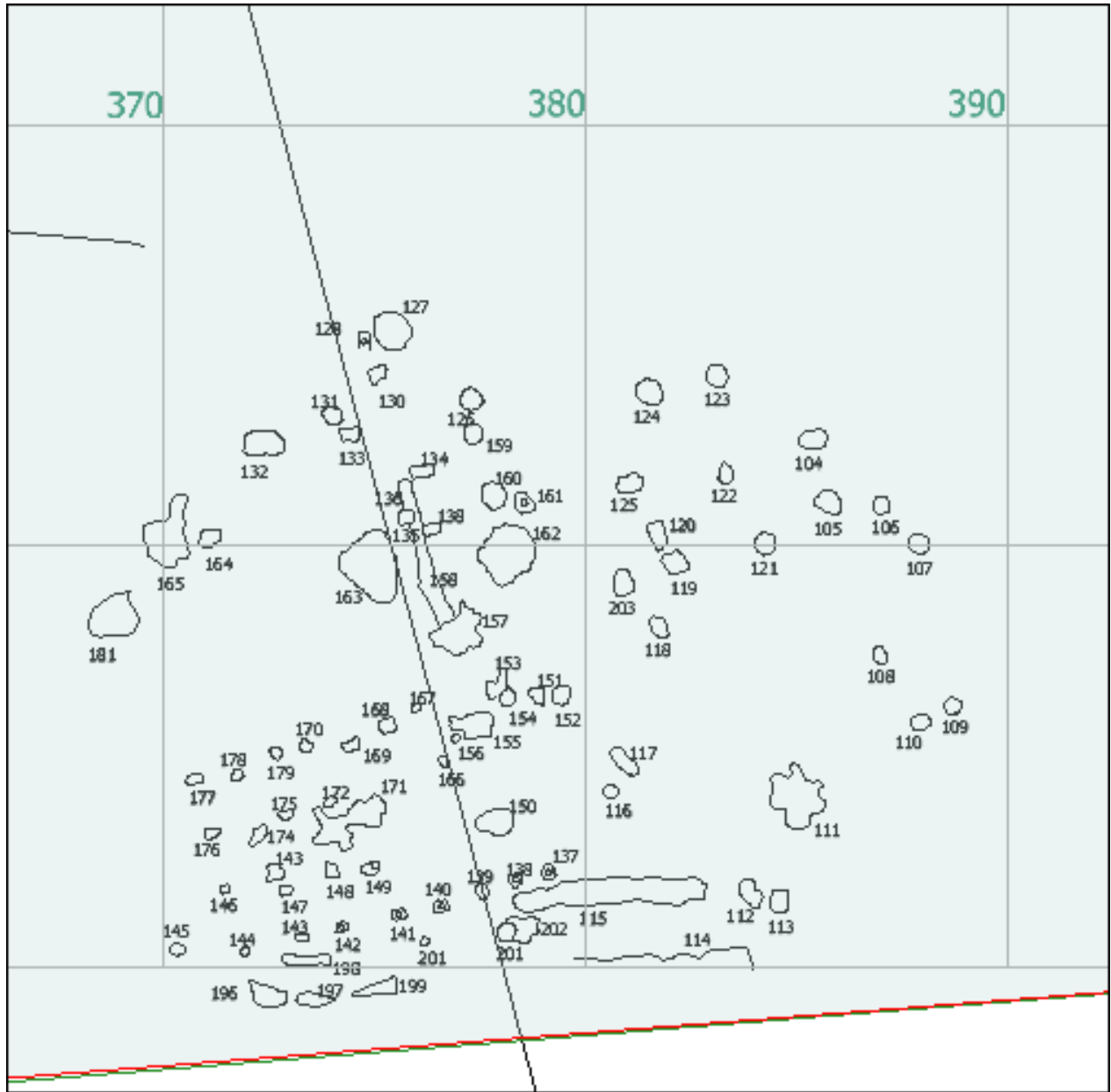


Figure 6.53 – Postholes identified in Section 1, Lots 7-8. Grid interval is 2 metres

Interpretation of OMF 56 is complex. The P22-P26 rectangle represents a reasonably coherent structure with alignments at right angles to each other and the lot boundary [refer to Figure 6.52]. The boundary on the lot was not distinct, although Units [201], [156] and [150] may have represented fence post holes. The clearest line is P26 with eight postholes in line, all of consistent form at about 1.0 to 1.2m intervals. Each posthole appeared to have been cut by spade, squarish in outline, measuring about 200 x 250 mm maximum, and backfilled. In each there was a small irregular shaped postpipe, generally circular or elliptical and measuring about 100mm diameter. The other alignments in the P22-P26 rectangle were less distinct, but largely contained similar sized postholes.

Other postholes in Lots 7 and 8 may describe an angled line [P21] but this is only moderately probable. A number of postholes in the front of the lot at the road reserve edge may represent the former location of slab fencing [196] – [199], but they were not clearly delineated, and their continuation was impacted by mechanical disturbance [114].

The evidence suggests that P22-P26 was a discrete structure erected to abut against an established fence. It divides into three stalls measuring 1.4 to 1.5 metres in width, which would be suitable for a range of animals. It was set close to the road boundary, but may have had a solid paling fence to prevent escape or theft.

There was no evidence of residential occupation on the lot, and its Sydney absentee landlords are likely to have leased it for farming.

Table 6.19 – Details of posthole alignments identified in Section 1 Lots 7-8 as part of OMF 56.

Line	Total length	Units	Comment	Likely alignment
P21	9.5m	[121], [127], [131], [132], [164], [165]		Medium
P22	7.7m	[144], [145], [176], [177]	Perpendicular to P23, P24, P25 and P26 Perpendicular to road frontage	High
P23	4.2m	[153], [167], [168], [170], [177], [178], [179]	Parallel to road Parallel to P24, P25, and P26 Perpendicular to P22	High
P24	6.0m	[166], [171], [172], [175], [176]	Parallel to road Parallel to P23, P25 and P26 Perpendicular to P22	High
P25	9.4m	[116], [143], [146], [147], [148], [149], [150]	Parallel to road Parallel to P23, P24 and P26 Perpendicular to P22	High
P26	7.5m	[137], [138], [139], [140], [141], [142], [143], [144]	Parallel to road Parallel to P23, P24 and P25 Perpendicular to P22	High
P27	11.3m	[112], [113], [117], [151], [152], [153], [157], [158]		Low
P28	10.2m	[108], [109], [121], [122], [124]	Parallel to P29 and P33	Medium
P29	3.7m	[104], [106], [107]	Perpendicular to P30 and P31 Parallel to P28 and P33	Low
P30	6.6m	[106], [119], [121], [157], [203]	Parallel to road Reasonably parallel to P31 and P32	High
P31	9.6m	[134], [135]	Parallel to road Reasonably parallel to P30 and P32	High

Line	Total length	Units	Comment	Likely alignment
P32	7.8m	[123], [124], [134], [136], [159]	Parallel to road Reasonably parallel to P30 and P31	Medium
P33	7.15m	[111], [118], [126], [127], [159], [161], [203]		Medium
P34	9.9m	[128], [130], [135], [136], [150], [155], [158], [202]	Close to lot boundary Perpendicular to road frontage	Low
P35		[121], [123]	Perpendicular to P30, P31 and P32 Parallel to P34	Low

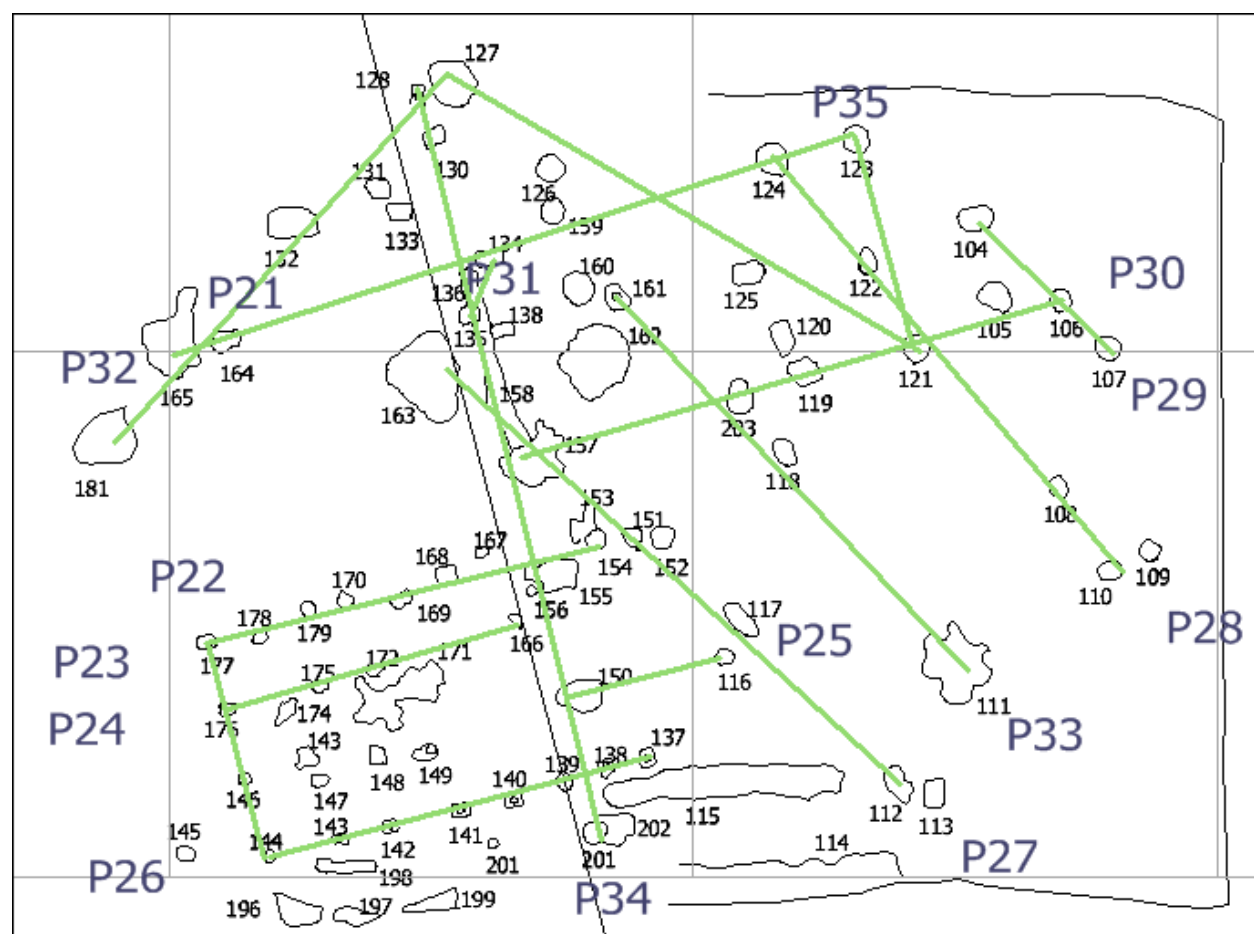


Figure 6.54 – Posthole alignments identified during Stage 2 excavations.

6.10 Section 1 Lot 8

[Current title - Part Lot 8 Section 1 DP 758653]

6.10.1 Occupational History

This lot was granted to Thomas Horton James in 1838⁷³. He held ownership for only half a year before transfer to Henry Rotton⁷⁴. Another half year later it was transferred to Thomas Ware Smart⁷⁵. James was a writer and sometimes publisher, while Rotton was a successful publican and merchant, who later entered Parliament. Smart was a land agent who became a successful banker and merchant. Then ownership remained constant until 1882 with ownership then transferred to Francis Artlett⁷⁶. The land was then transferred to Elizabeth Feltham in 1915, the earliest ownership by a member of the Feltham family in the study area⁷⁷. It remained in the Feltham family's ownership until its purchase by Holcim in 2007.

6.10.2 Survey

The surface archaeological evidence noted was limited. OMF 37 was a drain feature perpendicular to the road. This was offset about 5 metres from the western margin of the lot boundary but it is possible that it did delineate a property boundary at some stage. It ran from the edge of the road reserve into the creek. Beside the drain was a circular depression about 2 metres across [OMF 38]. It was shallow and could have been a soak. The drainage lines are believed to post-date the town. Several are offset but parallel to the cadastre, and it is possible that they represent an attempt to demarcate lot boundaries in the late 1800s or early 1900s after earlier landmarks have disappeared.

Table 6.20 – Elements located in Section 1 Lot 8.

Element	Survey markers	Element type	Proximity to impact area
OMF 037	M047, 48	Linear drain feature	Outside / Inside
OMF 038	M049	Pit / depression	Close

6.10.3 Stage 2 Excavation

Removal of the topsoil in the area revealed a distinctive concentration of post holes, designated OMF 61, cut into the B horizon. There was limited domestic refuse associated with the overlying topsoil. As the exposed posthole scatter in Lots 7 and 8 measured 19.5 metres wide, very close to the standard town lot width of 20 metres [1

⁷³ LTO Serial 202 Page 70 – 5.3.1838.

⁷⁴ LTO Book N No. 704 – 15-16.10.1838; NSW Parliament website – Henry Rotton.

⁷⁵ LTO Book O No. 788 – 11.5.1839.

⁷⁶ LTO Book 260 No. 983 – 21.12.1882.

⁷⁷ LTO Book 1056, No. 939 – 11.5.1915.

chain or 66 ft], it was initially thought that the remains on the two lots were actually the result of building within a single lot-width, and which had been offset by faulty surveying. The offset drainage lines were considered to be possible additional evidence of this being an issue with considerable time depth on the site.

Further examination of the posthole patterning however now proposes that there is a discernable difference in the post hole patterning in Lots 7 and 8. As they were held by different owners this is feasible as an explanation.

The alignments of postholes identified for Lot 8 are shown in Table 6.19 and illustrated in Figure 6.52. Unlike Lot 7 there was no consistent structure delineated by the postholes. P34 can be interpreted as a lot boundary structure, probably a fence. A possible structure can be proposed for P30, P31 and P32. On its western margin this incorporates part of P34, generally interpreted as the fence between the lots. Between P30 and P32 a clearly visible trench designated [158] could be seen along the lot boundary. This was a shallow feature that was lost when the trench flooded, and unsuccessful scraping revealed that it must have been of limited depth. It was cut through by later postholes [136], [138] and [157].

Working from the P30-32 line, which is 3.69 metres apart, and the line of P34 there is a possible two posthole alignment based on [121] and [123]. This could potentially define a structure measuring 7.8 x 3.8 metres. This would make it slightly larger than the standard 7.3 x 3.65 metres footprint of the simple slab cottage, more typically expressed as 24ft x 12ft⁷⁸.

There is very little resolution offered by the remaining postholes. Apart from those discussed above most of the alignments are ranked as low or medium possibilities. There was clearly some activity focussed in this area as extensive scraping to the east and to the north failed to identify further postholes.

The potential structure P30 – P32, P34 – P35 is proposed only as a tentative structure. While some of the alignments are considered to be reliable, the structure itself is not. If it is real it represents a building slightly larger than a standard residential hut in size. There was however no increased concentration of artefacts to support the identification as a residential dwelling.

⁷⁸ Gojak forthcoming.

6.11 Section 1 Lots 9-10

[Current title – Lots 13 and 14 DP 797340, Lot 2 DP 214304]



Figure 6.55 – Archaeological features identified in Section 1 Lots 9-10, Zamia Street and Section 7.

6.11.1 Occupational History

Two blocks – Section 1, Lots 9 and 10 – were granted to George Barber, the owner of neighbouring Glenrock Station in 1838⁷⁹. Barber died in a presumed riding accident shortly after this. No record of conveyancing or change of ownership is available for the two lots until a reference is made to the estate of James Hogg being in ownership. In this case it may have stayed within the Barber family, or their extended Kennedy / Hume families until quite late. Hogg died in 1886 and this property was eventually sold to James Wells⁸⁰. The ownership chain from Hogg to Wells and then onwards is consistent with other purchases across most of the study area. Following Wells it is bought by Walter Riley in 1951⁸¹, then Christopher Riley in 1984⁸² and John and Mary Feltham in 1989⁸³. Holcim bought the property in 2003.

A section adjoining the road was acquired by the Commonwealth of Australia in the 1950s, and a repeater station for the Sydney-Canberra coaxial cable, known in this report as the Telstra bunker, was built. The repeater station is still present⁸⁴.

⁷⁹ LTO Serial 202 Pages 117, 118 – 5.3.1838.

⁸⁰ LTO Book 1729 No 802 – 12.9.1935.

⁸¹ LTO Book 2177 No. 857 – 23.6.1951.

⁸² LTO Book 3611 No. 430 – 20.12.1984.

⁸³ LTO Titles 13-14 / 797340 – 20.1.1989.

⁸⁴ LTO Volume 9278 folio 180.

The RMS Heritage and conservation register provides some additional information. *'[A]fter 1901 [Lot 10] was purchased by the Postmaster-General's Department to build a trunk cable repeater station. The part of this land containing the original street frontage, Lot 1 DP 214304, was purchased by the DMR in 1962.'*

The widening of the Hume Highway road reserve has resulted in the loss of the southernmost 25 metres, about a quarter of the length of the lots.

6.11.2 Archaeological Survey

No archaeological remains were observed in the two lots [refer to Figure 6.53].

6.11.3 Stage 2 Excavation

The area within the impact footprint was stripped of the grass cover and topsoil to expose the clay A2 horizon. This did not show any disturbance of the subsoil by down-cutting features at all. It is likely that the two lots within the impact footprint remained vacant throughout their ownership.

6.11.4 Interpretation

Any interpretation has to accommodate the loss of the front of the lots. Even so there was little artefact material, which suggested that there may not have been a structure on the front section of the lots.

It is much more likely that the absence of occupation evidence is a reflection of a use restricted to grazing or as an agistment paddock. While George Barber himself was one of the extended family of Hume and Throsby that initially pioneered European settlement of this area, his death following the purchase of the lots may have prevented his daughters, as his heirs, from following through with any plans that he had for a tangible presence in the town. It should be noted that his daughters acquired Lots 5 and 6 in this town section in 1842, but do not appear to have done anything with them either. The 1840s depression may have also constrained the available capital or enthusiasm for speculative town lot building as well.

There is no indication that there was ever any significant activity on either Lot 9 or 10. It is not considered likely that there would be any archaeological evidence in the extant section of the blocks north of the impact area.

A strip of the impact area measuring about 1 metre wide was not excavated as a result of the presence of buried telecommunications services. The area of buried services is considered to be unlikely to retain archaeological evidence of historical occupation as a result of the presence of the services and the impact of their installation.

6.12 Zamia Street Road Reserve

[*Current title – Lot 11 DP 111641*]

6.12.1 Ownership History

The section of Zamia Street north of the main road was part of the original town plan. The westernmost half was closed and issued as private property to Walter Riley in 1967⁸⁵. It was transferred to Michael Galland in 1979 and then to Christopher Riley in 1985⁸⁶. It was then transferred to the Felthams and eventually Holcim⁸⁷. None of the rear lots in Sections 7 and 12 appears to have ever been developed or residentially occupied.

6.12.2 Archaeological Survey

No archaeological evidence was identified during field surveys in a variety of conditions throughout the course of the project. No evidence was identified for the road reserve having been defined by side drainage.

6.12.3 Stage 2 Excavation

No excavation took place as part of the OM7 project in this area. Development impact is restricted to a fairly narrow strip against the existing highway reserve, as the road formation for the highway begins to taper towards the established line of the highway. The ground was boggy and considered to be unsuitable for machine excavation, and there were a number of unmarked telecommunication lines passing through the area from the Telstra bunker immediately to the west which would have disturbed any below ground archaeological resource.

Based on surface evidence the alignment of Zamia Street is unlikely to have been formalised beyond being delineated by property fencing on either side, if any. There is no indication of side drainage. It is unlikely that the alignment was surfaced or formed.

There is considered to be a very low level of archaeological potential for this road alignment within the development footprint because of the likely lack of archaeological remains and the impact of later utility lines. Generally the side roads do not appear to have been developed or formalised with kerbing and side drainage and are likely to have been only defined by property fencing.

⁸⁵ LTO Vol. 10664 Folio 182 – 3.11.1967

⁸⁶ LTO Vol. 10664 Folio 182 – 7.8.1979; Lot 11 / 111641 – 4.3.1985

⁸⁷ See certificate of title 11/111641.

6.13 Section 7 Lot 1

6.13.1 Occupational History

Lot 1 of 2 acres 12 perches was purchased for a school by Mary Ann Hawthorne on behalf of herself and her husband, ticket of leave convict William Hawthorne, on 16 November 1835⁸⁸. The personal drama surrounding their relationship and the fate of the land has been discussed above in Section 3.8.3. There were buildings and yards worth £80-100, on the property and an early survey plan of the lot also shows a structure and several fences or yards being present on the property [refer to Figure 6.54. This building was located towards the front of the block, and now lies on the edge of the expanded road reserve boundary. The land was sold to John Richards, her 'private paramour' in William's words on 21 December 1836, two years before he died⁸⁹. At this point it passed to his widow, Ann, for a period. Then it passed to trustees Isaac Titterton of Parramatta, who already owned two lots in Marulan, and John Ireland, who had been an occasional partner of Richards in their coaching business⁹⁰. They seem to have held it until 1855 when it was granted or deeded to William Thomas Storer [or Storrier]⁹¹. In 1877, after the town had effectively been abandoned it was bought by Thomas Brennan⁹². He sold it to James Franki in 1883, who had earlier bought Lots 2 and 3 to the eastwards and Lots 4, 5 and 6 to the north⁹³. Franki consolidated these lots into what was likely to have been large grazing paddocks.

⁸⁸ NSW LTO Serial 40 Page 109.

⁸⁹ NSW LTO Book L No. 83; *Sydney Gazette* 10.11.1838.

⁹⁰ NSW LTO Book T No. 381.

⁹¹ NSW LTO Book 39 No. 781.

⁹² NSW LTO Book 176 No. 307.

⁹³ NSW LTO Book 274 No. 910.



Figure 6.56 – Detail from Town survey plan showing buildings and fences in Section 7 [source – SRNSW Map 3806A, town plan withdrawn 1902]

6.13.2 Archaeological Survey

This section was included in the survey area but it is almost all outside the impact area, apart from the southern extremity of the features near to the road reserve.

Table 6.21 – Elements located in Section 7.

Element	Survey markers	Element type	Proximity to impact area
OMF 39	M050, 51, 53, 54, 55	Linear drain feature	Outside / Close
OMF 042	M057, 58, 59, 60, 61, 62, 63, 64, 65	Exotic plantings	Outside / Close

The low lying ground is spongy and forms a natural drainage point off the road reserve. It is not clear whether this is a historical condition or it results largely from the building of the modern highway embankment. There is a slight slope to the southwards that suggests a small peripheral drainage line was disrupted by the embankment. OMF 39 and OMF 43 are drainage lines that run perpendicular to the road and also parallel to the road. These do not reflect any historical lot boundaries, so they probably reflect later drainage lines, aimed at keeping the fields reasonably dry.

An extensive cluster of exotic trees [OMF 42], some sitting beside the main drainage lines, mark the area. Apart from one small hawthorn at the other end of the survey area these are the only exotic trees noted.

6.13.3 Stage 2 Excavation

The impact footprint within Section 7 Lot 1 is restricted to a narrow strip along the road boundary. This area was not machine excavated as Telstra cables are located in this area.

The area of Section 7 Lot 1 located outside the study area may retain archaeological evidence of occupation by the Hawthornes in the mid 1830s, and the plan evidence suggests that a later building and fences may have been present towards the front of the lot. However this was likely lost in the widening of the highway in the 1970s. The drainage line OMF 39 and the line of trees OMF 42 are likely to reflect a relatively recent period of occupation in the late 19th or 20th century. OMF 42 may reflect landscape planting as early as the end of the period of Marulan's town life, but this is not considered to be very likely on the basis of available evidence.

Lot 1 retains interest because of its association with the historically known William and Mary Ann Hawthorne. The archaeological evidence of their occupation and possible later use of the lot have been destroyed by the widening of the highway in the 1970s and any potential archaeological evidence within the study area has been impacted by the Telstra cables.

6.14 Section 7 Lots 2-3

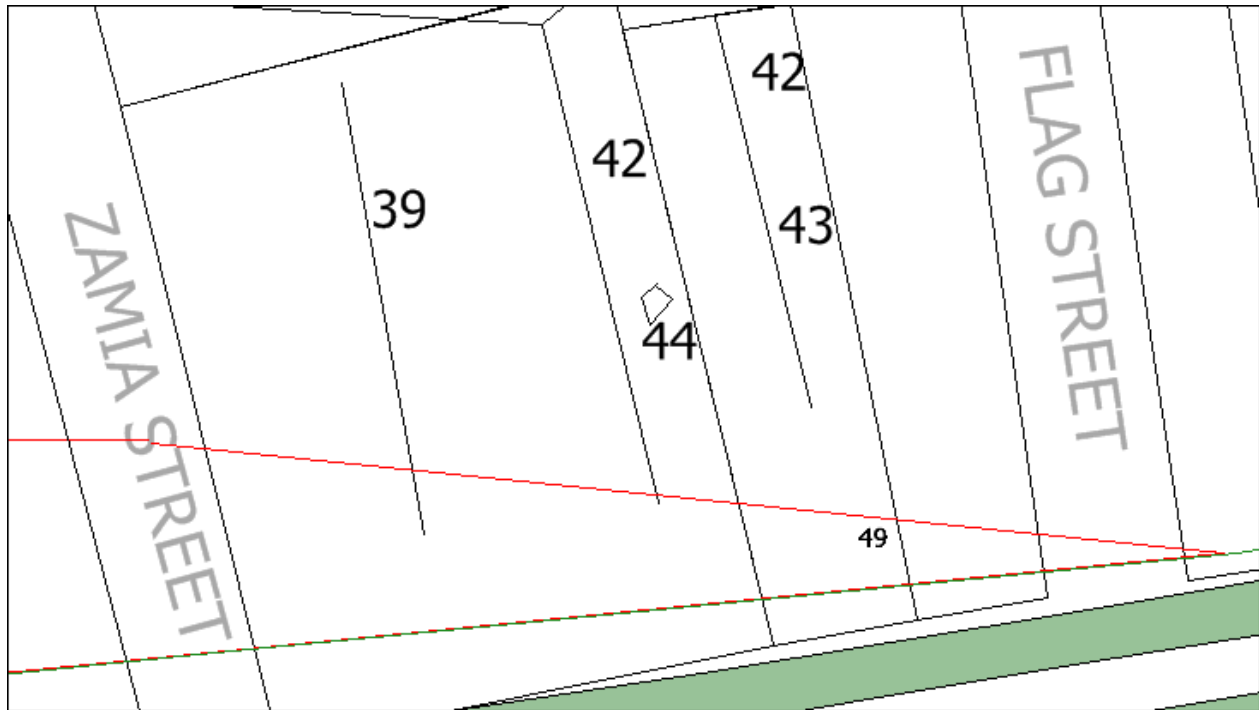


Figure 6.57 – Location of Sections 7 and 12, Zamia and Flag Streets within the site. Red outline shows development impact area.

6.14.1 Occupational History

During the township period the land was owned by Jas [James] Fulljames, who with John Fulljames, owned a significant block of town lots on this side of the South Road. The lot is not annotated at all in the parish and town map series as having a distinct use, but in 1868 is marked in Deering's map as being the post office [refer to Figure 3.11].

John Fulljames [also sometimes spelled Fuljames] bought Section 7 Lots 2 and 3 in June 1847. In the title documents he is listed as a storekeeper⁹⁴. In the same year he was listed as the Marulan poundkeeper⁹⁵. By 1857 John was the postmaster in Marulan, as a newspaper report on an accidental shooting involving his son Thomas makes clear⁹⁶. Also in 1857 he purchased the five lots of Section 12, extending north of the land that he already owned⁹⁷. J. and R. Fuljames [sic] are listed as store-keepers at Marulan in 1872, probably the new town.⁹⁸ It is not clear if he is the same individual as John Fulljames, who in the 1860s was a Bungonia-based pastoralist and stock agent, and for a time the owner of 'Riversdale' at Goulburn.

⁹⁴ NSW LTO Serial 220 Pages 145, 146. The title was regranted in 1848 due to a survey irregularity –Serial 221, pages 167, 168.

⁹⁵ Eddy 2000: 21.

⁹⁶ *Goulburn Chronicle* 28.1.1857.

⁹⁷ NSW LTO Lots 1-5 DP758653.

⁹⁸ *Greville's Post Office Directory* 1872.

It is not known when Fulljames won the Marulan post office contract. It was later awarded to Francis McCarthy in 1861, then to long-term local resident and occupant of the Woolpack Inn John O'Neil [or O'Neill] in 1866. When Moorooloolen was established in 1869 O'Neil also ran the post office there, with his wife operating the Marulan post office⁹⁹. The Marulan post office was officially closed on 28 February 1874, and the postmark stamp was officially transferred to the new town in 1878. The property passed to Eleanor O'Neil in July 1875, probably as his widow¹⁰⁰. She sold it on to Thomas Brown, a farmer, in 1875 and then it was sold quickly in succession to Augustine Betts, a solicitor, in April 1877 and Peter Franki, superintendent, in February 1878¹⁰¹. The next sale was to Percival Grose in 1925 who remained the registered owner until recently.

Given the land use history it is likely that the building was demolished for building materials or allowed to substantially decline and collapse after the transfer of the mail contract. This may have happened any time from 1874 onwards, assuming that the building remained as the post office once the contract was transferred. The rapid transfer of title in the 1870s also makes it likely that there was negligible owner interest in buildings on the site.

6.14.2 Stage 2 Excavation

Grading along the road margin to the east of the Telstra bunker was restricted because of both the boggy nature of the ground and the uncertain location of buried services. The average width of the trench excavated was only 2 metres and it was not considered that there would be much opportunity to expose archaeological remains in such a confined space. However, a structure, designated Feature OMF 49 was identified in Section 7 Lot 2 at the easternmost end of the impact area. The structure was represented by footings and other structural remains and some probable associated artefact material. It is likely to be the post office shown on Deering's 1868 map [refer to Figure 3.11].

The remains exposed, including those of the structure, consisted of the following units [refer to Figure 6.56]:

Unit [73] – Line of modern highway construction disturbance representing dark grey redeposited fill. This was not further excavated following identification as it may have contained active services.

Unit [75] – Line of sandstock bricks with diamond shaped frogs, lying on top of a partly revealed flat stone paver, probably sandstone or limestone. The bricks were mainly laid as headers, but the end two were paired stretchers over the slab. The section of brickwork exposed is c. 1 metre in length and is interpreted as a probable base for a 1 brick thickness wall.

⁹⁹ Eddy 2000: 40.

¹⁰⁰ NSW LTO Book 152 No. 579.

¹⁰¹ NSW LTO Book 163, No. 131; Book 168 No. 516; Book 188, No. 960; Book 1384 No. 611.

Unit [76] – This was a brick surface bedded into very dark grey light clay sand. The bricks were ½ thickness fragments ranging in size from ¼ to ½ brick size. This included fragments of bricks with diamond frogs. The bricks were on the surface of a light clay fill, with a total depth for the unit of c.150 mm, determined by excavating a testpit. Beneath the sandy clay fill there was a possible construction surface, containing specks of sandstone and mortar splats.

Not separately numbered – Post hole, square in section, measuring 300 x 300 mm

Not separately numbered – Line of disturbance and possible filled-in post hole or pit that lies along the fence boundary. This was a modern feature which cut through [73]. The visible section of the pit contained some building rubble, including sandstone pieces.

Not separately numbered - Severed cable. This was a section of exposed heavy duty iron or steel cable that was buried in its present condition.

An artefact scatter consisting of building materials [OMF 44] lay between two drainage lines. This consisted of sandstone blocks [which must have been brought in to the site], modern and late 19th century bricks. It is not possible to be certain whether this represents demolition rubble from a structure on the site or dumping of refuse such as is sometimes used to stabilise boggy ground.

The remains were of a building, consisting of a definite wall and probable interior floor made of split bricks used as pavers. The construction was professional and substantial, and suggests that the building itself was of considerable size and quality. The limited exposure does not allow for more interpretation. As discussed earlier Deering's plan shows all buildings in Marulan as placed right on the edge of the road, but this seems to be schematic rather than actual. It is therefore not certain whether the building found represents the rear of the main post office building or a rear structure.

The artefactual materials found were consistent with the middle period of Marulan's occupation. These included a reduction in black bottle glass and the higher proportion of lighter coloured glass, a slightly wider variety of ceramics and the diamond frog bricks, which are not found at the Woolpack Inn. Associated artefacts were all of mid-late 19th century date, with no evidence of occupational deposits or material from the very latest 19th or 20th centuries. It is probable, as with other Marulan buildings, that they were either demolished for materials or gradually left to decline. At some stage, as shown by the bulldozing of demolition rubble, the remains of the buildings were levelled and flattened. This could either have happened during routine works on the Hume Highway, the laying of one of the telecommunication cables running along the road margin or by a landowner.

The area within the impact footprint has been excavated and recorded, but it is evident that structural remains extend northwards outside the impact area. These may have suffered less later disturbance than the remains adjacent to the road reserve which show evidence of levelling and then excavation for services and probably for the construction of the road formation.

The area immediately to the north, outside the impact footprint, is therefore considered to be particularly archaeologically sensitive and should be avoided in any future ground disturbance. Where relocation of services is required then the impact should be localised to the area previously disturbed.



Figure 6.58 – Diamond shaped frogs on bricks laid for Marulan Post Office

6.15 Section 7 – Remainder

Table 6.22 – Features located in Section 7.

Features	Survey markers	Feature type	Proximity to impact area
OMF 040	M052	Artefact scatter	Outside
OMF 041	M056	Artefact scatter	Outside
OMF 043	M066, 68, 69	Linear drain feature	Outside
OMF 044	M067	Building material scatter	Outside

The remainder of Section 7 is largely level, although there is a slight slope in the land southwards away from the creek, which contributes to the boggy nature of the area near the road. There are a number of perpendicular drainage lines cut into the surface, although these do not generally appear to relate to any of the historic property boundaries and are probably of relatively recent vintage.

There are two small artefact scatters adjacent to the creek line outside the area of impact [OMF 40 and OMF 41]. These consist of a few small pieces of earthenware ceramic. It is likely that these are the remains of systematic dumping of refuse into the creek line. It should be noted that the first map of the area shows the creek as a chain of ponds and is now an extensive erosion channel that would have removed at least 10 metres of creek-side deposit.

Another artefact scatter consists of building materials located outside the area of impact between two drainage lines [OMF 44]. This consists of sandstone blocks, which must have been brought in to the site, modern and late 19th century bricks. It is not possible to be certain whether this represents demolition rubble from a structure on the site or dumping of refuse such as is sometimes used to secure boggy ground. The building shown in Figure 3.11 is likely to have been lost in the construction of the expanded road although it may have been the source of the material.



SECTION 7.0

Artefact Analysis

7.0 Artefact Analysis

A total of 49,211 artefacts were excavated and registered. These were predominantly from stratified contexts with close spatial control, i.e. they can be relocated to a specific stratigraphic unit within a 2 x 2 metre area. As such the artefact collection retains a great degree of analytical potential that includes not only the research questions generated from this excavation, but can also be interrogated to provide other information for future researchers. Other researchers have already used the collection for further archaeological work, including Honours degree archaeology students, and artefact researchers in Australia and the United States have made enquiries concerning specific components of the collection. Parts of the collection have also been used in Archaeology Honours training in artefact analysis and processing techniques.

7.1 Artefact Processing Method

7.1.1 Standards

The collection of archaeological information was guided by the requirements of the consents issued for the work [refer to Volume 1], which required that all archaeological data be recovered to a standard commensurate with its archaeological significance.

Artefacts were collected during the Stage 1 and 2 excavations. The majority of these were from stratigraphically secure contexts with good spatial control [within a 2 x 2 metre square], although some were also collected as representative material from mechanical scraping.

7.1.2 Field and Laboratory Procedures

Artefacts recovered during the excavation were retained for analysis and form part of the archaeological collection. The general procedure carried out was as follows:

1. Excavation took place in stratigraphic units. This was documented by a unique number for each stratigraphic context, such as a layer of soil, structure, post hole cut, surface or fill [refer to Attachment 5 for a complete list].

Excavation took place in a grid system consisting of [usually] 2 x 2 metre squares for spatial control. Each square was designated with the Cartesian coordinate of its southwestern corner in 6 digits, for example 250 / 592. The same stratigraphic unit could extend into two or more adjacent squares. Also in post-excavation analysis differently numbered stratigraphic units could be identified as identical or equivalent. Generally, in such cases the original numbering is retained but the data has been aggregated where necessary.

There were two exceptions to this general system. Firstly, during the mechanical excavator grading of large areas, artefacts were recovered and retained within 10 x 10 metre blocks rather than in more closely delineated areas. Secondly, all Aboriginal artefacts were individually given exact Map Grid of Australia coordinates using an unrectified GPS.

2. All artefacts uncovered during excavation were retained. Most excavation units were sieved through 5mm sieves, and all artefact material retained. Generally this meant anything that was not soil, plant or root material or natural stone outcrop was kept for cleaning. Particularly small pieces of glass, charcoal and other material were not retained. These measured less than 10mm in their maximum dimension.

All retained artefacts, whether from digging or sieving, were kept together with their provenance information as a single find context.

3. A field specimen number was allocated to each find context or bag of artefacts, as the same unit could be excavated over successive days. This was in the form FS XXX.
4. Artefacts were examined and separated into washable items – ceramics and glass – and items to be hand cleaned only. At this point any fragile material or fragments that had to be retained together were also attended to, such as by grouping items into sub-bags or diverting for specialised documentation and cleaning.
5. Once cleaned, artefacts were sorted according to fabric, and then systematically described and entered into a Microsoft Access-based relational database. The database has been developed by Jeanne Harris of Urban Analysts and has been widely used for other historical archaeological assemblages in Australia.

An initial decision had been made to use a computerised version of the Port Arthur Artefact database. However, it was found to be cumbersome in operation, and was set aside in favour of the Urban Analysts database.

6. Artefacts were described according to set descriptive fields used by the database, quantified and then re-bagged into specially labelled bags that have a unique catalogue number printed on card. The catalogue number corresponds to the database entry number.

An example of a completed collection label is shown below.

OLD MARULAN 07
CATNO 1579 NORTH 276 EAST 612 Unit 40
Pipe, tobacco Personal – tobacco Ceramic, earthenware Ball clay (kaolin) stamped QUANTITY 1 MIC 1

Excavation name
Catalogue and database entry number
Square coordinates and stratigraphic unit
Object name
Function
Material from which object made
Technomorphological attributes
Quantity of pieces; minimum item count

Figure 7.1 – Standard format of OM7 artefact tags used in final collection

7. All artefacts were sorted into one of three categories:

- Display collection
- Study collection
- Discard collection

on the basis of culling criteria as set out in Section 7.2.2 below. This reflects the relative informational value of the finds as well as other interpretative or educative value that they may have.

8. All artefacts were boxed according to which collection they belonged in numbered boxes supplied by NSW State Records Office. These are top-opening boxes which are reasonably standard in Australian historical archaeology. The boxes measure 395 x 250 x 170 mm. All boxes were numbered and the box number was added to the information for each item record. Large items were boxed in a larger tub or separately tagged and stored loose.
9. The boxes are temporarily housed in a Holcim storage facility. A permanent repository depends on a range of issues that have yet to be determined [see below for commentary].

7.2 Collection Management

7.2.1 Categorisation and Management

During analysis all artefacts were divided into three categories – display quality collection, study [or reference] collection and discard collection [material to be culled].

Display Collection

The display collection consists of those items that are:

- i. Complete or fine examples of representative items from the entire collection.
- ii. Unique and / or rare items.

This collection is dominated by ceramic vessels from the Woolpack Inn cesspit deposit, which include a large number of complete or near-complete pieces that could be re-assembled from fragments found in the deposits.

Study Collection

The Study collection consists of samples and examples of each artefact type from each context. The Study collection is integral to any future research on the site or study of the collection. This collection allows any future research to readily identify artefacts as described in the artefact catalogue.

An essential purpose of the Study collection is to provide tangible evidence of the descriptive categories and data generated by the artefact analyst, ie. it allows a later researcher to validate the original description and interpretation made of the object and therefore assemblage. There is a fundamental archaeological principle that data is separated from interpretation. The Study collection allows data to be independently reviewed by future researchers, who may have an expanded knowledge of the artefacts or different analytical tools at their disposal.

Discard Collection

The intention of the Discard category was to identify material that could be safely discarded or separated out without compromising the analytical potential of the collection as a whole.

The criteria used to determine what material could be removed or culled from the Marulan collection were:

- i. The artefact had no diagnostic value – its form could not be determined, e.g. a ceramic body sherd with no rim.
- ii. Form was determined, but the artefact provided no temporal, functional and / or techno-morphological information. Examples include:
 - bottle glass
 - strap or hoop iron
 - brick fragments.

- iii. Form could not be determined, but is temporally and functionally identified. There are multiple examples of these items. An example or sample was retained as part of the Study collection. Examples include:
 - a. fragmented ceramic vessels
 - ware and/or decoration is datable
 - multiple examples of the same artefact type that is in poor condition, e.g. by fabric decay or fragmentation.
 - b. fragmented glass bottles
 - c. fragmented decorated ceramic tableware
 - d. fragmented nails.

7.2.2 Culling Procedures

The following process was used to document the collection and provide surety that the culling process would have the least possible impact on the information value of the archaeological collection. The artefact management policy was submitted to the Heritage Branch for their input. The Heritage Branch subsequently have endorsed the process on 1.9.2009.

1. All artefacts were sorted into display collection / study [reference] collection / discard collection at the time of initial analysis and data entry by the Artefact Analyst [Jeanne Harris], using the criteria set out in Section 7.2.1.
2. Following the completion of the draft report the entire culled collection was reviewed by the Excavation Director to ensure that the initial sorting [Step 1] was consistent and justifiable. This was done at the end of the main analysis, and involved re-examination of all discard collection material in relation to their source contexts to determine whether further analysis was required or more specific information could be derived from particular artefacts.
3. Once satisfied that the allocation of artefacts to the three categories was correct and consistent, a recommendation was made to the Heritage Branch to endorse this artefact management strategy, subject to the remaining processes being completed. Once endorsed and the following actions completed, the discard collection can be disposed of as the Excavation Director requires. The Heritage Branch has endorsed the artefact management policy.
4. All artefacts in the Discard collection are photographed digitally in colour to medium resolution [typically 4-8 MB per image] in accession groups with provenance information and photographic scales. These images are saved in TIFF format as part of the digital data collection.

5. All glass artefacts have been examined to determine if they had any evidence of use-wear or deliberate flaking. None was identified that could not be readily attributed to standard open area breakage processes such as cattle treadage or frost spalling
6. As the Discard collection has not been accepted for use by an institution or other user, the different material groups have been disposed of as follows:

Glass	sorted by colour and taken to a glass recycling facility
Ceramic	into normal refuse stream
Metal	ferrous – into normal refuse stream copper – into specialised metal recycling facility
Packaging	boxes – reused labels – paper recycling plastic bags – retained if sound, otherwise into refuse stream.

7.2.3 Current Status of the Artefact Collection

The artefact management policy was endorsed by the Heritage Branch on 1.9.2009.

The OM7 artefact collection is currently housed in a secure and environmentally stable Holcim storage facility at Lynwood, NSW. The use of the storage facility is available until a resolution is made regarding the long-term transfer of the collection. All documentation requirements under the artefact management policy have been completed.

The Marulan and District Historical Society will be now opening a new building in mid 2015. The building will allow interpretative objectives like the establishment of a permanent display and the long-term management of the archaeological collection [for research and display] to be achieved.

7.3 Artefact Analysis – General Results and Commentary

The analysis of the artefact collection represents a considerable amount of work to process, then identify, register and research each of the 50,000 or so artefacts found. Moving beyond this to assigning dates for individual artefacts and the deposits within which they were found, and trying to determine what the artefacts represent, was even more complex, but essential to the archaeological process of interpretation.

The analytical framework that was used in the analysis, including the history of the different types of artefacts found, represents a substantial contribution to our knowledge of 19th century Australian material culture. This information is presented in detail in the Specialist artefact analysis report prepared by Jeanne Harris of Urban Analysts, in Volume 4 of this report series. The following section summarises some of the concepts that she uses in her artefact analysis.

7.3.1 Typologies

Standard typologies were established for the assemblage as a prelude to chronological reconstruction. The main artefact categories represented are glass and ceramic. Both show considerable variation over time as technological developments are made and tastes change. These provide good evidence for dating individual pieces, even quite small fragments.

The typologies used are representative of the ones that have been found most effective in historical archaeological analysis to describe forms that are diagnostic, ie retain features that provide dating evidence, or point to a manufacturing technique with dating or functional implications.

7.3.2 Dating

It was possible to provide dates for when about 60 percent of the old Marulan artefact assemblage was manufactured. This obviously can be very different from the date of importation of items to Australia, when they were used, and when they finally entered the archaeological record. To determine these requires examining all of the artefacts that are found together and establishing a date for the entire assemblage from a single stratigraphic unit.

Dating can be established using a range of sources, using patents, manufacturer's and merchant records, advertisements and other evidence. Some dating can be specified as definitively after a certain date, eg registration date for a ceramic pattern, or the establishment of the business marked on the side of a bottle. These provide initial dates but hardly ever final dates. Often objects can be reused and so have a secondary life that delays their entry into archaeological contexts. Dating can be provisionally set according to popular use ranges, and a mean date can be applied in some cases.

Factors that can affect the time lag between manufacture and discard can also include the relative cost of the item. For example, more expensive ceramics saved 'for best' in a household may be used only rarely and thus less likely to suffer the normal frequency of breakage. Other goods may be used sparingly, or curated, because their replacement is difficult. One of the research questions considered for Marulan was whether its rural location and distance from Sydney as the main market provided any incentive to conserve, re-use or recycle goods rather than discarding them.

Occasionally manufacturer's or retailers marks are present on an item. These provide excellent dating information, but are subject to the same caveats as discussed above.

7.3.3 Functional Classification

The function describes where or how an artefact was used. Function is generally attributed based on the identified form of an item, but often that cannot be conclusively determined or is ambiguous. Classifying by function provides a way of determining what different activities were taking place on the site, as comparison by item type may be too fine-grained, eg. in one area building nails may be present, while in another, window glass and a third may have a roof tile. They all reflect an architectural function that potentially links them even though the objects and their materials differ.

The functional classification used in this analysis includes the following categories:

- Activities
- Architecture
- Arms
- Clothing
- Food
- Furnishings
- Household
- Medicine
- Miscellaneous
- Personal
- Transportation
- Utilities

The Specialist artefact report [Harris, in Volume 4 of this report series] discusses further the use of functional classification and what items are generally placed in each of these categories.

Six of the major deposits with substantial material present were particularly examined in detail to determine whether there were significant differences in the functional categories between them, and whether this had any bearing on interpreting site activity. The six units were [2] – topsoil – upper profile, [3] – topsoil – lower profile, [4] – tree throw fill - upper, [5] – surface scatter, [15] – tree throw fill - lower and [41] – cesspit deposit fill. The MIC counts for each are presented in Table 7.1.

Table 7.1 – Frequencies of all functional categories in six main artefact-rich stratigraphic units. Mean is taken as average of percentage frequencies across the six stratigraphic units and is not weighted for total artefact numbers.

Function	Unit [2]	Unit [3]	Unit [4]	Unit [5]	Unit [15]	Unit [41]	Mean
Activities	1.3%	0.8%	4.7%	0%	1.5%	3.0%	1.9%
Architecture	14.5%	18.9%	40.1%	16.0%	19.7%	10.0%	19.9%
Arms	0.5%	0%	0%	0%	0%	0%	0%
Clothing	2.0%	0.8%	1.1%	2.0%	2.1%	10.0%	3.2%
Food	53.3%	53.2%	40.1%	62.0%	54.0%	56.0%	53.1%
Furnishings	0.4%	0.8%	1.1%	0%	4.5%	1.0%	1.3%
Household	0.5%	0.2%	0.3%	0%	0.2%	1.0%	0.4%
Medicine	0.4%	1.2%	0.8%	2.0%	0.9%	1.0%	1.1%
Miscellaneous	20.5%	15.9%	7.7%	10.0%	10.3%	8.0%	12.1%
Personal	6.3%	8.1%	3.9%	8.0%	5.3%	10.0%	6.9%
Transportation	0.5%	0%	0.3%	0%	1.0%	0%	0.3%
Utilities	0%	0%	0%	0%	0.5%	0%	0.1%

All of these assemblages are dominated by food function items, being primarily ceramic vessels and glass bottle remains, which comprise greater than 50% of all six assemblages except Unit [4]. Architectural items are next most common, being building demolition rubble at a constant density. The main variation is in Unit [4], which contains about double the average frequency of architectural items. This has been interpreted as being a clearance deposit. Clothing function remains are surprisingly high in [41], perhaps reflecting the characteristic loss of buttons and other clothing items during the use of the cesspit.

While the functional analysis provides a fundamental sorting of artefacts into groups it does not differentiate between the major deposits, apart from the few variations noted above. This would tend to indicate that the deposits were all used for general discard, or received refuse over a sufficient period to mask any specific discard patterns.

7.3.4 Market Access

This refers to the extent of trade and commercial networks within which the town operated. There were very few goods being manufactured in the colony during Marulan's occupation. These are examined in Table 7.2. The main exceptions were ceramic products such as utilitarian pottery and clay tobacco pipes. Individually handcrafted items most commonly bore no mark of their actual manufacturing location, and it was likely that many colonial clothing manufacturers, for example, went to great lengths to disguise the local origins of their articles. Of the items whose place of manufacture was known, most came from overseas, and almost all entered via the port of Sydney.

Market access measures how well Marulan fit into these international trade networks. There are no surprises in the prevalence of British goods in the form of English tablewares and Scottish bottles and clay tobacco pipes. It reinforces two important observations to keep in mind when thinking of Marulan as a remote little town – firstly, it was able to participate in what were essentially global networks for trade and commerce. As a small town in a colony of an imperial power it would be expected that even though raw materials such as wool and whale products were heading for Britain, it was receiving in turn a large quantity of manufactured goods. The second point to make is that there are no indications of differential access to the commercial market for this small town as compared to Sydney. The internal colonial trade and economic networks were clearly effective within this radius of Sydney.

Table 7.2 – Summary of identified manufacturers and product manufacturers by country [for details refer to Harris artefact analysis – Volume 4 – Table 4.1].

Country	Shape	Quantity
Australia	Bottle	4
"	Ceramic tableware	2
"	Pipe, tobacco	8
England	Bottle	7
"	Button	6
"	Ceramic tableware	21
"	Lid	3
"	Pipe, tobacco	1
"	Stopper	3
France	Bottle seal	1
Netherlands	Bottle	2
Scotland	Bottle	13
"	Foil	1
"	Pipe, tobacco	28
USA	Key	1
"	Shotgun shell	3

7.3.5 Quantification

The final Old Marulan 2007 artefact collection is represented as follows:

By Artefact Quantity

Table 7.3 – Quantities of excavated artefact material.

Collection Type	Quantity	Percentage	No of archive boxes
Display collection	332	0.7%	
Study collection	6557	13.5%	
Discard collection	41791	85.8%	

By Minimum Item Count

Table 7.4 – Proportion of artefact material in sub-collections, by Minimum item count.

Collection Type	MIC	Percentage
Display collection	175	3.6%
Study collection	2429	49.4%
Discard collection	2310	47.0%

In this analysis minimum item counts [MIC] are used rather than raw counts of pieces. This is necessary as the material is fragmented differently across the site and relying on the number of pieces only would skew the comparison. For example, in of the Woolpack Inn cesspit a plate may be largely intact but broken into three large pieces, all of which are recovered and able to be reformed into a single item, while in another it has been repeatedly trodden underfoot and is now in 20 fragments. The different quantity of pieces is deceptive. Elsewhere 20 pieces could also represent more than a single plate as well.

Consideration has also to be given to parts represented. In one area of the site a large number of clay tobacco pipe pieces were found, including bowl and stem fragments. Some pipe stems could break into a dozen pieces. To get an accurate count for how many pipes in total were actually present, the different elements were counted, and the minimum number of items that could account for these became the MIC.

7.4 Faunal Analysis – General Results and Commentary

The faunal analysis represented a major specialist analysis of the material. It was prepared by faunal specialist Ms Caroline Wilby. The final faunal report is presented in Volume 4 of this report series.

The old Marulan faunal assemblage derives from forty excavation squares / spits with twenty-four identified contextual units, the bulk of which derived from Unit [41], the deposit within the cesspit associated with the Woolpack Inn. Bone and shell was distributed across the site as shown in Table 7.5.

Table 7.5 – Distribution of bone and shell across the site. [NISP or Number of identified specimens is the count of individual identified bones, while MNI or Minimum number of individuals is a calculation of how many separate animals could account for all the identified bone].

Unit	Bone NISP	Bone No.	Shell NISP	Shell No.
[2]	4.3 %	133	17.4 %	4
[3]	2.9 %	90	13.1 %	3
[4]	4.7 %	144	0 %	-
[13]	5.4 %	166	0 %	-
[15]	3.5 %	108	13.1 %	3
[18]	1.1 %	33	4.3 %	1
[40]	1.1 %	34	4.3 %	1
[41]	72.1 %	2217	4.3 %	1
Others	4.9 %	150	43.2 %	10
TOTAL	100 %	3075	100 %	23

More than 70% of the faunal material was found in Unit [41]. The remainder generally occurred primarily within sheet midden and general topsoil levels across the site, with some dumping in tree throws and depressions across the site. The relatively low frequencies of bone and shell within general sheet middens or backfill units [c. 20% of assemblage] indicates that simply throwing food refuse out the back window was not an overly common practice on Peter's lands. This suggests that most of the bone was disposed of in an organised manner and took place off the site. There is very limited evidence of rodent gnawing which also supports the idea of the deliberate management of food refuse.

The following data was recorded for each bone:

- Provenance
- Taxonomic Identification
- Skeletal Element
- Breakage Unit
- Specimen Count
- Anatomical Features of Age
- Butchery
- Condition – burning, weathering etc.
- Scavenger Attrition
- Pathology

Although most of the animal bone specimens were damaged it was possible to identify nearly 90% of all bone to species or genus level and 85% of all bone was identifiable to skeletal element. All shells could be identified to species, even though many were fragmentary. The species or taxonomic groupings are presented in Table 7.6.

Table 7.6 – Identified animals by species / genus / family or morphotype [NISP or Number of identified specimens is the count of individual identified bones, while MNI or Minimum number of individuals is a calculation of how many separate animals account for all the identified bone].

Taxon	Status	NISP	% NISP	MNI *
Sheep [<i>Ovis aries</i>]	Introduced	1788	58.15%	37
Cattle [<i>Bos 326aurus</i>]	Introduced	348	11.32%	6
Rabbit [<i>Oryctolagus cuniculus</i>]	Introduced	171	5.56%	5
Chicken [<i>Gallus gallus</i>]	Introduced	159	5.17%	6
Cat [<i>Felis cattus</i>]	Introduced	90	2.93%	6
Pig [<i>Sus scrofa</i>]	Introduced	58	1.89%	4
Goat [<i>Capra hircus</i>]	Introduced	47	1.50%	2
Kangaroo / wallaby [<i>Macropus</i> sp.]	Native	17	0.56%	2
Koala [<i>Phascolarctos cinereus</i>]	Native	38	1.24%	1
Brown Hare [<i>Lepus europaeus</i>]	Introduced	13	0.42%	1
Rodent – rats & mice [<i>Murinae</i> sp.]	Native & introduced	4	0.13%	2
Dog [<i>Canis familiaris</i>]	Introduced	3	0.10%	2
Horse [<i>Equus caballus</i>]	Introduced	2	0.07%	1
Small carnivore sp.	Introduced	48	1.56%	2
Artiodactyla sp.	Introduced	23	0.75%	2
Small mammal		48	1.56%	2
Medium mammal		120	3.90%	1
Medium-large mammal		48	1.56%	1
Large mammal		33	1.07%	1
Bird sp.	Not known	17	0.56%	2
		3075	100%	84

The range of animals is likely to include both those eaten and whose body parts may also have been used [such as for hides] and 'drop deads' that enter the archaeological record as either deliberate or accidental deposition of carcasses. Cat, dog and horse skeletal elements are likely to represent dumping of carcasses, and the rabbits and rats may be incidental deaths of animals that were burrowing in the deposits.

The remains of the marsupials cannot be clearly attributed to consumption as there are no preserved butchery marks. Kangaroo and wallaby body parts were widely eaten where available in the bush, as attested by 19th century Australian cookbooks and travellers' memoirs. The remains of the koala are unlikely to be from the dinner table, although they were eaten as part of both the Aboriginal and European diet. Alternative explanations could have it as a hotel 'pet' or a curiosity belonging to a traveller that was discarded in the cesspit.

All of the shells were identifiable as Sydney rock oyster [*Saccostrea glomerate* – formerly *S. commercialis*]. The 23 fragments derive from no less than 14 individual shells. This oyster is naturally distributed along the NSW coast, but there is great difficulty in communicating between the coast and Marulan because of the Shoalhaven gorge. It would take at least two days, and probably three for a person on horseback to reach Marulan with a ‘fresh’ batch of oysters. This delicacy can be prepared for travel, but there is a risk of spoilage and contamination¹⁰². That oysters were served reflects something of the standard of custom set for the inn and the expectations of a certain class of traveller.

Distinct patterns of husbandry can be related to the different assemblages and species. Age at death could be established from teeth and some long bones, allowing for an estimation of how meat was procured sustainably over time. In general terms there were differences between the cesspit and surface assemblages, indicative of commercial kitchen needs. Cuts of meat and possible dishes were identified, consistent with known 19th century recipes. These also support the Woolpack Inn aiming at a higher class of meal being offered than the general diet indicated by the surface material.

7.5 Other Specialist Analyses

7.5.1 Soils Analysis

The soils analysis was prepared by Dr Roy Lawrie of the NSW Department of Agriculture. The aim of the analysis was to characterise the soils on the site and to identify any features of the soil profiles that were indicative of human intervention, such as manuring or tilling. A complete copy of the analysis is included in Volume 4 of this report series.

Three mechanically excavated pits were used to sample the site. These identified that the soil is variable across the site, but generally has a clearly distinct loamy topsoil and clay subsoil. Bedrock floaters are present throughout the soil, but appear to have been removed and stockpiled in some areas, suggesting possible ploughing and cultivation.

Analysis of soil chemicals indicated that Soil Pit 3, located in Section 1 Lot 5, has low phosphorus and nitrogen levels, suggesting cultivation. There was no evidence of charcoal or ash in the deposit, nor chemical evidence of ash being added to the soil. Soil Pit 1, at the rear of Section 1 is suggestive of former grazing.

The selective removal of stones to assist in cultivation and chemical evidence suggestive of cultivation and ploughing indicate differential uses for the front and rear parts of the site. Alternately these could be uses at different periods within the history of the site.

¹⁰² Contemporary advice was to carry the oysters in a bucket or container of sea water, possibly wrapped with straw. These could last for a week or more if well-managed.

7.5.2 Soil Microbiological Analysis

The soil microbiological analysis was undertaken by Dr Michael Macphail of the Australian National University. The aim of the analysis was to characterise specific archaeological deposits in terms of any plant material such as pollens, spores, presence of organic material content which may be indicative of the origin of the deposits or their immediate environment. A complete copy of the analysis is included in Volume 4 of this report series.

Fourteen samples were collected, representing material from the cesspit deposit, post holes and the garden bed features. Samples were chosen to avoid contamination by disturbance or handling, and to answer specific questions about the origin and environment of these features.

All samples were processed in a consistent manner, and fossil pollens, spores and other biological information such as macroscopic and microscopic charcoal recorded and identified where possible.

Macphail's report discusses the results of the analysis for each sample. Based on the results interpretations are made regarding the origin of each sample deposit, and the presence of plants in its immediate environment.

Generally only two samples are likely to retain evidence of the township period. There is some difference in the material represented by the cesspit samples and comparable Sydney deposits, reflecting a more impoverished and less diverse diet. The majority of the samples contain pollens that are likely indicators of modern contamination.

7.5.3 Remote Sensing

The remote sensing analysis was undertaken by Dr Martin Gibbs of the University of Sydney utilising ground penetrating radar. The work was undertaken in two sessions – following the Stage 1 test excavations, to trial the suitability of the technique for identifying subsurface features. The second session was to map the extent of the brick clamp – OMF 60 – found on the north side of the creek.

The initial session was focussed on OMF 34A, which at the time was identified as an area of possible structural floor, with associated artefact material. This was subsequently explored as OMF 48 [refer to section 6.8.4]. A 20 x 20 metre grid was laid out and a ground penetrating radar run undertaken at 1 metre intervals. In brief, the results provided no useful information.

A second survey area was laid out measuring 13 x 10 metres, centred on linear drainage Feature OMF 34. This was surveyed using 0.5 metre intervals. The results show the drainage feature clearly. They also show a section of otherwise unknown buried line, possibly a telecommunications cable.

The second session took place in March 2008, with the aim of providing coverage of the brick clamps – OMF 60 – identified to the north of the creek. An area measuring 60 x 40 metres was laid out and surveyed at 1 metre intervals. Despite some difficulty in uneven terrain close to the creek the GPR showed clearly that there were areas of in situ burnt brick representing a series of overlapping brick clamps.



SECTION 8.0

What we found out

8.0 What We Found Out

This section summarises the results of the historical investigation and archaeological research. It addresses some general findings that will be of use to any future consideration of archaeological impacts before dealing with the individual research questions which were identified for the investigation.

8.1 Site Chronology

The chronological outlines of old Marulan are well understood. There is evidence of moderate and sporadic Aboriginal visitation over an unknown period. In the period following the European settlement of Argyle, beginning in 1820, there does not appear to have been any occupation of the site. Mitchell identified the townsite as the place where his great roads to the southwards would divide into lines to Bungonia and Goulburn. Once the townsite was surveyed and laid out in the early 1830s blocks began to be sold. The town was officially founded in 1835, and the first inhabitants – Joseph Peters and his Woolpack Inn establishment and William and Mary Ann Hawthorne – moved in at the end of the year.

The town grew gradually over the coming decades without ever flourishing. However in 1867 the Main Southern Railway avoided the town and crossed the Great Southern Road several miles further north, where a new town was forming at the rail head. Business services, civic functions and residents began to relocate to the new town and the old town was considered to have died within five or ten years. Some residents held on for a time and there was a short-lived lime burning industry that took place within the town limits. The bulk of the town gradually turned over to grazing and perhaps potato growing and buildings either fell down or were cannibalised for materials. This use dominated until the present with the only impacts resulting from highway expansion.

A more detailed chronology can be developed that is based on a combination of the archaeological and historical work. This remains provisional and may change if further analysis or historical research takes place. It is set out schematically in Table 8.1 below.

Table 8.1 – Phasing of human occupation of the site of old Marulan.

Date	Historical phase	Main characteristics
pre-1788	Aboriginal occupation	Aboriginal occupation of the site. Likely to be low-level and occasional use over a long period.
1788 – 1820	Aboriginal – European contact I	Aboriginal occupation as above. European contact mainly through indirect impacts of epidemics and occasional exploratory parties.
1820 – 1835	Aboriginal – European contact II	Grants and occupation of land by Europeans decrease Aboriginal access to land. Creation of a pastoral economy based on convict labour and some use of Aboriginal people.

Date	Historical phase	Main characteristics
1834 – 1835	Marulan founded	Town set out and established. Woolpack Inn under construction, other residences built.
1835 – 1865	Marulan township	Construction of Great Southern Road near the town, and increase in traffic passing through the town. Woolpack Inn opens in 1836. Town lots sold.
1865	The railway doesn't come through	Mooroooolen settlement forms 1865. 'Marulan' railway terminus opens in 1867.
1865 – 1880	Marulan in decline	Gradual decline and change in town occupancy. Demolition and deterioration of buildings. Consolidation of town lots into larger paddocks. Lack of late 19 th century artefact material on site.
1880 – now	Post-Marulan	Marulan ceases to exist as a township and all services relocated to the new town. Becomes a historical locality name only.

Within the Marulan township phase it is arguable whether there are distinct sub-phases that can be defined, such as before and after gold. As the nearest significant discovery was beyond Bungonia it is just as likely that seasonal increases in the movement of pastoral traffic were mirrored by increased gold rush traffic. The impact may have arisen if the loss of male heads of households were removed for a significant period.

An incidental observation arising from the historical study is that non-official sources such as newspaper advertisements show that town occupancy, and the ownership and use of individual lots were more intricate than expressed in land titles and census information. While the digitisation of contemporary newspapers has made accessing some of this otherwise hidden material feasible, it is not clear just how much it will change our picture of the town.

8.2 General Site Formation, Survival and Taphonomy

As a result of archaeological field survey and excavation we can put forward supported assumptions regarding site formation that will also apply more generally to the remainder of the former township site, located outside the proposed development impact area.

1. The township site as a whole is likely to contain abundant archaeological evidence representing all periods of occupation. This will include Aboriginal archaeological evidence, township period evidence and evidence of later use.

2. Apart from where the highway has been widened, the investigated area indicates survival is good with little post-township disturbance identified that is likely to have removed evidence. Parts of the road reserve may also contain archaeological materials where this has been buried to form the highway embankment. However note that with the exception of the area immediately adjacent to the cesspit, the investigated section of the road reserve has been shown to be very disturbed with little archaeological potential
3. Historical archaeological material is densest closest to the highways and density reduces rapidly towards the back of lots.
4. Aboriginal archaeological material is likely to be present at a low density throughout the site and present low in the A horizon topsoil of the soil profile.
5. Substantial structures are only likely to be found at the front of the town lots. Post-built structures can be found in any location within the town lots.
6. The podsol soils on the site form a strong contrast between the A and B horizons, and provide clear indications of any features dug into the sub-soil, except where there are stone outcrops.
7. Depth of artefacts within the topsoil appears to reflect chronological order of deposition, so excavation within spits may reveal earlier and later historical phases of the site.
8. Exposures of bedrock have been incorporated into made surfaces during the township period, sometimes without further modification. Except where these have been clearly broken down by hammering to a desired level their use may not be evident. Conversely surface exposures of stone that look like deliberately placed stone are equally likely to be natural with no evidence of modification or use.
9. There appear to be poor conditions for the preservation of biological material. The only likely surviving locations within the township site as a whole are potentially buried land surfaces beneath dam walls. These have not been investigated. There are no locations that are likely to have remained viable preservation environments to the north of the highway, possibly excluding the town dam MRNH 2, where 19th century sediment may remain in the base of the dam if it has not been cleaned out since then. This is outside the project area and thus has not been investigated.
10. Disturbance factors include rabbits, in-ground biological action, cattle treadage and moderate erosion. These are not considered to have had significant impacts on the integrity of the archaeological resource. They are not considered to warrant specific management controls following completion of works.

11. There has been negligible modern fossicking and collection of surface archaeological evidence from the site, and this is not considered to have had a significant impact on the resource. However, this does remain an ongoing concern for the township site generally.

8.3 Structure of the Archaeological Site

The archaeological site revealed sixty distinguishable features reflecting past human use either through archaeological survey or excavation. These are able to be grouped into a number of categories, the main ones being discussed individually below. These feature types have differing archaeological potential and this needs to be considered in any extrapolation of the results of the investigation to the broader site.

8.3.1 Levelled Areas

OMF 18, OMF 19, OMF 29, OMF 30, OMF 33, OMF 36

When initially surveyed the levelled areas appeared to be prominent features in the landscape, standing out as flatter, and generally less well vegetated than the gently sloped natural ground contours. It was however difficult to define their edges at the time of survey.

Having now tested several of the levelled areas in Stage 1 and monitored their wholesale clearance in Stage 2 some conclusions can be made regarding their nature. They do appear to be a cultural feature or, more correctly, a combination of landscape characteristics that result from use. The levelling is minor but contrasts markedly with the natural slope, and has been more compacted than the surrounding area, so that in the prevailing drought conditions these stand out clearly from the remainder of the site.

Another characteristic that helps to define them is the presence of naturally outcropping bedrock at the northern limits of OMF 29, OMF 30 and OMF 31. These form both a break in the slope and appear to have prevented the loss of topsoil, so enhancing the platform effect.

Even so, there is no archaeological evidence that these levelled areas were deliberately formed. Close to the cesspit the cobbled surface was partly formed by beating down protruding lumps of bedrock to a general surface, but that only extended a short way out from the cesspit. The hand excavation within OMF 31 failed to find any evidence of the introduction of levelling fills, deliberate truncation of the soil, fencing or other signs that the levelled areas resulted from deliberate formation. The presence of tree throws that have been filled in suggests that deliberate clearing may have taken place with the intention of having an open area for various activities to the rear of the inn. As the extent ranges outside the Woolpack Inn blocks and into the Crown reserve and adjoining lots, it may represent a distinct 'middle zone' in activity areas, ie outside but near the main houses or front of blocks.

All appear to reflect activity areas during the township period. While they coincide with the highest concentration of artefact material they are not necessarily indicative of sub-surface deposits or evidence of former use.

8.3.2 Drainage Lines

OMF 32, OMF 34, OMF 37, OMF 39, OMF 43

Drainage lines and similar linear features are present in the lower parts of the site. They are generally perpendicular to the road frontage and appear to be primarily drainage lines, although they may have served as field boundaries. They were tested in Stage 1 and in some cases comprehensively cleared during Stage 2.

It was initially considered that all were of post-township date because of their continued operation into the 20th century, and the presence of 20th century artefacts in their fill. None line up well with the surveyed town lot boundaries. However, there is some potential for the entire township cadastre to have been misaligned, as there is an occasional offset of several metres in the placement of buildings in relation to lot boundaries.

Where investigated the drainage ditches are either V or U shaped in cross-section. The excavation spoil is not banked up at the edges, supporting their identification as primarily for drainage rather than field boundaries. They average about 500 mm deep, and are concentrated around Section 7, which is low lying with a slight flow away from the creek, which was probably disrupted by continuing works on the highway in the 20th century.

8.3.3 Sheet Midden

Units [2], [3], OMF 02, OMF 05, OMF 06, OMF 09, OMF 13, OMF 14, OMF 40, OMF 41, OMF 59

The sheet midden is the diffuse scatter of artefact material found in the top soil layers of the site. It has been systematically investigated in the excavation of the Big Rectangle, and selectively in other locations. Upper [Unit 2] and lower [Unit 3] components were separated to determine whether the deposits had any internal differentiation.

The sheet midden contains a mixture of artefacts reflecting the diversity of material used in the site. Importantly, however, it does not retain the same proportions of artefact fabric or functional categories as are found in the specialised dump deposits such as the cesspit. This is an important consideration in analysing the meaning of artefact frequencies.

From the specialist artefact analysis it can be established that there is a slight chronological difference between the artefact material found in Units [2] and [3], meaning there was a gradual accumulation of deposit and associated artefact material across the site, with [3] being earlier than [2].

Table 8.2 – Comparison of artefact frequencies from Units [2] and [3].

Artefact category	Unit [2]	Unit [3]
Activities	1.3%	0.8%
Architecture	14.5%	18.9%
Arms	0.5%	0%
Clothing	2.0%	0.8%
Food	53.3%	53.2%
Furnishings	0.4%	0.8%
Household	0.5%	0.2%
Medicine	0.4%	1.2%
Miscellaneous	20.5%	15.9%
Personal	6.3%	8.1%
Transportation	0.5%	0%

The sheet midden assemblage is dominated by food-related items, which is a combination of food refuse such as bones and broken table wares, representing more than half of the assemblage. Architectural items in the form of nails and brick fragments are the next most common, followed by miscellaneous finds. The dominance of broken table wares and small pieces of building fabric is consistent with household sweepings and incidental discard which, over time, produces the pattern seen above.

The average density of the sheet midden across the landscape is highest around the Woolpack Inn and gradually tapers off to the east and west, although this may be a result in part of the loss of road frontage. The density certainly tapers off with distance from the road although there may be localised concentrations that vary this general pattern. It is possible that rather than being a gradual decline there is a distinct difference between front and rear areas of the town lots.

As well as sheet midden there were a number of discrete artefact scatters identified during site survey. These vary from a few artefacts located in an erosion patch to dense scatters along the former road line. Leaving aside the potential for reworking of artefact-rich deposits during road construction, most of these are discrete and localised clusters of material dating from the township period. They appear to represent specific occupational deposits. As argued elsewhere, they are best explained as the use of unalienated roadside land within the town by travellers. A similar situation has been identified at the creek to the rear of the Woolpack Inn.

8.3.4 Structures and Structural Evidence

OMF 01, OMF 03, OMF 04, , OMF 07, OMF 16, OMF 17, OMF 23, OMF 25, OMF 31, OMF 44, OMF 45, , OMF 46, , OMF 47, , OMF 49, , OMF 51, , OMF 53, , OMF 54, , OMF , OMF 55, , OMF 56, , OMF 58, OMF 60

Table 8.3 – Archaeological features representing buildings and other constructions found during the survey and excavation of the site.

OMF 01	Possible structure	Lot 1 Section 5
OMF 03	Possible structure	Road reserve
OMF 04	Possible structure	Section 10, Lot 10
OMF 07	Possible structure	Section 5 Lot 3
OMF 16	Possible structure	Road reserve
OMF 17	Possible structure	Section 5 Lot 3 / Road reserve
OMF 23	Possible structure	Section 5 Lot 10
OMF 25	Possible structure	Section 5 Lot 10
OMF 31	Structure / levelled area	Section 1, Lot 1
OMF 44	Building material scatter	Section 8
OMF 45	Possible structure	Section 5 Lot 4
OMF 46	Cesspit and cobbled surface	Section 1 Lot 2
OMF 47	Brick and timber structure	Crown reserve
OMF 49	Probable former post office	Section 7 Lot 3
OMF 51	Cobbled surface	Section 1 Lot 2
OMF 53	Dwelling in Section 5	Section 5
OMF 54	Post holes – building[s]	Section 1 Lots 4-5
OMF 55	Post holes – building[s]	Section 1 Lots 3-4
OMF 56	Post holes – building[s]	Section 1 Lots 7-8
OMF 58	Structure – south of creek	Outside town layout
OMF 60	Brick clamps – north of creek	Outside town layout
OMF 61	Possible fence line	Crown reserve / Section 1

A wide range of structures were identified during survey and excavation. These range from definite and substantial buildings, represented by the Woolpack Inn's cesspit, to post-built structures of indeterminate form incorporating masonry in selected areas or as chimney butts. A number of post-built buildings were also identified although, unfortunately, the abundance of post holes makes determining their exact form difficult.

In general terms, the Woolpack Inn would have been the most substantial building constructed on the north side of the road. The evidence for other buildings suggests that they were of more modest form. These were either entirely post built, or incorporated some brick in their construction, as with the Post Office [OMF 49] and the mysterious building in the Crown reserve [OMF 47]. While the post built structure in Section 1 Lot 7-8 is likely to be a domestic residence based on its position in relation to the road, it represents a far more modest form of dwelling. The other identified post built buildings are more likely to be outbuildings from their location on the lots.

The placement of buildings was dictated by the town planning regulations in force when the town was first laid out. How well this was observed over the decades cannot be determined, but there is some evidence of encroachment, at least for substantial buildings on the southern side of the road. There is unfortunately no evidence of how public and private spaces were arranged.

8.3.5 Refuse Dump Locations

OMF 11, OMF 12, OMF 24, OMF 46 [Unit 41], OMF 50 [Units 4, 15]

The main refuse dump is the cesspit [OMF 46] but there were other systematic dumps of material that reflect dumping opportunities, particularly OMF 50. These are essentially *ad hoc* and would reflect a diversion of the waste stream from normal patterns to filling in depressions such as tree throws or burrows.

There appears to be a continuum from sheet midden representing a gradual accretion of refuse material to concentration in greater density as part of refuse dumps. Apart from the cesspit, which was capped by the collapse of the brick superstructure, other dumps seldom have well-defined boundaries, and artefact densities merge into the background density.

It is likely that there was a regular pattern of refuse disposal, as there is little evidence of gnawing of bone refuse by rats. This pattern has not been identified, but probably the dumps represent diversions from the refuse disposal stream when there is a requirement to fill a hole, that might otherwise be unsafe, with broken glass.

8.4 Responses to the Research Design

1	How closely does the planning and layout of the town follow the 1829 regulations?
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The 1829 town planning regulations specified that towns had to conform to basic layout rules¹⁰³. Those which appear to have been observed fully at Marulan include:

- Lots and side streets laid out perpendicular to main road frontage.
- Lots half an acre in area, measuring 1 x 5 chains.
- Road reserves will be 100 feet wide, including 80 feet of carriageway flanked by two footpaths, side streets will be 84 feet with a 66 feet wide carriageway.

Some of these are confirmed by physical evidence, the others by historic maps.

¹⁰³ NSW Govt 1829.

There is uncertain compliance with the following requirements:

- Set back of 14 feet from edge of road reserve to building line, which is clarified as front of the body of the house, with only 'an open Verandah or such Plantations as may be desired' within the 14 feet corridor.
- The front area to be enclosed in an open fence, or delineated by posts in front of shops.
- The door sill level 'shall be one foot above the level of the crown of the street, immediately opposite to such door'.
- Buildings should be completed within three years of obtaining authority to take possession. This seemed to acknowledge the possible lag between purchase and grant of the land.
- Drainage to be formed beside the road by landowners, leading into a public sewer.

The lots along the southern side of the road show masonry remains closer than 14 feet [c. 4.5 metres] from the road reserve. This may reflect a reduced building set back, collapsed building material obscuring the correct position or a modified road boundary.

These structures are outside of the current project area, however, if the opportunity arose in the future further research investigation may resolve this question. It is possible that the buildings constructed on the southern side are later, and so reflect the gradual decay of the sense of order provided in the initial township construction.

2	How closely does the evolution of the town remain within the bounds of the 1829 regulations? What was the nature of the changes made in the town's life time?
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When the town was gazetted it consisted of Sections 1, 2, 3, 4 and 5. During the mid 1840s a number of additional sections were added at the eastern end of the town, and Section 10 at the western end. For the first time a rear range of lots without a frontage to the road was also added on each side. While the lots all appear to have been sold there is almost no evidence of any substantial construction on these new lots. It is possible that some of the town lots were mainly used as grazing paddocks for existing lot owners and occupants but there does not appear to have been a significant residential presence in the new areas.

Another change from the initial layout is that the line of the road to Goulburn does not follow the front of Sections 5 and 10 as closely as it was planned. From Deering's 1868 plan it very clearly swings southwards, following the present highway line, and leaving a substantial area of land between the road boundary and the lot frontages. It was in this unalienated area that there seems to have been a substantial amount of casual camping during the town's existence.

3	Can we see evidence of the broader impress of authority or the encouragement of town growth in the town's evolution or was it essentially left to its own devices following establishment?
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Historical geographer Dennis Jeans proposed the 'impress of authority' to describe how the central government maintained its control over outlying areas through the use of police or legal mechanisms, displays of control and other means¹⁰⁴. The impress of authority was intended to make it clear that these were not lawless hinterlands, but were fully integrated into the colonial centre through provision of law, such as policing and legal services, control of land occupancy and communications.

At a broad level, Mitchell's plans for the great roads are a clear expression of centralised authority ensuring that the further parts of the colony were effectively linked back to the centre, allowing both communication and direct response. Mitchell's idea, which he successfully forced onto successive governors, provided a basis for exerting the authority of the central administration into rural areas. Even though Mitchell's line of road ran away from the main pastoral areas, the need for a good road was recognised. The need for towns along the route, which would provide the basis for a rural free population, was less welcomed. There was a problem in that there was no integration between Mitchell's idea and the plans of other government departments. There was only moderate official presence in rural areas, and these had traditionally been decentralised, relying on the major landholders who acted as magistrates to also be the landlords for services such as courts and a police presence.

The historical record tends to suggest that Marulan was built because there was a fork in the road, rather than vice versa. Mitchell certainly planned the point at which his two lines south would diverge, but there is no real reference to the desirability of a town in that specific location, as there is for Berrima, for example. Based on the timing of the transfer of administrative functions to the new town there does not seem to have been a real desire to consolidate civic functions within such towns by any of the later governors until the late 1840s at least. This reluctance may have derived from the rural elite's desire to continue to act as magistrates from their own properties. There was also a concern that if small towns were over-represented with civic functions it would in some way distort their natural place in the scheme of things. Similarly, there was little active promotion of town settlement, even though the sale of town blocks was potentially a major source of colonial income and tied directly to assisted immigration policies.

¹⁰⁴ Jeans 1975.

4	Do the structures that exist outside the confines of the occupied blocks, which appear to represent camping, reflect temporary use or do they reflect a more permanent presence of an underclass or fringe camp.
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These areas were not excavated or surveyed in detail beyond their initial identification as they are located outside the project impact area. Their position along the road margin between the front of Sections 5 and 10 and the actual road alignment, and the presence of a broad range of ceramics and glass makes it likely that these were an area favoured by travellers as a temporary camping spot. It is not clear if this would be primarily regular road users such as bullockies or travelling families.

A similar pattern of camping just off the road was also found at Towrang, where there is similar patterning of material near the convict stockade¹⁰⁵. This was probably favoured because of safety against bushrangers, who remained a constant risk along the road, and the same would apply to Marulan. Another example of 'squatting' on land where shifts in road lines left unowned and otherwise vacant land occurred during this period is at Rouse Hill, on Windsor Road in front of Rouse Hill House¹⁰⁶.

The possibility that this was a more permanently occupied location cannot be dismissed.

There was no evidence of any visible re-use or knapping of glass artefacts, which is a likely, if somewhat simplistic, sign of Aboriginal occupation¹⁰⁷. The historical record strongly suggests that there was no separate Aboriginal community within the area that could form the basis of such a settlement, but this is not certain.

5	What was the range of material that the occupants of Marulan were able to buy or bring with them?
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Excavation revealed a wide range of cheap and popular ceramics, as well as glass. The range of ceramic patterns is slightly less broad than that found in comparable urban assemblages but is otherwise comparable in terms of the types of wares, the change of fashion in decoration, such as flow blue and flow black transfer print patterns and in the overall range of material culture represented.

It is also apparent from the historical record that Marulan was closely integrated into a system of trade that allowed for the rapid dissemination of goods from Sydney through merchants who specialised in sending goods into the country. Therefore it is likely that there will be little meaningful difference between Marulan's assemblages and those of contemporary urban sites. Differences are likely to arise as a result of the difference in size of the urban and rural markets and the quantity of goods that may eventually end up in archaeological contexts.

¹⁰⁵ Banksia Heritage + Archaeology 2007.

¹⁰⁶ Fergus Clunie, Curator Rouse Hill House, pers. comm.

¹⁰⁷ Wolski and Loy 1999.

6	Did this differ among different residents and can these differences be attributed to social status, income, background or other known factors from the individuals?
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This was initially indicated in the Stage 1 excavations through superficial differences in material excavated in OMF 34A [part of a larger set of stone features further defined as OMF 48 during Stage 2 excavations] and the OMF 29, OMF 30 and OMF 31 levelled areas. The results of the Stage 2 excavations do not provide a good basis for identifying household assemblages that would be directly comparable in testing these questions.

7	How does the range of material culture compare to exactly contemporary assemblages elsewhere in Australia?
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Harris's artefact analysis [refer to Volume 4 of this report series] generally concludes that the range of material represented, although somewhat more limited than urban sites, reflects the range and diversity of contemporary assemblages found in other Australian sites.

The way that goods come into small towns is probably responsible for the more limited range of material present. Orders were taken with wholesalers and importers, and probably storekeepers in Goulburn. These may have been supplied by particular producers or British wholesalers that bought preferentially from specific suppliers, which may have limited the breadth of available stock from which to choose. Goods that new arrivals in town brought with them would have added some of the broader range of material, for example less popular ceramic designs.

It should also be remembered that every year after the shearing probably hundreds of bullock wagons laden with wool bales would pass through the town from stations right down to the Murray. These all emptied their loads in Sydney, and would be available to offer ready and abundant cartage back south at good rates¹⁰⁸. These return trips would allow people to order in bulk with their city agent, pay for goods with a share or advance of the wool cheque, and get a dray load of goods and supplies for the coming year delivered to their door. In such circumstances wholesalers and suppliers of goods would need to keep importing in bulk in order to fill the annual demand. Stores such as Joseph Gould's 'cheapest house in the colony' specifically aimed advertising at this market [refer to Figure 3.12]. Given these circumstances it is likely that much of the material being shipped into rural Australia was not only bought recently but may have been made within a year of its arrival.

¹⁰⁸ See McAlister's 1907 account. He was one of the bullockies who often made this trip.

8	Is there evidence of lag or conservatism relating to purchase and use of material goods because of the distance from the centre?
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The dating of the assemblages has clarified this issue. There are many older items represented in the cesspit assemblage discarded as late as the 1880s, including pearlwares that were declining in popularity after the 1830s. The evidence of conservatism is that these goods were likely to have been bought for the initial stocking of the Woolpack Inn, and were used with sufficient care that they remained intact and usable until the probable closure of the inn. There is evidence in the same assemblage of a major restocking episode which favoured flow black decorated wares around the late 1840s – early 1850s.

Apart from this major exception there does not appear to be any evident conservatism in either consumption or building construction techniques. For example, wire nails appear in the immediate post-town deposits, which match their adoption date in urban contexts.

The lack of conservatism shows that the population was able to access manufactured goods efficiently through established trading networks, and presumably without too much additional cost for distance. The high turnover of population, literacy and regional newspapers, and the prevailing culture of domesticity would also have allowed people to remain in touch with prevailing cultural and social trends.

9	Was living in rural Australia comfortable or different to life in urban Australia?
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While this was a small rural town situated several days' travel from Sydney and Parramatta it cannot be considered to be 'the bush'¹⁰⁹. It was well-connected back to Sydney and the nearby big town of Goulburn by regular coaching services and post. The detailed inventories found in insolvency records suggests that the shops and inns were well-stocked, and the assemblages that were excavated also show that a range of goods comparable to those in bigger towns were able to be consumed and discarded.

Lawrence considers archaeological evidence of life in the bush, and how it contrasts with the way the period and people were portrayed in literature - images that still strongly influence the way that we see the period. Before the 1890s, the ideal male in the bush was written about as 'Domestic Man', someone of strong principles who had total devotion to family and home life, and was usually white, middle class, god-fearing, and teetotal but nonetheless willing to fight for his beliefs. Towards the end of the 19th century this image was reworked by a range of mainly urban writers, and most popularly through the *Bulletin*, who created new rough and ready, plain-spoken characters who lived in and tamed the bush as shearers, miners, pastoralists and so on. The archaeological record shows that neither is essentially correct. 'The physical traces suggest similarity with contemporary middle- and working-class urban dwellers and their

¹⁰⁹ Lawrence 2003: 212 notes that 'the bush' originally meant just that, but the term gradually transformed to include everything between the cities and the outback, including large regional towns and farming districts.

concerns for evangelical piety, neat well-ordered dining, a love of colourful decoration and the pleasures of gambling, and a shared drink ...¹¹⁰.

Work by Lawrence and others has demonstrated that even in remote bush shacks, whaling camps and huts in a small poor man's goldfield, you can find archaeological or historical evidence of transfer-printed ceramics, stemmed drinking glasses, wallpaper, books and mementoes from home. The aim was to create a domestic space that was often at odds with the reality of its location. To a greater or lesser degree almost all Australians considered themselves as being British and tried to create surroundings and practices that re-affirmed this. As a result the interior of a home would be broadly similar whether in Sydney or the bush. Travelling in the Murrumbidgee in 1838 Walker records in one cabin on the road:

*that we have had the pleasure and advantage of the society of three handsome well-dressed young ladies, with music and singing, a well-selected library, &c., with the newest and attractive periodicals of the mother country, the latest Sydney newspapers, and all this contrasted with a rude temporary cabin, and other anomalous circumstances.*¹¹¹

The shops and markets sought to service the needs of people in creating and furnishing their houses with products that re-affirmed their connection with Britain and civilisation. The need to feel part of a greater protective entity may even have been much stronger where there were kangaroos and kookaburras outside the window.

This prevailing worldview only changed during the 1890s, when the colonies were beginning to actively consider federation, and a new nationalism developed. This took the land as something distinctly Australian and made the case that, as Australians had constantly 'battled' the bush, it had forged a new and different character to the British.

Based on the archaeological evidence the buildings that were lived in were well-made and sound. While Marulan did not have the services of a larger town it had a school, several stores and inns. Goulburn was within ready reach. Material goods seem to have been easily available, as there is no clear evidence of recycling of ceramics or husbanding resources against hardship. The quality of the material excavated is certainly not poor, and would be not out of place in lower middle-class urban settings. If money was no object then goods such as oysters that had travelled from the coast and other luxuries could be consumed. De Castella expressed surprise at being served lobster, tinned but still good, in an inn somewhere in the Victorian bush, noting that 'all sorts of food could be found in these bush inns'¹¹².

¹¹⁰ Lawrence 2003: 214.

¹¹¹ Walker 1838: 14.

¹¹² de Castella 1861: 93.

10	Is there evidence of recycling, extended use or conservation of goods because of the distance and cost of transport of these items?
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There is no notable evidence of conservation, reuse or other strategies for extending the use life of goods from the excavated evidence.

The pattern of discard of ceramic patterns in the cesspit suggests that material accumulated was used until either broken or discarded in a major clearance event. The dating profile of the ceramics suggests that, in hotels at least, ceramic services and individual pieces stayed with the property as part of the contents transferred to successive owners.

11	Do records such as the Woolpack Inn accounts ledger duplicate information from archaeology or, if not, what insight does it reveal about town life and material culture?
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Analysis of the Woolpack Inn ledger continues outside the structure of the Old Marulan 2007 project¹¹³. Some of the preliminary findings from the process of transcription include the following observations.

The inn's clients, at least those permitted credit, are a diverse group of individuals. They can be divided into Marulan and immediate local residents, known pastoralists in the Monaro and Murrumbidgee – both resident and Sydney-based owners, and a host of itinerant visitors, some of whom worked for Peters. There are at least 550 named individuals in the ledger, of whom about half can be identified or at least placed into a social or historical context.

There are more than 50 place names identified, with the majority found in the southwestern part of the Cumberland Plain, such as Appin, and then Counties Camden and Argyle, and then the Monaro.

The high proportion of travellers who may be considered part of the rural elite may also reflect their credit worthiness compared to labourers, although these seem to be well represented too.

The records of the Woolpack Ledger and the archaeological assemblage do not directly speak about the same matters. However, they do provide a more rounded understanding of the Woolpack Inn's social role in the community and how it operated as an institution.

¹¹³ Banksia Heritage + Archaeology has been progressing this work and is seeking to interest Archaeology student researchers in the resource.

12	Role of within-class, status and other social groupings, particularly specific religious ideologies. This has not been investigated in Australia but Quirk has begun to examine the role of Victorian moral reformism at Paradise, Qld.
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The deposits best represented are:

- Unit [41] – discarded ceramics from the Woolpack Inn, probably single final clearance of a collection of ceramics assembled over the life of the inn, with two main periods of purchasing – c. 1835 and c.1850.
- Feature OMF 50 – artefactual material from the end of the township period and afterwards to perhaps c.1880.

Quirk identified a number of characteristics of her assemblages from the late 19th century Queensland town of Paradise that, she argued, represented a material response to the adoption of Victorian notions of moral reformism. This included temperance, or at least moderation in consumption and overt displays of modesty and morality. These were detectable as patterning within a large surface assemblage, much of it derived from buildings with known occupants. In the case of Marulan, the two richest assemblages are unlikely to reflect any social differences due to their being functionally different in origin. No evidence of 'Victorian piety' such as limited alcohol consumption, or ostentatious display of religion was found. The relative amount of alcohol bottles was more likely to be dictated by practices relating to the management of bottles and broken glass around a home environment. There were no evident religious paraphernalia that were uncovered.

Historical sources attest to the relatively modest contribution of religious life to the people of Marulan, and this may reflect a disinterest in religious behaviour. It may also show that the town of Paradise, which although much shorter-lived, was more stable in the sense of having a clearly established social hierarchy. There is less sense of this being the case at Marulan, with a continual flux of people moving through the town.

13	Control of landscape and declaration of status as expressed in the placement of buildings and items. The best Australian example of this was produced by Burke for Armidale, NSW, but for a later period in the 19 th century.
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Based on a combination of archaeological information, mainly for the southern side of the road, and limited map and documentary evidence, it is possible to reconstruct a composite town layout map [refer to Figure 3.14]. This shows the different known buildings and, where possible, provides some indication of their status, using Jevons' 1858 terminology, which reflects contemporary perceptions of class.

There is little clustering of commercial buildings, which are reasonably well-spaced along the road frontage. Neither is there a particular clustering of civic spaces, counting the cemeteries, schools and public buildings. There is a seeming clustering of Residential A buildings towards the road intersection, but this is possibly a function of survival. There is similarly a likely preference for the southern, more elevated side of the road, but this cannot be confirmed due to the road frontage losses on the northern side. What does appear clear is that substantial residential construction is limited to those blocks that were sold by the mid-1840s. Town lots on either side of the road that were sold later show no evidence of masonry buildings.

The most interesting sites are those which appear to be not associated directly with any substantial buildings. These occur as scatters of domestic refuse in the front of Sections 10 and 5 at the western entrance to the town, and to a lesser extent on the other side of the creek near the brick clamps. These may be best explained as the results of casual traveller camps. They are close to the road and the Crown Reserve, which was dedicated to allow travelling stock to be watered. Travellers could be regular road users like bullockies and draymen, seasonal workers such as shearers, or families relocating to different places. From 19th century accounts camping by the side of the road was commonplace, particularly as the horrendous condition of the roads meant that travel was slow and unpredictable. As the actual line of the road was set quite well away from the frontage of Sections 5 and 10 this provided a large area for travellers to use with no risk of being moved on or being charged with trespass.

Taken overall there is only limited structuring of the townscape, in the sense of internal planning. This is revealing however, as within the town planning regulations there are no structuring principles. Therefore the spatial patterning that we do see is entirely the result of the pattern of purchase and investment over a 30 year period. This resulted in little or no commercial and civic patterning along the street, preference of the upper [southern] side of the street for more expensive residences and a regular camping spot for ad hoc camping at the western end of the town. The spatial patterning has implications for any further investigation of the town, or sampling of different zones within the town, suggesting that while there is a reasonable likelihood of commercially derived deposits and artefact scatters being found throughout the town area, for example glass scatters from pubs, finding sites associated with the different socio-economic strata would require looking in different parts of the town.

14	What was the pre-European environment within the town site?
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The pre-European environment can be generalised from historical information that discusses the region in the period immediately following the arrival of Europeans. Observers such as Throsby and Meehan, Wilson, Atkinson, Cunningham and others all refer to the area before 1830. This information is summarised in Section 2 above. It shows, especially in Throsby's short but detailed description, that the area was cloaked in fine open forest and abundant herbage. The occasional stony rises on the breaking the surface were also noted.

The elements of the pre-European environment that can be specifically referred to on the site are, however, not numerous. Mitchell's original town map shows the small creek as a typical chain of ponds, suggesting a representative drainage pattern for the area. The open area excavation shows evidence of trees being placed perhaps 10 metres apart, so their crowns did not meet at all, confirming the open forest description. Macphail notes that the Southern Highlands ecosystems are either grassy woodlands, dominated by eucalypts, or dry sclerophyll forest¹¹⁴. Both are dominated by eucalypts and share many understorey plant species and genera. These are often not likely survivors in relict pollen assemblages and are generally not distinguishable to genus or species where recovered.

No waterlogged or other sealed deposits that may have retained 19th century environmental data were identified.

In the absence of specific archaeological deposits that capture environmental data, Throsby's initial description of 'Moorooaulin' is likely to be as good a description as can be found.

15	Does environmental impact and change coincide with town establishment or does it precede European arrival?
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It is generally considered that environmental change, particularly degradation of 'natural' systems, accelerated dramatically once European occupation of an area began. More detailed work on specific transformations has however provided a more nuanced view, as summarised by Young¹¹⁵. He has shown that some degradation is certainly exacerbated in the past 200 years while other changes are the result of longer term environmental cycles, which result in similar types of change, such as multi-year cycles in vegetation and water regimes.

Recently some authors have argued that there is specific evidence of changing environment in the period immediately before the arrival of Europeans. Gale and Haworth argue that, based on well-dated sediment samples there is an increase in erosion and vegetation change predating the arrival of Europeans into the New England tablelands¹¹⁶. They suggest several possible causes, the most likely being epidemic disease introduced from the European settlements causing massive social collapse and subsequent disruption of activities among Aboriginal people that had a strong influence on vegetation patterns, such as systematic firing of the bush.

¹¹⁴ Macphail 2008: 5 [in this report – Volume 5], citing Keith 2004.

¹¹⁵ Young 2000.

¹¹⁶ Gale and Hayworth 2002.

If there was a disease impact on Aboriginal populations then it is likely that this had a substantial effect in 1789 with the variola [possible smallpox] epidemic. Recovery of the population a generation later seems to have taken place, only for the 1820 influenza epidemic to strike. The effects of this later epidemic were to weaken Aboriginal resistance to European settlement, so that there was effectively no challenge to occupation. While there are occasional comments indicating that Aboriginal people did continue to live traditionally in the period after 1820, and that this would have meant continuing to use fire for management, it is likely that this would have stopped by about 1830-35 because of the decline in Aboriginal populations, the consequent rise of more mature high-intensity fire vegetation, and the fear that fire held for the pastoralists. As a result it is likely that in the broader area there would have been vegetation change resulting from reduced fire frequency in the immediate period following the start of large-scale grazing.

It is also possible, however, that once Marulan was established, the demands of the locals upon the resources within a fairly small catchment may also have caused damage and change. Visible evidence for environmental change consists of:

- the transformation of the creek from a chain of ponds to an erosion scour
- removal of trees leaving largely clear paddocks, restricting copses and stands to along creeks and rough country
- increase in sediment washing down slope
- possible removal of stones in topsoil for farming
- localised quarrying and digging for stones
- after Lynwood homestead was established, further clearing of paddocks.

Our evidence for the timing of these changes is meagre, as no deposits that optimally preserve this sort of environmental data were found. The timing of the erosion of the creek is unclear. Elsewhere in the Southern Tablelands increased erosion from grazing was found to start slowly and then accelerate in the 1860s, but also then stabilise early in the 20th century¹¹⁷. At Limekiln Creek, near Bungonia, erosion occurs during the 19th century, but Young notes that it cuts through earlier gully infill sediments, indicating that at least some time in the past there was a previous history of down-cutting and erosion of the drainage lines¹¹⁸. In similar fashion the banks of the creek at Marulan also reveal layers of water-transported stone that were previously deposited in a deep channel. The age of this earlier down-cutting is not known but is definitively pre-European, and most likely is pre-Aboriginal.

Incidental evidence for the date when erosion affected the creek comes from surface scatters of nineteenth century artefacts on the northern side of the creek next to the brick clamps [OMF 60]. These seem to represent camping activity, and the scatters continue to the very edge of the bank of the creek. Brick rubble is also exposed in the top of the current bank. These would indicate that the bank of the creek was not so wide during the brick-making period, which is the early Marulan period, or during the period of camping that took place during the late Marulan period. Similarly the

¹¹⁷ Wasson *et al* 1988.

¹¹⁸ Young 2000: pp. 27-30.

occasional historical artefacts found along the bank can be taken to suggest dumping or deliberate discard, but, if so, this took place before the creek widened to its current state and the evidence was all but completely lost.

Transforming the creek required the loss of vegetation; to reduce the holding ability of the soil and increase the speed and amount of run-off, and this would also have the effect of increasing erosion along the slopes above the creek. The only indication that there has been erosion occurring is the gradual sedimentation of the drainage lines [OMF 32, OMF 37, OMF 39] that were cut into the slopes, but these are all of post-Marulan date, when it is likely that broad-acre grazing came into operation. The formation of the floodplain beside the creek may indicate increased erosion, or back-up flooding of the creek. The deposit is generally shallow and does not represent a significant accumulation of erosion deposits, and shows little recent floodplain accumulation. In the one trench excavated in this area the top deposit is only about 5 cm thick.

The area of Section 7 Lot 1 is presently fairly boggy when it rains, and there is no good fall from the area near the road back to the creek. The explanation for this is not entirely clear, and it may be a consequence of road construction channelling water from the south side through a single main culvert to an area in the north. Another possible explanation is that there was a nascent drainage line that took water southwards under the road and then rejoined the creek near the town dam, and that this has been disrupted by later earthworks blocking the drainage. The channels [OMF 39] cut through the area are strongly indicative of drainage channels rather than paddock boundaries or other explanations.

No evidence exists to determine whether the environmental change began to take place before the arrival of Europeans in the area as settlers from the early 1820s. If the opportunity arose in the future, outside the structure of the Old Marulan 2007 project and this report, further investigation of the surface and drainage levels of Section 7 which is located outside the project impact area, could provide an answer as to whether it represents a Marulan period or relatively later disrupted drainage line.

16	What vegetation succession took place within the town limits?
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No good deposits were encountered that may have answered this question. Analysis of bulk soil samples for evidence of plants produced the following general comments.

The palynological evidence is inconsistent between samples. In general terms Macphail says that there is indication of little eucalypt pollen in the samples. This may be suggestive of substantial deforestation during the township period. Abundance of casuarina pollen suggests that either *Allocasuarina* or *Casuarina* was growing within or near the town during township period. Given the desirability of *Casuarina* timber for construction this perhaps could be identified as a deliberately maintained ornamental tree.

There is also inconsistent evidence for herbage growth with a mix of species with dry and damp preferences. Macphail proposed that sections of yards may have remained largely damp and unkempt and created small pockets of ground where different species would thrive.

It remains possible that good environmental data has been captured in specific locations. Possible places to test (outside of the Project disturbance area), should future works in the area outside the structure of the Old Marulan 2007 project and this report present the opportunity, would include beneath the dam wall to the east of town near MRNH1, in the base of the stone-lined well [MRNH2], and in the side road reserves.

17	Did the pattern of use of lots result in sedimentary erosion or is this mainly attributable to later grazing?
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It is not possible to definitively prescribe what activities took place on different lots, as even if they contained a dwelling they had plenty of room for extensive stock pens, yards, planting or orchards. During the Marulan period we know that Peters agisted horses and stabled them for travellers as well as having his own. William Hawthorne had his stock agisted at Fish River and Gunning, until they were seized. There is no definite evidence of ploughing or farming having taken place, apart from the clear marks of gardening noted at the eastern end of Peters' blocks, and possible indications of systematic clearance of stone from the upper soil levels identified in some areas by Roy Lawrie.

No evidence of excessively elevated chemicals characteristic of intensive grazing or deliberate manuring was found in the soil analysis. The lots without evidence of structures are presumed to have been available for grazing, but there is no evidence of solid boundary fencing that would be suitable as yards or paddock fences. There is possible evidence of the deliberate clearing of stones from some areas in the Peters' lots, but this is not certain, and it does not necessarily imply farming.

The later ditches that were dug across parts of the site have been partially filled in with sedimentary inwash.

Overall, there is no strong sense in the evidence that the town lots were heavily used during the township period, in such a way as would cause erosion.

18	How was surface drainage and stormwater controlled, and was it harnessed at all?
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The issue of water management and especially managing stormwater runoff was one of Mitchell's primary concerns on the Great Roads. He was aware that rainfall was irregular and often heavy storms could wash away roads and collapse engineering works. He also had a concern to provide water for stock and travellers, although this appears to have been a lesser consideration for him. Although we do not know the form of the Great Southern Road in the vicinity of Marulan there is evidence from

nearby at Towrang, constructed at around the same time by much the same gangs. At Towrang the road is pierced by substantial very well-built culverts that are of sufficient height to allow a man to walk through¹¹⁹. The roads are bordered with dish drains that feed into the culverts, supplemented if necessary with additional stonework to effectively direct the water. Although Towrang was much hillier than Marulan we could expect that drainage was provided on the upslope side of the road and that it fed into substantial culverts to cross under the road. As side streets on the southern side of the road would also have had drains, these would have at times fed storm water at high velocity into the main road alignment, so it is likely that there was some provision for breaking the water flow at this critical point. No clear surface evidence of the drainage system remains visible.

The position of any original culverts under the road within the township is unknown. There are currently two active culverts beneath the highway within the town area – one crossing near the Telstra repeater station building, at a natural low point in the landscape, and another at Section 5 Lot 8 at the western edge of the town. Certainly the first of these is on a natural drainage line, but the other appears to be required as a result of the elevated road formation having altered the natural fall of the land. No culverts are shown on the Deering 1868 plan within the town area. As they are clearly indicated on the Towrang section of the road in his map, this probably means their actual absence in Marulan.

Travellers along the Great Southern Road crossed or passed a number of reasonably permanent rivers and creeks on either side of Marulan, but none could be completely relied upon as a source of water for travelling stock between the Uringalla and the Wollondilly at Towrang, a distance of 33 kilometres.

Marulan was founded in the midst of a severe drought that reached its peak in 1838. As such it seems likely that water would have been an issue that was of great importance to the occupants, at least until the wetter years of the 1840s and 50s. Despite this, positive evidence of active water management was minimal.

In the town period we have the following evidence relating to water management:

- the large stone-lined 'town dam' [MRNH 2] situated outside and to the east of the study area
- possibly the timber-lined well [MRNH8] on the southern side of the road, outside the study area, which may date to the town period
- the designation of the crown reserve as a water reserve from at least 1868
- the drainage lines serve to control water flow and drain boggy ground but are likely to post-date the town.

¹¹⁹ *Banksia Heritage + Archaeology 2007.*

Incidental and negative evidence for water management includes:

- the cobbled surface at the rear of the cesspit implies at least an expectation that the ground would be muddy, and there is no evidence for a consistent drip line around the cesspit structure, which might imply guttering being installed on the building and capture of stormwater
- no formalisation of the ground near the creek line to allow access for stock from the water reserve
- erection of a dwelling in the water reserve
- possible evidence of refuse being thrown into the creek channel during the town period
- sale of town blocks in Section 12, on the other side of the creek line
- a possible 'washing surface' present in the initial stages of the development of Sq. 305/635 as part of Feature OMF 48.

The timber-lined well [MRNH8] sits in the natural collection point for drainage along the southern side of the Hume Highway and presumably the Great Southern Road before that. Its form and location suggests that it was a cistern rather than a well in the strict sense, which taps an aquifer. The dimensions of the structure, the use of wire nails and strengthening of the collar with concrete all indicate that it was operative in the late 19th and early 20th centuries, but it may be the latest version of an earlier town supply. If so its position within the road reserve is not readily explained.

Taking all this evidence together it seems that while storm-water was probably being managed because of its potential impact on the road, there is not strong evidence that it was being used to fill in reservoirs, with the possible exception of the timber-lined well. The position of the large stone-lined 'town dam' [MRNH2] is not optimised for collecting stormwater runoff. A more recent earth-wall dam is better positioned to collect water, and may be associated with the circular sheep dip [MRNH1].

There is no evidence that stormwater was being collected at the rear of the properties for domestic, animal or crop use. Neither is there any evidence of anything more than casual use of the chain of ponds creek.

19	Was the creek the main water supply for lots backing onto it or did they also have other tanks and cisterns?
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It would be expected that if substantial use was made of the creek there would have been evidence of this appearing as structures associated with the area between the back of the town lots and the creek line. Thus far only one [OMF 58] has been identified.

As discussed above there is little evidence for any systematic collection of water. This may be a result of the loss of the building frontages, with cisterns located close to where they can catch roof runoff. Even so, it seems more likely that the townspeople relied upon cisterns and water storage close to their houses than the creek.

20	How did the cistern / well MRNH 8 operate, and when was it built?
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This structure is a rectangular hole partly surrounded by poured concrete shuttered with vertical timber boards. A framework of timber posts, some scarfed or checked, sat over the top of it. The internal dimensions of the opening are about 1.6 x 1.6 metres, and its depth is unknown. The visible concrete and wire nails are almost certainly early-mid 20th century in date, but probably represent the repair or refurbishing of a much earlier structure.

MRNH8 is almost certainly a cistern, ie a below-ground water storage, rather than a well which taps into an aquifer to obtain water¹²⁰. The cistern was not proposed to be impacted during construction works and as such was not archaeologically excavated. MRNH8 was recorded and conserved *in situ* in accordance with the requirements of the s60 Excavation permit and the endorsed *Old Marulan – Timber-lined well MRN8 Specification for in situ conservation* [refer to Volume 1 Attachment 6 of this report series]. Visible features that indicate date are the use of wire nails [post 1860] and concrete poured in to reinforce the surface opening [post 1880, and likely post 1900]. The timber work present is mainly attributable to repair or placement with wire nails, so there is no direct evidence of the cistern operating during the town period.

The position of the cistern in the road reserve cannot be readily explained. It is very close to the inn shown in Deering's 1868 plan, which is tentatively identified as the Golden Fleece Inn¹²¹. The inn is shown as being right on the road reserve, but this seems to be a convention rather than accurate rendition. There is no indication of a well, which Deering is likely to have included, as his survey was specifically required to identify encroachments on the road alignment. If so, the extant fabric suggests that it was either substantially rebuilt in the late 19th / early 20th century from an earlier structure associated with the hotel, or was a new construction of the late 19th century.

The cistern is located at a natural low point in the landscape. Drainage along the southern side of the road flowed naturally towards it. It is not clear if the modern culvert almost next to it replaced an earlier or even original one.

21	What building materials were accessed or made locally? Can the bricks from the clamps known elsewhere on the Holcim site be used for dating or interpretation?
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Marulan is at the centre of a geologically complex area, which has resulted in a long history of mining near the town, although no mining was undertaken on an extensive scale before the coming of the railway. This is because it is immediately outside the Sydney Basin, with its restricted suite of stone types. The geology of Marulan is discussed in Section 2.1 above. The complex geology provided opportunities for a substantial range of building stone to be used, as well as manufactured building items.

¹²⁰ See Volume 3 - Archival recording for details of construction.

¹²¹ LTO Map 824-1603 Deering 1868.

The remains of several buildings were identified which would have been constructed of timber post frames, probably clad with slabs. No timber samples survived, but traditionally iron bark was used as it resisted termite and rotting longer than other timber types. If built of posts they would have been clad with split ironbark slabs. In the 1830s and 40s these were most commonly fitted into slots in the framing to reduce the use of nails, but in the 1850s nailing became commonplace, at least closer in to Sydney¹²². The roofs could have been either shingled, the preferred tree being Casuarina, or covered using sheets of bark from one of the Melaleucas [paper-barks] or other soft-barked trees. All these trees have been observed as present in the area. Local timbers would also have served for fences and other incidental uses as well.

The Woolpack Inn's cesspit is the only more substantial structure investigated. This used naturally fractured or roughly split fieldstone boulders of porphyryite found in the immediate area to construct the foundations and the below-ground chamber. The superstructure was built of brick. This is likely to have been fired in the brick clamps found on the other side of the creek immediately behind the Woolpack Inn blocks and outside the study area. Mortar appears to have a high proportion of crushed limestone, which was available from outcrops in the area and abundantly at South Marulan.

No timber joinery was found in the demolition rubble, but at Peters' slightly later property at Marian Vale much of this is either cedar or finely dressed eucalyptus softwood. These timbers were available along the escarpment and cedar-getting was a major industry along the immediately adjoining coastal fringe at the time¹²³. Sawyers worked either cutting bulk timber for shipment back to Sydney or could, if required, cut dimensioned timber to order for delivery direct to a building site.

The only materials that needed to be sourced from outside the region were nails, which could have been made from nail rod by the local blacksmith, window glass and some of the material used in paints. All of these were stable and readily transportable and represented a fraction of the materials required in construction.

The Woolpack Inn records for tradesmen builders employed at Marian Vale during 1839 suggest that there was not a problem attracting specialist trades to do work in the country areas. Given the rising prosperity of this area there was probably considerable work available as towns such as Goulburn and Berrima were being built and successful pastoralists and businessmen constructed houses and homesteads reflecting their wealth and status. It is also entirely possible that convicts who were working on the road gang and iron gang building the South Road were occasionally engaged for quarrying and shaping stone¹²⁴.

¹²² Gojak 2008.

¹²³ See Harris 1961.

¹²⁴ I am grateful to Iain Stuart, who initially proposed this suggestion.

There are outcrops of other useful construction materials within a 10 km radius, including sandstone, tabular mudstones and schists, both low and high quality marbles and limestones. The only evidence of any of these on the site is a dumping of limestone in Sq. 306/635, which does not show any sign of having been used for building although the possibility of it being slaked on site is still open.

22	Does the town have an ecological footprint within which it exploited local resources and is this a useful model for interpreting past environmental information?
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The concept of an ecological footprint, which calculates the notional areal extent of resources that are consumed by an individual, household or community, has become a useful tool in representing differing levels of resource use. It represents building materials, fuel use [cooking, heating and motive] and food generation. It relies on a fair degree of information that can be quantified, such as numbers of people, their diet and relative proportions of meat and plant foods, and the other goods they consume.

The only household for which information is available is the Woolpack Inn, which suffers from the uncertainty of what can be ascribed to travellers and to the occupants. In general terms most of the food they ate either came fresh off the hoof locally or was cultivated, such as grain. Vegetables were a less preferred part of the diet according to observers. Natural foods, including seafood, were a negligible part of the diet. Pre-processed or packaged foods are similarly rare, but there is a lot of written about and artefactual evidence for alcoholic drinks, which themselves require various amounts of crops and energy to produce. Water was essential for stock and crops, but as its availability was very variable, reliance upon it may have been reduced as much as possible for human consumption. As the 19th century progressed it is likely that the relative proportions of locally produced foods would have decreased and more high intensity production processed foods would become standard in the diet. This was certainly so in the cities, but it is not clear whether the same took place in small towns like Marulan as rapidly. Similarly the processes of globalisation and mercantilism would have offered increasing proportions of building materials, consumables and commodities from tertiary producers, such as cottons from India and wool from Australia brought to England and then processed for re-export as fabric and manufactured clothing.

This remains a broad descriptive model, but one that has the potential to chart the increasing move away from de facto sustainability where the majority of goods were sourced from the immediate region, and were only processed in a limited way. As these transformations are tracked, we get insight into how being part of a mercantile empire worked, and the relationships between core and peripheral markets. This process was interrupted by the arrival of the railway line, which changed the way that goods could be accessed and moved.

There is insufficient information on which to model the sorts of domestic consumption that would be needed to establish changing ecological footprints.

23	What use was made of local food resources such as native animals or plants?
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No evidence of use of native plants was found. Leaving aside the use of timber for building construction and carpentry and fuel there was historically little use of native plant species that is likely to survive in the archaeological record.

At least two macropods were found in the cesspit assemblage, represented by at least 16 distinct skeletal elements. The macropods were in the large wallaby to small kangaroo size class. No direct evidence of butchery was found on the bones, and it remains equally possible that these were either consumed by humans, slaughtered for dog food or dumped natural kills.

Remains of a koala were also found in the cesspit. While koala was eaten by Aboriginal people and occasionally by Europeans it is unlikely, given the extensive representation of body parts, that it was a dietary item. It is more likely to have been a pet and its body was dumped in the cesspit upon its death.

24	Did environmental management result in proliferation of weed species or pest animals such as rats and rabbits?
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Some of the soil features identified during excavation have been identified as rabbit burrows. This is based on their overall form. No associated skeletal material was recovered from any of the burrows. Rabbit bone was found in the cesspit, although none of it appears to have evidence of being processed or butchered, so it is likely that the rabbits were burrowing into the cesspit fill after its abandonment in approximately 1880. There is little evidence of rats being present, either as skeletal remains or tell-tale gnawing marks.

While it was not possible to date any rabbit burrows, two things suggest that they substantially post-date the town period. The first is that it seems very unlikely that they would burrow so close to an occupied building as the rear of the Woolpack Inn. The second is the seeming propensity of the occupants of the town and later occupants to dump refuse into any hole in the ground, as with Feature OMF 50, and Unit 5. There is no atypical association of artefacts with the burrows.

Rabbits may have been consumed as farmed animals in the town period. They would have been raised in cages or possibly small rabbit runs. Apparently, escapee rabbits did not create a population explosion [except in Tasmania] until the well-known release of rabbits for hunting in Victoria in 1859¹²⁵. Any that did escape were likely to be killed by dasyurid 'native cats', as they were called by farmers who regarded them as vermin, and which made the keeping of poultry difficult¹²⁶. The rapid rise in rabbits following a specific release in 1859 in Victoria may have been assisted by much heavier hunting of dasyurids following the gold rushes. Atkinson also recommended removing all dead

¹²⁵ Gojak 2008.

¹²⁶ Atkinson 1826: 23; de Castella 1861: 98-99 with a description from Victoria.

trees and logs from an area to prevent nesting habits for the dasyurids, which may have also happened casually through greater clearance and bushfires.

Overall, there does not appear to have been any problem with rabbits in the township period, and only minor presence of rats. This does not appear to reflect whether or not there was environmental degradation.

The palynological evidence indicates that there was localised growth of damp-loving weeds, probably during or immediately after the township period. These were most common in Sample 7 from the garden beds in Section 1 Lots 4-5 [OMF 32] and Sample 10 from the post hole fill of [266] in the same area.

There is little evidence of uncontrolled timber regrowth in the post-township period, with both eucalyptus and casuarina being unusually absent, apart from a high localised casuarina concentration in Sample 14 from the narrow timber beam stain [324]. This may reflect the growth of a non-native pine tree, possibly an extant tree on the road boundary near the cesspit. Pine tree [*Pinus* sp.] pollen shows up as a contaminant of relatively recent date in some samples.

25	What evidence is there of back-yard farming, soil improvement and deliberate agriculture?
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The majority of the site investigated consisted of the central third of the town lots, as the frontages were lost, and the impact area does not extend the full depth of the lot.

The only clear evidence of agriculture is of five definite linear depressions in Section 1 Lots 4-5 which are Feature OMF 32. This feature represents at least four, and probably more, raised garden beds that were planted before the construction of several buildings over the top of them. It is not certain what they grew. No pollen evidence was found to indicate a likely crop. The suite of plant pollens found by Macphail was indicative of 'abandoned / overgrazed land'. He considered that there was some likelihood that the samples were contaminated with later material, or possibly that there had been manuring, which may be an alternative explanation for the mix of identified species¹²⁷.

There are conflicting accounts of observers about the presence of vegetables in the rural diet. Louisa Meredith noted abundant vegetables being grown around huts, but another traveller, Anton de Fauchery said 'I have visited twenty stations: in none of them have I found a poultry yard or a kitchen garden. Not a trace of cultivation; nothing but sheep and oxen.' His countryman de Castella said that grains and corn [maize] were commonly grown for human and stock food, but there was no point keeping poultry because of the depredations of native cats¹²⁸.

¹²⁷ Macphail 2008: Samples 6, 7, 8 – in this report – Volume 5.

¹²⁸ Meredith 1844: 58; de Castella 1861: 98-99, including quote from Fauchery.

Later, following their initial arrival for the goldrushes, many former Chinese miners became market gardeners supplying rural towns with vegetable produce. None are known from Marulan. By the end of the 19th century the only farming residents listed for old Marulan are John and Joseph Hogg, who we know as purchasers of many of the former town lots. John is listed as a potato grower and Joseph as a grazier¹²⁹.

Lawrie was unable to identify clear evidence of soil improvement in his soil analysis. He considered that in some areas of the site it was likely that stone had been deliberately removed to improve the agricultural values of the soil. No trace elements were identified that were consistent with widespread manuring, pasture improvement or intensive grazing.

26	What does the evidence for grazing and pastoralism [sheep dips, farm house, fencing] reveal about changes in land management in the later 19 th and 20 th centuries?
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Within the site there is some evidence of the use of the town for rural activities following the decline of the town. Its interpretation depends somewhat on when the Woolpack Inn ceased being occupied, either as an inn or a private residence. The artefact evidence suggests a date of c.1880 as being about the time when active refuse dumping ceased.

The ownership of town lots was consolidated into increasingly fewer hands during the late 19th and early 20th centuries, resulting in the creation of larger acreages. While this has only been documented in detail on the northern side of the town [in Sections 1, 5, 7 and 12] the eventual pattern elsewhere was the same.

The only new building known to have been built since the decline of the town was the small brick cottage still standing behind the Anglican cemetery, and the lime kilns near the Catholic cemetery. Even though the land was reverting to a rural character there was no pastoral infrastructure until the building of the circular sheep-dip to the northeast of the site in the early 20th century and an associated earth bank dam.

Away from the town site no evidence was noted of 19th century rural infrastructure. The present surviving evidence is all of early-mid 20th century date, although it is possible that earlier infrastructure was lost in bushfires. Assuming that the absence reflects a real lack of earlier material, then it appears that there was an intensification of land management in the early 20th century. Lynwood homestead appears to date from around 1900, and was the first farming operation on that land. Land clearing in the area between the homestead and the town site is likely to date to the 20th century as well.

¹²⁹ *Yewen's Directory* 1900: 181.

27	Can palaeomagnetism and OCR dating provide a relative dating tool for structures and soil formation processes on the site?
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Palaeomagnetism dating is based on the phenomenon that when certain magnetic materials such as iron or rocks with high ferrous content are heated to a threshold temperature the residual magnetic field that they contain is cleared and the object picks up the magnetic field of its new orientation. This means that, for example, the stones used to form a hearth will have magnetic fields that reflect their point of formation, and the subsequent random orientation. If the hearth bakes the rocks beyond a certain temperature these existing magnetic fields are effectively 'wiped' and are then imprinted with the magnetic field that operated at the time of the fire. As the north magnetic pole is mobile it is possible, knowing the position of the pole, to determine the date of heating by working out when the orientation corresponded to known magnetic pole positions.

The technique has been used in Australia, but primarily on Aboriginal sites, where relative dating is not to do with the fine movement of the pole but with geomagnetic reversals. From North America, the position of the North Magnetic Pole follows a broad arc across the Canadian shield, so the relative position changes clearly. From NSW, however, the North Magnetic Pole remains in approximately the same position, so its wanderings are only expressed in fairly small differences in bearing, and there is redundancy in the tracking, meaning the same bearing can apply to a number of possible dates. For this reason it has not been used in Australia to date.

The brick clamps found adjacent to the town [OMF 60] and along Jaorimin Creek [MRNH6] were originally considered the best locations for sampling in order to undertake such dating. These locations are reasonably extensive and demonstrably fired *in situ* with no later site use they are likely to have little risk of providing false dates. Also, they are substantial, allowing the prospect of multiple samples being taken to verify the readings. In both cases useful information would be provided by dating the brick clamps. Those north of the creek are believed to date to the beginning of town construction, c.1834, probably associated with the building of the Woolpack Inn, and MRNH6 probably is associated with the construction of the railway between Moorooloolen and Goulburn in 1867-9.

Oxidisable Carbon Ration [OCR] dating is used to provide a way of directly dating buried soils. Carbon content within soil degrades over time, altering its chemical composition with the loss of particular components of the total carbon content. This is measurable and able to be correlated with known rates of chemical alteration. The technique is still experimental but has some prospect of affording useful dating support in contexts where other dating techniques cannot be used¹³⁰.

¹³⁰ Harrison and Frink 2000.

The analysis of the soil within the site indicates a degree of unobserved disturbance within the deposits. This was best shown by the palynological evidence, which identified recent Pine pollen in samples that were thought to have remained intact and undisturbed since burial in the 19th century. It is therefore likely that there has been considerable bioturbation, ie reworking of the soil by animal action, including worms, beetles, burrowing spiders, and other organisms, as well as the more obvious burrowing of rabbits.

These considerations mean that the site is not an optimal target for experimenting with OCR dating. In consequence no soil samples were referred to dating laboratories as the data would not be considered to be reliable.

28	Is the restricted range of material goods, especially short-term consumables, real, and if so does it suggest importation in bulk?
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This question was prompted by the discovery during Stage 1 excavations of a number of identical clay tobacco pipes in Feature OMF 34A, which was part of the complex stone Feature OMF 48 identified in the Stage 2 excavations.

As discussed above in Section 6.8.4 this impression was largely dispelled as a result of the Stage 2 excavation. It became clear that there was a substantial range of material presented archaeologically. This is not as extensive in variety of transfer print designs as may be found on an urban site, but this is considered to be a consequence of the total quantity of material circulating in the town rather than reflection of a more restricted availability of goods for purchase.

Further excavation of the area around OMF 34A uncovered a considerable quantity of clay pipes of two designs. The artefact analyst's interpretation was that these had been dumped from elsewhere on the site, but they did reflect someone probably buying a stockpile of identical pipes and going through them before their disposal as refuse above OMF 48. This appears not to reflect curation as much as behaviour to accommodate an addiction.

29	Can the difference between <i>ad hoc</i> site occupancy and discard from adjoining sites be distinguished archaeologically?
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This refers to the levelled area OMF 29 in the crown reserve and whether the artefact material is from its use or spill over from adjoining sites. When examined in Stage 1 the crown reserve was considered to have been likely to have remained as a vacant space throughout its history, reflecting its use as a place for travelling stock to access the creek and for travellers to rest. The artefactual remains were considered likely to be a mixture of refuse left by campers and discard from the adjoining Woolpack Inn block.

Further examination of the crown reserve in Stage 2 [refer to section 6.6] revealed that there had been structures present on the site, probably during the township phase. As the remains were heavily fragmented the form of the exposed structure could not be interpreted. The question of whether artefact material found in the reserve relates primarily to either *in situ* use, travellers, or lateral discard from elsewhere in the town remains open.

30	Does the placement of OMF 34A reflect a general site limit within the town, ie a 'back street' line of <i>ad hoc</i> buildings along the rear of the blocks
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This question was based on the identification of OMF 34A as a building based on the limited exposure afforded by the test pit. Expansion of the feature during Stage 2 excavations revealed a far more complex ordering of deposits, which are more fully discussed above in Section 6.8.4. The idea of a back line of buildings along the rear lot boundary may still have some credence, as some explanations for the feature [OMF 34A / OMF 48] require access to water with a position as close to the creek as possible.

No other features were identified that reinforced a sense of a maintained line of demarcation or use along the rear line of the Section 1 lots. This may have been lost as a result of subsequent erosion and flooding along the creek, but this is an unlikely explanation.

31	Do the ratios of different glass and ceramic type reflect other factors of site occupancy?
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The detailed artefact analysis undertaken by Jeanne Harris examined the relative proportions of different artefact functional categories in the main assemblages. In all of the major assemblages, apart from Unit [4] of OMF 50, ceramic and glass related to the food function contributes more than 50% of the assemblage. Generally, apart from a few minor variations, the frequencies are surprisingly consistent given the differing way that the deposits accumulated.

The excavated archaeological assemblage remains available as a resource for any archaeologists or social historians who may wish to explore the issue further, either in the context of Marulan's history or as a comparison with other assemblages.

8.5 A Broader Picture of the Town

During the 19th century Australia turned from being a small satellite of Britain into a distinct nation. The way that this process occurred was complex. It remains one of the central challenges of Australian historical archaeology to map this transformation. Can the archaeology of old Marulan say anything about it?

Archaeologists, beginning with James Deetz in the US, began to speak of the 'Georgian transition'¹³¹. This was one of the fundamental societal shifts in the industrial age. Before the transition society was different in fundamental ways. People did not demarcate the different parts of their life from each other so much – work places merged seamlessly into living areas, sleeping quarters were shared with kitchens and social space in houses, food was cooked so that it was eaten as a communal meal – a central pot was delivered to the table and so on. The Georgian transition created a far more structured way of life. In almost every stratum of society change took place. Georgian architecture imposed an immediate order on space, creating bilateral symmetry that demanded balance and planning. Adding a room to one side of a building immediately made it look askew, so it was hard to modify the landscape without some thought and purpose. People's lives became increasingly regimented, clocks started to take over from the sun for time-keeping, life in many ways became more mechanical and the rhythms of machines began to impose an external order on what had been patterns of behaviour that were more in tune with natural annual and daily cycles. Personal space was increasingly demarcated and differentiated from public space and different rules of behaviour governed both.

The transition was not complete by the time that the First Fleet arrived in Australia. Referring to Sydney's Rocks area Karskens argues that it was the front line between the Georgian order of the colony's leaders and its emergent middle class, while the current and former convicts were the last hold-outs¹³². She refers to The Rocks' characteristic disordered tiers of small, awkwardly shaped houses piled on top of each other up the hillside. Using records, such as transcripts of court cases, she shows that there was little demarcation of space in the way we would accept. People lived and worked and slept in the same room, public paths would meander into what we would think of as private space.

The official attitude to the presence of a community in the centre of Sydney that did not conform to the basic measures of order was a constant problem, and one that caused the authorities many problems. But even though this core of something different and old existed right in the centre of Sydney, it does not appear to have made itself felt beyond its own confines. As more convicts came from Britain they would have been increasingly children of the new order. When the settlement of Argyle began officially in 1820 the transition was in full flow. The planning intent of the 1829 regulations created the sort of ordered landscape that was entirely consistent with the Georgian order, the town plans created for the Great Southern Road were symmetrical, ordered and structured consistently. The larger towns also had hierarchies of space, and clearly differentiated public lands. Even the highly ordered process of obtaining ownership of town lots was the opposite of the organic and haphazard way that it had replaced.

¹³¹ Deetz 1977, Johnson 1996.

¹³² Karskens 1994, 1999, 2003.

Right from the commencement of historical archaeological work in Australia there has been an awareness of the dominance of British imports in colonial assemblages. Allen, for example, found this at the remote garrison at Port Essington, and others soon also found their assemblages contained almost exclusively British transfer printed and other ceramics, glass bottles made either in Britain or in the same style, Scottish clay tobacco pipes and so on¹³³. Less evident was the social transition that we certainly know took place. Written evidence strongly suggested that many Australians did not think of themselves as anything other than British, this changing predominantly at the end of the century as federation of the colonies became a dominant discussion.

As we have discussed above, the archaeology suggests a strong culture of domesticity prevailed, which emphasised the Britishness of the townsfolk¹³⁴. Their ceramics and personal belongings and the way they used them tried to create an ordered household environment that was 'proper' – meaning that it reflected values that were seen as being the norm for people of their status. Therefore, compared to the immediately preceding century, the ceramics show an increasing amount of specialisation – there are distinct vessels and pieces for different meals and courses. Tea sets represent a social custom that had its own rituals of invitation, sharing and returning the favour¹³⁵. Although none are represented among the excavated material, dwellings also become more complex in form, transforming from simple structures with a few multi-use standard sized rooms into buildings with rooms that had distinct purposes, and which are of different sizes¹³⁶.

This material culture expressed and reinforced a form of social behaviour that was itself very structured, with class, religion or devoutness, social status and family origin being important measures. In the middle class this was often expressed as gentility¹³⁷. The origins of our town's inhabitants, whether they came as convicts or free, were established or new, or held land, were all factors that influenced how people interacted. As can be seen at Marulan the inhabitants came from a great diversity of backgrounds. Over time we may expect that the strictest social norms were broken down and the practicalities of rural town life smoothed out some of the differences. This certainly does not appear to be reflected in the diversity of the material found and reliably dated to the later part of the town's occupation. Within the period for which we have archaeological evidence, which includes the town and later residence until c.1880, there does not appear to have been any significant change in the types of behaviour represented by the artefact material. Even though the town died, the basic social norms seem to have prevailed.

¹³³ Allen 2008; Birmingham 1976; Coutts 1985; Dane and Morrison 1979.

¹³⁴ Brooks 1999.

¹³⁵ Williams 1852: fn 3; Roth 1988; Blainey 2003, Khamis 2006.

¹³⁶ e.g. Archer 1987; Timms 2008.

¹³⁷ Young 1997, 2004; Quirk 2007.

This may be compared with the types of buildings and the use of space within the town. A plotting of building information from diverse sources reveals that the town was spatially structured, even though nearly all of the town blocks were exactly the same, and only differed in being either on the high side or low side of the road. Even though there is an absence of evidence due to the widening of the highway, there does appear to have been deliberate placement of the more affluent buildings towards the junction, commercial buildings are evenly spaced along the route, and more modest buildings in between. Particularly interesting is the evidence of casual camping at the periphery of the town, which is likely to reflect regular itinerant rural travel. Although there were no regulatory constraints directing where buildings were placed in the town, cultural behaviour is shown in the patterning that developed as the expected pattern. The dominant pattern was the contrast between front and rear areas of the lots, with buildings along the road front being oriented directly to face the road. Activities in the rear of the lots, which may have included subsidiary residences, would have been far less visible. The road would have been bordered by fences clearly delineating public and private space, only opening out where the inns and stores were set.

The buildings themselves were a mixture. As would be expected, nearly all identifiable or presumed building materials in the early period came from the immediate vicinity, with only window glass, metal door furniture and fastenings being the main exceptions. The little evidence that we have of buildings is restricted to the lower part of a cesspit, remains of the post office, some conjectural timber buildings and more substantial remains across the Highway to the south of the study area. All show completely typical construction techniques, allowing for the constraints of the local material. Being outside the Sydney Basin the local stone was not as suitable as brick for construction. In Berrima the equivalent buildings were made with quarried sandstone as frequently as brick, but in Marulan brick predominates in visible masonry. There is not sufficient information to talk about their internal arrangements or how space was used. There is a strong contrast between the implied massiveness and solidity of the Woolpack Inn, based on how solidly the cesspit was built, and the presumed flimsiness of the post-built buildings also identified. However, it should not be assumed that a post-built building is any less weatherproof or comfortable if well-built or maintained than one made of brick. One category of building that is not found is the timber-framed house using milled timber, which came into prominence in Australia during the 1850s. These may have been present, but their archaeological traces are minimal.

There is a surprising lack of evidence for use of the back of the town lots, and what has been found is mainly ephemeral and ambiguous. Sheet midden – a general scattering of domestic refuse across the land surface – seems prevalent near the rear of the buildings. This however quickly drops in density so that artefact material becomes sparse. Depressions such as tree throws were used to dump broken glass, presumably on some logic of making them safer. These are essentially pit deposits, and have the benefit of providing assemblages of limited duration that, we assume, provide a reflection of the range of material being used at the same time. There was little evidence of zonation within lots using fencing, although it is almost certain that it must have existed.

The civic life of the town has been noted from the documentary evidence, but there is little direct reflection in the archaeology. The Woolpack Inn, as perhaps the key single building in the town, has been almost completely lost, apart from its cesspit. This retains an assemblage that reflects an accumulation of ceramics for use in the inn and other material over the course of perhaps four decades and then discarded in a relatively short period at perhaps 1880, when the town had finally died.

The death of old Marulan is the main reason for its fame. If it had continued on it would have been similar to hundreds of other towns in regional NSW, with an early history that is almost completely concealed by more recent town growth and population change. The catalyst was the non-arrival of the railway in 1867. The exact reasons why it missed the town have never been documented, but politics can be assumed to have played a significant role. Once a construction camp was established and the railhead located the days of old Marulan were numbered. It held on but, as the population analysis has shown, its population aged, lost male household heads and eventually businesses and civic functions all moved to Mooroooolen. Eventually, when Mooroooolen's postal cancel stamp needed replacement, the decision was made to take the one from Marulan. There is no clearer bureaucratic symbol of the town dying than that.

The archaeological evidence of the slow but assured death of Marulan is subtle. The level of construction within the excavated areas shifts from substantial masonry building at the town's founding to more typical post-built structures later in the town's life, and with evidence of repair only in the later years, when wire nails appear in assemblages. In the broader township the pattern of construction does appear to show that there was new building into the 1850s but nothing substantial for the final decade or so before the railway was built.

The death of Marulan does not seem to hinge exclusively on the construction of the railway however. The information about the movement of people into and from the town shows the volatility of the population. If people moved out at the same rate but the number of new arrivals was reduced for any reason then the town would have been extremely vulnerable in any case. If something such as drought or a Goldrush diverted the usual flow of new people into the town then it rapidly lost population. Marulan had few natural advantages that guaranteed a stable population.

The decline of the town, however caused, was part of a broader process of the transformation of rural Australia. The population of shepherds was depleted by fencing, the railways replaced bullockies, small farmers with families who survived replaced itinerant farm labourers. This change in the character of the bush in the 1860s and 70s was still being felt two decades later as nostalgia for the 'real' Australian bush. In 1958 Russel Ward published *The Australian legend*, arguing that Australians' sense of self-identity was grounded in the archetypal rural characters of late 19th century – knockabout blokes, mateship, distrust of authority and egalitarianism¹³⁸. Others

¹³⁸ Ward 1958.

thought that what the *Bulletin* writers and others described was not necessarily a reality, but a literary tradition that was created by writers for the *Bulletin*, essentially all urbanites and people who had fled their country town upbringing. Waterhouse argues that they wrote about this older Australia not because they remembered it or even because it ever existed, but because it contrasted with the rather less romantic reality of rural life with which they were familiar¹³⁹. The nostalgic, honest, individualistic bush also contrasted with the duplicitous, complex, increasingly mechanised and impersonal city within which the authors and much of their audience lived. The view of the bush was not only nostalgic but also partisan. Squatters transformed from being depicted as the pioneers in late 19th century literature to becoming the baddies, exploiting their workers and the land for profit, while the selector and other rural workers took on the under-dog battler role¹⁴⁰.

This transformation took place as old Marulan ceased to exist as a town. The new settlement that developed around the railhead initially as Mooroooolen was a significantly different town because it reflected a broader population that was changing rapidly. The town was no longer reliant on travellers moving down the road, but had a rapid daily connection to Sydney and Goulburn and beyond. Its population continued to serve surrounding farm land, but increasingly this meant small holdings rather than large estates. There were more people making a living off the land than ever before. As Louisa Atkinson noted however, there were many threats to livelihood, including rust for wheat farmers, drought and unsustainably small parcels of land, as well as the farmers' own lack of experience. Produce could now get to market on the same day if necessary, and bulk materials that were previously uneconomical found a new market with rail. Mining the complex geology surrounding Marulan became feasible, starting with limestone. The former town hosted a lime kiln next to the Catholic Cemetery. Marulan and satellite settlements became home to miners as well as rural workers, making a much more diverse community and creating a local market for goods.

Old Marulan itself underwent a transformation that suggests a protracted death. John O'Neil, son of 'the world's oldest married couple', lived in the Woolpack, probably after it stopped being an inn. His household inherited the previous half-century's tablewares and furnishings and as these were broken they began to fill up unregarded areas of the property, like the old toilet pit and a hollow near the fence for the crown reserve. Other inhabitants of Marulan into the 1870s had to contend with civic services gradually moving to the new town to the north. Many of the remaining households were headed by women, who may have outlived their husbands or relied on them being travelling workers. They were trapped in a dying town. Around them buildings were probably being dismantled for salvageable materials or slept in by road travellers. The town lots were bought up by a few new owners, who consolidated them into larger land parcels, presumably for farming or grazing. As the regional population aged and was replaced the memory of the old town would have grown smaller and been largely forgotten except for those who had close ties.

¹³⁹ Hirst 1978; Davison 1978.

¹⁴⁰ Waterhouse 2000.

The most recent chapter in old Marulan's history is the impact of upgrading for the Hume Highway. This has been a process of gradual change, starting with the declaration of the Hume Highway itself in 1928, and then gradual improvements to the roadway as transport demands increased. In the mid 1970s the road finally started eating into the town plan itself, resulting in the loss of whatever remained of the Woolpack Inn and other buildings at the junction of the highway and Jerara Road. Shortly after that its historical value was recognised with the proclamation of a permanent conservation order. However, it took another thirty years to realise some of its archaeological research potential.

8.6 Further Research Potential

Marulan has confirmed the expectations placed on it 29 years ago when the Department of Planning argued that it was one of the most important archaeological sites in New South Wales. The Old Marulan 2007 archaeological project has realised some of its archaeological potential and demonstrated that the remainder of the town could contribute to a host of future archaeological investigations.

This current project provided a detailed field investigation and analysis of the portion of the Old Marulan township impacted by the Lynwood Quarry Project. The majority of the Old Marulan township resource was unaffected by the project and this remaining resource offers a broad range of possible investigations that could take place, should the opportunity arise in the future outside the structure of the Old Marulan 2007 project and this report. Some particular investigations that could add considerably to our understanding of the town, and help to round out the picture provided by this investigation could include:

- Archaeological survey of the entire town site, with accurate mapping and detailed descriptions of all remains in relation to the cadastre, to update Temple's 1981 survey and provide new information on the surviving remains, and taking advantage of better dating information.
- Mapping of early lime processing remains – recording in detail the lime kilns on the southern side of the Highway and conduct historical research on development of the industry.
- Sampling for environmental data – seeking deposits that preserve a good record of landscape and vegetation changes over the past two centuries, such as buried soils, permanently wet areas and sediment traps.
- Detailed ownership history of lots on the southern side of the highway with expanded biographical searching to establish personal and business connections.

Archaeological excavation has been shown to have the potential to provide detailed and well-provenanced information about households in different social strata in the town. Any future impacts upon other parts of the town site must consider the best method of investigation to ensure recovery of meaningful data sets rather than difficult to interpret assemblages from small test pits or other minimalist recovery strategies.

The construction of the interchange also prompts consideration of an appropriate name for it. Any name should refer directly to the historical significance of the site.

Ideally the name would mark the former town but as there are several other Marulan exits further north it may not be appropriate or unambiguous. South Marulan, while technically correct, refers to a much less significant later township. Other possible options suggested by the site's history and the way that the historic intersection was known to travellers would favour one of the following:

Woolpack Inn / Interchange. This would be particularly apt, as it refers to the most significant building in the town's history, which was a landmark for travellers at the junction of the roads and which lies beneath the road. Not least, there is a slight pun with Inn / Interchange that further reinforces the connection.

Joe Peters This would mark the first property owner and most significant person in old Marulan's history. Inns were often referred to by their licensee's names, and 'Joe Peters place' or 'Joe Peters Inn' is mentioned in travellers' accounts.

Mitchell's Thomas Mitchell laid out the road and the position of the town reflects his initial uncertainty of the relative potential of the seaward or inland routes. He is otherwise poorly commemorated on the road. It would complement Hoddle's Corner as the long-established name used for the Illawarra Highway / Hume Highway interchange locality.

While Woolpack Interchange is preferred any of these would be a positive reinforcement of the story of Marulan and serve a valuable interpretative purpose.



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Maps

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ATTACHMENT 1

Air photo analysis

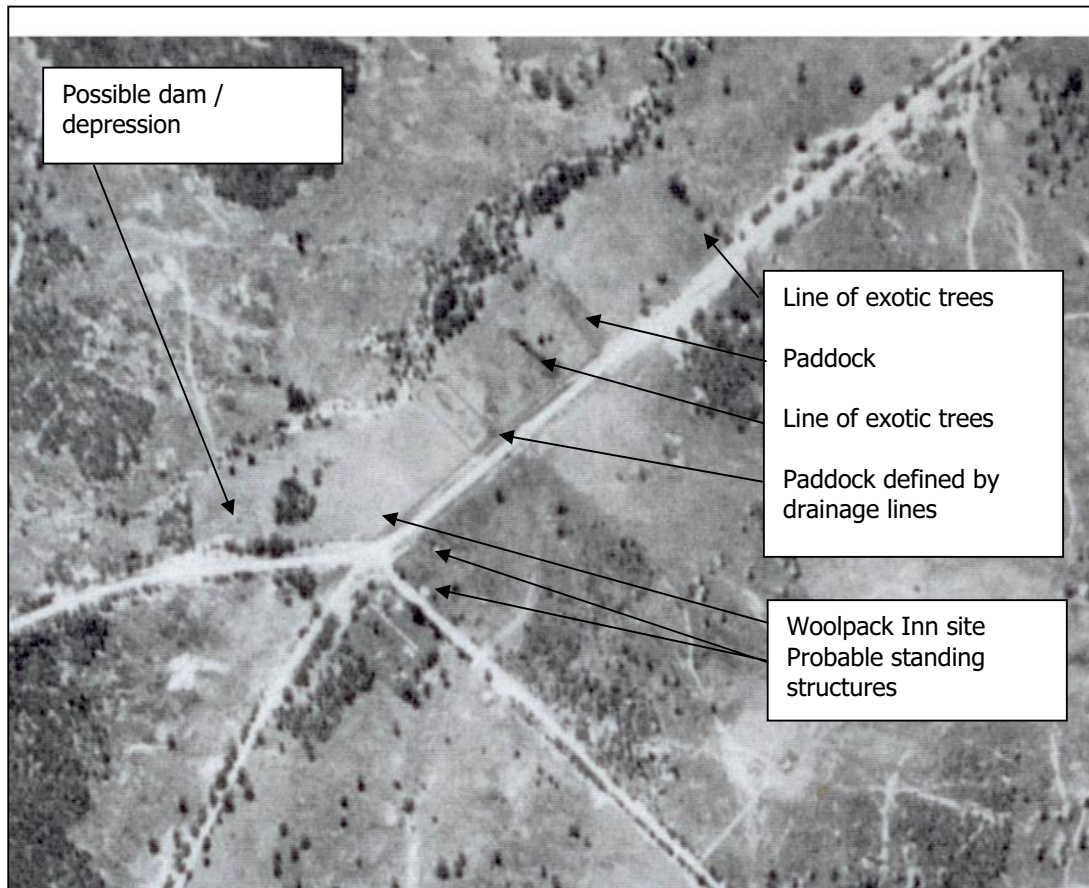
Old Marulan – air photo examination

In determining the s.60 application relating to Old Marulan the Heritage Office requested that additional examination of air photo coverage be undertaken to determine whether this could supply additional information [Condition 2.2].

The first available air photo covering the area is dated 1953. Four images taken from this date to 1975, when the Hume Highway widening was completed, were examined. The four sequential series examined are:

NSW 2034 Survey 1442 / I55 / g	Run 12	25 February 1953
Goulburn NSW 1176 5041	Run 5	February 1963
Goulburn NSW 1489 5110	Run 4	14 January 1967
Goulburn NSW 2333 15	Run 4	9 September 1975

None of the air photos reveal unexpected landscape features but they do clarify the extent of impact taking place during the widening of the highway. Individual images are discussed below.



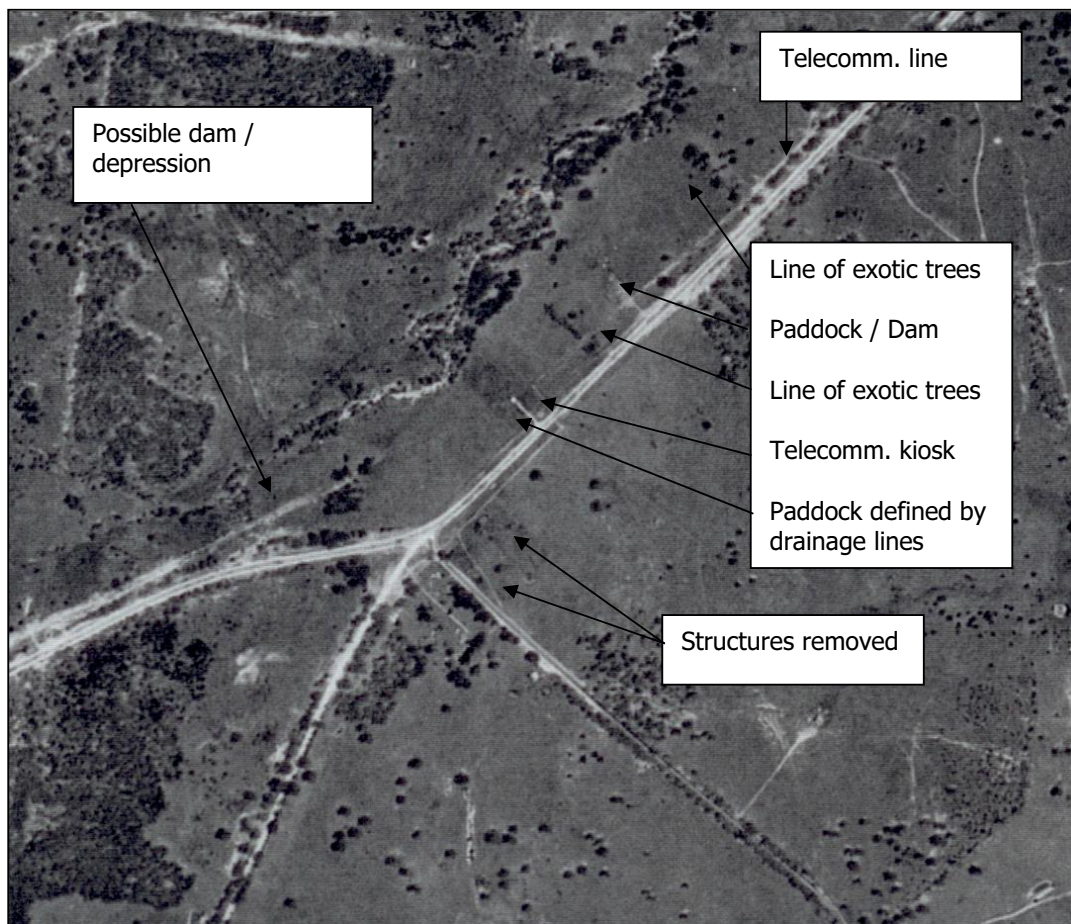
NSW 2034 Survey 1442 / I55 / g

Run 12 25 February 1953

The 1953 air photo shows the Hume Highway as low-grade rural road, probably unsealed. The impact area around the Woolpack Inn on the northwest side of the road is demarcated as a single large paddock. Further north there is a distinct paddock, which corresponds with drainage lines identified during survey, then a line of exotic trees and further linear features perpendicular to the road, outside the impact area.

No structures are visible on the Woolpack Inn site, but there are two probable standing buildings on the opposite corner. The only possible feature identified in the impact area is a slightly darker feature to the west of the large tree clump. This may be a depression such as a dam.

The next photograph dates to 1963. The main changes are that a telecommunications line has been installed to the west of the road line. This is clearly visible as an unvegetated scar which runs through the large tree clump. A short entry road leads to the small roadside repeater station bunker. To the north of the bunker the line of exotic trees, a small road and further trees.



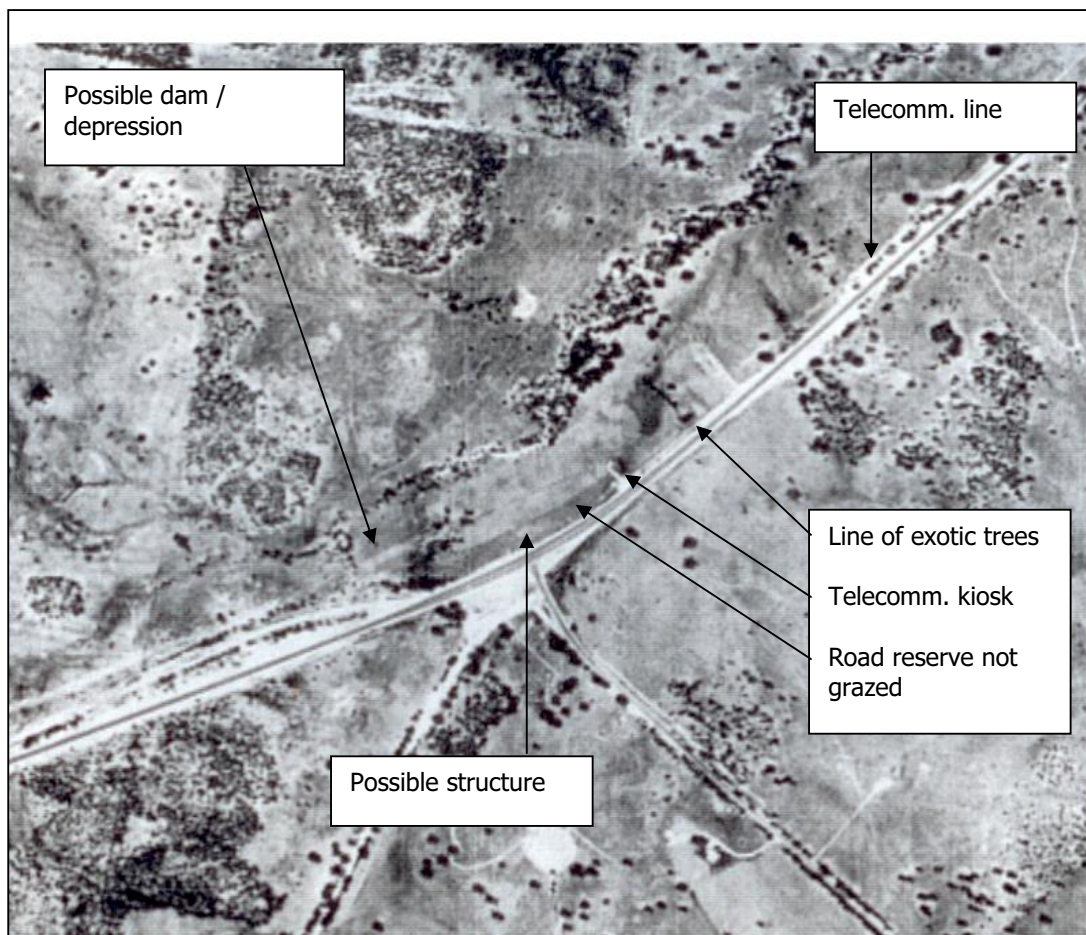
Goulburn NSW 1176 5041

Run 5

February 1963

Around the Woolpack Inn there are no visible structural remains or changes in the image that align with the levelled pads. The two structures on the southern side of the road have been demolished. This is consistent with the recollection of members of the Marulan Historical Society, who dated the removal of the last town structures as taking place in the 1950s.

The third image is dated to 1967. By now the construction of the widened Hume Highway had not reached Marulan, but it is clear that it would take place soon. On the Woolpack Inn site the air photo shows that the widened road reserve must have been fenced and excluded from grazing as there is a very different ground texture to the adjoining paddock. A slight angular lighter patch within the road reserve may indicate a structure in the Woolpack Inn location. The possible dam or depression to the west of the clump of trees is still evident.

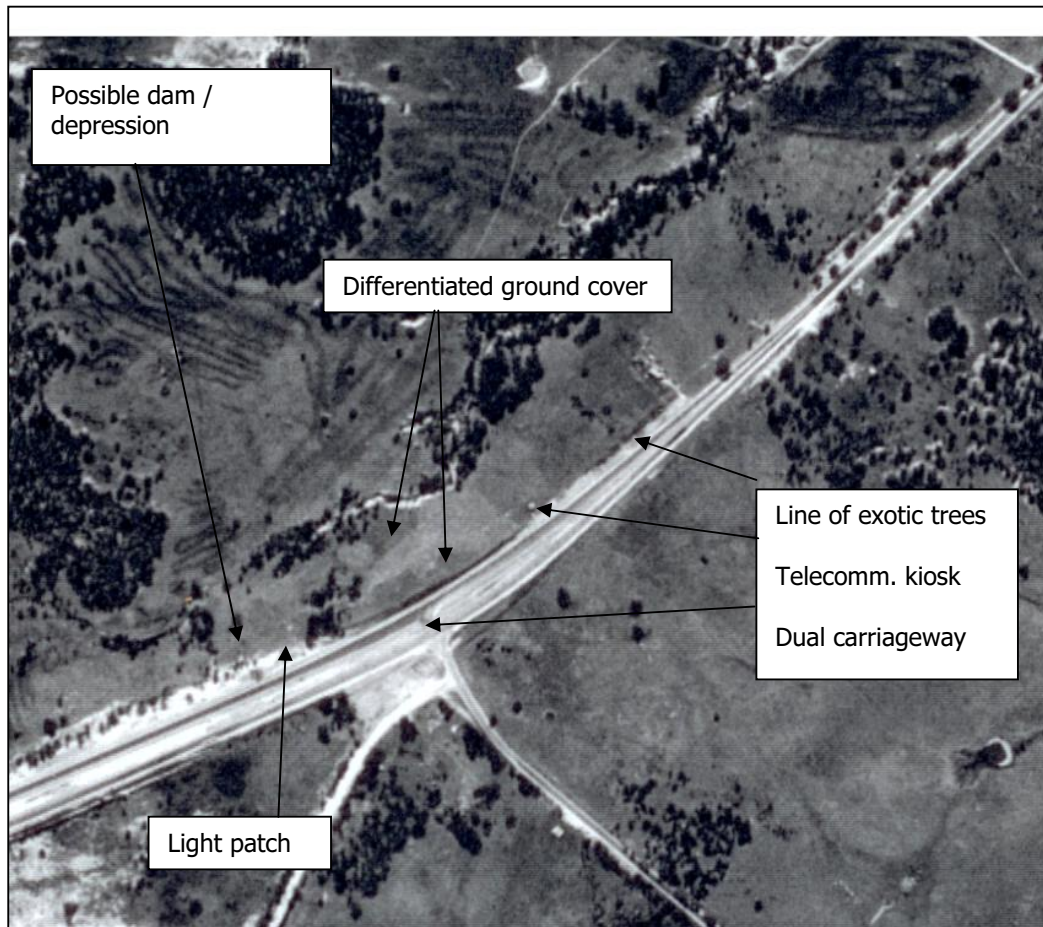


Goulburn NSW 1489 5110 Run 4 14 January 1967

The fourth air photo dates to 1975. The Hume Highway dual carriageway was constructed from just north of Old Marulan southwards. There are no substantive changes north of the Telstra kiosk.

To the west of the large clump of trees the possible dam can still be seen, along with another lighter patch. To the east of the trees, and northeast of

the Woolpack Inn the air photo shows differential colouring of grass roughly corresponding to the location of identified levelled areas and the creek flood plain.



Goulburn NSW 2333 15 Run 4 9 September 1975

Summary

Telecommunications line / kiosk	between 1953-1963
Last town structures	demolished between 1953-1963
Wider road reserve taken up	between 1963-1967
Dual carriageway constructed	between 1967-1975

Identified / possible structures

Possible Woolpack Inn
 Visible 1967
 Original location – Section 1, Lots 1-4

Lies within road reserve and is likely to have been partly destroyed in construction of dual carriageway. Adjoins OM30, 31 – levelled area and structure.

Structure west of clump of trees

Visible 1953, 1963, 1967, 1975

Original location – Section 5, Lots 8-9

Appears to be a depression or dam.

Roughly corresponds to either OM 20 or OM 21. Close to or outside the impact area.

Line of exotic trees [OM42]

Visible 1953, 1963, 1967, 1975

Outside the impact area.

Light coloured feature west of large clump of trees

Visible 1975

Original location – Section 5, Lot 10 or Crown reserve

Corresponds to OM23 – Possible structure.

Lies within the impact area

Paddock

Visible 1953, 1963, 1967, 1975

Original location – Section 7

Defined by linear drain features OM39. Extreme southern end is close to the impact area.

Telcommunications trench

Runs roughly parallel to road reserve, past kiosk.

Appears to be a single line. On-ground evidence shows more than one line in some places, meaning post-1975 work has also been undertaken.

Lies partly within the impact area.

Assuming that the two features west of the large cluster of trees correspond to OM20, OM 21 or OM 23, then there are no new archaeological structures indicated from the air photo coverage. Exact correspondence of these with the features will be confirmed when the extent of the identified structures are defined in Stage 1 archaeology work.

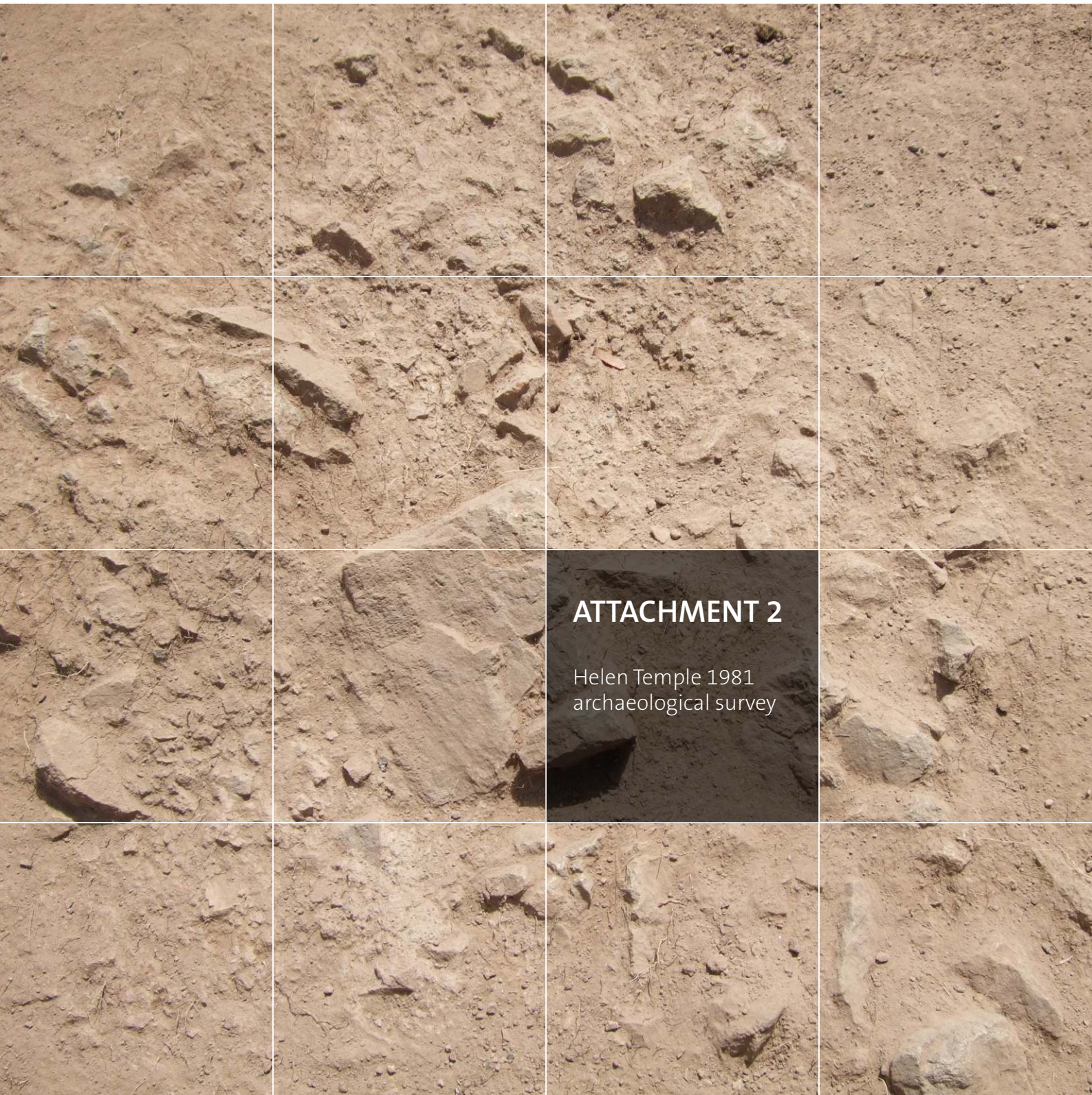
The additional information supplied by examination of the air photos provides more precise dating of important later events in the site's history. It also confirms the local tradition for the date of the demolition of the last building from the township.

Denis Gojak

Director

Banksia Heritage + Archaeology

8 December 2006



ATTACHMENT 2

Helen Temple 1981
archaeological survey

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OLD MARULAN TOWN, HUME HIGHWAY,

NEW SOUTH WALES.

ARCHAEOLOGICAL EVALUATION

REPORT BY: H. TEMPLE.

Archaeologist

Department of Environment and Planning.

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MAR

SUMMARY

Old Marulan Town was established as a simple wayside village on the Great Southern Road in 1834, and grew in size and importance until 1867 when the Sydney - Goulburn railway was completed. The rail route did not pass through Old Marulan, however, and from this time the town rapidly decreased in population and importance until by 1875 it was described as being in a ruinous state.

The town had a finite period of existence and there has been little subsequent disturbance of the site. As an archaeological resource it is potentially rich in information relating to life in a country town during a specific early period in Australian history. No other similar site is known as New South Wales.

The archaeological description of the site has been treated in two parts:

- (i) Eastern section
- (ii) Western section

Synopsis

The site of Old Marulan is outstanding archaeological resource which is able to vividly illustrate unrecorded details of Australian history relating to the form and functions of an early colonial service town and the way of life of its inhabitants.

Examination of the ground surface indicates that the total area of the site contains relics relating to the early occupation of the town. Future Archaeological research of the site will result in a wealth of information which is only suggested from surface finds.

The significance of the relics and deposits within this land is heightened by the limited period of the town's existence and the subsequent lack of further development of the land.

The site therefore is a rare "time capsule" relating to colonial town life from 1835-67 which has suffered minimal contamination from later phases of use.

Exploitation of the site in order to gather historical information would necessitate the preparation of a full research study prior to archaeological excavation of any part of the site in order that all possible avenues of research be considered.

Archaeological excavation may be regarded as organised destruction with current methods available, archaeological stratigraphy is destroyed in the process of interpreting the cultural remains. Therefore it is imperative that archaeological investigation of the site not take place until sound research questions have been outlined, and excavation methods evaluated.

Location

The site of Old Marulan town is situated on either side of the Hume Highway, 3.2 kilometres south of the present town of Marulan. It's position is readily identifiable by two prominent cemeteries on the eastern side of the highway.

Description

A village plan still exists, and is shown on the 1:25,000 scale Topographic plan TOWRANG 8828-1-5. The Hume Highway (formerly the Great South Road), Bungonia Street and Barber Street remain in present use, and a number of other streets are still identifiable. Barber Street currently provides access to trucks carrying material from mines in Bungonia Gorge although the road alignment has been altered at the intersection of the highway.

This plan is the final plan of the village layout dated and a series of earlier plans of the growing town have been located dated 1835, 1839, 1841. A detailed description of archaeological features and relics located in the field survey is attached at Appendix 'A'.

(i) Eastern Section

Remains of the town buildings and associated structures are concentrated on the eastern side of the highway (see sections 4, 2 and 6, plus lots 122-126 on plan marked appendix 'B'). The approximate position of the N/S property boundaries along the highway is indicated by a fence line with heavy vertical timber posts.

Field survey has identified the position of a substantial number of surface features in these areas associated with the original township.

These include:

- (a) foundations of a line of stone, brick and slab buildings which once stood along the highway;
- (b) evidence of domestic planting
- (c) remains of fences, walls and hedges along property boundaries;
- (d) depressions representing the alignment of streets.
- (e) refuse piles containing domestic debris,
- (f) one substantial (possible) communal well,
- (g) evidence of a blacksmith's forge,
- (h) an industrial area containing evidence of brick and lime manufacture for the production of building materials.
- (i) concentrations of brick, worked stone and artefact scatters indicating previous human occupation of the land,
- (j) various other features such as rectangular depressions and large bramble bushes which are characteristic of disturbed land resulting from human occupation,
- (k) two cemeteries containing burials from the period of settlement to the present time.

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(ii) Western Section

While the greatest number of sites have been identified on the eastern side of the highway, evidence of the previous occupation is apparent on the western side of the highway.

(Section 1, 7 and 8 and Lot 1 D.P. 21885 (plan attached as Appendix B))

Sites include:

- (i) a concentration of ceramic and glass fragments and a small number of broken bricks was found on the grass verge on the DMR reserve; though disturbed it would appear that the material relates to the site of the Woolpack Inn known to have stood on this land;
- (ii) mature introduced vegetation in section 7, indicative of early garden planting;
- (iii) a large bramble bush (section 5) possibly represents an early building site.

Field survey did not locate relics in Section 5 of "Appendix B".

Southern Section of the Site

Field survey did not locate relics in section 3 of Appendix B".

ARCHAEOLOGICAL EVIDENCESubsurface Remains

The concentration of surface finds in some areas indicates the location of subsurface, stratified archaeological deposits, however, it is important to note that no systematic archaeological excavation has been undertaken within the curtilage. The deposits of archaeological significance indicating the nature of occupation and settlement of Old Marulan Town are distributed throughout the site.

Surface evidence predominates in some sections of the site, and it can be predicted that the whole site contains covered relics which are not visible without excavation.

SIGNIFICANCE OF THE SITE

The town site is a valuable historical and archaeological site rich in information relative to the form and function of an early colonial country town and the way of life of its inhabitants. It was established in the earliest expansions of town and village settlement beyond the Cumberland Plain.

Population growth in the young colony had necessitated the increasing alienation and rural use of land. Dramatic increases in the number of traders and travellers along the new roads to these outlying areas required the establishment of service centres such as Old Marulan.

The town's formation in 1835, it's growth, subsequent removal to a site servicing the new railway in 1867 and the lack of it's further development, have resulted in settlement remains relating only to the thirty years of

occupation. Therefore occupational evidence at the site is restricted to these few decades.

Old Marulan's significance is two-fold. First, the number of towns dating from this early period which were not developed after the 1860's is very small. Those known to exist include Carrington, Boydtown and towns associated with mining activities.

Second, although roughly of the same period, Old Marulan is unlike these other town sites. The mining "towns" were mainly canvas settlements built for a transient and itinerant population and generally contained few buildings of even a semipermanent nature. Examples of this type of township include Hill End, Byng and Silvertown from the 1850's and 60's and Newnes and Glen Davis and Joadja from the turn of the century.

Both Carrington and Boydtown were private towns established as agricultural and trading centres respectively, for the purposes of the controlling company only. Neither town was formally laid out by the colonial administration.

Archival and documentary evidence for the town's history is limited. It provides the intended layout and subdivision of the town and some factual information on the existence of specific structures.

More detailed information on the number of allotments developed, the nature and chronology of that development, and its extent can only be found through archaeological analysis of the surface and subsurface remains. This would provide information on the economic, industrial and social history of the town and details on the daily life of its inhabitants verifying and augmenting the written record.

APPENDIX "A"Old Marulan - Sites Identified in Field Survey

SECTION 2-LAND OWNED BY D. MALCOLM

SITE NO.	LOT NO.	DESCRIPTION
✓ 1	10	A raised rectangular mound associated with brick rubble.
2	9	Small scatter of brick rubble.
3	8/9	Line of rubble both stone and brick - may represent a boundary fence. A clump of trees planted as a screen are also on this line.
4	8	Clearly defined rectangular foundations of a house. This is associated with a considerable scatter of brick, some of which show evidence of having been cement rendered. A row of rose bushes are situated on the street edge and an old apple tree behind. This building may have been standing until relatively recently.
5	7/8	Large climbing rose bush.
6	7/8	Unidentifiable non-indigenous plant, clearly part of garden planting.
7	7	A mound at the northern (street frontage) end of the timber post line (site 8) which is the base of a masonry wall.
8	7	2 depressions about 1.5 metres in diameter. The northern one may be a robber trench dug by relic hunters the southern one is filled with timber planking and - possible - defined by stone - just possibly a small well.
9	7	A line of vertical timber posts at regular intervals which apparently represents the boundary line of these two lots and the structure being site 7a.
10	6	Large bramble bushes covering mounds of stone rubble. Clear foundation lines visible and scattered with bricks.
11	6	A raised mound running E/W. This featured traces of vertical timber planks and coursed rubble foundations and may represent the base of a boundary wall.

- 2 -

SITE NO.	LOT NO.	DESCRIPTION
12	5	A large rectangular depression at the eastern end of the block. The edge is clearly defined by a raised mound 8 x 4m. (approx) and associated with a scatter of brick and stone rubble, bricks measured 6 x 10 x 22cm.
13	4	A small circular depression approximately 1 metre in diameter. While there was no evidence of rubble here, the grass within the circumference was considerably greener - may have been formed by extracting a tree root.
14	3	A loose scatter of stone, some of which may have been roughly cut on 3 sides.
15	2	Very shallow rectangular depression visible at dusk. Roughly 2m x 4 behind a large gum tree - no evidence of rubble.
16	1	A large cluster of brambles which may indicate disturbed land.
17	1	Rubbish dump - roughly circular depression about 2 metres in diameter containing artefacts of various ages, some quite contemporary but others clearly dating from the Old Marulan settlement. The deposit consisted of metal, glass, ceramic sherds, leather, and glass including black glass beer bottle bases with kickup. Numerous bricks were associated with this site. They were made of very roughly puddled clay, had no frog and measured 6cm x 10cm x X - no complete bricks were visible.
18	Sec. 2 Lot 11	Large rectangular depression near dam.
19	6	Series of mounds of brick and stone rubble clearly marking site of a structure a number of bricks featured a diamond-frog and all measured 6 x 10 x 22.
20	5	2 large timber posts set vertically in the ground just S/E of a substantial rectangular well. This is timber lined and reinforced with concrete aggregate.
21	5	A rectangular depression which may represent the remains of a timber slab structure.

+61 2 9873 8599

- 3 -

SITE NO.	LOT NO.	DESCRIPTION
22	4	Mounds of stone rubble defining a rectangle aligned with site 18. The site of a stone building or one with stone foundations.
23	3	A slight mound containing a concentration of brick and stone rubble aligned with sites 18 and 20. Probably the base of a fireplace and may have been part of a slab building.
24		A rectangular depression with a concentration of brick and stone rubble at the North and Southern sides, probably the bases of chimneys. This feature is aligned with sites 18, 20 and 21. The bricks featured diamond frogs.
25	2	Directly behind 22 a small area of slag was located associated with numerous items of wrought iron. It is postulated that here is the site of a blacksmith's forge.
26		A slight depression running NE/SW, parallel with Lot 1. This may represent the course of Flag Street.
<u>Section 9</u>		
27	5-8	A general scatter of domestic debris including glass, metal and ceramic artefacts associated with a scatter of brick.
28	1-4	Cemetery with standing tomb stones.
29	A151 2121	2 notable features being two high mounds. NE mound partially demolished brick structure with suggestion of domed top. Constructed of brick, the inner skin of which has been vitrified and which has been reddened by intense heat - this is clearly a kiln, probably a brick kiln and may have had a double chamber. SW - a semicircular feature constructed primarily of stone, the inner surface of which has a thick coating of hardened but not reddened mud. A brick arched flue pierces the SW side of the feature - no evidence of heating.

- 4 -

SITE NO.	LOT NO.	DESCRIPTION
30	122/125	Both features associated with a deep rectangular depression, possibly a small water reservoir.
31		Scatter of brittle calcium carbonate - probably heated limestone and associated with a few bricks with 1 vitrified face - probable site of lime production.
<u>D.P. 210885 Lot 1</u>		
Department of Main Roads reserve on the North Eastern side of Hume Highway.		
33		Area features a considerable concentration of transfer printed ceramic sherds - glass bottle bases and a small number of broken bricks. This has been identified as the site of an inn.
<u>Section 7</u>		
32		Mature introduced vegetation forming a hedge.
<u>Section 3</u>		
34	1	1 small concentration of broken brick rubble close to cemetery boundary.
<u>Outside Town Boundary</u>		
35		A standing cottage approximately opposite the intersection of Murray and Barber Streets. This cottage is later than the township of Old Marulen but interesting as the construction methods may echo those of the earlier, now demolished buildings. i.e. stone rubble coursing to a height of approximately 1.5 metres brick coursing about - an inconsistent mixture of colonial, english and flemish bonds.

Heritage Council of New South Wales PLAN

Under the Heritage Act, 1977

Description PART OF THE TOWN OF MARULAN
(SITE OF OLD MARULAN TOWN)

Mun/Shire/City MULWAREE

Parish of MARULAN

Locality MARULAN

County of ARGYLE

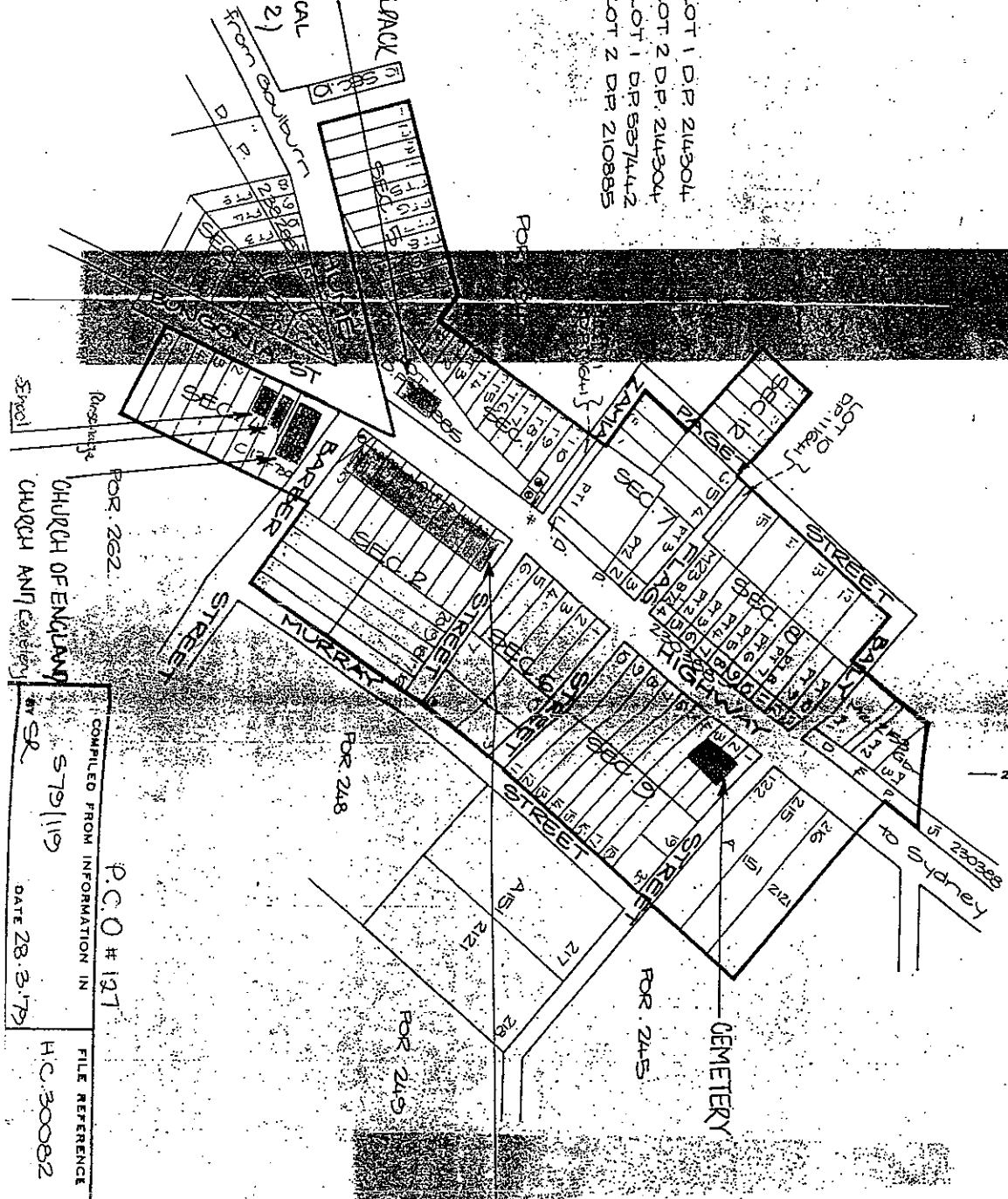
Scale 1:5000



LOCATION OF SITES
IDENTIFIED IN THE
HISTORICAL REPORT:

- LOT 1 D.P. 214304
- LOT 2 D.P. 214304
- LOT 1 D.P. 537442
- * LOT 2 D.P. 210885

PETER'S WOODLACK
INN, 1875
(REFER HISTORICAL
REPORT PAGE 2)

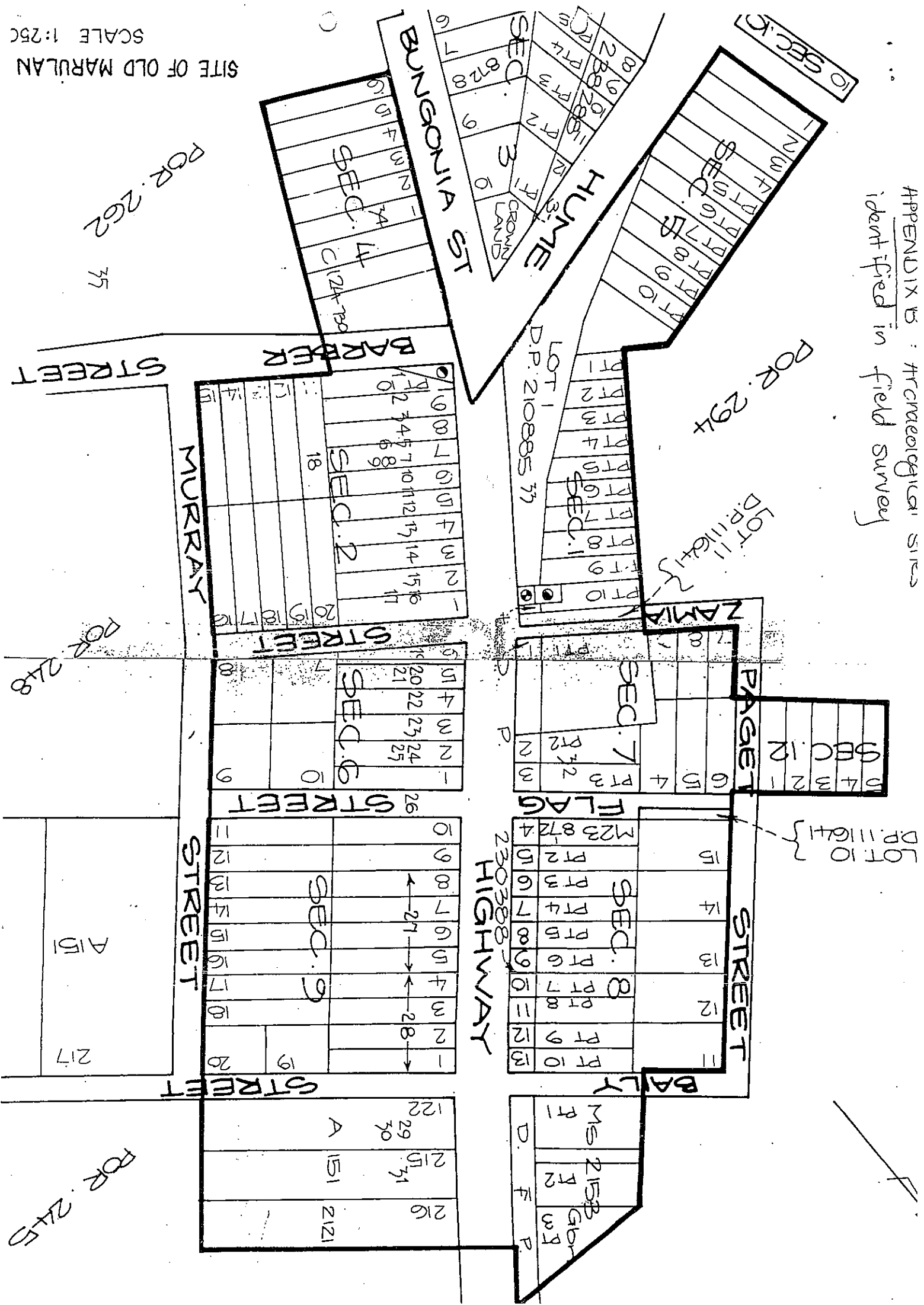


PULPING PLANTING FROM
1840's (REFER HISTORICAL
REPORT PAGE 3)

1. THE AUSTRALIAN STORE
(BRICK ON STONE FOOTINGS)
2. A SCHOOL HOUSE
(TIMBER SLABS)
3. A STABLE FOR FIVE
HORSES WITH LOFT.
4. A COWHOUSE, LATER
THE PUBLIC SCHOOL.
(BRICK ON STONE FOOTINGS)

COMPILED FROM INFORMATION IN S79/119	FILE REFERENCE H.C. 30082	PLAN APPROVED <i>Wanda Thomas</i>	PLAN NUMBER H.C. 384
P.C.O # 127	DATE 28.3.79	for SECRETARY, HERITAGE COUNCIL	

APPENDIX B : Archaeological sites
identified in field survey





ATTACHMENT 3

Consolidated electoral
and directory
information
1863 – 1878

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll
		ALDERSON, Wm H.		ABBOTT, Charles ARDLEY, William ARMSTRONG, George	ABBOTT, Charles ARDLEY, William ARMSTRONG, George
BARBER, George Hume	BARBER, GEORGE BARLOW, Nicolas BARLOW, Robert BARLOW, James		ARDLEY, William		
		BAXTER, Thomas BAYLEY, Edward	BATES, William	BATTEN, Edward	
BERRISFORD, Obediah	BERESFORD, Obadiah		BERESFORD, Obadiah	BELL, William BERENGER, Chas W. BERESFORD, Obadiah	
	BLAXTON, John		BERWICK, George BLAXTER, John BRENNAN, Kate BRENNAN, Mary	BERESFORD, Obadiah	
				BLAXTER, John	
	BRIELY, William S.	BRIERLY, James BRITH, James		BRENNAN, Thomas BRENNAN, John	BRENNAN, Thomas BRENNAN, Timothy Chas. BRETT, James
	BURTON, John		BROWN, John	BROWN, John	BROWN, John BUCK, Horatio Nelson BULMAN, George BURCHER, George H. BURNS, Paul
				BYRNE, James H. CADE, Joseph W.	
			CAPON, Charles	CAPON, Charles CARMICHAEL, Samuel CARRIGAN, Mary	CAPON, Charles F, junior CAPON, Charles F, senior CARMICHAEL, Samuel
	CASSON, Charles, National School teacher		CARRIGAN, Mary		
	CLARKE, George C.	CLARK, George CLAYTON, Henry CLOUTE, Henry	CHAPMAN, Richard	CHAPMAN, Richard CHISHOLM, William CLARK, George	CHAPMAN, Richard
			CLARK, George CLAWTON, Henry		
			CLOUT, John	CLOUT, John	CLOUTE, David

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll	
COLLINS, Joseph DALY, William DAVIS, David	COMES, John CONNORS, Denis CORRIGAN, Edward	COLEMAN, John	COCHRANE, John COLEMAN, John	COLEMAN, John	CLOUTE, William senior	
			COOK, Steven	CONNOR, Joseph		
			COOMBES, James	COOMBES, James	COOMBS, Edward COOMBS, James COOMBS, Joseph COOMBS, William	
				CUNNINGHAM, William H.	CUNNINGHAM, William M. CURTIS, Edward	
			DAWSON, George DAWSON, William	DAWSON, George	DAWSON, George	DAVIS, Thomas DAWSON, George junior DAWSON, George senior DAWSON, William
				DEAKLY, Ellen	DIGNAM, Patrick DIGNAM, Michael	
				DOBYNS, William DOWNS, John		
		DRENNAN, William		DRENNAN, William DUBAR, Daniel	DRINNAN, William	DRENNAN, William
		EDMONDS, Edward		EGAN, Patrick	DUCK, Thomas	
		ELWORTH, Michael EUSTACE, William	ELWORTH, Michael			
		FARROW, Walter Reeve	FARRER, Walter	FARBER, Walter	FARRON, Walter Reeve FELTHAM, John junior FELTHERN, George	
FERGUSON, John	FERGUSON, John FERGUSON, Thomas FERGUSON, Walter FERGUSON, William		FERGUSON, John	FERGUSON, John		
	FERRISS, John	Finnings, John	FERGUSON, William FENNING, John	FERGUSON, Walter	FERGUSON, Walter	
			FENNING, John			
			FITZPATRICK, Henry		FITZPATRICK, Hugh	

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll
FULLJAMES, John		FOLLENT, John FORREST, James FRANKS, Peter	FULJAMES, J. & R.		
		FULTON, William		FULTON, William FULTON, John FULTON, George GARBETT, John	GEORGE, William
	GILES, JOHN GLOVER, William			GRECIAN, Thomas GREEN, Thomas	GRECEAN, Thomas
	GREEN, William GREEN, Emma	GREEN, Thomas GREEN, William	GREEN, Thomas GREEN, William		
	GREY, Lettia GRIFFIN, Patrick			GREEN, Henry	
HALPIN, Daniel		GUTTERY, Thomas HALL, James HALPIN, Nicholas HANLEY, George HASLINGTON, John	HADDEN, Walter		
	HATFIELD, JOHN	HATFIELD, John		HANDLEY, George	
HATTER, James	HAWKINS. John HEATHWOOD. James J	HAWKINS, John			HILL, James HOARE, James HOGG, John HOGG, Ralph James HOGG, James
	HOPKINS, William			HOGG, James HOPKINS, James HOPKINS, George HOPKINS, William	
	HUGHES, George			HUGHES, James HUNTER, Thomas	HOURN, John HUNTER, Thomas
	ISAACS, Thomas JACKSON, William R.	ISAACS, Thomas			
	JEFFREYS, Mary	JARVIS, William F.			

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll
	JEFFREY, William JEFFREY, Maurice JENNINGS, John		JENNINGS, William JENNINGS, Elizabeth	JENNINGS, William	JENNINGS, William
	JOBSON, Robert JOBSON, William		JONES, Harry JONES, Henry		
	JORDAN, John	JONES, Charles JORDAN, Timothy	JONES, Charles	JONES, Charles	JONES, Charles
		KELLEY, Garrett		JUGS, Silas KEEFE, Patrick	
KILDEA, John KILDEA, Patrick	KILDAY, John KILDAY, Patrick KILDAY, Thomas		KELLY, George KELLY, Thomas	KELLEY, Thomas	
		KILPATRICK, Henry	KILPATRICK, Henry		KING, James LAWSON, Peter
	LEES, JOHN		LEAP, James LIARDET, Frederick LENNON, Mary	LEAP, James	LEAP, James
		MACARTHUR, Francis	MAHER, James	MAHER, James	
	MANN, JOTHER J			MARLEY, James MARTIN, William	MALLEY, James
MCCARTHY, Francis	MARSH, William MCCARTY, Francis MCLLLHATTON, William			MCLAREN, Arthur	MCLAREN, Arthur MCEWAN, William
	MCNIECE, Hugh,	MEDLEY, James		MEDLEY, George MILLER, John	
	MONTGOMERIE, Hugh	MONTGOMERY, Hugh	MONTGOMERY, Hugh	MONTGOMERY, Hugh MOODIE, A.	MONTGOMERY, Hugh MOODIE, Andrew
MORONEY, James	MORRISS, David			MORRICE, John	

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll
NEWCOMBE, Charles Edwin	MURRAY, James			MORROW, Joseph	
			MUNDAY, William	MUNDAY, William NASH, Robert	MUNDAY, William NASH, Robert NETTLETON, George H.
				NIMMETT, Robert NISBETT, James NOUGHNAN, John	NIMMETT, Robert
				O'BRIEN, Thomas	NOUGHNAN, John
NOLAN, Thomas	NOLAN, THOMAS	NOWLAN, Thomas	NOWLAN, Thomas		
	O'BRIEN, JOHN O'NEIL, Anne		O'NIEL, Anne O'NEIL, Eleanor		
O'NEIL, John OSLINGTON, John	O'NEIL, John O'SHUTON, John [?]	O'NEIL, John	O'NEIL, John OSLINGTON, John OSLINGTON, James PATHER, Joseph	O'NEIL, John	O'NEILL, John
PALLIER, Joseph	PATHER, JOSEPH	PALLIER, Joseph		OSLINGTON, James PALLIER, Joseph PAYTEN, Nathaniel	
	PEPPER, William		PENNY, Thomas PEPPER, William PEPPER, Henry	PENNY, Thomas PEPPER, William	PENNY, Thomas PEPPER, William
				PEPPER, Charles PEPPER, John PEPPER, James	PEPPER, Charles
			PETTINT, George	PETTINGELL, Joseph	PERKS, John PERRY, John
		PHILLIPS, James PIPER, Fred POLLARD, John PROSPER, George	PHILLIPS, James	PHILLIPS, James	
	QUINN, JAMES QUINN, Patrick		POLLARD, James PROSSER, George	PROSSER, George	
	RILL, William		REID, Ellen		REID, George P.
			RIPPON, Henry RIPPON, John	RIPPON, John	
		ROBINSON, George	ROBINSON, Thomas ROBOTHAM, Isaac		ROBERTS, William
				ROUSE, R. ROGERS, Henry	

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll
SHEPHERD, James	SHEPHERD, James SHEPHERD, John SHEPHERD, William	SHEPHERD, James SHEPHERD, John	SHEPPARD, James	SHEPPARD, James	RYAN, John
				SHEPHERD, George SIDWELL, Thomas SILAS, Conrad	SHEPHERD, George
	SLOWCOME, Maria	SIMPSON, Ebenezer	SIMPSON, George	SIMPSON, George	SIMPSON, George
	SPELLISSY, John		SMITH, John	SMALL, James	
				SPELLSY, John SPELLSY, Martin SPELLSY, Michael	
	SPRIGGS, Robert	SPRIGGS, Robert	SPRIGGS, Robert	SPRIGGS, Robert	
		STACE, Henry	STACE, Henry	STACE, Henry	
		STEVENS, William STEWART, William	STALL, Joseph STEPHENS, William	STHALL, Joseph STEPHENS, William	STEVENS, William
	STREET, John S				
			TICKNER, Edward	TAYLOR, Alfred Thompson, William	TAYLOR, Alfred
TINDALL, William	TINDELL, William TOTKILL, Samuel TOTKILL, John,	TINDALL, William			
	Wade, Eliza Jane			TWEEDY, John	TWEEDEY, John VEARES, John A.
WADE, John		WADE, John	WADE, William WADE, John	WADE, William WADE, John	WADE, John A. WALLACE, Joseph
	WALSH, Nicolas WALSH, Adam		WALCH, Nicholas	WALSH, Nicholas WALSH, Robert	
		WALSH, John		WARBURTON, Isaac WARBURTON, John	
				WARD, John WARD, Patrick	WARD, John A. WARD, Patrick
		WATERS, Joseph		WARD, Joseph	
WATERWORTH, James					WEEKES, Henry

1863 electoral roll	1867 Postal Directory	1871 electoral roll	1872 Greville Post office directory	1875 Greville Post office directory	1878 electoral roll
WILLOCK, Matthew	WHITE, John	WEBSTER, William	WELSH, John	WELSH, John WESTON, Alfred	WRIGHT, Alfred H.
		WOODS, John	WHEATLY, Ellen		
		WRIGHT, Charles	WRIGHT, Charles	WRIGHT, Charles WRIGHT, Morris WRIGHT, David	
		WRIGHT, Maurice			
		ZIMMERMAN, Charles			

Table Att 3.1. Comparison of names in electoral rolls and directories for Marulan 1863 – 1878. Highlighted names are ones that appear in more than one source.

Name Lists

All names appearing in the rolls were listed in the above table under the relevant year. Names that are likely to be identical were ascertained. Sometimes this was a matter of judgement, as people could potentially be listed with a common use name in one list and a formal name in another. Also some names were clearly misspellings, while others were likely on the basis of being too close in form or sound to be distinct people.

The resulting analysis revealed:

- 212 distinct named people
- 73 of these appear more than once

Only John O'Neil and John Wade appear throughout the period 1863–1878.

1863 – 27 Names

This is the START population for the calculation of population turnover.

1871 – 57 Names

Of these 7 occur previously

Loss per year $[27-7] / 8 \text{ years} = 2.5$ people of START population per annum are replaced.

This is annual turn-over of 4%.

Loss per year $[57-7] / 8 \text{ years} = 6.25$ people of END population per annum are replaced.

This is annual turn-over of 11%.

1878 – 77 Names [includes Tangryang]

Of these only 8 occur in 1871

Loss per year $[57 - 8] / 7 \text{ years} = 7$ people of START population per annum are replaced.

This is annual turn-over of 12%.

Loss per year $[77 - 8] / 7 \text{ years} = 9.9$ people of END population per annum is replacement and increase.

This is annual turn-over of 13%.

Population Increase

1863-1871

$[57 - 27] / 8 \text{ years} = 3.75$ new people p.a.

Increase of 13.9% per annum on START population

1871–1878

[77 – 57] / 7 = 2.9 new people p.a.

Increase of 3.5% per annum on START population

Taking these figures at face value the turnover in population in the 1860s is an average of 4% every year of the original population, but during the 1870s this triples. Over both decades the departures are both replaced and there is a far more rapid increase in population during the 1860s. This cannot be further narrowed down as to whether it is a quick result from the Robertson Land Acts in the early 1860s or a consequence of the coming of the railway in 1868.

There are methodological issues associated with this analysis. As mentioned above the identification of the same individual from different lists where they may use their common name on one and a formal name on another cannot be easily identified. The misspelling of some names was common, and correlating similar sounding names requires judgement in the absence of other reference information.

There is a slight potential for error arising from the compilation date of the lists. The date chosen is the publication, but there may be a considerable lag as the data was collated from across NSW.

There are also likely to be differences resulting from different rules for inclusion. The criteria for entry onto the electoral roll are clear but the requirement for household heads or independent business person could vary in other lists. Whether the female head was always listed if the husband was away is not clear.



ATTACHMENT 4

Master list of identified
archaeological features

Features are combinations of archaeological evidence and stratigraphic excavation units that represent discrete features, such as a building or activity area.

Feature	Element name	Cadastral location
Identified during preliminary survey and Stage 1 excavation		
OMF 01	Possible structure	Section 5, Lot 1
OMF 02	Artefact scatter	Crown reserve
OMF 03	Possible structure	Road reserve
OMF 04	Possible structure	Section 10, Lot 10
OMF 05	Artefact scatter	Section 10, Lot 10
OMF 06	Artefact scatter	Unalienated land
OMF 07	Possible structure	Section 5 Lot 3
OMF 08	Ground disturbance	Unalienated land
OMF 09	Artefact scatter	Unalienated land
OMF 10	Ground disturbance	Unalienated land
OMF 11	Pit / depression	Unalienated land
OMF 12	Pit / depression	Section 10, Lot 10
OMF 13	Artefact scatter	Road reserve
OMF 14	Artefact scatter	Crown reserve
OMF 15	Exotic planting	Section 5, Lot 1
OMF 16	Possible structure	Road reserve
OMF 17	Possible structure	Section 5, Lot 3
OMF 18	Levelled area	Section 5, Lot 3
OMF 19	Levelled area	Section 5, Lot 6
OMF 20	Dam / waterhole	Section 5, Lot 9
OMF 21	Pit / depression	Section 5, Lot 8
OMF 22	Isolated find	Section 5, Lot 8
OMF 23	Possible structure	Section 5, Lot 10
OMF 24	Pit / depression	Section 5, Lot 10
OMF 25	Possible structure	Section 5, Lot 10
OMF 26	Ground disturbance	Section 5, Lot 10
OMF 27	Alleged grave	Section 5, Lot 10
OMF 28	Quarrying	Section 5, Lot 10
OMF 29	Levelled area	Reserve
OMF 30	Levelled area	Section 1, Lot 1
OMF 31	Structure / levelled area	Section 1, Lot 1
OMF 32	Linear drain feature	Section 1, Lot 3
OMF 33	Levelled area	Section 1, Lot 4
OMF 34	Linear drain feature	Section 1, Lot 5
OMF 35	Pit / depression	Section 1, Lot 6
OMF 36	Levelled area	Section 1, Lot 6
OMF 37	Linear drain feature	Section 1, Lot 8
OMF 38	Pit / depression	Section 1, Lot 8
OMF 39	Linear drain feature	Section 8
OMF 40	Artefact scatter	Section 8
OMF 41	Artefact scatter	Section 8
OMF 42	Exotic planting	Section 8
OMF 43	Linear drain feature	Section 8
OMF 44	Building material scatter	Section 8

Feature	Element name	Cadastral location
OMF 45	Possible structure	Section 5 Lot 4
Identified during Stage 2 survey and excavation		
OMF 46	Cesspit and cobbled surface	Section 1 Lot 2
OMF 47	Brick and timber structure	Crown reserve
OMF 48	Stone features	Section 1 Lot 5
OMF 49	Probable former post office	Section 7 Lot 3
OMF 50	Burnt tree dump – units [4][15]	Section 1 Lot 1
OMF 51	Cobbled surface	Section 1 Lot 2
OMF 52	Garden beds	Section 1 Lots 4-5
OMF 53	Dwelling in Section 5	Section 5
OMF 54	Post holes – building[s]	Section 1 Lots 4-5
OMF 55	Post holes – building[s]	Section 1 Lots 3-4
OMF 56	Post holes – building[s]	Section 1 Lot 7
OMF 57	Post holes – building[s]	Section 1 Lot 8
OMF 58	Structure – south of creek	Beside creek outside town plan
OMF 59	Artefact scatter – north of creek	Beside creek outside town plan
OMF 60	Brick clamps – north of creek	Beside creek outside town plan
OMF 61	Possible perimeter fence line	Crown reserve



ATTACHMENT 5

Master list of identified
archaeological
stratigraphic units

OLD MARULAN 2007 Master list of excavation units

Unit No	Name	Type	Located in square	Excavated
1	Turf layer	Soil layer	220/591	Yes
2	Topsoil	Soil layer	222/598	Yes
3	Dark brown sandy soil	Soil layer	236/594 236/596 238/594 238/596 238/598 238/600 240/598 240/600	Yes
4	Black/dark brown humic layer	Soil layer	236/598 236/600 238/598 238/600	Yes
5	Crumbly mid-brown soil	Soil layer	236/594 236/596 238/594 238/596	Yes
6	Dark, fine compact soil	Soil layer	248/592	Yes
7	Dark brown soil removed from feature	Soil layer	246/594	Yes
8	Mix of brown topsoil (2), clay and bedrock (66)	Soil Layer	236/594 238/592 238/594	Yes
9	Surface extrusion of natural clay (66)	Natural	238/592	Yes
10	Dark soil	Soil layer	236/596	Yes
11	Dark humic soil	Soil layer/fill	256/598	Yes
12	Charcoal layer	Soil layer	246/594	Yes
13	Fill within irregular elongated feature (14)	Fill	236/598 236/600	Yes
14	Irregular cut with near vertical sides	Pit	236/598 236/600	Yes

Unit No.	Name	Type	Located in square	Excavated
15	Gravelly soil	Soil layer	236/596 236/598 236/600 238/596 238/598 238/600 240/600	Yes
16	Brown soil and gravel	Soil layer	238/594	No
17	<i>Not allocated</i>	-	-	-
18	Dark layer	Soil Layer	240/598 242/596 242/598 240/600	Yes
19	Dark humic soil	Soil layer	258/590 260/590 262/590 264/588 266/588 270/588	Yes
20	Possible stone structure	Structure	258/590 260/590	Yes
21	Possible cobble floor	Structure	260/590	No
22	Possible Stone Wall	Structure	262/590	No
23	Feature A and Feature B cutting into (66)	Negative interface	238/596	No
24	Light brown topsoil with brick and stone rubble	Soil layer	264/588 264/590 266/588 266/590 268/588 268/590 270/588 270/590	Yes
25	<i>Not allocated</i>	-	-	-
26	Interface above cobbled surface	Soil layer	264/588 266/590 268/590	Yes
27	Cobbled surface	Structure	266/590 268/590	Yes
28	Orange red clay	Soil Layer Arbitrary level	266/590 268/590	No

Unit No.	Name	Type	Located in square	Excavated
28a	Test pit (cobbled surface)	Soil Layer Arbitrary level	264/590	Yes
29	Small rock 'outcrop'	Natural	220/598	Yes
30	Rock outcrop	Natural	220/600 222/600	Yes
31	Rubble from collapsed structure (32)	Structure	266/588 268/588	Yes
32	Collapsed stone and brick structure possible privy	Structure	266/588 268/588	Yes
33	Two vertical rocks in possible alignment	Possible Structure	220/600	Yes
34	Brown soil 'fill' associated with (30)	Soil Layer	220/600	Yes
35	Vegetation line/natural or artificial drainage line	Possible Structure	286/596 288/596	Yes
36	Dark Round Pit	Pit	286/596 286/598	Yes
37	Olive grey sand with clay	Fill	286/596	Yes
38	Fine dark grey brown soil	Soil layer	286/594 286/596 286/598	Yes
39	Loose silty soil	Soil layer/Fill	238/600	Yes
40	Dark soil and artefacts	Soil layer	274/610 274/612 276/612 276/610	Yes
41	Sandy grey-brown silt	Soil layer/Fill	266/588 268/588	Yes
42	<i>Not allocated</i>	-	-	-
43	Clay fill of pit (36)	Fill	286/596	Yes
44	Fill of posthole (42)	Fill	286/596	Yes
45	Dark, fine-grained humic sandy soil and rubble	Soil layer	305/635	Yes
46	Square Posthole	Posthole	286/594	No

Unit No.	Name	Type	Located in square	Excavated
47	Square Posthole	Posthole	286/594	No
48	Possible drain	Linear Feature	286/594	No
49	Circular pit	Pit	286/594	Yes
50	Rectangular feature	Pit	286/594	No
51	Circular pit	Pit	286/594	No
52	Fill of pit (46)	Fill	286/594	Yes
53	Fill of posthole (47)	Fill	286/594	Yes
54	Fill of pit (49)	Fill	286/594	Yes
55	Fill of (50)	Fill	286/594	Yes
56	Fill of pit (51)	Fill	286/594	Yes
57	'Shadow' of rectangular feature	Possible Structure	286/594	No
58	Circular Posthole	Posthole	286/598	No
59	Fill of posthole (58)	Fill	286/598	Yes
60	Dark yellow brown clay	Soil layer	286/596	No
61	Stone cobbles	Structure	305/635	No
62	Gritty soil with lumps of yellow clay	Fill	305/635	Yes
63	Fill	Fill	305/635	Yes
64	Stone rubble	Fill	305/635	No
65	Packed stone and pebbles	Structure	305/635	No
66	Natural bedrock/clay	Soil layer	Across site	No
67	Silty loam	Soil layer	305/635	Yes
68	Compact yellow-brown soil with brick inclusions	Soil Layer	305/635	Yes
69	Decayed bedrock	Natural substrate	184/604 208/600 218/600 224/600 244/618 252/616	No
70	Dark grey soil	Fill	310/620	Yes
71	Burnt tree root	Pit/Posthole	310/620	Yes
72	Dark patch in soil	Pit/Posthole	264/588	Yes
77	Possible rectangular	Posthole	232/600	No

Unit No.	Name	Type	Located in square	Excavated
	posthole			
78	Pit	Pit	224/600	No
79	Linear feature with bricks	Structure	224/600	No
80	Linear depression with bricks	Structure	224/600	No
81	Three bricks in line	Structure	224/606	No
82	Brick line with corner	Structure	218/600	Yes
83	Possible square Posthole	Posthole	208/600	No
84	Possible rectangular Posthole	Posthole	184/604	No
85	Shallow possibly rock lined Pit	Pit	244/618	Yes
86	Pit fill	Fill	244/618	Yes
87	Pit fill	Fill	244/618	Yes
88	<i>Not allocated</i>		88-100 not allocated	
101	Posthole	Posthole	380/590	No
102	Posthole	Posthole	380/590	No
103	Posthole	Posthole	380/590	No
104	Circular posthole	Posthole	380/590	No
105	Posthole	Posthole	380/590	No
106	Rectilinear posthole	Posthole	380/590	No
107	Circular posthole	Posthole	380/590	No
108	Dark brown soil	Soil Layer	380/590	No
109	Circular posthole	Posthole	380/590	No
110	Rectilinear posthole	Posthole	380/590	No
111	Dark brown soil	Natural	380/590	No
112	Cut into natural clay	Pit	380/590	No
113	Rectangular Posthole	Posthole	380/590	No
114	Light brown soil	Feature	380/590	No
115	Black brown with yellow sand inclusions	Linear feature	380/590	No
116	Rectilinear posthole	Posthole	380/590	No

Unit No.	Name	Type	Located in square	Excavated
117	Grey-brown clay loam	Fill	380/590	No
118	Rectilinear posthole	Posthole	380/590	No
119	Rectilinear posthole	Posthole	380/590	No
120	Rectilinear posthole	Posthole	380/590 380/590	No
121	Rectilinear posthole	Posthole	380/590 380/590	No
122	Rectilinear posthole	Posthole	380/600	No
123	Circular posthole	Posthole	380/590	No
124	Circular posthole	Posthole	380/590	Sectioned
125	Grey-brown soil	Soil layer	380/590	No
126	Dark brown soil within Pit	Fill/Pit	370/590	Sectioned
127	Irregular pit	Pit	370/590	No
128	Circular posthole	Posthole	370/590	No
129	Rectilinear posthole	Posthole		No
130	Circular posthole	Posthole	370/590	No
131	Rectilinear Posthole	Posthole	370/590	Sectioned
132	Circular posthole	Posthole	370/590	No
133	Rectilinear posthole	Posthole	370/590	No
134	Rectilinear posthole	Posthole	370/600	Sectioned
135	Rectilinear posthole	Posthole	370/590	No
136	Linear feature associated with a rectangular pit	Linear feature	370/590	No
137	Square-cut posthole	Posthole	380/590	Sectioned
138	Square-cut posthole	Posthole	380/590	Sectioned
139	Square-cut posthole	Posthole	380/590	Sectioned
140	Square-cut posthole	Posthole	380/590	Sectioned
141	Square-cut posthole	Posthole	370/590	No
142	Square-cut posthole	Posthole	370/590	No
143	Square-cut posthole	Posthole	370/590	No
144	Square-cut posthole	Posthole	370/590	No
145	Square-cut posthole	Posthole	370/590	No
146	Square-cut posthole	Posthole	370/590	No
147	Circular posthole	Posthole	370/590	No

Unit No.	Name	Type	Located in square	Excavated
148	Circular Posthole	Posthole	370/590	No
149	Circular posthole	Posthole	370/590	No
150	Rectilinear posthole	Posthole	370/590	No
151	Irregular Pit	Pit	370/590	No
152	Posthole	Posthole	370/590	No
153	Dark brown soil	Soil Layer	370/590	No
154	Circular posthole	Posthole	370/590	No
155	Irregular pit cut into natural	Pit	370/590	No
156	Circular posthole	Posthole	370/590	No
157	Dark grey soil/linear feature	Linear feature	370/590	No
159	Rectilinear posthole	Posthole	370/590	No
160	Circular pit	Pit	370/590	No
161	Rectilinear posthole	Posthole	370/590	No
162	Tree root	Natural	370/590	No
163	Grey brown soil	Soil Layer	370/590	No
164	Posthole	Posthole	370/590	No
165	Dark grey-brown soil	Soil layer	370/590	No
166	Triangular Posthole	Posthole	370/590	No
167	Oval Posthole	Posthole	370/590	No
168	Rectangular Posthole	Posthole	370/590	No
169	Rectilinear posthole	Posthole	370/590	No
170	Rectilinear posthole	Posthole	370/590	No
171	Amorphous cut	Pit	370/590	No
172	Amorphous cut	Pit	370/590	No
173	Rectilinear Posthole	Posthole	370/590	No
174	Rectilinear posthole	Posthole	370/590	No
175	Rectilinear posthole	Posthole	370/590	No
176	Rectilinear posthole	Posthole	370/590	No
177	Rectilinear posthole	Posthole	370/590	No
178	Rectilinear posthole	Posthole	370/590	No
179	Rectilinear posthole	Posthole	370/590	No
180	[flooded]	-	370/590	No
181	Dark grey-brown	Fill	370/590	No

Unit No.	Name	Type	Located in square	Excavated
	soil			
182	Rectilinear Posthole	Posthole	-	No
183	Rectilinear Posthole	Posthole	-	No
184	Dark grey-brown soil	Linear feature	-	Sectioned
185	Grey-brown soil	Fill	-	No
186	Dark grey-brown soil	Fill	-	No
187	Dark grey brown soil	Fill	-	No
188	Dark brown soil	Fill	-	No
189	Circular Posthole	Posthole	-	No
190	Amorphous Cut	Pit	-	No
191	Rectilinear posthole	Posthole	-	No
192	Grey soil	Fill	-	No
193	Dark grey brown soil	Fill	-	No
194	Black-brown soil	Soil Layer	-	No
195	Grey soil	Soil Layer	-	No
196	Rectilinear posthole	Posthole	370/580	No
197	Rectilinear posthole	Posthole	370/580	No
198	Dark grey-brown soil	Soil Layer	370/590	No
199	Grey-brown soil	Soil Layer	370/580	No
200	Circular posthole	Posthole	370/590	No
201	Rectilinear Posthole	Posthole	370/590	No
202	Dark grey soil	Fill	370/590	No
203	Circular posthole	Posthole	380/590	No
204	Pit and Tree root	Pit	310/620	As Units 70 and 71
205	Grey staining	Soil Layer	-	No
206	Circular Posthole	Posthole	-	No
207	Circular Posthole	Posthole	-	No
208	<i>Not allocated</i>	-	-	-
209	Circular Posthole	Posthole	-	No
210	Dark grey-brown soil	Soil Layer	-	No

Unit No.	Name	Type	Located in square	Excavated
211	Dark grey soil	Fill	-	No
212	Linear Charcoal Feature	Linear feature	-	No
213	<i>Not allocated</i>	-	-	-
214	Circular posthole	Posthole	-	No
215	Dark brown soil, burnt tree root	Natural	-	No
216	Charcoal layer	Soil Layer	-	No
217	Black-brown soil	Soil Layer	-	No
218	Circular posthole	Posthole	-	No
219	Circular posthole	Posthole	-	No
220	Circular posthole	Posthole	310/600	No
221	Posthole	Posthole	310/600	No
222	Circular Posthole	Posthole	310/600	Sectioned
223	Grey-brown soil	Soil Layer	310/600	No
224	Oval Posthole	Posthole	310/600	Sectioned
225	<i>Not allocated</i>	-	-	-
226	Circular Posthole	Posthole	310/600	No
227	Dark grey brown soil	Soil Layer	-	No
228	Posthole	Posthole	-	No
229	Dark Brown black clay loam	Linear feature	310/600	No
230	Dark grey-brown soil	Soil layer	300/600	No
231	Dark brown , charcoal inclusions	Linear feature	310/600	Sectioned
232	Dark brown	Linear feature	300/600	Sectioned
233	Rectilinear posthole	Posthole	310/600	No
234	Dark brown soil	Soil Layer	310/600	No
235	Circular posthole	Posthole	310/600	Sectioned
236	Circular Posthole	Posthole	310/610	No
237	Rectilinear Posthole	Posthole	310/610	No
238	Circular posthole	Posthole	310/610	No
239	Circular Posthole	Posthole	310/610	Sectioned
240	Circular Posthole	Posthole	310/610	Sectioned
241	Circular posthole	Posthole	310/610	No

Unit No.	Name	Type	Located in square	Excavated
242	Circular posthole	Posthole	310/610	No
243	Dark brown soil	Fill	310/610	No
244	Grey brown soil	Natural	290/610	No
245	Rectilinear Posthole	Posthole	290/610	No
246	Rectilinear Posthole	Posthole	290/610	No
247	Two rectangular overlapping Postholes	Posthole	290/610	No
248	Rectilinear posthole	Posthole	290/610	No
249	Circular posthole	Posthole	290/610	Sectioned
250	Rectilinear posthole	Posthole	280/600	No
251	Rectilinear Posthole	Posthole	280/600	No
252	<i>Not allocated</i>	-	-	-
253	Circular Posthole	Posthole	310/600	No
254	Rectilinear posthole	Posthole	320/600	No
255	Circular Posthole	Posthole	300/610	No
256	Circular posthole	Posthole	300/610	No
257	Rectilinear Posthole	Posthole	300/610	No
258	Circular posthole	Posthole	300/610	No
259	Circular posthole	Posthole	300/610	No
260	Linear feature	Linear feature	300/600	No
261	Rectilinear Posthole	Posthole	300/600	Sectioned
262	Circular pothole	Posthole	300/600	No
263	Rectilinear Posthole	Posthole	-	No
264	Circular posthole	Posthole	290/600	No
265	Rectilinear posthole	Posthole	290/600	No
266	Rectilinear posthole	Posthole	290/600	Sectioned
267-299	<i>Not allocated</i>	-	-	-
300	Charcoal staining	Soil Layer	280/600	No
301	Linear charcoal stain	Linear Feature	290/590	No
302	Rectangular Posthole	Posthole	290/590	No
303	Rectilinear posthole	Posthole	290/590	No
304	Rectilinear posthole	Posthole	290/590	Sectioned
305	Rectilinear Posthole	Posthole	290/590	No
306	Rectilinear posthole	Posthole	290/590	No

Unit No.	Name	Type	Located in square	Excavated
307	Circular Posthole	Posthole	-	No
308	Rectilinear Posthole	Posthole	-	No
309	Circular Posthole	Posthole	290/590	No
310	Circular Posthole	Posthole	290/590	No
311	Circular Posthole	Posthole	290/590	No
312	Circular posthole	Posthole	290/600	No
313	Linear feature	Linear feature	290/590	No
314	Dark grey linear feature	Linear feature	290/600	No
315	Grey-brown linear feature	Linear feature	290/600	No
316	Rectilinear posthole	Posthole	290/600	No
317	Rectangular Posthole	Posthole	290/600	No
318	Circular posthole	Posthole	-	No
319	Rectangular Posthole	Posthole	280/590	Sectioned
320	Posthole and linear feature	Posthole	280/590	Test pit
321	Rectangular Posthole	Posthole	-	No
322	Rectangular Posthole	Posthole	290/600	Sectioned
323	Dark loamy soil	Soil Layer	290/600	Sectioned
324	Dark grey brown sandy loam	Linear feature	290/600	No
325	Dark grey sandy loam	Linear feature	300/600	No
326	Two circular Postholes	Posthole	280/600	No
327	Rectangular Posthole	Posthole	310/600	Sectioned
328	Irregular Posthole	Posthole	290/600	No
329	Rectangular Posthole	Posthole	290/600	No
330	Circular Posthole	Posthole	290/600	No
331	Circular posthole	Posthole	290/590	No
332	Circular posthole	Posthole	290/590	No
333	Circular posthole	Posthole	280/600	No

Unit No.	Name	Type	Located in square	Excavated
334	Circular posthole	Posthole	280/600	No
335	Dark brown sandy loam	Linear feature	280/590	No
336	Circular posthole	Posthole	280/590	No
337	Black-brown with charcoal inclusions	Linear feature	280/590	No
338	Rectilinear posthole	Posthole	280/590	No
339	Rectangular Posthole	Posthole	280/590	No
340	Circular posthole	Posthole	280/600	No
341	Circular Posthole	Posthole	280/600	Sectioned
342	Dark brown-grey soil	Soil Layer	260/600	No
343	Rectangular Posthole	Posthole	230/600	No
344	Circular posthole	Posthole	252/616	No
345a	Circular posthole	Posthole	280/600	No
345b	Charcoal stained loam	Linear feature	290/600	No
346	Dark humic brown soil	Linear feature	290/600	No
347	Rectilinear posthole	Posthole	-	No
348	Posthole	Posthole	290/600	No
349-410	<i>Not allocated</i>	-	-	-
411	Square-cut posthole	Posthole	122/ 335	Y - section
412	Posthole	Posthole	560 / 334 560 / 336	560 / 334
413	Dark brown soil	Soil layer	Across site	Multiple square
414-500	<i>Not allocated</i>	-	-	-
501	Modern redeposited soil	Fill	Road reserve	Excavated
502	Interface of destruction	Interface	Road reserve	-
503	Township deposits	Surface	Road reserve	-
504	Brick rubble	Fill	Road reserve	[= 031]
505	Hydrated lime	Layer	Road reserve	-
506	Ephemeral structure		Road reserve	-