BLAYNEY SHIRE COMMUNITY BASED HERITAGE REVIEW

Thematic History







Cover photograph: Blenheim Hall., 1859, Carcoar

ACKNOWLEDGEMENTS

The 2010 Review has been completed for Blayney Shire Council with the support of the NSW Government – Office of Environment & Heritage and the Heritage Council of NSW by David Scobie Architects Pty Ltd

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Invaluable contributions were made by the community during the Review and in particular the Millthorpe Village Committee, Millthorpe & District Historical Society and Carcoar & District Historical Society and Carcoar Village Association supplied information and reviewed a range of documents.

The Heritage Study including the Thematic History was funded by Blayney Shire Council with support from The NSW Heritage Council and The Office of Environment & Heritage

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Tuesday, 23 February 2010

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THEMATIC HISTORY

1.1 THE BIOPHYSICAL ENVIRONMENT

The Blayney Shire Council consists of a natural drainage basin, of approximately 1,600 square kilometres, bisected down the north/south axis by the Belubula River, which is a headwater stream for the Lachlan water catchment.

The Belubula drains a section of the Orange Plateau, which is a part of the Central Tablelands, uplifted from its surrounding regions along a series of fault lines, the main one in the Blayney Shire being the Copperhania Fault. It is seen most clearly at the steep incline at Fitzgerald's Mount.

Geologists consider that in ancient times, volcanic islands sat amidst warm shallow seas, whose coral reefs now form extensive limestone deposits and caves in the area. The lava which erupted from Mount Canobolas, near Orange, spread across the Blayney district onto the sedimentary rocks of the shallow seas. Chemically-rich steam was trapped, and condensed to form mineral deposits. As the lava cooled quickly, it formed fine grained basalt rocks, possessing high iron content. This metal reacts with air to create a rusty red colour on the rock's surface, although when broken, a bluestone is revealed. This feature has been used in many of the older buildings in the Shire. As well, varieties of igneous rock formed around a volcanic vent, which is known as Mount Macquarie.

The district is extensively folded and faulted, due to past volcanic action. Its topography has developed into a series of well rounded ridges, separated by wide, mature valleys. These valleys are thought to have developed in two stages:

- 1) Broad valleys carved into the plateau by runoff, in a period of much higher rainfall;
- 2) A subsequent uplift of the area, leading to a renewal of activity by the present underlift streams cutting into the older valley floors.

Between these two periods of valley formation, renewed activity causes lava to flow over the plateau, and down the channels of the mature valleys, to form a hard covering of basalt. Remnants of the basalt are found on the top of the plateau, in places such as Millthorpe, and on a bench on the sides of the valleys.

In places, the geological instability has resulted in the exposure of rich mineral veins, which attracted miners to many sites across the Shire. Currently, there are open cut mining operations in Cadia Valley which commenced in 1996. The mine is the largest gold and copper producer in New South Wales and one of Australia's largest gold producers. The operations comprise a large low grade Cadia Hill open pit mine and the higher grade Ridgeway underground mine.

Past tectonic activity combined with the subsequent erosion of the thin lava crust, to expose the more easily erodible granite rocks. In some places, the original sedimentary rocks have been incised, creating blends of fine silty soils.

At the risk of over-generalisation, red basalt soils tend to dominate the tops of the hills, and lighter granite soils the valley floors. As the granite, formed from lava which cooled slowly, it breaks up into large grained soil, which is easily leached, and holds little moisture in dry

periods. Alternatively, the red basalt soils are more clayey, and can become waterlogged. Both are slightly acidic, and form solodic and podzolic soils respectively. Lime is spread by farmers to neutralise the acidity, and superphosphate utilised to replace leached nutrients.

Sixty percent of the district has soils which are being eroded, most suffering moderate gully erosion, although two-thirds of the district is flat to undulating. Most of the remaining area is rolling to hilly terrain, which has formed on granites, and, more particularly, andesite. As this volcanic rock possesses a column joint pattern, it creates rugged upstanding topography, evidenced at Coombing Gorge. Mount Macquarie (1,200 metres) dominates this area, as the country falls away to the lowest point in the Shire, of 500 metres at Burnt Yards.

The variation in heights creates several micro climates. However, precipitation is relatively high, in what is the driest continent. In the Blayney Shire, it ranges from 740mm to 800mm, generally increasing with height, although there are some rain shadow effects from Mount Canobolas, on the western boundary.

Usually, there is a slight seasonal drought from February to May, and plant growth between April and October is very slow, and subject to heavy frosts. Blayney's daily average minimum temperature, over a year, is 4.3 degrees Celsius, while the average maximum temperature is 18.4 degrees Celsius.

Prior to European settlement, this region was covered by open eucalypt woodland, featuring the long leafed box and stringy bark varieties. The forest tended to be denser in the east of the Shire, with outcrops of heavier soils and higher precipitation.

Amongst the species which populated the district were ribbon, Peppermint, Snow and Yellow Box gums, Black Sally and Black Wattle. Native tussock grasses, which had low density and high fibre content, thrived beneath this light leafed canopy. In European eyes, this gave them limited grazing value. Typical examples of the native grasses were Wallaby Grass, Rough Spear Grass, Queensland Blue Grass, Weeping Grass, Common Wheat Grass and Kangaroo Grass. Meanwhile, wallabies, kangaroos, koalas, possums, echidnas, platypus, wombats and a variety of reptiles dwelt in this habitat. Not surprisingly, the biophysical environment supported an Aboriginal culture for thousands of years.

1.2 THE ADAPTIVE ABORIGINAL SYSTEM

It is generally accepted that the Aboriginal inhabitants of the region lived in harmony with the environment. The lifestyle utilised the natural resources of fish, timber and the native flora and fauna, without depleting them to the point where they would have to change their ways to a more sedentary lifestyle.

Owing to the cold winter climate, the Blayney district served primarily as a hunting ground for the Wiradjuri tribe, which was based around the Macquarie and Lachlan River systems. Nevertheless, there were religious sites, which were identified with nature, and marked by natural landforms.

As hunter gatherers, the Aboriginals lived off whatever was available from the land. A large percentage of this was plant food. Although the Aboriginals did not generally grow their own food, neither did they wait for food to come their way. They developed a very detailed

knowledge of what was available, the seasons during which these foods occurred, and access to water. The Blayney district was particularly suited to their lifestyle during the dry times, as it possessed a network of perennial streams and springs, and retained a 'green pick' until late in the season. At time, the Aboriginals utilised firestick farming, to help rejuvenate the forest, while flushing out wildlife from the woodland.

Each clan resided within a specific territory, and held in trust a series of 'dreaming' sites, where particular ancestors had travelled in the past. Periodically at these sites, the initiated men re-enacted chants, mimes and dances, regarded as essential. The events of the 'dreaming' thus formed the basis of the local Wiradjuri religion, spiritual values, social relationships, food collection, distribution and law.

1.3 THE ARRIVAL OF EUROPEANS

The arrival of European explorers in the district in 1815 signalled the rapid decline of the Aboriginal system, as the environment was altered to suit the methods of a northern hemisphere social, economic, political and religious system.

Through the expansion of the pastoral industry, introduced diseases, government policies and genocide, the Europeans decimated the Wiradjuri tribe. The crucial relationship, where the Aboriginals believed that they did not own the land, but the land owned them, was broken by the invasion of squatters, the establishment of government stock stations and the sale, and granting, of land to free settlers and emancipists.

Initially, the Wiradjuri were willing to share their land. However, once they realised that much of it was been taken from them, they resisted in a series of guerrilla wars, which threatened the whole European system of pastoralism. It was only through the poisoning, rounding up and shooting of women and children, that the warrior leader, Windradyne, was forced to ask his clansmen to lay down their arms. The Wiradjuri became dependent on white society for handouts and lowly paid work. They were fringe dwellers on their own land.

The new white immigrants were determined to remodel the strange new southern environment on that of the northern hemisphere. They replaced the native grasses and trees with exotic crops and animals. Ignoring the heat of summer, the Europeans maintained the dress and customs of a cold climate.

After George Evans' initial foray into the district, known as Kings Plains, in 1815, Governor Macquarie tried to slow the drive into the interior. HE had a vision of NSW as a closely settled agricultural community, similar to his homeland. He proscribed that settlers were to venture no further than government out posts. Within this territory, public service was to be funded by the sale of stock, raised on lands set aside as Church and School Estates. However, the Governor's intention was defeated by squatters, who soon crossed the Macquarie River, and took up tracts of land in the Blayney district.

The local Church and School Estates were vested in a board of five commissioners. Nevertheless, the grants were revoked in 1833, the stock sold, and the country opened up to private settlement in 1837. However, the fact that the commissioners obtained the largest and choicest areas and wealthy squatters claimed other tracts outside the estates, and received the largest grants, because they possessed the most capital, were the seeds of conflict in later years. Furthermore, intermarriage between three families, controlling over 300,000 acres, and their appointment to the local judiciary, exacerbated the fear that a wealthy, Protestant, English clique governed the area, as if it were their own fieldom. Their tenure and influence was extended by illegal practices, such as dummying, and the securing of considerable bodies of convicts to work on their lands.

Meanwhile, the sites for Kings Plains and Carcoar were set aside in 1828 and 1829. Although Carcoar grew to become the administrative centre of the Blayney district, the bulk of the population lived in the private town, owned by Thomas Icely, on the southern side of the Belubula River, on part of his 'Coombing' property. The government side of the town of Carcoar was laid out in 1834, and owing to the requests of large landowners, including Icely, a police detachment was stationed there, to protect citizens from the increasing depredations of smaller squatters, who stole stock, and committed other illegalities, to maintain their foothold in the district.

Carcoar eventually became the second most populace town on the western side of the Blue Mountains, due to its role as an ecclesiastical and administrative centre. Meanwhile, the crossroads settlements at Millthorpe and Blayney developed slowly.

By 1850, the society of England had been duplicated, and the Wiradjuri all but eliminated. Large gentleman land-holders were surrounded by servants, and all the accoutrements that an Englishman of status required. Their carriages, gardens and residences were modelled on the English practice, with little concession to the Australian conditions. Perhaps, the wholesale transfer of lifestyle and regard for the environment was more easily attained in the colder tablelands area. However, those on the smaller holdings, and battling against the native environment rather than insulating themselves against it, were the first to realise the nature of the problem that the European invasion had set itself. They had been assigned a place in the English perception of the noble yeomen, working their acreages, to produce the English crops. Failure soon led these settlers to conclude that this role was unworkable, unless they adapted their farms and lifestyle to Australian conditions, which favoured pastoralism on large acreages. The onset of the Gold Rushes in the 1850s provided the small-holders with the opportunity to get bigger, or get out.

1.4 RAPID POPULATION GROWTH WITH THE GOLD RUSHES

The discovery of gold at Ophir in 1851, had obvious effects on the natural environment, and caused significant changes to the social, political and economical environments in the Blayney district. The gentlemen squatters were faced with a drying up of cheap labour, from both the full time artisans they had imported from England, and the surrounding small-holders who supplemented their income through seasonal work. A new middle class of shopkeepers, self employed tradesmen and entrepreneurs arose, and established themselves in towns and villages throughout the Shire, to serve, not only the miners needs, but also the requirements of those who took up the new lands, released under the Selection Acts of the 1860s.

Governments were forced to cater to the rapid population growth in the District, and established an improved infrastructure and supply of services, such as postal and telegraph

facilities, and increased police protection. For it was during the 1860s, when the easy gold had been found, and the free selectors found their dreams of rural prosperity on 40 acre allotments turning sour, that the bushranging menace was at its height. In the Blayney district, it was exacerbated by the long running political, religious and social divisions, which had been established in the earlier pioneering days.

The social environment lent itself to bushranging, and the physical environment of wooded hills and valleys, made pursuit of the culprits difficult. Ex-convicts, the Irish and the desperate small-holders and selectors were not averse to seeing the large gentlemen land-holders subjected to robbery and ridicule, and in fact, provided and extremely effective system of shelter and bush intelligence, encouraged by rewards of booty.

Eventually, the gangs under Ben Hall and Frank Gardiner were run to ground, but not before there had been a basic shift of power to the new entrepreneurial class, in the rapidly growing towns. As some of the larger property owners, such as Thomas Icely, moved out of the district, the business men filled the vacuum and provided leadership and stability. Their enterprises served the rural and mining populations, as well as the big squatters. At the same time, they provided employment opportunities and new local markets for district producers. It was during this period that many of the present long-established families gained a start. It was also the period which saw the peak of Carcoar's dominance as the centre of the district, and the shift of influence to Blayney, Millthorpe and Newbridge, when the new Great Western Railway line was driven through the area, in the mid 1870s.

1.5 CLOSER SETTLEMENT REINFORCED BY RAILWAY DEVELOPMENT

Blayney's central role in the region was reinforced by its rise to the status of a major junction in 1888, when the line from Cowra was completed. Certainly, Carcoar now had a railway station, but the intervening lag of 12 years saw most of the major operations flourish in Blayney, as produce and commerce followed the railway. It was in the 1870s and 1880s, that the boom in Australia was reflected in the district, with the construction of major public works, and an increase in primary processing, with the establishment of flour mills and butter factories. The surrounding villages prospered, but it was the towns of Blayney and Millthorpe which flourished.

Blayney became a railway town. Hundreds of workers were directly employed by the government, while many businesses catered to freight and passenger traffic, which grew rapidly as export markets opened up.

But it was the direct link to the Sydney market which provided the greatest stimulus to Millthorpe. The rich soils and reliable rainfall, couples with its late season, combined to provide the chaff industry, which fed the capital's horse-based transportation system, with a unique market niche. As well, the establishment of a large flour mill, created regular employment to support the wide range of seasonal work available in local orcharding and farming enterprises.

Essentially, the whole district was regarded as progressing from a more diversified base than had been present before the arrival of the railway. Development was now tapped into a wider market, both in NSW and overseas.

1.6 DIVERSIFICATION OF MINING DEVELOPMENT

A diversified mining base, linked to strong export demand, reinforced rural development in the Blayney district. Certainly, it was more subject to boom and bust, but the wide range of metals, extracted from the region's complex geology, provided a certain stability, which other regions lacked.

Although gold was still the basis of most initiatives at sites such as Browns Creek, Junction Reefs, Forest Reefs and Gallymont, it was the discovery, and smelting, of copper, combined with the shipping of iron to a new blast furnace at Lithgow, which created many employment opportunities. The Blayney Copper Mine and the Carcoar Iron Quarry provided a long term stimulus to town development. In fact, increased private wealth led to demands for a matching rise in the standards of local public facilities. This demand was met by the formation of Carcoar Municipal Council in 1879, and the Blayney Municipality in 1882.

1.7 GROWTH OF LOCAL GOVERNMENT INFRASTRUCTURE

While the railway brought expanded commercial development, the provision of adequate roads, water supply and town planning, to ensure health and safety, lagged far behind. Initially, the formation of local government was concentrated in the towns. However, by 1906, the remaining areas of the district were embodied in the Lyndhurst Shire, a precursor to the current Blayney Shire.

At the time, a certain unity of purpose between the urban and rural dwellers was maintained in the common goal, to ensure that the roads remained passable, and allowed the benefits of the railway to be fully realised. However, by the turn of the century, it became obvious that Blayney was a town that was earning a reputation as an unhealthy place to live, due to its primitive public water supply. Real efforts were made to improve, not only the sources, but also the distribution, particularly in the light of the high water table, and its effects in mixing the contents of latrines with the wells on which many people relied.

Town planning became imperative as processing industries developed, including flour mills, slaughter yards, breweries, a chicory mill, cordial factory, butter factories and a freezing works. Each had their own particular demands for natural resources, and each had to dispose of certain effluent into a water catchment, which supplied consumers further downstream. In addition, streams were subject to erosion, particularly in the 'Sahara Drought' at the turn of the century, and with the multiplication of the rabbit problem. At various points on the tributaries of the Belubula, mining took a heavy toll of the natural environment, and polluted the river with mud and toxic effluent from the tailings dumps.

1.8 EXPANSION OF PRIMARY PROCESSING

Despite the 1980's depression and drought, the Blayney district's diversification placed it in a better position than most to survive the downturn, and expand anew after Federation. In fact, the local village of Lyndhurst was regarded as a prime site for the new national capital, and was only eliminated at the very last stage.

It was this period, early in the twentieth century, that saw the permanent population of the district at its peak, and the integration of the local economy at its most productive and rewarding stage. Firm export markets, good transport links, relative closeness to an expanding Sydney and industrialising economy, saw diversification and increased primary processing prosper.

There was still an opportunity for both the small businessman and farmer to make a good living, while unskilled labour had several avenues to seek employment. A circuit of seasonal work, linked to orcharding, vegetable growing, mining, timber cutting, rabbit freezing and chaff cutting, supplemented the income of many small-holders and town-dwellers. However, despite an expansion in capital investment in processing plants by local consortia, the whole integrated system was essentially labour intensive, and relied upon the barrier of distance from Orange, Bathurst and Cowra, which horse-based private transport afforded.

1.9 THE IMPACT OF THE MOTOR VEHICLE AND MECHANISATION

Just as the impact of the new technology, embodied in the arrival of the railway, promoted diversified economic development, technological break-throughs in the mechanisation of farm tasks, and the introduction of the motor vehicle, undermined the integrated nature of economic progress in the Blayney area after the First World War.

Compared to marginal areas further west, the new reapers and binders, and their associated rural machinery, did not lead to a great expansion of the area being cultivated. Rather, there was a replacement of labour by capital equipment, which saw an amalgamation of holdings, and a draft to the cities by rural labour and small-holders, who could no longer secure the unskilled work, at which the new machines excelled. Owing to the climate and the shift to hard wheat growing in the drier areas, the new machines did not create market opportunities for local producers, but rather contained costs, and eliminated some of the drudgery of farm work.

However, it was the spread of the motor car that had the greatest impact on a district, which sat amidst the triangle of larger centres; had as one of its major industries the provision of chaff to the Sydney horse market; and owed much of its employment to the operation of the railway system. The district economy suffered on both the supply and demand side, as work opportunities shrank, traditional markets contracted and local residents were now able to spend more of their income in the larger towns, encouraged by the improvements in motor transport.

The downturn was by no means dramatic, and residents still spent most of their money in local stores and entertainments. However, as the nation slid into depression at the end of the twenties, 'insurance fires' became common in local towns and villages. Fledgling enterprises, including a jam factory, bacon curing works and boot making plant, went to the wall even sooner.

Ironically, the local area's population increased with the severity of the Depression, as people who had joined the drift to the city returned to relatives, to eke out a subsistence living growing vegetables, trapping rabbits, fossicking in the creeks, and obtaining the odd bits of seasonal and relief work.

In the post war period, there was a general feeling that local towns should attempt to match the larger centres in the provision of modern attractions and facilities, trumpeted so prominently with the spread of radio. For instance, the twenties saw the introduction of electricity to Blayney, when the Council installed its own generating plant. However, the pressures on local government were such that Blayney and Carcoar municipalities were absorbed into the Lyndhurst Shire in 1937.

Nevertheless, even at the end of the thirties, the local economy would have hardly been described as prosperous. It was only the onset of the Second World War, which saw a decrease in the level of unemployment. The emphasis shifted from labour surplus to labour shortage, as enlistments grew, and calls were made for higher rural production, to meet the needs of the war effort. In particular, there was an increase in local vegetable growing and processing.

The Depression and the Second World War saw temporary reversals of the drift of population to larger centres, but the trend proceeded well into the 1950s, before an initiative by a local public consortium, promoted the growth of an integrated meat processing industry, based o0n the growing demand for lamb.

1.10 REVIVAL THROUGH MEAT PROCESSING EXPANSION

By the 1950s, the district's rural economy had reached a watershed. The larger properties had been broken up, either through family sub-division, soldier settlement schemes, and purchases by smaller land-holders, trying to achieve a viable size to justify the use of capital equipment. Labour was in short supply, and youth tended to look to the city, and its burgeoning service and manufacturing industries, for its opportunities. Immigrants were reluctant to obtain employment in the countryside. Furthermore, with the Korean War boom in wool prices, there was a short term injection of capital, which enabled farmers to consider judicious investments. Essentially, this meant increasing productivity on the land, by improving fencing, breeding, fertiliser application and sowing improved pasture. The increased volume of production, and the advantage of reducing the weight of the carcase close to the point of production, saw the re-opening of the Blayney Abattoir in 1957, to serve a captive domestic market in the Central West, while penetrating a growing Sydney demand.

A series of back and forward linkages evolved, with an expansion of the Abattoir's capacity and work force, as export markets were also captures. Now, residents could look to secure employment, and there was an urgent demand for further labour. To encourage stability of supply, the local council embarked on an ambitious project, entailing the provision of hundreds of new houses, and the sealing of major access roads from farming areas. The scheme flourishes with the expansion of meat processing, and the growth of by-products and service industries, including trucking. But, once the growth slowed, with the rural recession in the mid 1970s, the ability to service the debts, built up in the expansion phase, shrank. The Abattoir began to rely on government assistance, the by-products industries contracted, and the home construction industry nose-dived. The general slowing of economic growth was exacerbated by severe droughts and low stock prices, in an area which had tied itself very tightly to the health of the sheep and cattle industries. Yet, amidst the gloom of the basic rural economy, a plan was imposed from outside the district, to create artificial growth around new service and manufacturing industries in the Bathurst/Orange/Blayney Growth Centre. But the rationale for this injection of public funds was based more on easing the pressures on Sydney, created by its rapid expansion, rather than an examination of the fundamentals of the Blayney district. Ironically, with the commencement of spending, there was a rapid decline in Australia's population growth. This trend removed much of the urgency to proceed, as did the general slowing in economic development, and the containment of some city pollution problems, which had been seized on by town planners.

Despite the shaky basis of the initial Growth Centre Scheme, the Blayney Council felt obliged to provide infrastructure and land, to service the prospective demand, when the Blayney population was expected to quadruple in less than a decade, as it acted as a construction centre for a new city at Vittoria.

1.11 RECESSION THROUGH RELIANCE ON A NARROW PROCESSING BASE

Although the Growth Centre concept was undermined by funding cuts, the local Council was left in a precarious financial position, as its large holdings of industrial and residential land met with little demand. Those plants which were established, including a meat canning operation and a tannery, failed to make profits, while the Abattoir went deeper into debt to cater to the requirements of a diversifying rural sector, suffering from low prices in sheep and wool markets.

Desperate farmers moved into cattle, goats, pigs, horse breeding and deer, as they sought relief from the downturn. However, in an almost self-fulfilling fashion, prices fell in these thin markets, and producers were left to face a bleak outlook, as the worst drought recorded in the district forced many families into crippling debt.

Eventually, output at the Abattoir fell to the extent that not only was labour reduced, but part time operation ensued. Because of the over-dependence on the growth of this single plant, its downturn trapped local families into a falling market for housing, and a lack of alternative employment opportunities.

1.12 GROWTH FROM A BROADER BASE

Fortunately, amidst the contraction forces in the meat industry, an industry from the past was resurrected, and broadened the base of the local economy. Mining had taken place, spasmodically, for well over a century, but the new large scale mining at Browns Creek, and then Junction Reefs, offered alternative employment, not only to unemployed townspeople, but also for struggling farmers. In fact, the eighties saw many farms operated on a part time basis, matched by the continuing 'hobby' farm movement from city dwellers. The original settlement pattern, when Europeans first arrived in the district, appeared to be almost replicated, with some larger concerns surrounded by many small operations, dependent on outside sources of income.

Revival of the district's fortunes also came through injections of capital, but more particularly skill and experience in the processing sector. The Tannery at Blayney has been placed on a successful footing by a long established operator, while Nestlé showed their confidence in the viability of pet food production, at a rebuilt facility on the outskirts of Blayney. Meanwhile, the Abattoir was sold to experienced private interests. The Central Livestock Exchange was completed in 2009 on the outskirts of Carcoar and provides a large scale coordinated and efficient means of selling sheep and cattle from the surrounding region. Agricultural growth has included an emerging viticultural sector based on the attractions of the cool climate and the vicinity of Orange and their Wineries.

Essentially, the impetus for development has swung back to the free market, rather than public enterprise. The completion of the Blayney Wind Farm by Eraring Energy near Carcoar established a landmark for the future based on more sustainable practice. A network of 15 turbines generates 10MW of energy. The multi-modal terminal at Blayney attracts a range of users for the rail freight and container services from the region direct to Port Botany in Sydney. A substantial cold storage warehouse facility has been developed on the fringe of Blayney to service the food industry.

The district continues to face a scaling down of many public services, owing to its small population growth over the past years. Many services have been concentrated in the regional centres of Bathurst and Orange which deliver economies of scale.

Although direct government participation in the local economy has been reduced, there have been increasing demands for environmental standards to be maintained, and long standing problems to be addressed.

In particular, there has been a movement by both government and private landholders, to reforestation, for both commercial and environmental benefit. As well, the pressures of the Belubula River, whose catchment defines the Blayney Region, had reached a critical stage. Decades of short-sighted land management and waste disposal practices saw sections of the river become heavily polluted.

It was ascertained that the combination of fertiliser application, urban run-off and erosion from the Abattoir, all contributed to overloading the river with phosphates. Construction of an improved sewerage works at Blayney, improved farming practice and re-vegetation and erosion control at the Abattoir site have contributed to water quality improvements. As well, the renovation of mining scars at Browns Creek and Junction Reefs have contributed.

There appears to be an underlying attraction to the area, due to Blayney Shire's proximity to Bathurst and Orange. The lifestyle opportunities offered by village living in Millthorpe in particular continue to attract residential and commercial development. The lower cost of housing in villages such as Lyndhurst, Neville, Mandurama and Newbridge attract Miners working locally and those seeking retirement or simply a lower cost of living in a rural setting.

If the small town and village rural environments epitomised by Millthorpe, Carcoar, Newbridge and Neville can be conserved, the rare historic buildings retained, and the landscape managed sympathetically for agriculture and pastoralism then the region will prove to be an increasing base for cultural tourism.

1.13 A POST SETTLEMENT CHRONOLOGY

The following time line was prepared by Russell Moor and provided within "Wool Sheds -The Anvils that Forged a Nation". Marsden Rural History Research Centre & the Royal Australian Historical Society, 2009.

The schedule provides a detailed account of key events from European settlement in the central west:

- 1819 William Lawson posted to take charge of Bathurst
- 1821 Lawson's grant at O'Connell surveyed and stocked
- 1822 Thomas Icely arrives in Sydney having arrived in Australia in 1820
- 1823 Thomas Icely takes up 2000 acres "Sultram" at Bathurst
- 1824 Lawson recorded as having 1.000 cattle and 8.000 sheep
- 1825 Icely imports 144 Merino sheep
- 1826 Lawson resigns his commission at Bathurst
- 1827 William the Younger constructs "Errowanbang" homestead
- 1828 Lawson listed as one of the 12 largest stock owners west of the Blue Mountains
- 1829 Icely takes up land on the Belubula River
- 1830 Icely married to Charlotte Rothery in England
- 1830 Completion of the fist Errowanbang woolshed commenced in 1820
- 1831 William the Younger married to Caroline Icely
- 1831 Thomas and Caroline Icely and the Rothery brothers arrive in Sydney on the "Sovereign"
- 1832 Land for "Cliefden" and "Cliefden Springs" granted to the Rothery brothers
- 1836 "Coombing" total area at 26.500 acres
- 1837 Icely has 62 convicts
- 1842 The brick barn & house at "Cliefden" are completed and occupied by William and family

2.0 BUILT HERITAGE

The architectural heritage of Blayney Shire has had a long and colourful history. It began in the early days of settlement, following Evans' push to the south-west., into the Kings Plains area in 1815.

For the purposes of this report, buildings are categorised under the following headings:

- Rural (generally residential)
- Educational
- Ecclesiastical
- Institutional
- Public Buildings
- Commercial
- Residential
- Miscellaneous building types

A detailed database of existing buildings of interest was prepared as part of this study, and accompanies this report.

2.1 RURAL BUILDINGS

The rural building survey was generally confined to the domestic buildings. Rural industrial buildings were included where they were part of the main complex. Most outbuildings are recorded.

Blayney Shire is rich in terms of its built rural heritage. The rural and mining industries were the key to the whole development of the district, and many fine buildings still stand as reminders.

The most outstanding of all the original buildings are 'Cliefden', 'Sunny Ridge',' Millamolong' and Mandurama, and the 'Coombing Park' homestead at Carcoar. The Victorian Italianate residence is not the original 'Coombing Park' homestead, but represents the prosperous rural development of the period. This building is a fine example of the work of the architect, G.A. Mansfield, who designed a number of buildings in the district. The brick buildings of the stables, sheds and cottages are testimony to the development of a prosperous farm as early as 1826.

'Cliefden' is a unique original homestead complex. Mr. Montague Rothery was granted 2,460 acres in 1832, and erected a small cottage in that year. By 1840, the homestead was substantially complete, as it now stands. It had 22 rooms, and was surrounded by wide verandahs, with access by shuttered French window and door. The property remains in the Rothery family, who still run the farm. The last Miss Rothery died in 2008. The substantial brick barn, built in 1847, is included in the database as part of the main complex.

'Millamolong' is another early property which boasts a substantial portion of the original homestead still standing. It is now used as a guest house for farm holidays. Some of the original structure has been covered with weatherboards, but sufficient sections of the slab construction, external and internal, are still exposed and preserved, and are being restored. The 'Millamolong 'complex of buildings is a built historic panorama of the development of the property from the 1830s to the 1930s. The present 1936 homestead was built by the Ashton

family, who purchased the property from the Rowlands. The various outbuildings were included in the database as a graphic display of the development of the property.

'Rockville' and Sydenham homesteads were built on the same property in 1859 and 1864 respectively. They are large, substantial, well fitted buildings, illustrating the prosperity of the district in that period. Both homes are in original condition, although in need of some care.

In 1926, Fagan, a descendent of the original settler of 'Sunny Ridge', decided he did not like the old homestead, built in 1869. It was demolished to make way for his grand Spanish Mission style homestead, designed by the architects Thorpe and Walker of Sydney. The building is original and well maintained, and has a considerable history of its own.

'Errowanbang Park' homestead at Errowanbang was built in the 1840s. It is another historic property worthy of mention.

There are many other interesting homesteads in the district included in the database, which contribute to a pattern of development. Periods range from some of the earliest rural settlements in NSW, through the prosperous times, the slumps and the changes in demand and supply of the products farmed.

Particular mention is made here of 'Linfern' and 'Kareela' on the Mid Western Highway; Wonga and 'Thurlstone' on Hills Lane, Blayney; 'Errowanbang' at Errowanbang; and, of particular interest despite its extremely dilapidated state, 'Grove Farm', at Millthorpe. This homestead, built in 1835-36, would probably be the oldest in the Millthorpe area. It has an architectural style brought to the area by the original Cornish settlers. There still exist some relics of the original internal finishes and wallpapers.

Also worthy of mention are some of the small homesteads, such as 'Robindee', 'Hilltop' at Garland and another, later period (1920s) bungalow style of 'Showerlea', at Moorilda.

2.2 EDUCATIONAL BUILDINGS

Public Schools

Small public schools, usually with only one teacher, were a feature of the educational development of the district. Original buildings generally are not recorded, but schools were established as early at 1857 in Carcoar, and 1858 in Blayney and Neville. They followed the path of explorers and settlements along the old south-west route. By 1900, there were some 32 public schools established, including small schools and larger schools in the main centres.

Following the original establishments, more permanent buildings were provided in the flourishing towns and villages in the mid and latter half of the nineteenth century. Larger settlements received brick school houses, including those at Carcoar, Blayney, which moved to the present Lindsay Street site in 1933, Neville and Millthorpe. Smaller rural areas, such as Errowanbang and Barry, were eventually provided with the typical pre-fabricated weatherboard school houses and teachers' residences seen throughout NSW. This included many metropolitan areas. Some of these are recorded in the data base as examples of this development. Schools in the Shire will continue to depend upon enrolments with some

villages such as Millthorpe continuing with the sustained population while others will not survive unless families are attracted to the area.

Private Schools

Private and Church schools were also established in the district. Carcoar Catholic School, now closed, was established in the convent now known as 'Shalom'. There was also a Church School in the Church of England Rectory at Carcoar. St. Joseph's School in Blayney, was founded as a convent school in 1880, and is now a primary and intermediate high school. However, it is soon to become a primary school only, and the Intermediate High School is due to close. Newbridge and Millthorpe Catholic Schools have been closed for many years. The Millthorpe School is now part of the Museum, and the Newbridge School is in private ownership.

Tertiary Education

Technical education was established in the Bathurst district in 1896. The Department of Technical Education purchased the 1934 Blayney Shire Council Chambers, in Adelaide Street, in the 1960s. A TAFE College was established in the early 1970s in this building. This is no longer operating.

2.3 ECCLESIASTICAL BUILDINGS

The spread of the Christian churches was encouraged and financed by the Colonial government, which saw the churches as a stabilising influence on the Colony. This led to rapid growth and expansion of the churches, and the establishment of some very fine buildings in the Shire. There were also many small buildings in the more remote parts of the district. The buildings in the main centres were of substantial brick or local stone construction. The first of these was St Paul's Carcoar in 1845, followed by the Presbyterian Church in Adelaide Street, Blayney, in 1861.

Substantial residences for ministers were provided in all the main centres. The district features a great number and variety of styles of ecclesiastical buildings. This built history provides a continuing record of the development and decline of many places, as the bulk of these buildings are original. In many places, such as Forest Reefs, Neville, Newbridge and Mandurama, they are stark testimony to the cessation of continuing development.

The Roman Catholic Church was founded in the district in the 1870s, and rapidly developed, with churches at Carcoar, Blayney, Millthorpe and Mandurama. Substantial buildings included churches, convents, school and presbyteries.

Many outlying village churches were established, some on land grants by farmers and other benefactors. Many of these small churches have been sold, or have fallen into decay or disappeared. Falling population, and the advancement of good transport, particularly the motor car, allowed people to travel to the larger centres to worship and socialise. Examples of outlying churches still operative are the Presbyterian churches at Moorilda and Neville, the Uniting Churches at Hobby's Yards and Forest Reefs and the Anglican Church at Forest Reefs.

A number of very fine minister's and priest's residences have been sold for use as private residences, notably the beautiful Victorian Gothic Anglican Rectory and the Italianate Catholic Presbytery at Carcoar, both of which have been well preserved.

Church buildings, particularly in the main centres, are major contributors to the built heritage. There are many notable survivors. Apart from those mentioned above, some notable churches in Blayney are the Christchurch Anglican and Uniting Churches in Adelaide Street. In Millthorpe, there are the Uniting Church, the Anglican and Catholic Churches in Park Street. St. Paul's Anglican Church and the Catholic Church in Carcoar should be mentioned. These last two buildings are examples of different styles and construction. The Anglican Church, established in 1845, is a well constructed brick building with a high shingled spire, designed by Edward Gell. The Catholic Church is a fine example of local stone construction, with a rather smaller spire, incorporating a bell. Unfortunately, the stone is soft granite, and is weathering badly. Also worthy of mention, is the Catholic Church on the Mid Western Highway at Mandurama. It is a rather grand brick building of the 1930s and, together with other buildings of the period in Mandurama, such as the National Bank, indicates some optimism for the growth of the town. This growth never eventuated.

Also of note, is the small weatherboard Presbyterian Church in Neville. The interior still boasts original cedar lining boards, in their original finish. Electricity is still not connected to the building, and the iron wall brackets, for hanging lanterns, are still fitted.

The Shire provides a number of substantial Cemeteries, Blayney being the largest, generally associated with the Villages. Carcoar is a rare example where the Anglican Church yard accommodates grave sites and Millthorpe where the Cemetery is literally shared between the major Churches. All the Cemeteries are among the most visited sites on a local public itinerary due to the interest in family history.

2.4 INSTITUTIONAL BUILDINGS

This group of buildings include hospitals and convents.

Convents were generally recorded with schools. They are usually attached to them, and are closely associated with educational buildings. They have had, however, another identity, as primarily religious institutions. Education, social welfare and other functions were part of their outreach.

Hospitals include the Carcoar Hospital, the original section of which is a fine example of Victorian Gothic style. This institution is now associated more with Health and Aged Care, and is no longer domiciliary or surgical.

The original Blayney Hospital was demolished in 1988 to make way for the new complex.

Convent institutions were established in Blayney (St. James'), Carcoar (now Shalom) and Millthorpe (now part of the Museum). All have now been converted to other uses. The recycling of these buildings has brought about their conservation, and gradual restoration and renovation.

2.5 PUBLIC BUILDINGS

Blayney Shire boasts some very fine public buildings, most notable of which are the Courthouses in Blayney and Carcoar. The Blayney Courthouse is an excellent example of Victorian Colonnaded Italianate Pavilion design, with central colonnaded verandah link. This building was restored in the early 1890s, but the NSW Coat of Arms, over the central portico, was never re-instated. The Carcoar Courthouse is a far more elaborate building, built for a future which did not eventuate, mainly because of the advent of the railway system. The Great Western Railway line, constructed in the late 1870s, switched the main transport link to Blayney, and spelled the decline of Carcoar as a main centre.

Other public buildings included in the database are the Blayney Post Office, occupied on 4 September, 1882. Unfortunately, it has suffered major changes over the years, including the removal of the first floor verandah with cast iron balustrade. The Millthorpe Post Office, built in 1927, replaced the original building, which was destroyed in a storm. The Carcoar Post Office, built in 1879, is in almost original condition. The Blayney and Carcoar Post Office buildings incorporate postmaster's residences; the Millthorpe Post Office has a detached residence.

The old post office building at 'Millamolong' Farm is still in existence, but has not been used since about 1950. This outpost was purported to be the smallest post office in NSW, when operational. It was constructed of river stones, transported from the local river by cart.

The surviving railway stations of the Shire include Blayney, Millthorpe, Newbridge, Carcoar and Newbridge

Blayney Railway Station was designed as a major facility. It was the junction of the Main Western and South Western (Demondrille) lines, and survives as testimony to the busy heydays of rail transport. It is a large Victorian structure, with elaborate cast iron decoration.

The Millthorpe, Carcoar and Newbridge station buildings are small and less elaborate, but stand with Blayney as a built history of the railways.

2.6 COMMERCIAL BUILDINGS

The commercial buildings of Blayney were substantial and included Hotels, shops and industries. The desire for growth and to have this expressed within the streetscape, saw many changes to the facades in particular, with verandahs removed, and facades rendered, painted and altered to suit the perceived fashion of the time.

The best examples of retained small commercial buildings are in the streetscapes of the villages of Millthorpe and Carcoar. Many of these buildings have undergone substantial restoration during the 1990's. The trend is likely to continue as new owners and commercial interests discover the value of conservation and adaptive re-use, supported and encouraged by Council and the community.

The bank buildings have generally managed to survive, and have been renovated or restored either by the Banks, the property owners or the residential occupiers. These include the former CBC Bank in Blayney and the National and Westpac Banks in Mandurama. Many prominent commercial and retail buildings such as the old Permewan's Building in Blayney,

are now cafes and offices and they makes a positive and traditional contribution to the main street. The Spanish Mission style Royal Hotel and the Clubhouse Hotel are assets to the main street and have great potential.

Of particular note is the Millthorpe Grand Western Hotel. This is now a community house, and still boasts its original 2 storey posted verandah. Also of note are the former Bank of NSW in Victoria Street, now Rosebank Guesthouse and the very well restored Royal Hotel at Mandurama. The hotel has undergone extensive renovations. After many years without a licence, it now has a new lease of life. The Neville Hotel is an interesting bungalow style building of the late 1920s.

The Millthorpe Store in the heart of the village is a great conservation success story from 2007-2010 with conservation of the store, re-erection of the verandah and construction of motel accommodation on an adjoining site. The catalyst for much of the commercial success of the Millthorpe village has been the Tonic restaurant and the 2009 adaptation of the adjoining Hall as a function centre.

Other commercial buildings now being used for other purposes include the old hotels in Carcoar, such as the Commercial and the Criterion Hotel in Collins Street; 'Stoke' House in Naylor Street; Boxall's Inn in Icely Street; and the row of houses in Naylor Street, previously Kenworthy's Victoria Hotel. To these should be added the Banks at Carcoar – the old Commercial, CBC and City Banks in Belubula Street, which were well known to the bushrangers of the period. The former Commercial Bank has the dubious reputation of having been held up by O'Meally and Gilbert, who were members of Ben Hall's gang.

A notable restored building in Icely Street, Carcoar, is 'The Saddlery', now a shop and residence. This was originally a blacksmith's shop.

While the architecture of Carcoar has stood up well during the 1990's, business has not and the level of economic and tourism activity has reduced with many premises vacant in 2010. This will prove to be a threat to the sustainable conservation of the village unless business is developed. The restoration of the Courthouse through the volunteer community action supported by government may yet prove to be a catalyst.

2.7 RESIDENTIAL BUILDINGS

Few of the early pre 1860 domestic buildings, located in town and village areas, survive in recognisable form. This is usually due to a combination of the natural decay and neglect of their timber construction and their replacement for commercial reasons. It is probable that some, or portions of some early structures do survive, but only detailed research would uncover such relics.

The earliest intact examples are likely to be the Colonial cottage on the Mid Western Highway at Kings Plains, and 24-26 Charles Street, Blayney; the Miner's Cottage in Martha Street. Vidler's house at the end of Albion Street; Gleadhill's house in Martha Street and the timber house in Osman Street near the bowling club. The best examples range from the Mid-Victorian period to late Federation, with a small number in the 1920—30 period.

Blayney

Most notable of the Victorian and Federation periods in Blayney, would be the Christchurch Rectory, the Crofts House and 30 Adelaide Street, 8 Plumb Street, 15 Ogilvy Street, the Presbyterian Manse in Church Street, 26-28 Church Street, 50 Osman Street and 'Allonby' in Polona Street. A unique example of group houses in a small town, are the 'Marsden' Cottages in Plumb Street.

Of the later periods, 33 Adelaide Street is singles out for mention. It is a particularly fine example of a vernacular bungalow style. 29 Church Street is interesting for its total period consideration – matching brickwork, fence, gates. 2 Water Street is a good example of weatherboard bungalow style.

Millthorpe

Millthorpe is quite rich in Victorian and Federation houses. Of particular mention are 56 Victoria Street, and 'Hillview' in William Street. Also in Millthorpe, at the corner of Victoria and William Streets, is the Millthorpe School residence, with its finely detailed timber porch. It is built in local basalt stone. Of equal note is the original flour mill manager's residence in Pilcher Street.

Newbridge

In Newbridge, one finds the old Catholic Church Presbytery, now a private residence, the corner house and store and the Railway Cottage on Bathurst Road.

Mandurama and Lyndhurst

In Mandurama, the 2 storey polychrome brick house on the Mid Western Highway, and the late Victorian cottage in Silver Street, should be noted. So should the two early Victorian weatherboard cottages in Gold Street. These cottages are worth preserving as almost original built history items.

For the same reason as the cottages last mentioned in Mandurama, the two cottages in Terminus Street, Lyndhurst, deserve special mention.

Carcoar

The landmark study by Ken Latona for The National Trust identified clearly the rich architecture, townscape and setting of the village. Carcoar is an entirely different proposition with a large number of buildings, particularly of the Victorian period. This was a time of great rural prosperity, and the town was expected to become the main centre of the district, prior to the coming of the railway.

Probably the most notable and significant residence in Carcoar would be 'Blenheim Hall' in Icely Street. It is distinguished by its unique and original character, both externally and internally. The original joinery is in excellent condition, and much of the original wallpaper and paintwork are almost intact. This includes the marbled walls of the entrance foyer and hall. Other fine houses are the Old Anglican Rectory and the Catholic Presbytery, previously mentioned.

Almost every street in Carcoar produces a new vista of period houses – the cottage adjacent to St. Paul's Church; the one opposite in Belubula Street, next to the City Bank; and a

number of buildings in Icely Street, all in fairly original condition. They include the old Presbyterian Church Manse.

A unique building is the 'Stammers' house at the top of Icely Street, near the Mid Western Highway, which is currently undergoing renovation. The two brick cottages in Stoke Lane are also of note. One cottage, backing the Belubula River on the eastern side, has been renovated/restored. So, too, has the early Victorian weatherboard house on the corner. It has some original, intact, interior timber lining.

2.8 MISCELLANEOUS BUILDINGS

There are some buildings which do not fall in any particular category. They are not of any particular architectural merit, but were included in the database to complete the general structure and historic and social development of the towns, villages and rural areas of the Shire.

These buildings include:

- The RSL Memorial Halls in Blayney, Lyndhurst and the Memorial Hall in Mandurama;
- The Schools of Arts at Millthorpe and Carcoar, Centres of the Cultural Arts, particularly the one at Carcoar, which entertained major social and cultural functions. Both facilities are still in use; and
- The Masonic Halls including Blayney (1889), Millthorpe and Mandurama.

3.0 HISTORICAL ARCHAEOLOGY

3.1 INTRODUCTION

Historical Archaeology is the study of Australia since European occupation. It involves the use of both historical and archaeological sources: newspapers, letters, official documents and photographs, and oral history. The archaeological component examines the physical remains of society: pottery, tools, ruins, structures, buildings and technology.

Historical Archaeology uses themes to tie the history and the physical remains into a context. For a detailed schedule of the relevant Themes, refer to the Appendix prepared by the Heritage Council of NSW. These are referred to by **Theme No.** within the text.

There are a number of areas of investigation in Historical Archaeology. It throws light onto the historian's traditional areas of interest: colonisation and immigration; the hardships imposed by isolation; the effects of distance and communication; and cultural traditions and their transmission through generations.

The archaeologist proceeds to examine these themes by using settlement patterns, and their development through time. With these, they study the relationship between the population and natural resources, and human adaptation to the environment. They look at material cultural, the objects of daily life and technology. These are examined as evidence of the continuously improving response of human exploitation of the natural resources. Physical remains carry information about the society that erected them. They tell us about the cultural requirements for subsistence, shelter, security, communication, symbolism and spiritual welfare. Thus, Historical Archaeology sets out to interpret and explain how physical remains were affected by human behaviour.

We study Historical Archaeology because we, as a culture, have a need to investigate the past; to develop a comprehension of the processes of change and continuity, and the functioning of our society. Through this, we begin to understand how and why our society developed into its present stage.

Historical Archaeology is concerned with the investigation, surveying, recording and conservation of sites, structures and relics. Through the conservation of the material culture of our past, we enrich our living environment.

Criteria of Cultural Significance

Cultural significance is used to help identify and assess the features which make a place of value to us, and our society. The Burra Charter states that a place has Cultural Significance

if it has Aesthetic, Historic, Scientific or Social value for past, present of future generations. These areas of focus have been redefined to include Archaeological, Architectural and Cultural value.

The identification of places with attributes of aesthetic significance is based on the recognition of the formal principles of scale, form, materials, textures, colour, space and the relationships of these elements. Architectural significance is usually assessed using these principles, in association with historic aspects of the architecture.

Historic significance underlies many of the other areas of significance, especially social, cultural, scientific, archaeological and architectural. It creates a time frame, in which changes amongst these other criteria are examined. Therefore, evidence for alterations and developments in the pattern of social, cultural, scientific, archaeological and architectural areas can be assessed. It also encompasses places that were the location of an historic event, or were influenced by an historic figure, such as bush rangers.

Scientific significance depends upon the ability of a place to reveal information that will contribute to current research themes, in any of the scientific areas.

Cultural significance relates to those features which capture the desires, values and changes in contemporary tastes of a society.

Social significance assesses how a place illustrates social life, working and living conditions, usually of past eras, but it may also include the present. It comprises the qualities for which an item has become a focus of spiritual, political, national, municipal or other cultural sentiment to a majority, or minority, group.

The archaeological significance, or potential of a place, rests on its ability to contribute evidence to current research themes in historical archaeology. Thus, a place has to be able to expand, or redefine knowledge, of earlier human occupation, activities and events. An item of archaeological significance may be a standing structure or ruin, relics, archaeological deposit and landscapes.

Once these aspects of significance are assessed, a place is tested to see what is the nature, and degree, of its significance; whether it is:

- An early example of its kind;
- An intact example of its kind;
- A representative example of its kind;
- A rare example of its kind; an important group;
- Associated with an historically significant event, industry or person.

The degree of significance a place possesses will be expressed in relative terms:

- Of national/exceptional significance;
- Of state/considerable significance;
- Of regional/some significance;
- Of local/little significance; or non-significant.

All the individual statements of level of significance are based on current information, and may alter if new knowledge comes to light. Nor is it an exhaustive collection of places within the study area. Access was not always possible, for various reasons.

3.2 INDUSTRIAL HISTORY OF BLAYNEY SHIRE

Industry in the Blayney Shire began with the establishment of the government sheep and cattle stations on the Church and School Estates at Kings Plains, in the 1820s. Settlers in area purchased stock from the stations, and went on to develop their own herds. In the early period, there were problems with the adaptation of sheep breeds to the environment. The low lying ground throughout the area could be boggy, creating problem for the rearing of sheep. It also necessitated the re-location of early homesteads, such as Cross Hills, Lynch's, and the Smith's at 'Roseleigh'. Sheep and cattle have continued to be important in the livelihood of the community.

People initially moved into the district for farming and grazing purposes, but in the years following the discovery of gold, in 1851 at Ophir, the population of the area ballooned, as thousands of men arrived in search of gold. Mining in Blayney Shire began prior to the gold rushes. Copper was mined at Carcoar Mine by Thomas Icely, who imported Cornish miners to work for him, pre 1850 to 1880. Other copper mining, prior to 1851, is recorded just outside the study area, at Byng. Gold mining from the 1850s and 1860s is not recorded officially, but there was much activity in the area. It is difficult to pin point the extent of gold mining during this time, because no official records were kept. One way of determining the presence of mining, is to examine the statistics for the establishment of towns.

Up until the 1860s, there were 20 towns within the district – all but three were located east of Carcoar. The majority of these towns were service centres, located in rich pastoral areas, or on transport routes – such as Millthorpe, Moorilda and Neville. Between 1870 and 1890, 16 more towns were established west and south of Carcoar, in the more productive gold mining areas. In effect, the most important goldfields were not exploited until the 12870s. It was the that the easily accessible gold at Burnt Yards, Confidence at Kings Plains, Forest Reefs, Browns Creek and Junction Reefs were worked. *(Theme 4)*

The gold rush altered the employment and social structure of settlements throughout the district. Most men were now working as miners, and the large landholders found it impossible to employ seasonal labourers. This eventuated in the introduction of fencing, and the demise of the shepherd. The less successful small farmer sought to make extra money to support his farm, by mining, or selling his mining rights. The increase in population created a bigger market for local industries. The miners had to buy all their staple food products from the local shops and farms. Inns were extremely successful, and many were established throughout the area.

The 1870s saw another development – the introduction of the railways. The first railway line at Blayney began operating in 1877, and reached Carcoar in 1888. This inverted the economic importance of both towns. Blayney became the business focus for the district. The railways took a number of years to build, and required the employment of many men. This increased the population, yet again, and saw the establishment of railway settlements such as Trendon Grange, Mandurama, Lyndhurst, Garland and Lucan. They are a few of the 16

new towns that developed after 1870. The five towns have railway stations, and each is about five kilometres from the next town. *(Theme 5)*

The railways altered the way industry operated in the area. It opened up new markets, and allowed farmers to develop and sell perishable crops. Wool was always a good investment, because it was non-perishable. But now the sheep could be shipped away as meat on the hoof, to be slaughtered at the point of arrival. Farmers were able to send produce to Sydney, Bathurst and larger towns, further afield. Settlements with railway stations progressed, while those without tended to stagnate.

Two small towns, Moorilda and Newbridge, are about 4.5 kilometres apart, yet they developed differently after the arrival of the railway. Prior to the railway, Moorilda had a flour mill, a post office, a school, and was the service centre of the agricultural community. Yet today, there are no intact buildings, and the mill is a ruin. Newbridge developed as a railway town, and today has a main street, a number of well built buildings and stock yards. Newbridge became one of the major towns in the district, while Moorilda lost its focus as a town.

Many of the settlements in the district disappeared, and are now only remembered with area names, such as Somers, Gallymont, Wombiana, Norton, Teasdale and The Square. Most of these towns were established as mining camps, and were never official towns. They were often tent cities, which leave little evidence of their existence. If these settlements could be accurately located, they would have archaeological potential, especially Norton, where ruins have been sighted.

Changes in the local mining industries began in the 1880s, and continued spasmodically for a number of years. *(Theme 6)*. Large deposits of copper and iron ore were located at Blayney, and near Carcoar. The Blayney Copper Mine employed hundreds of men from the town in its mines and smelter. It had a private rail siding, to transport copper to its markets. The iron ore quarry at Carcoar was a very successful long term project, which employed many men in the area. It also had a rail siding to ship ore to the smelter at Lithgow.

These two companies were large concerns, with investors employing miners to do the work. They were no longer small groups of miners working their claim together. They involved the investment of large amounts of money, for machinery and plant, to process the ore. There was 30,000 pounds worth of plant and machinery at the copper mine when it was operating at its peak. This company was forced to build a very tall chimney stack, to enable the smoke fumes to escape out of the valley. *(Theme 7).* Gold continued to be dug at Browns Creek, Burnt Yards, and Junction Reefs. The only major gold mine to commence operations in the late 1880s was at Gallymont. It was a major project, and involved floating shares on the English Stock Exchange.

Aside from helping mines to make transporting of ore viable, the railways supplied the means, for primary processing industries, to develop. An industry will develop when it has access to cheap raw materials, a good workforce and transport to markets. The processing industries with the greatest influence on the economy of the district were flour milling and chaff. These industries were important for employment within the towns, as well as supplying seasonal farm work. It was advantageous for the farmer, because there was a local purchaser for his crop. Flour mills were located in most of the major towns in the district.

Wheat grown locally was the main source of grain, but the Great Western Milling Co., of Millthorpe, processed a different type of wheat, which was purchased outside the area. Primary producers were able to reach a wider market, after the railways came to the district in the late 1870s. They helped the Great Western Milling Co. to become one of the largest millers in the State. *(Theme 8).* Prior to this, the mills were smaller, and had limited markets.

The industry, central to the growth of Millthorpe during the late 1890s and early 1900s, was supplying of chaff to the Sydney transport market. *(Theme 8).* Up to 50 trucks of hay, chaff and straw, were shipped to Sydney by rail each week. The hay would be cut in fields or in chaff sheds such as that run by W & E Hayes. There were also contract chaff cutters, who cut and bagged the hay in the field. It was then transported to the rail yards, and shipped to Sydney. The chaff industry quickly fell apart, with the arrival of the motor car, which replaced the horse as the preferred form of transport. *(Theme 9).*

The standing evidence, for mills and chaff sheds, does not compare well with the known primary processing activity within the district. A number of mills in Millthorpe, along with other industrial buildings, were burnt down before World War 11. Other burnt industrial complexes included jam factories, butter factories, chaff sheds and a boot factory. Many of these fires were thought to be for insurance purposes. Structures were set alight by the factory owners, because the companies were about to go broke, or could not cope with technological changes that gave competitors, outside the area, greater advantages. The destruction of industrial buildings is found elsewhere in the area. If they were not destroyed by fire, they were demolished. In Blayney, the 'Urura' mill was in Martin Street. A large mill at Carcoar, which stood next to the only remaining mill in the town, was demolished to build a house. Thus, the industrial structures found in the Shire, are a small fraction of those that existed. This small fraction must be preserved, if this aspect of the Shire's heritage is not to disappear completely.

3.3 INDUSTRIAL ARCHAEOLOGY OF BLAYNEY SHIRE

Agricultural and Pastoral Industry: Buildings and Technology

The agricultural and pastoral industries of Blayney Shire have a large body of physical evidence. The sheep industry has been the only continuously practised industry since the initial occupation of the Shire: with the exception of horse studs. This industry has demanded the construction of woolsheds for shearing sheep, fencing of paddocks and developments in technology to protect sheep from diseases. It is a major money earner and employer of full time and seasonal labour and thus an essential element in the economy of the Shire.

Woolsheds

The Australian woolshed is the product of the local industry. It was not patterned on English or American woolsheds but has an indigenous evolution. The woolsheds developed a nave and aisle floor plan through force of circumstance. The activities carried out in the woolshed required a large interior space but then there was the problem of roofing it. Thus, the central element became the long rectangular shed with a single gable. A skillion, with a lower pitched roof, was added on either side. The only interior divisions were framing timbers; the

exterior was clad with slabs or later with galvanised iron. The woolsheds built in the 1890s are the culmination of this evolutionary process.

The woolsheds surveyed are not exhaustive but they are representative of the kinds of sheds and the styles of construction evidenced throughout the shire. The earliest is at 'Cliefden'. It is thought to date from the construction of the stables in 1842. It has gable roof except at one end where there is a skillion addition, suggesting a transitional phase into the nave and aisle plan. By the 1860s, the woolsheds at 'Sunny Downs' and 'Rockville' represented the evolution to a nave and aisle construction on a large scale. The 'Rockville' shed, probably the earliest of the two, is the most intact, with its slab wall and timber fences. The same plan is found in the smaller buildings at Pounds Lane and Fullers, although the Pounds Lane shed stands out as being an architectural hotch potch. 'Linfern', 'Eden View' and 'Nuneham Park' are later examples of the large scale nave and aisle woolshed. The 'Cross Hills' shed has an alternative floor plan, but still shares the same framework of functional progression.

In the 1890s, the wool industry was at its peak. There were large overseas orders to be met, and the invention of the mechanical shears was dramatically altering the number of sheep that could be shorn in a season. To cope with demand, flock sizes increased, and woolsheds were built on a grand scale. The woolshed at 'Errowan Park' is the perfect example of a 'cathedra; woolshed'. It is massive, with 40 stands, and is able to contain 3,000 sheep at any one time. It is composed of 5 structures, joined together to form an interconnecting series of phases for the sheep to move through. The floor plans of sheds built during this period were frequently experimental in design. The use of an architect was common. Thus, the woolshed was changing, in response to the functional demands being made upon it.

'Quarry Hills' and 'Roseleigh' woolsheds were built in the early twentieth century, after NSW had suffered from drought and depression. Many of the larger properties had been broken up because of the economic conditions. 'Errowanbang' was one of these. Huge woolsheds were unnecessary with smaller flocks. They were reduced initially, because of the economic conditions, but when the weight of the average fleece was doubled, smaller flocks could produce a bigger wool crop. Thus, smaller properties such as 'Quarry Hills' and 'Springlawn' built small woolsheds. 'Roseleigh', built later, is larger and idiosyncratic, but it has returned to the nave and aisle floor plan.

Woolsheds have developed in response to local demands, but the raising of sheep, and the use of wool, is a European tradition, transplanted into Australia. The wool was the raw material that was shipped back to England for processing into textiles. Thus, the sheep industry is a feature of the European economic system, which was imposed upon Australia. *(Theme 3).* The large properties of 'Coombing Park', 'Cliefden', 'Sunny Ridge' and 'Errowanbang' are testimony to the dominance of the gentleman land-holder.

Stables

The stables surveyed present a contrast of design, materials and construction processes. These features are representative of social and economic changes. The sandstock brick stables of 'Coombing Park' and 'Cliefden' were built at the same time, and present a picture of rural wealth, and the value places on horse flesh. They are, in varying degrees, testimony to the English influence of design and style of farm outbuildings. In effect, they are the creation of an English style of living and farm management in Central NSW. *(Theme 3).* The retention of this influence into the early twentieth century is typified by the brick stable block at 'Sunny Ridge'. All of these buildings were associated with horse breeding. The earlier two aimed their markets at the upper class, or at the English military in India.

The substantial nature of the 'Stoke' stables accords with Carcoar being the second most populous town west of the Blue Mountains, until the coming of the railway. Carcoar was a thriving commercial centre for the area, and as such, had to service the needs of frequent business travellers. The stables at 'Blenheim Hall', located within the town, also represent the prosperity of Carcoar, prior to the railway. They were built be Bernard Stimpson, who was a businessman in Carcoar, and owned property nearby. It was purchased by Cobb and Co. at the height of their business success. The house and stables are located within the town. Thus, the people who owned the house and stables were businessmen, whose money came from successful commercial activities, rather than pastoral profits. It is an early example of the development of wealth, based on commercial transactions, rather than from the exploitation of the land. There was also a stable/barn in the Catholic Presbytery. (*Theme 4*). Thus, 'Blenheim House', its stables and 'Stoke' stables are evidence of a broader economic prosperity.

The stables at 'Fern Hill' were not based on the English style, but were built from easily available and inexpensive materials. It is a functional building, for a small working property, where money was scarce and not invested in the outbuildings. It would have been planned as a temporary structure. The intention behind its construction was function, not permanence. It was not attempting to follow an English pattern, or conform to set cultural ideals. This stable is a product of the environment and times, and is representative of the structures erected by less successful land-holders.

The stone stables at the Commercial Hotel, Millthorpe, built in the 1870s, suggest that the owner considered it essential to supply well built stabling for guests. This is far from the slab inn and stables of the 1840s-1850s, most of which have disappeared. The hotel owner had the money to invest in substantial structures. He obviously expected to recoup this money through business activities. This is an example of the development of the middle class, the shopkeeper and the self-employed businessman. It was part of the changing social and economic conditions wrought by the gold rush, and the increase in population and service industries, in towns like Millthorpe. *(Theme 4)*.

The basalt stables at 'Westbrook' were built during Millthorpe's economic boom, when horses were still essential labour, for producing crops such as wheat and chaff. These are very large stables, really a barn, and would easily have stored bagged chaff or wheat, ready for shipment to Millthorpe.

The horse studs, with the associated stables, are another element of the exotic European system. *(Theme 3).* Within the town, stables become part of the trappings of a developing middle class, and evidence of it commercial success. *(Theme 4).*

Granaries

Three granaries were surveyed at 'Sunny Ridge', 'Coombing Park' and 'Rockville'. They are all architecturally very similar, except that the building at 'Rockville' has the wall timbers internally placed to the cladding, rather than externally. Alternatives, such as sheds or barns,

were probably used. The stable building at 'Westbrook' was large enough to store grain. Wheat and other grains were grown in the district during the early twentieth century to supply the mills. *(Theme 8).*

The most common evidence from the extensive grain growing industry throughout the area, are the numerous pieces of disused farm machinery lying idle in paddocks. Every property visited had one or two pieces of machinery, on occasions from 5 to 10 machines, sighted. There were jump ploughs, cultivators, harrows, seeders, drill and cultivators, at least one thresher, and horse drawn stripper-harvesters. The reasons these machines had not been sold, is that they were usually superseded by more efficient and labour saving machines. *(Theme 8).* In one instance, at 'Roseleigh', a number of machines that superseded each other were found.

Farm Outbuildings

The large pastoral properties were self-sufficient, with specialised outbuildings to perform various functions. The outbuildings at 'Rockville', 'Sunny Ridge', 'Cliefden' and 'Coombing Park' have been discussed above, but not as a group. Each pastoral property had a series of farm buildings, constructed to perform specialised functions. They are usually clustered together, a short distance from the homestead. In some instances, these buildings look alike. At 'Sunny Ridge', a number of the buildings have horizontally laid galvanised iron, painted cream and red. This property has one of only two blacksmiths' workshops surveyed in the area. This made the property, with its huge stabling capacity, self-sufficient. Independence is a major element in the variety outbuildings each property possesses.

Smaller holdings, such as 'Fern Hill', have only twp early buildings on the property. One is a house, the other a stable. If there were other early buildings, they have either collapsed, or were demolished. They were not built to be permanent structures, unlike the outbuildings of the large properties, where they sought to construct buildings that would last.

Domestic Outbuildings

There is a variety of domestic outbuildings associated with the various properties examined. There are two meat rooms, two dairies, servants' quarters, bakery, kitchen/laundry and an adobe building of unidentified function. They all relate to the daily domestic life on a property. That there are so few of these buildings, compared to the number of farm outbuildings, is indicative of cultural changes. Where once farms were virtually independent in cooking and producing everyday food needs for staff and family, the situation has changed. These days, bread and cakes are purchased from a bakery in town, meat from a butcher and dairy products from the supermarket. These buildings are representative of functions that have shifted from the farm to town. These few remaining domestic buildings are very important, because so many others have been lost.

The kitchen/laundry at 'Blenheim Hall' is the only early detached kitchen surveyed in the area. Usually early kitchens were demolished when newer ones were incorporated within the home. The construction of separate kitchens was the normal practice, to protect the living area from smoke, and the possibility of fire.

'Stammer's' House also had a separate kitchen building.

A number of the outbuildings are constructed from pise or adobe; both of these building materials are rarely used today. Quite a few of these early structures were sighted throughout the district, but they were not surveyed. Most were in danger of collapse, through exposure to the elements. Many did not have over=hanging eaves to protect the earthen building material from rain. Therefore, the above intact buildings are highly important.

Primary Processing

Flour Mills

There are four extant flour mills within the study area. They cover the period from the 1840s, to the end of production in the 1930s. The earliest extant mill is in Carcoar, but it has no intact machinery. The mill at Moorilda dates to the 1860s; it is a run. The largest mill in the area was the Great Western Mining Co. in Millthorpe, established 1882. It is only partially intact, with no machinery. However, it has a millpond and rail siding. The mill on 'Athol' is undated, but is the most intact structure of the four, and it has not had its integrity destroyed.

The mills were variously affected by the arrival of the railways. *(Theme 5).* The site of the Millthorpe mill was chosen because of its proximity to the railway line; the construction of the siding allowed it direct access to rail transport. The mill at Moorilda was erected to process the local crops. In the 1860s and 1870s, transports to markets were slow and access was limited. Moorilda mill was never able to compete with those in Blayney and Millthorpe, once they possessed rail transport. To ship by rail from Moorilda, the milled goods had to be taken to Newbridge station. This increased costs and delivery time. The success of a mill, or any business concern, depends upon its access to markets. Those with good access to the railways survived until another factor in the economy altered the viability of the industry.

The Millthorpe mill grew during the time of the 1890s depression, and in 1907 was remodelled, and had new machinery installed. Later, another lot of machinery was installed, valued at 60,000 pounds. In the following week, the mill was purchased by a competitor, who closed it down. When it was resold later, the milling machinery had to be destroyed. Thus, the reasons for the death of an industry are not always straight-forward.

Chaff Shed and Machinery

There is only one chaff, or produce shed, left in Millthorpe. It is in Elliott Street, close to the railway. It was owned by W & E Hayes, a business established in 1893. Processing of the chaff was performed in the building. It was cut and bagged, and then transported to Sydney. There were originally two identical produce sheds next to each other; one has burnt down.

No chaff-cutters were located in the field, but three were found in the Millthorpe Museum. Two of them were hand cutters; one was a hand-powered two-blade chaff-cutter, with wormdriven feed roller. The third was a stationary machine that was operated by a steam engine.

Lime Kilns and Stone Quarries

There were 2 D-shaped intermittent lime kilns and a limestone quarry on the outskirts of Blayney. The limekilns were built in 1880, and ceased working in 1935. During its initial period of operation, a large percentage of the lime dug from the quarry, was shipped to Lithgow to be processed, and a smaller amount was burnt in the kilns for local use. Raw lime was used by the Blayney Copper Mines as flux for smelting. This type of kiln was basically inefficient, yet they were used throughout NSW in the late nineteenth and early twentieth centuries.

Mining

Gold mining in Blayney Shire did not really begin until the 1870s-1880s. There most productive mining areas at this time were Burnt Yards, Forest Reefs, Flyers Creek, Browns Creek, Gallymont and Junction Reefs. *(Theme 4)*. Each of these sites had associated towns, usually with a school, and sometimes a church. The miners lived in tents. There are a few buildings left in some of these areas. At Burnt Yards there was a school which was removed c. 1947; Forest Reefs has a church building and an old hotel; and Beneree, near Forest Reefs, has two churches.

At the sites, the evidence for mining activity is generally restricted to earthworks. There are numerous mining shafts with mullock heaps strewn across the countryside. At Forest Reefs, the mullock heaps, topped by eucalypts, constantly draw the eye. Of all the mining districts surveyed, it presents the most obvious physical evidence for mining. Many of the shafts in this area were dug to test the depth and direction of the three gold reefs.

Water races are further evidence of mining. They are found in three areas. The races at Flyers Creek/Jervis Gully possibly date to 1879080. The date of the Wire Gully race is uncertain. Races were used to channel water from dams above the mining area. The water was used to run steam engines, to power stampers, and was essential for running treatment plants. If water were not available, a mining site could close down for weeks or months.

Few of the mining sites have any relics. All the sites had a variety of machinery during their working life, and for some period after, but eventually everything was removed from the mines. There are a number of reports of machinery being dumped into shafts. This was either for later re-use, or because it was not viable to try to sell and remove them from the site. In many instances, machinery was sold, but rarely is the buyer's name mentioned. Machinery that was too heavy to move, worn out or superseded, would be left at the sites. This is rare within Blayney Shire, where in situ intact mining relics are found only at Junction Reefs and Burnt Yards. There are machine beds at Gallymont and Century Mine at Forest Reefs. Wire Gully has machine beds, and a few timbers, but little else. Burnt Yards has two notable relics – a timber head frame (which may have fallen down), and a winder – the only example found within the Shire.

Junction Reefs has the largest range of mining relics within the study area. There are relics from most phases of gold mining at the Reefs' three main sites. They give a sense of the complex assortment of activities undertaken at different times. The methods used to produce and use power are typified first with the Belubula Dam. The dam was built in 1896, to store water, and to use it to generate power. There are upper and lower water races, along which water was transported to the processing sites. Other relics, relating to water use, are a boiler, a pelton wheel and generator.

There are a variety of relics that dealt with different stages in the processing of the ore; reverbatory furnace, cyanide vats and agitator, the twin Cornish roll crusher, gyratory crusher and an Edward's roaster. Many of these relics belong to the 1930's mining phase, when there was an attempt to re-activate the mine. This attempt lasted only two years.

There is no standing mine building at Junction Reefs, but there are the terraced platforms they were built upon. There are remains of some of the miners' houses, such as a corrugated iron chimney. The only intact mine-related building in the district is an explosive store at Gallymont.

This evidence is but a shadow of the range of structures that photographs of the mines tell us was there. Photographs of the Last Chance Mine at Kings Plains reveal buildings, chimney stacks, poppet head and pumps. Yet, at the Last Chance, there were only shaft openings filled with rubbish. Pictures of Junction Reefs' mining depict a variety of buildings and plant, none of which remain.

The majority of known successes in the 1870-80 periods were companies, not single men digging, and hoping to make a lucky strike. To dig a mine shaft, it was necessary to have a number of men performing the hard work, and money to pay for the explosives. Then there was the setting up of the headframe, the lifts and the winders. Once the gold-bearing ore was carried to the surface, it was necessary to treat the ore, usually by crushing, then cyanide treatment and roasting. All this required money in the first place, and thus mining operations had to involve a number of men. At Gallymont, the name of the town was changed from Gally Swamp, so that the shares could be sold on the London Stock Exchange. Only in the very early stages of the gold rush does the picture of the single miner success story ring true. Alluvial gold was easier to claim, but it was also the first gold to be exhausted.

Two of the most successful mining operations within the study area were not gold mines, but iron ore and copper mines. These ore loads were much more reliable than gold ores. They were an important employer of large numbers of men. Yet, like the gold mines, they have few relics to convey the wide range of industrial pursuits. Photographs of the Blayney Copper Mine show where there had been a smelter, seven chimney stacks, at least eight buildings, poppet heads and a rail siding, but now there are sandstock bricks, lumps of slag and the earthworks, where the siding ran along. There were many relics at the copper mine in Blayney in the 1950s, which may still be there. Carcoar Iron Mine has only the open cut and a rail bridge siding. Newbridge Iron Ore quarry is an open cut, surrounded by eucalypts.

Railways

The railway was an important instrument in the settlement and the industrialisation of the Shire. Yet, it has now been replaced, to some extent, by road haulage and private transport companies. The railways began operating in Blayney Shire in 1877, and are still operating throughout the Shire with limited passenger and industrial services. There are two lines that cross through the district. The first line ran from the south-east to the north-west, from Bathurst to Orange, passing through Gresham, Newbridge, Athol, Blayney, Polona and Millthorpe. The second line, completed in 1888, began at Blayney, and ran to Cowra, stopping at Stanfield, Carcoar, Mandurama, Lyndhurst, Garland and Lucan. The train still runs along the Bathurst/Orange line, but not along the Blayney to Cowra line. Stations along this route have been variously affected. The building at Mandurama station has been removed from the platform, while that at Lyndhurst was demolished in the late 1980s.

Carcoar station is closed, but the station remains, as does the station master's residence, and a rail bridge. A railway cottage at Blayney, located near the rail crossing, was

demolished in the 1980s, and was not able to be located. The Blayney station operates a few services daily. A number of private sidings have operated off the main rail line: Blayney Copper Mine, Carcoar Iron Ore Quarry, the Great Western Milling Co. at Millthorpe, and possibly the Limekilns. The railway sidings are physical statements of the dependence of these industries upon their access to transport, whether it was shipping goods out, or bring materials in, to be processed.

3.4 CEMETERIES

Blayney Shire has a variety of cemeteries:

- 9 general cemeteries;
- 4 church yard cemeteries;
- 1 private cemetery; and
- 1 private vault.

There is supposed to be a cemetery at Forest Reefs, but there are no headstones. The earliest acknowledged burial in the district was in 1836, in the Rothery Family Cemetery, Four years after William Rothery took up his grant in 1832, his son died, at the age of three months. The first general cemetery in the district was established at Carcoar in 1852. It has a wider variety of earlier monuments than is found in any of the other cemeteries. This was followed by the Methodist Cemetery at Hobbys yard in 1864, and Blayney General Cemetery in 1867. The percentage of burials, prior to 1890, in the two later cemeteries, is very low.

The permanent population of Blayney Shire reached its peak in the 1900s. (*Theme 7*). From 1870-90, the population began to increase, and spread out over the whole Shire. This phase saw the development of 16 new towns. Yet, the cemetery monuments have virtually no records of deaths during this period. This raises questions, regarding the nature of the occupation. If these people were buried, they were not buried locally. Generally, they were only passing through, on the way to the next gold discovery. Men, and their families, moved to where they could find employment. Thus, the population of the area, at this stage, was transitory, and the cemetery monuments are not an accurate document of events during this period. There may have been numbers of early deaths which went undocumented, when bodies were buried on private land, without any significant memorial, other than a pile of stones.

The most significant cemeteries within the study area are the Rothery Family Cemetery, the Carcoar General Cemetery, and the John Lister burial at Millthorpe, the John Marsden Vault at Blayney, and the Chinese burial outside Newbridge Cemetery. Each is rare, and has important historical associations.

The Rothery Family Cemetery is the only private cemetery of an early land owner, and it documents the life of the Rothery family. The Carcoar General Cemetery has many early burials, and a varied range of monuments. The John Lister burial at Millthorpe is a record of a discovery which altered the face of the district, and made Australia the biggest producer of gold in the world, for many years. The John Marsden Family Vault is an unusual structure, associated with an historically important family.

The three Chinese burial monuments, two at Carcoar and one at Newbridge, make a valuable cultural statement about the status of the Chinese within the predominantly Irish and Anglo-Saxon population of the Shire. The monument to Ah Con, who died on 8 March, 1880, is a testimony to an act of bravery. It was an extraordinary attempt that paved the way to his inclusion in the cemetery. In ordinary circumstances, he would not have been buried there, but sent to Beechwood, or sent back to China. The Tankey headstone is about 10 metres north-east of Ah Con's headstone. It has been incorporated within the main burial area, but the father of the children, John Tankee, felt it necessary to anglicise their surname. This qualifies them for inclusion in the cemetery, with other Christians. The burial of Wong Hang Hing in 1917, outside the boundaries of Newbridge Cemetery, confirms the carryover of these cultural views concerning the separateness of the Chinese and the European people.

A number of burials, throughout the cemeteries, record the early death of children. Most of these deaths were due to epidemics through the communities, including typhoid, diphtheria and influenza. There are three in the Rothery Family Cemetery. The Tankey children in Carcoar Cemetery, James Carnery, the two Hextell children, and the three Smith children at Lyndhurst Cemetery, are but representative of the many children who died before their tenth birthday. There was a high child mortality rate during the nineteenth century, because of primitive living conditions.

4.0 LANDSCAPE

4.1 INTRODUCTION

The Shire of Blayney encompasses approximately 1,600 square kilometres of well watered, gently undulating to hilly country on the Central Tablelands. Much of the land is elevated, at over 900 metres above sea level, and the climate is partially suitable for cool climate crops and trees.

The topography, the natural landscape, its native vegetation and the pastoral and agricultural landscapes have been studied from traverses of the Shire, along the major connecting roads between the towns and villages. Many minor roads and 4 wheel drive tracks have not been covered. Very limited botanical sampling was carried out, and identification of trees mainly limited to visual inspections.

4.2 GEOGRAPHY AND LANDSCAPE

The Shire's characteristic landscapes are predominantly formed by the pattern and influence of the Belubula River and its tributaries. The catchment of this river almost completely falls within the boundaries of the Shire. The complex geology and fragmented river system has produced three fairly distinct topographical landscapes in the district.

In the northern section, from Millthorpe to Blayney, extending west to Forest Reefs is generally flattish farming land. It is mostly bare of native eucalypts, but there is some cultural; windbreak planting of pines and cypresses. Along the rivers and creeks, willows are firmly established, often as the only tree species along the banks.

The undulating country, of gently sloping hills, extends south and either side of the flatter landscape. The country supports, almost entirely, sheep and cattle grazing, with scattered eucalypts or, occasionally, woodland formation.

The exceptions are many of the hills around Blayney, now strikingly bare of trees, a legacy of the mining era.

The cultural planting in this landscape rarely extends beyond that surrounding the traditional farmhouse. It is principally composed of Radiata Pines and Cypresses, as well as fruit trees, with occasional deciduous trees, olives and Kurrajongs. Within this attractive undulating countryside lie two man-made lakes of the Carcoar and Rowlands Dams.

The third landscape type is one of the steeper hills and more frequent gullies. These extend roughly from the highest mountain, Mount Macquarie (1,203 metres) north-west to Carcoar, then west to Junction Reefs and north to Cowrigg (Browns) and Flyers Creeks. There are

also pockets of quite hilly country, east of Gallymont, Coombing Creek and the Brother Mountains, in the central east.

Mount Macquarie is a notable landmark, rising from the surrounding landscape, with its encompassing pine forest standing out in dark green. The larger remaining stands of eucalypt woodland are found in this rougher country of alternating hills and gullies. Such landscapes feature many creeks and springs, often fertile soil and numerous localised small scale mining areas. This explains the occurrence of the high number of small settlements in the Shire, many of which are now almost deserted, or surviving in a most tenuous fashion.

4.3 THE NATIVE VEGETATION

The native vegetation remaining is conserved, generally within private ownership. Typically, on the undulating and hilly grazing lands, eucalypts are left scattered in the landscape, or occasionally left as small woodland formations. This gives the typically Australian character to the landscape. The character, however, is modified by occasional windbreaks of exotic species, or cultural planting around farm houses.

There are no State Forests of native trees, or any National Parks in the Shire. The public reserves are confined to small areas, such as Junction Reefs Reserve, commons and stock routes.

The historical texts and early photographs indicate that the area was covered by a medium to tall open woodland, of principally eucalypt trees, with native grasses and only a few understorey shrubs.

The original species are believed to have included Ribbon Gum, Peppermint, Stringybark, Boxes, Red Gum, Snow Gum, Black Sally, Kurrajongs, Casuarina and Wattle. At present, the most common native species remaining include Blakely's Red Gum (*Eucalyptus blakelyi*), Apple Box (*E. bridgesiana*), Yellow Box (*E. melliodora*), probably long-leaf Box (*E. goniocalyx*) and Red Stringybark (*E. macrohyrea*), as well as River Oak (*Casuarina cunninghamania*), Black Wattle (*Acacia decurrens*) and Kurrajong (*Brachychiton populeum*).

Much of the fertile land was cleared early for wheat growing. Local timber was also cut for early settlers' cottages. Though brick has become the characteristic surviving building material, timber, and later corrugated iron, was commonly used for miners' and farm workers' huts and general construction. William Lawson's first cottage was covered with Stringybark shingles. Large trees were cut for bridge and mining construction, however, only one pole bridge can be found in the Shire, (Carcoar Bridge) which crosses the Belubula River in Carcoar. In the Blayney Directory of 1886, no saw millers are noted, though two bricklayers appear.

In the 1860s, when bushranging was at its peak, the heavily wooded areas of the district provided excellent cover and hide outs.

The most severe loss of tree cover appears to have occurred after 1870, through a combination of farm clearing and mining.

Steam engines fuelled by wood became a common source of power for mining and smelting (Blayney Copper Mine), lime making, brickworks, flour mills (at Blayney, Millthorpe and Carcoar), as well as for farm machinery and fuelling open fires and stoves.

Leaves of peppermint eucalyptus were also distilled for use in some mining flotation processes.

At the Cadia Copper Mine, in the late nineteenth century, 'Wood fuel was burnt at the rate of 1,000 tons a month...'¹

Water supply and quality have been a long term problem in the district, first from run-off from mine tailings and later from abattoir. In 1883, the supply of a safe water supply was the first priority of the newly elected Blayney Council.

Vegetation and pasture has also suffered from natural causes of fire and drought: '...in 1900 there was a large fire which started at Canowindra and burnt out vast tracts of land through Trunkey...'² Natural areas, as well as grazing countryside, were also affected badly by the combination of rabbits and blackberry. In 1955, the remaining native forest on Mount Macquarie was cleared and planted with pine trees.

4.4 REMAINING NATIVE VEGETATION

Areas of native vegetation, listed on the Database, include:

- The Reserve at Junction Reefs (1160117);
- The eucalypt woodland east of Blayney Golf Course (1161662);
- A small reserve behind Mandurama School (1160107);
- The area south of Carcoar Cemetery (1161022); and
- The area south of Blayney Cemetery (1161020).

The River Oaks (*Casuarina cunninghamania*) along Cardiagulla Creek are included as a fine element (1161093) of the natural landscape. Eucalypt vegetation is also noted on grazing properties around cultural landscaping (1161661, 1161501, 1161096 and 1161120). Individual trees have been noted as having significance – such as Yellow Box and two large Kurrajong trees at the 'Errowanbang' property (1161096); the large Yellow Box in South Blayney (1161657); the tall White Box in the Carcoar Anglican Grave yard (1161017); and eucalypts in Lyndhurst Public School Grounds (1161667).

Other areas of native eucalypt wood land of some significance, but not itemised on the database, include vegetation east of Newbridge; on the hillside east of Lyndhurst; and along sections of Fell Timber, Gap and Flyers Creek Roads. There are also some sections of eucalypt woodland left between Carcoar and Blayney, to the west of the highway.

¹ The King's Colonials, p 27.

² The King's Colonials, p 46

4.5 THE CULTURAL LANDSCAPE

Mining Landscapes

Former mining areas are scattered over a great many sites in this district, and are covered thoroughly in the Archaeology Report. Often, little now remains to mark the location and former activity on these sites, unlike the extensive workings along the Turon River, near Sofala. Exceptions include the bleak landscape of the former Blayney Copper Mine above the town, and the most interesting dam built at Junction Reefs in the late 1880s. The extensive gold races, built to run for long distances in the western part of the Shire, were not seen.

Farming and Grazing Landscapes

Originally, the land was opened up in the 1830s for sheep grazing, using the native pasture grasses. By the 1850s, much of the more fertile red basalt soil was being cultivated for wheat. The combination of flattish land, and the good well watered basalt soils around Millthorpe, permitted more diversified rural pursuits in the area, up until the mid-twentieth century. From the 1880s, it was a prime area for growing hay and chaff for the Sydney market. When this market dried up, with the advent of the motor car, vegetables, potatoes and orcharding became more common. In the remainder of the district, some diversification occurred, up until about the 1950s, but since then the predominant farming occupation has been grazing for wool, with some fat lambs, dairying and cattle. This has resulted in the typical grazing landscapes, common in the Shire at present.

In areas of flatter terrain, and on some hills around Blayney, the grazing landscape is one of improved pasture (fertilised exotic grasses), with few or no trees, except for cultural planting. In the more hilly areas, there is more native tree cover, and a mix of fertilised, native and exotic pasture. Much of this landscape has a well managed and visually attractive appearance of contrasting fertile grasslands, with reasonable eucalypt cover. Farmhouses, many from the Victorian period, are set amid mature exotic trees. The apparent loss of leaves on some of the eucalypts in the district, usually associated with the disease Dieback, will need to be monitored. Possibly the concerns should be examined by the appropriate scientists. If there is a serious problem, solutions need to be investigated.

Cultural Tree Planting

The first settlers in the area brought with them plants from overseas. Willows were first planted near Orange in 1825, and today identify the course of the Belubula River, as well as the slower sections of Cowrigg and Coombing Creeks. Hawthorn hedges, now significant in the Millthorpe to Orange landscape, were brought out from England in 1836, by the Kingham family. They also brought daffodils which, in season, carpet the driveway of 'The Wattles' in profusion (1160040).

'Coombing Park', settled in 1829, has some huge olive trees, said to have been planted by Thomas Icely in 1838, with seeds brought from England. Grapes were also planted.

Elms and oaks were characteristically planted in the Victorian period, as well as Cypress, Deodar Pines and Irish Strawberry.

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A few of these still exist from before 1900, including the elm at Kings Plains School (1161582), elms, olives and Irish Strawberry trees (*Arbutus unedo*) in Coombing Park (1161065), oaks, elms and Irish Strawberry trees in Carrington Park (1161648) and the Blayney Primary School (1160013), a few elms in the northern part of Blayney township (1161649) and old trees at 'Cliefden' (1161120) and 'Allonby' (1161577). There is also an oak tree at the Catholic Presbytery in Carcoar, near the Church, (1160070) which was used by the priest to tie his horse in the shade.

At the turn of the century, towns such as Blayney and Carcoar made requests for trees from the Botanical Gardens, and had them supplied from the State Nursery at Gosford. Records show that over 100 Radiata Pines, 20 Podocarpus and 30 Cypresses were forwarded to Blayney; and over 200 trees to Carcoar, including Planes, Walnuts, Elms, Radiata Pines, Camphorlaurels, Oaks and Robinias.

In 1890, the Government schools were issued with gardening tools, plants and trees for the 'Beautification of the School Grounds' project.

An Agricultural Instructor was sent to Carcoar in October 1890 and reported that 'The Playground is about two acres, and was formally a brick yard. One portion is a deep dell terminating in a creek. Some fine healthy fruit trees are growing on the banks of it. Elders and poplars are growing in the playground, giving it refreshing shade. In front of the schoolhouse and the teacher's residence are well designed ornamental flower beds. The teacher has gone to some trouble and expense, digging out the remains of the brick yard, and filling in with good loam.' ³

The quick growing, soil tolerant Radiata Pines became the most commonly planted tree in the district during the Federation Period (1900-1930). The Database clearly shows their importance in the cultural landscape, forming the common mature tree group around most of the late Victorian and Federation farmhouses. (See 1160083, 1161663, 1161577, 1161065, 1160001, 1161048, 1161722, 1161502, 1161501 and 1161057)

Also existing, though less common, are the cypress windbreaks on a number of farms, including 'Kareela' (1161580) and 'Waverleigh' (1161137).

4.6 LANDSCAPE ON FARMS

'Coombing Park'

This property, settled in 1829, has a fine setting in a bend of Coombing Creek, and an important early garden, considered having State Significance. Elements considered significant, include the grazing landscape; the long drive beside the row of Radiata Pines, with terminating Carriage loop; the layout of the house and farm buildings; the garden with venerable trees; an old orchard of cold climate fruit trees; banks of willows along the creek; and fine lawns. These all combine to set off the grand Victorian, single storey house, dating from the late 1880s.

³ Photos, taken c. 1901) from 'The Lumme Collection' in the National Library show the trees in the school grounds. Few still exist, but there are some very old trees at the back of the school. (1161026)

'Cliefden'

This is another pioneering property, settled in the 1830s, and still in the Rothery family ownership. It is pleasantly sited on a saddle formation, on rising ground above Limestone Creek, and is considered to have State Significance. Important elements of the property include the grazing landscape; the layout of the buildings; the forecourt area in front of the large brick stables; and the mature, though somewhat overgrown, garden. The original house is surrounded by mature, ornamental exotic trees; some old orchard trees, including quince; and rough stone-edged cargen beds of typical Victorian period flowers. These include roses, May, daisies, herbs and vegetables. The former carriage loop is now grassed over, and some beds are becoming indistinct.

'Errowanbang'

Originally the property of William Lawson, granted in 1826, and later his partner Hopkins, it is well suited in the undulating country above Flyers Creek, on a flattish section of hillside. Though the Victorian garden layout has lost significant characteristics, such as the carriage loop, remaining elements include the surrounding grazing landscape; an interesting layout of farm buildings, mostly dating from post 1930; two Ponderosa Pines (c. 1890), which are rare in the district; mature Kurrajongs and Yellow Box trees, possibly 170-220 years old; as well as a circular rose bed and unusual pigeon coop.

4.7 FARM GARDENS GENERALLY

Around the three principal towns, there are many properties with tree groups surviving, from before the 1930s. The group of farms surrounding Blayney, often established in the Victorian period, commonly have their farmhouses set amongst cultural planting from c. 1900, with recurring Radiata Pines. Such a group of properties is very significant locally, and gives the district a strong link with its Victorian heritage. ('Anahdale', 'Boomanulla', 'Thurlstone', 'Wonga', 'Napier Park', 'Kareela', 'Linfern', 'Allonby' and 'Merriwonga').

4.8 TOWN GARDENS AND TOWNSCAPE

Blayney

The town is surrounded by hills, with the Belubula River, and its line of willows and flood land, forming a distant edge to the east. The main street, Adelaide Street, is wide, and displays important Victorian buildings, though many have disappeared to give the street a somewhat inconsistent, fragmented appearance. The churches of Adelaide Street contribute significantly to the streetscape. The former Methodist Church, with its delicate bell tower, is framed by three fine cypresses planted in the 1920s, as evidenced by a contemporary photograph. The more traditional Anglican Church, with its robust tower, is also notable for its fine tall memorial stone cross and windbreak of Himalayan Cypresses. On the west side, the Presbyterian Church has a sympathetic arrangement of mixed planting, setting off an unusual shingle spire, atop its bluestone tower.

The main town park, Carrington Park, has lost much of its Victorian/Federation integrity, as it was later sub-divided to provide sites for the Primary School and the town pool. The park was laid out in the form of a Union Jack flag at the turn of the century, with just a little more

than one quarter of the original park remaining. There are mature elms, oaks, pines and an Irish Strawberry tree remaining from the original planting. From the 1920s, a fine memorial stone gateway exists, as well as a bandstand and simple shelter sheds, significantly from the same period. One of the shelter sheds was once used as a 'Teahouse'. There are also a few non-functioning cast iron Victorian lamp posts (1161648). This park, though off the main street, provide the most important cultural planting of heritage significance within the town. The Frank Brown Memorial Gates, in Church Street, are a memorial to Mr. Brown, who kept the park going as a volunteer for many years.

There are few private gardens within the town having heritage significance, though a few in the main street are important in the main streetscape (1160085). The former entrance to the Marsden property,' Anahdale', has a stately avenue of mature, mixed deciduous trees from the 1920s (1161653

Only one large indigenous eucalypt (1161657) was found within the town's developed area, a Yellow Box of 20 metres height, in the Southern sub-division.

There are a few streets with consistent mature tree planting of significance. Parts of Osman Street have some mature mixed deciduous planting in Pin Oak, Elm, Plane and Holly Oaks up to 18 metres high (1161652).

Recent Street and general public planting in the town appear to be sympathetic to the cultural planting of the past. On Church Hill, new re-vegetation with indigenous eucalypts (*E. melliodora, blakekyi and polyanthemos*) will help restore this bare hillside, a legacy of the mining era.

The hills around the town provide a visually important setting, and buildings have, fortunately, been excluded from them.

The town cemetery (1161020) on the north-western outskirts, with headstones from the 1860s, has some period planting of oaks, Funeral Cypress and, what is considered to be, a very old laurel bush. The large copse of native eucalypt forms a valuable background to the southern boundary.

Carcoar

Rising from a steep, small scale valley of the Belubula River, this small town of 700 inhabitants is justly famous for its Victorian period character. The main street, Belubula Street, has a notable charm of verandahed, brown brick buildings, with a vista down to the Courthouse tower at the foot of the hill, and beyond into the countryside (1161094). The many views from the town to the open pasture countryside, with scattered eucalypts, are appropriate, and fortunately not compromised by extraneous elements.

The cultural planting plays a subtle role in the town, around the churches, streets and houses in the town. The bank of willows along the river is an important visual element at the foot of the town.

The War Memorial, with granite statue of a soldier and surrounding cast iron picket fence, though erected c. 1920, is sympathetic to the town's Victorian style. Also of note, are the exposed granite kerb and guttering at the high end of Belubula Street, and basalt kerb and guttering scattered throughout the town.

There is a robust, five span timber pole bridge at the river crossing, c. 1890.

The Showground has a Victorian atmosphere, completely surrounded by mature exotic trees such as Elm, Oak, Radiata Pine, and Cypress, forming a strong feeling of enclosure, with only a few glimpses of the hilly countryside beyond. (See1161067)

The town cemetery (1161022) is set on a hill above the town, devoid of cultural tree planting, but set with native eucalypt woodland below it.

Millthorpe

Set on rising ground in flattish country, the town has a considerable Victorian/Federation character and consistency, especially around the central cross roads (1161121). The period street planting from the 1920s to the 1950s, gives the small town considerable elegance, which fades away towards the southern end. (See 1161064, 1161048, 1161005 and 1161089). Street trees include Radiata Pine, Plane and Ash.

There are fine stone memorial gates and mature Radiata Pines at Redmond Oval, the principal recreation ground, and another group of Radiata Pines in the Cemetery (1160001, 1161028). The garden of 'Rosebank' (a former bank) is notable for the reconstruction of its Victorian garden and fence (1161578).

A group of mature Cypress and Cedar trees can be seen in the grounds of a Victorian building on the corner of Morley and Victoria Streets (1160041). In the primary school grounds, there is a large spreading oak tree, possibly over 100 years old (1161129). Many of the houses have well maintained, modest gardens, sympathetic to the character of the town.

4.9 THE SMALL VILLAGES

The district has a large number of small villages of former prominence during the gold rushes. The largest of these is Mandurama, which retains some of its Victorian character, even with the demolition of its Victorian railway station in the late twentieth century. A number of houses have neat gardens of traditional plants, and behind the Primary School, a small nature reserve of native eucalypt woodland has been set aside (1160107).

'Lyndhurst', to the south, is an unusual town made difficult to read by the Highway by-pass which ignores the original grid pattern and dominance of the Railway Station – demolished in the 1990's. It gives a first impression of having as many streets as houses, sprawling up a gentle slope. There is an unusual garden in Garland Street (1161124), with cultural planting of Cypress and Palms. At Kings Plains, few buildings remain from the former township, but there is a very large Elm tree, possibly more than 100 years old, in the School Yard (1161582). Other settlements include Newbridge, Hobby's Yards, Barry, Neville, Gallymont and Forest Reefs. Newbridge is of particular interest, given the dominant lower valley with intensive plantings and upper ridge line with the extraordinary Showground on the hilltop surrounded by cultural plantings. Neville also has a large Showground with substantial windbreak cultural planting set aside from the village centre.

The final key source of cultural and early plantings is the Cemeteries of the Shire: Blayney is the largest with a dominant setting, while Carcoar and Millthorpe include dominant settings and collections of native and introduced plants and trees.

APPENDIX

NSW Historical Themes

COMMUNITY BASED HERITAGE STUDY

Broad Topics and Themes for Historic Research

1. Convicts

The use of convicts as assigned labour in the shire; the daily lives of convicts; convict escapees; convicts who obtained their ticket of leave and settled in the shire; who were they (specifically) and do any of their descendents still live in the shire; what impact did convicts have on the settlement and development of the shire; was the presence of convicts associated with law and order problems in the shire; where were convicts house; were there any convict farms or similar institutions, operated for and by the government; if so, who were the overseers; identify potential heritage items relating to this, including sites that have been demolished/removed.

2. Exploration

Who were the first explorers to traverse the region and what did they find; when was the region first explored; when were the first roads and property boundaries surveyed; who did the earliest surveys in the shire; collect as many maps, plans, surveys etc as possible; what were the impressions of the explorers and surveyors; identify potential heritage sites relating to this e.g. fence lines, boundary markers, surveyors marks, trig stations etc.

3. Pastoralism and Agriculture

When were agricultural and/or pastoral activities first attempted in the Shire; who were the first people to attempt this; how did they go; look at the development of these industries from the first settlement of the district up to the present day; examine the changes in type of crops grown, stock grazing, farm technologies, effect of drought, flood, epidemics, wars etc. identify potential heritage sites relating to this.

4. Mining

Look at all types of mining and fossicking that have taken place in the shire since first settlement; how did they contribute to the economy; what sort of people were attracted to these industries; where and when did they take place; identify potential heritage sites relating to this.

5. Forestry Industries

The development and exploitation of timber reserves; dedication of state forests; contribution to the economy; what type of timber and what was it used for; sawmilling and timber production/finishing industries; identify potential heritage sites relating to this, including forests and items within forests.

6. Environment

Identify areas of environmental significance such as wilderness areas; why are they significant; what do they represent and what do they contain.

7. Townships

The development of towns and villages and how they interconnect; what specific function did each town fulfill; a concise history of each settlement area; impact of WWI and WWII on the shire and each specific settlement; housing; social institutions; cultural sites and activities; leisure activities; identify potential heritage sites relating to all these areas (there should be lots).

8. Migration and Ethnic Influence

Identify major ethnic groups who settled in the shire; why were they attracted to the district; why so many Scots; was there any conflict between Presbyterians and other denominations; use of Chinese labour; impacts of migration on the shire; identify potential heritage sites associated with different ethnicities.

9. Transport

Establishment of travel routes, stock routes etc; building of the railway and its impact; early use of water transport (convict times); building of the aerodrome and its impact; identify potential heritage sites associated with these areas.

10. Town Services

Development of utilities; development of commerce; law and order; government and administration e.g. development of the shire council; identify potential heritage sites associated with these areas (there should be lots).

11. Health

Development of health services and hospitals in the shire; what was available in the smaller settlements; what did people do before hospitals; who were the early doctors and midwives; identify potential heritage sites associated with these areas.

12. Religion

Establishment of religious institutions in the shire, including the small settlements; where did people worship before churches were built; what were the main religions; how has this changed; has religion been an influential factor in the development of the shire; identify potential heritage sites associated with this (including former sites of worship).

13. Education

Establishment of education services in the shire, including the small settlements; where did children go to school before government schools were established; who attended the government schools vs. private schools; who were the early educators in the shire; identify potential heritage sites associated with this.

14. Death

Identify and map all burial grounds, including lone graves and private cemeteries in the shire; where did the earliest burials take place; where were convicts buried; who was the first undertaker in the shire; where were the chinese labourers buried; did different ethnicities practice culturally specific burial practices, or was everyone treated the same; identify potential heritage items relating to this.

15. Persons

Who were the most prominent and influential people; biographic details on the major players in the shire's development from first settlement to the present day.; how did they influence the development of the shire; where did they come from and why; are their descendents still living in the shire; identify potential heritage items relating to them and their families.

16. Recreation

The development of recreational pursuits including sporting clubs, musical societies, dance halls, hostelries and illicit recreation (such as brothels). Include wayside inns that may no longer exist.

17. Law and Order

The development of law and order in the district including constabulary, courts of law, punishment etc.