

Appendix I

Non-Aboriginal heritage assessment report

New England Highway Upgrade, Belford to Golden Highway

Non-Aboriginal Heritage Assessment

Report to Arup

June 2016



 artefact

Artefact Heritage
ABN 73 144 973 526
Lvl 1/716 New South Head Rd
Rose Bay 2029
PO BOX 772 Rose Bay
NSW Australia 2029

+61 2 9025 3958
office@artefact.net.au

EXECUTIVE SUMMARY

Roads and Maritime Services (Roads and Maritime) proposes to upgrade a section of the New England Highway, from Belford to the intersection with the Golden Highway. It is expected that the proposal will be assessed under Part 5 of the *Environmental Planning and Assessment Act 1979*. On behalf of Roads and Maritime, Arup is preparing the concept design and Review of Environmental Factors (REF) for the proposal. Arup has engaged Artefact Heritage to prepare a non-Aboriginal heritage assessment to assess the potential historical (non-Aboriginal) heritage impact of the proposal.

Overview of findings

There are no listed heritage items within or in close proximity to the study area.

The study area includes parts of properties that were granted in the 1820s and 1830s, and developed as part of the corridor of agricultural land along the Hunter River. No associated structures are known to have been present within the study area. However, the western part of the study area includes a small section of a large rural property with a landscape that is characteristic of the history and vistas of the local area. This property has been impacted in the past by at least two stages of realignment of the New England Highway at the intersection with the Golden Highway. The heritage values of the landscape are not provided with statutory protection.

The study area includes parts of two road alignments that were in existence by the mid-1830s, and these routes themselves are considered to be of local heritage significance as major regional thoroughfares. It includes two sections of former alignment of the New England Highway. The study area may also include additional historic fabric relating to earlier phases of the construction and use of Jerry's Plains Road / Great North Road / New England Highway. Any such fabric is likely to have been impacted by earlier road works and will be fragmentary in nature. The known remains date to the mid to late twentieth century, and are unlikely to be of heritage significance. The potential remains dating to the nineteenth century are of local heritage significance. However, they would be defined as works rather than relics, and are therefore not protected by the *Heritage Act 1977*.

The overall proposal provides for the ongoing use of the New England Highway, which is a route that has been in use since the 1830s. However, elements of the proposal will result in impact to the identified heritage value of the study area. The assessed impact is as follows:

- Construction of the duplication and relocation of utilities is likely to result in the complete removal of any archaeological remains, as outlined above, within the footprint of the works. This is considered to be a moderate heritage impact.
- Construction of the flyover will encroach onto the rural landscape adjacent to the road. This is considered to be a minor heritage impact.

Recommendations

The following recommendations are made:

- An archival record should be made of the known elements relating to earlier phases of the road. This comprises the section of former alignment of the New England Highway that is located on the north side of the highway.

- During geotechnical investigation within the current road pavement, where this appears to follow the earlier alignment, a record should be made of any elements of the former road that are encountered. This will provide an indication of what is likely to be encountered during construction works.
- During construction, a stop-work procedure should be followed in accordance with the *Standard management procedure: Unexpected heritage items* (RMS 2015). Any unexpected archaeological relics remain protected by the *Heritage Act 1977* and should be managed accordingly.
- Following completion of the proposed works, the archival record and any additional records required in the course of the work should be compiled into a report. Copies of the report should be lodged with the Heritage Council of NSW, Roads and Maritime Services, Singleton Council, and the Singleton Historical Society and Museum.

CONTENTS

1.0	Introduction.....	1
1.1	Background.....	1
1.2	Study area	1
1.3	Aims and limitations.....	1
1.4	Authorship and acknowledgements	1
2.0	Legislative context and heritage listings	3
2.1	Legislative context	3
2.1.1	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)	3
2.1.2	Heritage Act 1977 (NSW)	3
2.1.3	Environmental Planning and Assessment Act 1979 (NSW).....	5
2.2	Summary of heritage listings	5
3.0	Historical context.....	6
3.1	Singleton, Belford and Whittingham	6
3.2	Study area	6
4.0	Survey	19
5.0	Heritage significance.....	28
5.1	Historical heritage resource.....	28
5.2	Significance assessment	31
5.2.1	NSW heritage assessment guidelines.....	31
5.2.2	Significance assessment	32
5.2.3	Statement of significance	34
6.0	Potential historical heritage impact.....	35
6.1	Proposed development.....	35
6.2	Impact assessment.....	35
6.3	Statutory implications	37
6.4	Recommendations.....	38
7.0	References	39

FIGURES

Figure 1:	The study area (red outline).	2
Figure 2:	1834 (Portion of map of the colony of New South Wales transmitted to Thomas Balcombe by Major Mitchell on 7 April 1834, State Library NSW, Digital order no. a4621001, Call no. Z/M2 812.1/1834/1).	9
Figure 3:	1842 (Sketch shewing [sic] the roads around Singleton and Jerry's Plains, State Library NSW, Digital order no a5642001, Call no. Ca 84/17).....	10
Figure 4:	Detail of an 1866 plan of the Old North Road (Plan of a parish road from a point on the Main Northern Road near Maitland to a point on the said road in the Parish of Wittingham near Singleton, LPI, Crown Plan 566.1603).	10
Figure 5:	Detail of a 1901 map of the Parish of Belford (LPI).	11
Figure 6:	Detail of a 1902 plan showing the western half of the study area (Land included in Application No. 12489 edged red, Parishes of Belford and Wittingham, County of Northumberland, LPI, Crown Plan 1048.3070).	11
Figure 7:	1905 subdivision of Portions 10 and 42 (LPI, Deposited Plan 4561).	12
Figure 8:	Detail of a 1911 map of the Parish of Belford (LPI).	12
Figure 9:	1916 (Parish of Belford, LPI, Crown Plan 2534.3070).	13
Figure 10:	Detail of a 1926 map of the Parish of Belford (LPI).	13
Figure 11:	1927 (Australian Section Imperial General Staff, Singleton New South Wales, National Library of Australia, MAP G8960 s63).	14
Figure 12:	1932 (Plan of land to be resumed ... in connection with the proposed widening of the Great Northern State Highway at Warkworth Turnoff, LPI, Crown Plan 18942.1603).	14
Figure 13:	The New England Highway near Singleton in 1933 (Main Roads, Vol. 4 No. 8, April 1933).	15
Figure 14:	1942 (A.H.Q. Cartographic Coy, Singleton New South Wales, National Library of Australia, MAP G8960 s253 (Copy 1)).	15
Figure 15:	Detail of a 1943 map of the Parish of Belford (LPI).	16
Figure 16:	The study area in 1952 (LPI).	17
Figure 17:	The study area in 1984 (LPI).	18
Figure 18:	The three survey sections.	19
Figure 19:	Detail of the Golden Highway, showing the current alignment in green and the former alignment in blue (base image: LPI).	20
Figure 20:	The current Golden Highway alignment.	20
Figure 21:	The Golden Highway embankment.	20
Figure 22:	The Golden Highway cutting.	20
Figure 23:	Former Golden Highway alignment.	20
Figure 24:	Gravel shoulder.	21
Figure 25:	Private road to the abattoir.	21
Figure 26:	The rest area, in the background of the photograph.	21
Figure 27:	Access from the rest area to the former alignment of the Golden Highway.	21

Figure 28: Toilet block in the rest area.	21
Figure 29: New England Highway, looking east from near the intersection with the Golden Highway.	23
Figure 30: Cutting on the New England Highway.	23
Figure 31: Embankment for the New England Highway.	23
Figure 32: Culvert under the New England Highway.	23
Figure 33: Stone alignment observed to the south of the New England Highway (outside the study area).	23
Figure 34: Former road pavement on the south side of the New England Highway (outside the study area).	23
Figure 35: Access track running along the northern side of the New England Highway.	24
Figure 36: Detail of the New England Highway, showing the sections of former alignment to the south, shaded yellow (base image: Google Earth).....	24
Figure 37: Road pavement on the western section of former alignment.	24
Figure 38: Cutting alongside the western section of former alignment.	24
Figure 39: Culvert on the western section of former alignment.	25
Figure 40: The change in level between the two parallel former road alignments.	25
Figure 41: Eastern section of former alignment.	25
Figure 42: Cutting.	25
Figure 43: Culvert under the eastern section of former alignment.	25
Figure 44: Road between the eastern section of former alignment and the highway.	25
Figure 45: Access track along former alignment to the north of the New England Highway.	26
Figure 46: General view.	26
Figure 47: The main watercourse running through the western part of the study area.	26
Figure 48: Dam on the main watercourse.	27
Figure 49: Dam on the minor watercourse.	27
Figure 50: Stockyard, in the background of the photograph.	27
Figure 51: Approximate line of the former road alignments through the study area, with circles indicating approximate locations of water crossings.	30

TABLES

Table 1: NSW heritage assessment criteria.	32
Table 2: Assessed scale of heritage impact.	36
Table 3: Summary of heritage impact.	37

1.0 INTRODUCTION

1.1 Background

Roads and Maritime Services (Roads and Maritime) proposes to upgrade a section of the New England Highway, from Belford to the intersection with the Golden Highway. It is expected that the proposal will be assessed under Part 5 of the *Environmental Planning and Assessment Act 1979*. On behalf of Roads and Maritime, Arup is preparing the concept design and Review of Environmental Factors (REF) for the proposal. A Preliminary Environmental Investigation (PEI) for the proposal has been completed (Hills Environmental June 2014). Based on the results of the PEI, Roads and Maritime requires the REF to include assessment of non-Aboriginal heritage. Arup has engaged Artefact Heritage to prepare a non-Aboriginal heritage assessment to assess the potential historical (non-Aboriginal) heritage impact of the proposal.

1.2 Study area

The study area is shown in , and consists of the New England Highway from the intersection with the Golden Highway to the intersection with Bell Road; the Golden Highway for a distance of approximately 450m west of the intersection with the New England Highway; and parcels of land on either side of the road. The study area is in the Singleton Local Government Area (LGA) and runs through the Parishes of Belford (in the east) and Whittingham (in the west) in the County of Northumberland.

1.3 Aims and limitations

The present report assesses the potential historical heritage impact of the proposed works. It has been prepared in accordance with the following relevant guidelines:

- *The Burra Charter* (Australia ICOMOS 2013).
- *Statements of heritage impact* (Heritage Office & DUAP 2002).
- *Assessing heritage significance* (NSW Heritage Office 2001).
- *Assessing significance for historical archaeological sites and 'relics'* (Heritage Branch 2009).

This non-Aboriginal heritage assessment has been prepared to address non-Aboriginal (historic) heritage values only. An Aboriginal cultural heritage assessment is being prepared separately. The assessment of historical archaeological potential is based on documentary research and surface survey only; no sub-surface investigation was undertaken.

1.4 Authorship and acknowledgements

This report was prepared by Fenella Atkinson (Senior Heritage Consultant) and reviewed by Abi Cryerhall (Principal Historic Heritage). The survey was undertaken by Atkinson and Alyce Haast. The assistance of the Arup and Roads and Maritime Services project team is gratefully acknowledged, as is the assistance from Robert Parkinson, Land and Property Information.

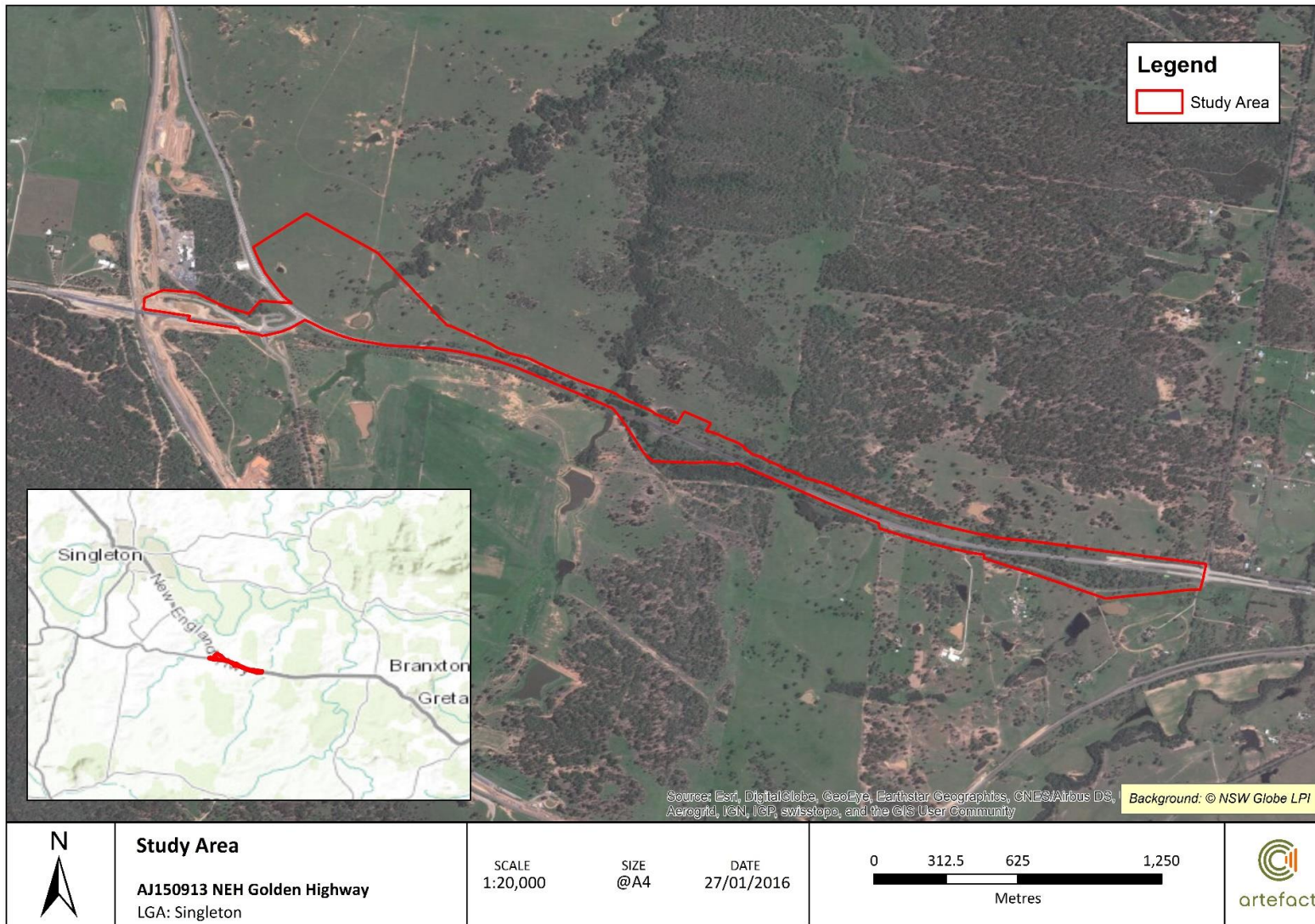


Figure 1: The study area (red outline).

2.0 LEGISLATIVE CONTEXT AND HERITAGE LISTINGS

2.1 Legislative context

A summary of the relevant Acts and the potential legislative implications for the proposed development follow.

2.1.1 Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides a legislative framework for the protection and management of matters of national environmental significance, that is, flora, fauna, ecological communities and heritage places of national and international importance. Heritage items are protected through their inscription on the World Heritage List, Commonwealth Heritage List or the National Heritage List.

World Heritage List

The *Convention Concerning the Protection of World Cultural and National Heritage* (the World Heritage Convention) was adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 1972 and came into force in 1975. The World Heritage Convention aims to protect heritage that is of such outstanding universal value that its conservation is important for current and future generations, and defines criteria for the identification of such sites. The Convention also outlines the role of States Party in the protection and preservation of world and their own national heritage.

National Heritage List

The National Heritage List has been established to list places of outstanding heritage significance to Australia. It includes natural, historic and Indigenous places that are of outstanding national heritage value to the Australian nation.

Commonwealth Heritage List

The Commonwealth Heritage List has been established to list heritage places that are either entirely within a Commonwealth area, or outside the Australian jurisdiction and owned or leased by the Commonwealth or a Commonwealth Authority. The Commonwealth Heritage List includes natural, Indigenous and historic heritage places which the Minister for Sustainability, Environment, Water, Population and Communities is satisfied have one or more Commonwealth Heritage values.

No items within or adjacent to the study area are included on the World, National or Commonwealth Heritage Lists.

2.1.2 Heritage Act 1977 (NSW)

The NSW *Heritage Act 1977* (Heritage Act) provides protection for items of 'environmental heritage' in NSW. 'Environmental heritage' includes places, buildings, works, relics, movable objects or precincts considered significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. Items considered to be significant to the State are listed on the State Heritage Register (SHR) and cannot be demolished, altered, moved or damaged, or their significance altered without approval from the Heritage Council of NSW.

State Heritage Register

The SHR was established under Section 22 of the Heritage Act and is a list of places and objects of particular importance to the people of NSW, including archaeological sites. The SHR is administered by the Heritage Division of the Office of Environment and Heritage (OEH) and includes a diverse range of over 1500 items, in both private and public ownership. To be listed, an item must be deemed to be of heritage significance for the whole of NSW.

The SHR does not include any items within or in close proximity to the study area.

Section 170 registers

Under the Heritage Act all Government agencies are required to identify, conserve and manage heritage items in their ownership or control. Section 170 requires all government agencies to maintain a Heritage and Conservation Register that lists all heritage assets and an assessment of the significance of each asset. They must also ensure that all items inscribed on its list are maintained with due diligence in accordance with State Owned Heritage Management Principles approved by the Government on advice of the NSW Heritage Council. These principles serve to protect and conserve the heritage significance of items and are based on NSW heritage legislation and guidelines.

In some cases, the s170 Register listings are reproduced in the State Heritage Inventory. The Roads and Maritime Services Register is also available online. The Roads and Maritime s170 Register, and the s170 Registers reproduced in the State Heritage Inventory do not include any items within or in close proximity to the study area.

Relics

The *Heritage Act* also provides protection for 'relics', which includes archaeological material or deposits. Section 4 (1) of the Heritage Act (as amended in 2009) defines a relic as:

...any deposit, artefact, object or material evidence that:

- a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and*
 - b) is of State or local heritage significance*
-

Sections 139 to 145 of the Heritage Act prevent the excavation or disturbance of land known or likely to contain relics, unless under an excavation permit. Section 139 (1) states:

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

Excavation permits are issued by the Heritage Council of NSW, or its Delegate, under Section 140 of the *Heritage Act* for relics not listed on the SHR, or under Section 60 for relics included within an SHR curtilage. An application for an excavation permit must be supported by an Archaeological Assessment and Research Design prepared in accordance with the NSW Heritage Division archaeological guidelines. Minor works that will have a minimal impact on archaeological relics may be granted an exception under Section 139 (4) or an exemption under Section 57 (2) of the Heritage Act.

The potential for the presence of historical archaeological relics within the study area is discussed in Section 5.0.

2.1.3 Environmental Planning and Assessment Act 1979 (NSW)

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

Singleton Local Environmental Plan 2013

The study area is located within the Singleton LGA. Heritage items and archaeological sites in this area are managed under the Singleton LEP 2013. The LEP aims to conserve the fabric, setting and views, and integrity of heritage items and to protect archaeological resources.

Schedule 5 (Environmental Heritage) does not list any items within or adjacent to the study area.

2.2 Summary of heritage listings

As outlined above, the following statutory heritage lists were searched:

- State Heritage Register
- Singleton LEP2013
- World Heritage List
- National Heritage List
- Commonwealth Heritage List
- Section 170 Heritage and Conservation Registers

The following non-statutory heritage lists were also searched:

- Hunter Region Heritage Study
- Register of the National Estate
- National Trust Register

No listed items were identified within or in close proximity to the study area.

3.0 HISTORICAL CONTEXT

3.1 Singleton, Belford and Whittingham

Two official surveys of the Hunter River were undertaken in 1801 (Thorp 1994: 13). In 1820, a group of explorers reached the area now occupied by Singleton, and named it Patricks Plains (Thorp 1994: 13). In 1822, Governor Macquarie opened the land along the River for free settlement, and Henry Dangar carried out a survey of the region (Thorp 1994: 13 & 16). By 1827, it was noted that 'every acre of ground of the Banks of the Hunter is now occupied from Newcastle to the fountainhead' (Thorp 1994: 16). A member of the 1820 exploration party, Benjamin Singleton, was granted 240 acres on the Hunter, and in 1827 established an inn beside the ford across the River (Thorp 1994: 37; AMAC 2008: 9).

A location was set aside for a government village, to be called Whittingham, and the first lock-up in the district was built in this location (Thorp 1994: 43). However, the first town developed in the area surrounding Singleton's inn, in the location now occupied by Singleton (AMAC 2008: 9). A courthouse and gaol were established in Singleton in 1841 (Thorp 1994: 43). The early growth of the town was encouraged by its location on an important overland route, and later also as a terminus on the northern railway system (Thorp 1994: 17).

In the 1820s, there were large stock runs in the Singleton district, often with absentee landlords (Thorp 1994: 23). Crops were also cultivated, with a focus on wheat and maize (Thorp 1994: 26). From the 1830s the district became a centre for horse breeding and racing, and regular race meets were held (Thorp 1994: 24-25). By the second half of the nineteenth century, much of the land surrounding Singleton was occupied by small farms devoted to cultivation – wheat, maize, oats, barley, potatoes, garden produce (Thorp 1994: 26). In the late nineteenth and early twentieth centuries, dairying and fruit growing also became important (Thorp 1994: 24).

In 1863, the Great Northern Railway was extended from Branxton to Singleton. A station was opened at Belford in 1869, and remained operational until 1976 (Nexus 2010: 9 & 15). In late 1889, Belford was laid out and proclaimed a village (Nexus 2010: 15). Belford public school had been opened in 1880, and continued in operation through to 1935 (Andrews n.d.). There was also, briefly, a school at Whittingham, from 1881 to 1883 (Andrews n.d.).

Coal was mined in the area on a relatively small scale from the 1870, and after the Second World War became a major industry (AMAC 2008: 10). The War had a major impact on the nature of the areas, as in 1941, the Singleton Military Training Area was resumed by the Commonwealth (Thorp 1994: 31). The area was taken over by the RAAF, and clearing of the landing strip began in 1942 (ERM 2014: 22). Facilities included hideouts for aircraft, mess facilities and ablutions blocks, and petrol storage tents (ERM 2014: 22-23). Use of the area by the military has continued; the National Trainees Army Camp was opened in 1965, and new barracks built in 1989 (Thorp 1994: 31).

3.2 Study area

The study area passes through Portion 42 of the Parish of Whittingham, and Portions 60 and 62 of the Parish of Belford. It includes sections of the New England Highway and the Golden Highway.

Portion 42

Portion 42 of the Parish of Whittingham, consisting of 2000 acres, was granted to James Mudie (or Moodie) in 1836, but was initially acquired by him in 1825 (Dowd & Fink 1967). Mudie was already in ownership of the land to the north, which he had been granted in 1823. The northern property

included a Hunter River frontage, and was the location of Mudie's homestead, which appears to be the location of the present Baroona homestead.

Mudie (1779-1852) had arrived in Sydney in 1822, with his three daughters and a step daughter (Dowd & Fink 1967). He ran the estate with the assistance of his overseer John Larnach, who became his son-in-law and partner. The property was turned into one of the finest agricultural establishments in the colony, producing wool, meat and wheat. Mudie was appointed a justice of the peace in c1830, and was known for his harsh sentencing. He sold Castle Forbes in 1836 and left the colony, only returning briefly in 1840-42.

By 1848, the Castle Forbes estate was in the ownership of James Barker ('John Larnach & James Mudie'). At that time 650 acres of the overall property were cleared and in cultivation, and was said to be 'intersected by the new line of road from Maitland to the Upper Hunter, marked out and made by Major Sir Thomas Mitchell'. Portion 42 appears later to have been incorporated into the Minimbah or Rusholm estate to the west.

Portion 60

Portion 60 of the Parish of Belford, consisting of 640 acres, was granted to Richard Jones in 1837. He arrived in the colony in 1809, and initially worked as an importer and merchant (Shineberg 1967). Jones returned to England for a period from 1818 to 1825, and on his return brought his new family and a flock of Saxon sheep. He already held properties totalling 6000 acres, but in 1829 applied for an additional grant of 10,000 acres, which he received on the Hunter River. On this property he ran sheep and cattle. Jones was declared insolvent during the 1840s depression, and all of his estates were sold.

Portion 62

Portion 62 of the Parish of Belford, consisting of 2050 acres, was granted to John Malcolm. As with the other two properties, Malcolm is likely to have been in possession from the early 1820s. The property included a Hunter River frontage. The owner may be the John Malcolm listed as a druggist in Sydney in the 1828 Census, who had arrived free in the colony in 1824 (Sainty & Johnson 2008: M1552). By 1844, the property was in the ownership of John Stephen Ferriter, who sold it to J.S.C. McDouall in that year (Callaghan). McDouall changed the name from Drayton to New Freugh. The homestead was located on the northern part of the property, close to the River.

However, a public house called the Crown and Anchor Inn appears also to have been established on the New Freugh estate. The publican from 1843 to 1846 was John Kerrigan, followed by William Ramsay from 1847 to 1851 ('The Crown and Anchor Inn'). Evidence indicating the location of the Inn has not been found for the present report, but it is likely that it was located adjacent to the road. In 1850, a public pound was established at New Freugh ('Pound and poundkeeper'). Again, the exact location is not known.

The property appears to have remained in the ownership of the McDouall family until McDouall died in 1891, after which time the property was subdivided for sale. The 1903 advertisement noted that the estate at this time consisted of 6384 acres, and contained 18 grass and 15 cultivation paddocks, and 100 acres under lucerne ('For absolute private sale'). There was a homestead with outbuildings, and also a cottage with outbuildings.

New England Highway and Golden Highway

The study area includes sections of the New England Highway and the Golden Highway. The development of these two roads is closely related to the establishment of the Great North Road. The present T-intersection where the Golden Highway meets the New England Highway was originally a

cross-roads, with the east-west road being part of a route along the Hunter River (Jerrys Plains Road), and the north-west road being a branch off the Great North Road.

In 1819 and 1820, the Windsor district constable traced a route to Jerrys Plains, which was formally opened in 1823 (Thorp 1994: 17). This was initially known as the Bulga Road, but was later changed to Putty Road (ERM 2014: 15), and the present Putty Road largely follows the original alignment (Thorp 1994: 17). By the mid-1820s, planning had begun for an alternate route from Sydney to the Hunter River, to shorten the length of travel. In 1825, a survey was made by Heneage Finch of a route from Wiseman's Ferry to Wallis Plains (Maitland), and work began on the road in 1826 (Thorp 1994: 18). A number of changes to the proposed route were made by Sir Thomas Mitchell, after he became Surveyor General in 1828 ('Which route'). The road through to Maitland was completed in 1831, and was known as the Great North Road (Thorp 1994: 18).

Work appears to have continued on branches off the northern section of the Great North Road. At Wollombi, a branch road led off the Great North Road northwest through Broke to Patrick's Plains (Singleton) and Cockfighters Creek (Warkworth) (Thorp 1994: 18; ERM 2014: 17). Mitchell reported in 1836 that the Great North Road was complete through to the bridge over Cockfighters Creek (now Warkworth) at the point where Great North Road (now Wallaby Scrub Road) unites with the road along the right bank of the Hunter River (now Jerrys Plains Road) ('Historical Roads', 1952).

The east-west route through the study area; the eastern section of the New England Highway and the Golden Highway / Mitchell Line of Road; appears to be part of the road that Mitchell referred to, running along the right bank of the Hunter River, and already in existence by the mid-1830s. A plan from 1834 shows this east-west route (Figure 2). It also shows a road running southeast-northwest, including that part of the present New England Highway running north towards Singleton from the intersection with the Golden Highway. This appears to be part of an alternate route running west from Maitland / Morpeth to cross the Hunter at Singleton and then north. An 1842 plan shows a similar arrangement of routes through the region (Figure 3).

By 1851, the route from Morpeth through to Singleton was recognised as part of the Great Northern Road ('Historical roads', 1952). As noted above, the earlier plans show two routes from Morpeth to the west (the northern one including part of the present study area), and it is not clear at this point which was the alignment that was included in the Great North Road. However, a plan from 1866 shows that the Great North Road incorporated the northern alignment, turning towards Singleton at the intersection (Figure 4).

By 1865, the section of the Great North Road from Morpeth to Singleton had been gravelled ('Historical roads' 1952). The 1902 plan indicates that the road was of variable width (Figure 6). A plan from 1927 shows the two roads through the study area (Figure 11). It shows ten bridges or culverts along the New England Highway, where it crosses watercourses and drainage lines. In 1928, the route was renamed the Great Northern Highway, and in 1933 it was renamed again, becoming the New England Highway ('Historical roads' 1952).

In 1934, the section of the New England Highway between Branxton and Singleton was surfaced with tar, replacing the previous loose gravel surface ('Reconstruction of the New England Highway'). The work involved several small deviations, improvements to the alignment and grading, and creating a uniform formation width of 28 feet (8.5m) with a pavement of 20 feet (6m). During this program of works, the bend in the New England Highway (at the present intersection with the Golden Highway) was widened (Figure 12). Works undertaken at this time, on the New England Highway but not certainly within the study area, included replacement of timber culverts with concrete structures ('Northern district' 1932).

By 1942, the New England Highway was a concrete or sealed road (Figure 14). The 1952 photograph indicates that this was a bitumen surface (Figure 16). Jerry's Plains Road however

remained unsurfaced. The 1984 photograph shows that by this time the New England Highway had been straightened, involving significant changes to sections of the alignment within the study area (Figure 17). There are substantial areas of bare ground adjacent to the road, indicating that the works may have been only recently completed. This photograph also shows that Jerry's Plains Road (the Golden Highway) had been significantly realigned.

In 1990 the Mitchell Line of Road was declared a main road (OzRoads n.d.). In 1997, the Golden Highway was named, a route incorporating a number of sections of existing road, including the Mitchell Line of Road within the study area (OzRoads n.d.). In 1998, a 6km section of the New England Highway was duplicated at Belford (OzRoads n.d.), extending approximately 300m into the eastern end of the study area.

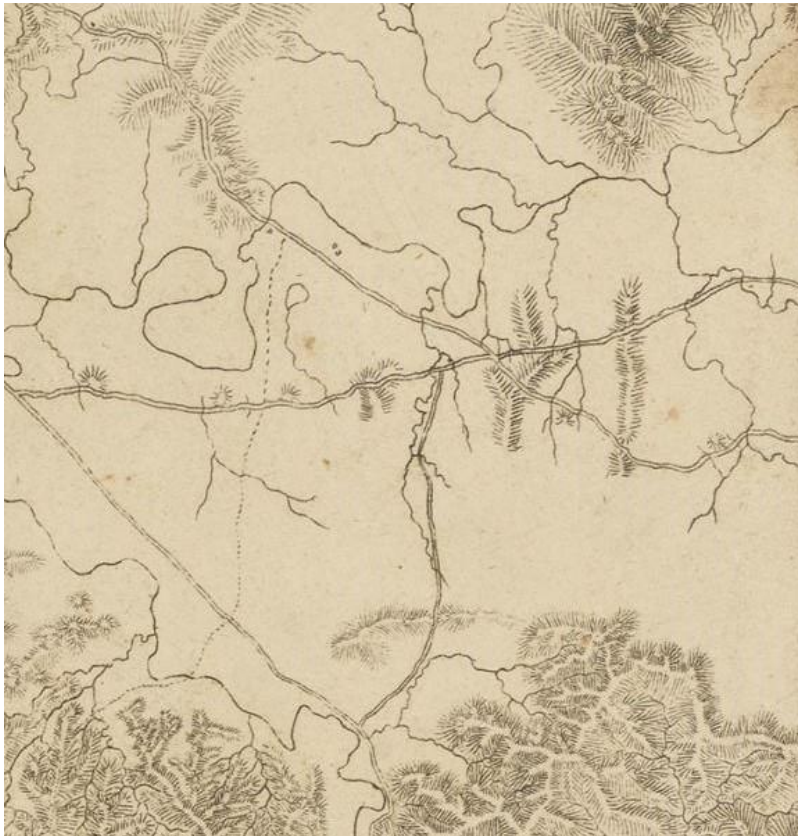


Figure 2: 1834 (Portion of map of the colony of New South Wales transmitted to Thomas Balcombe by Major Mitchell on 7 April 1834, State Library NSW, Digital order no. a4621001, Call no. Z/M2 812.1/1834/1).

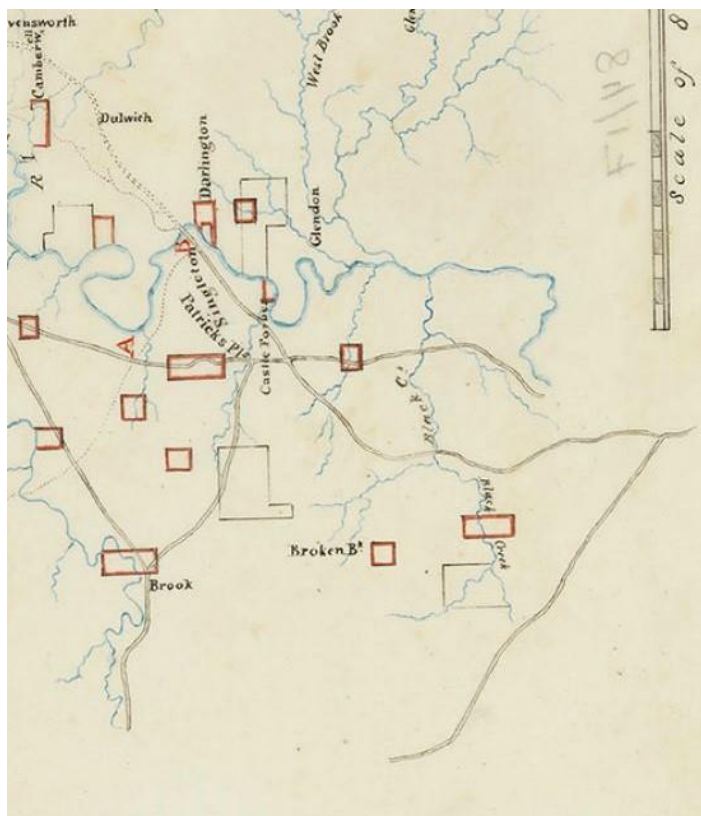


Figure 3: 1842 (Sketch shewing [sic] the roads around Singleton and Jerry's Plains, State Library NSW, Digital order no a5642001, Call no. Ca 84/17).

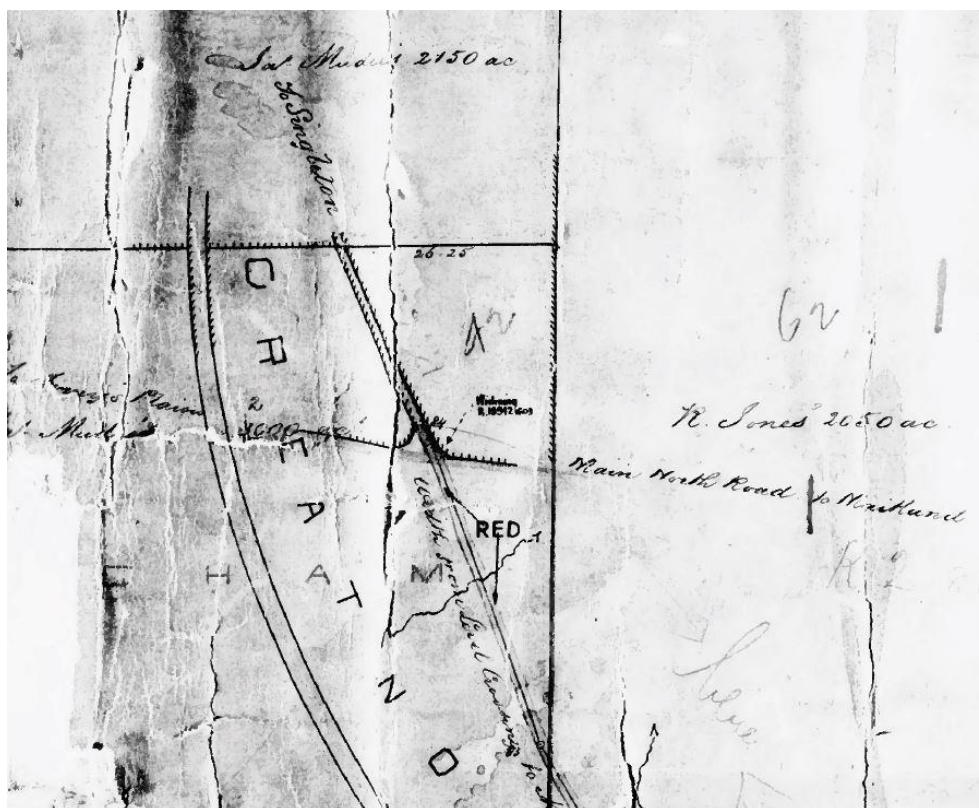


Figure 4: Detail of an 1866 plan of the Old North Road (Plan of a parish road from a point on the Main Northern Road near Maitland to a point on the said road in the Parish of Wittingham near Singleton, LPI, Crown Plan 566.1603).

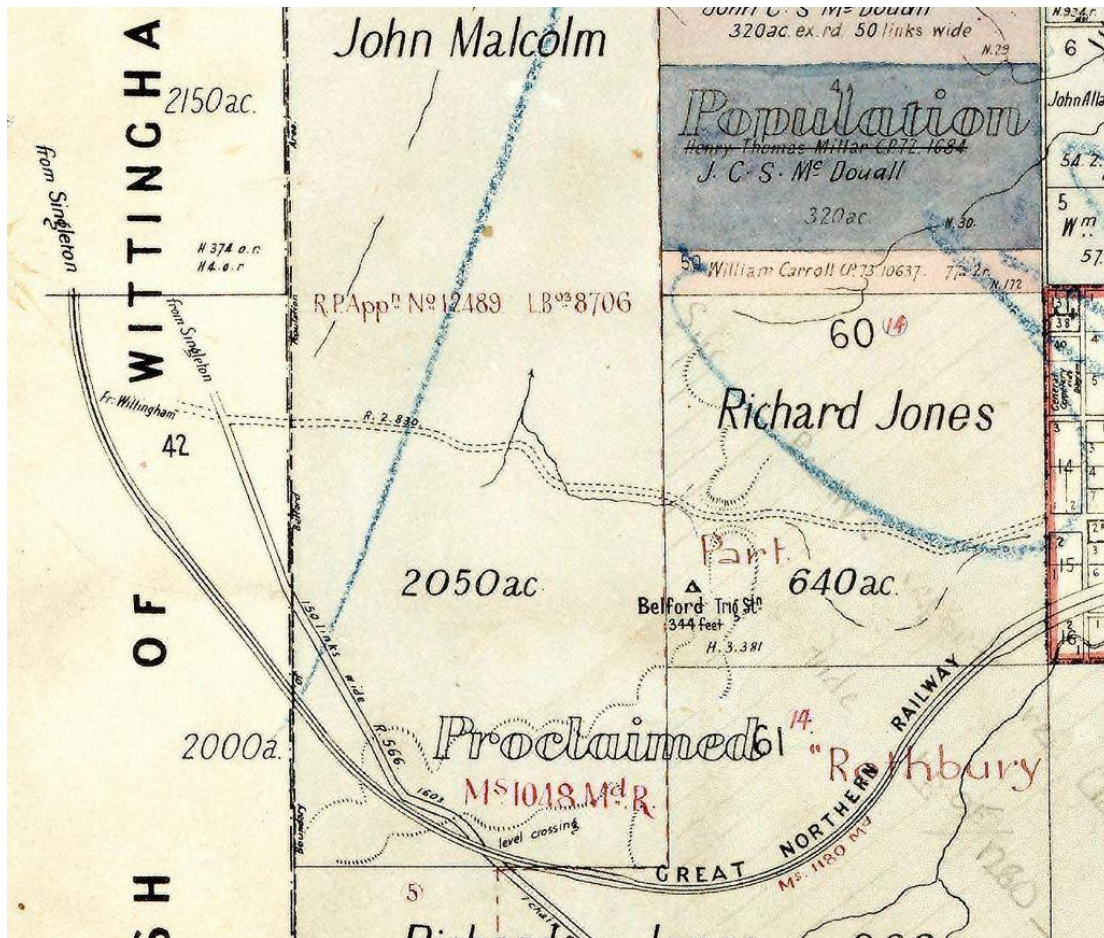


Figure 5: Detail of a 1901 map of the Parish of Belford (LPI).



Figure 6: Detail of a 1902 plan showing the western half of the study area (Land included in Application No. 12489 edged red, Parishes of Belford and Wittingham, County of Northumberland, LPI, Crown Plan 1048.3070).

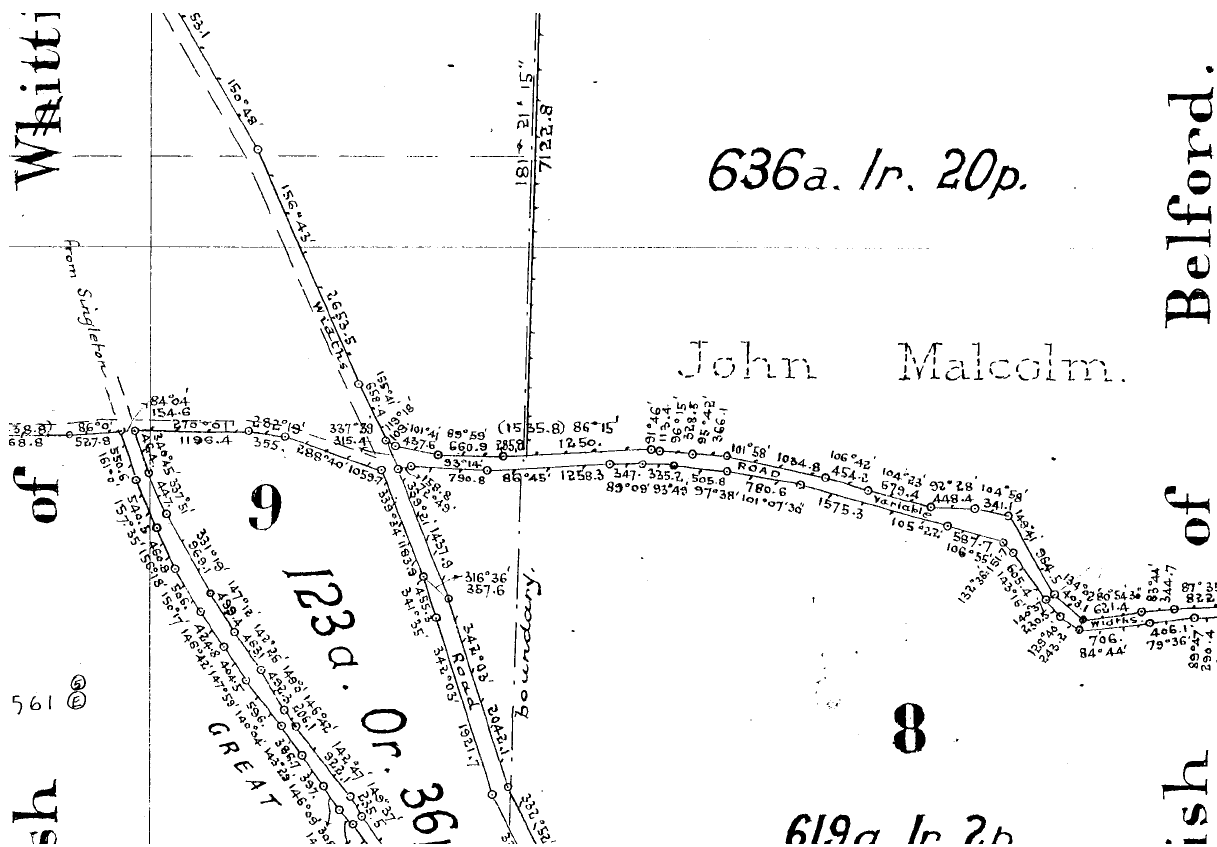


Figure 7: 1905 subdivision of Portions 10 and 42 (LPI, Deposited Plan 4561).

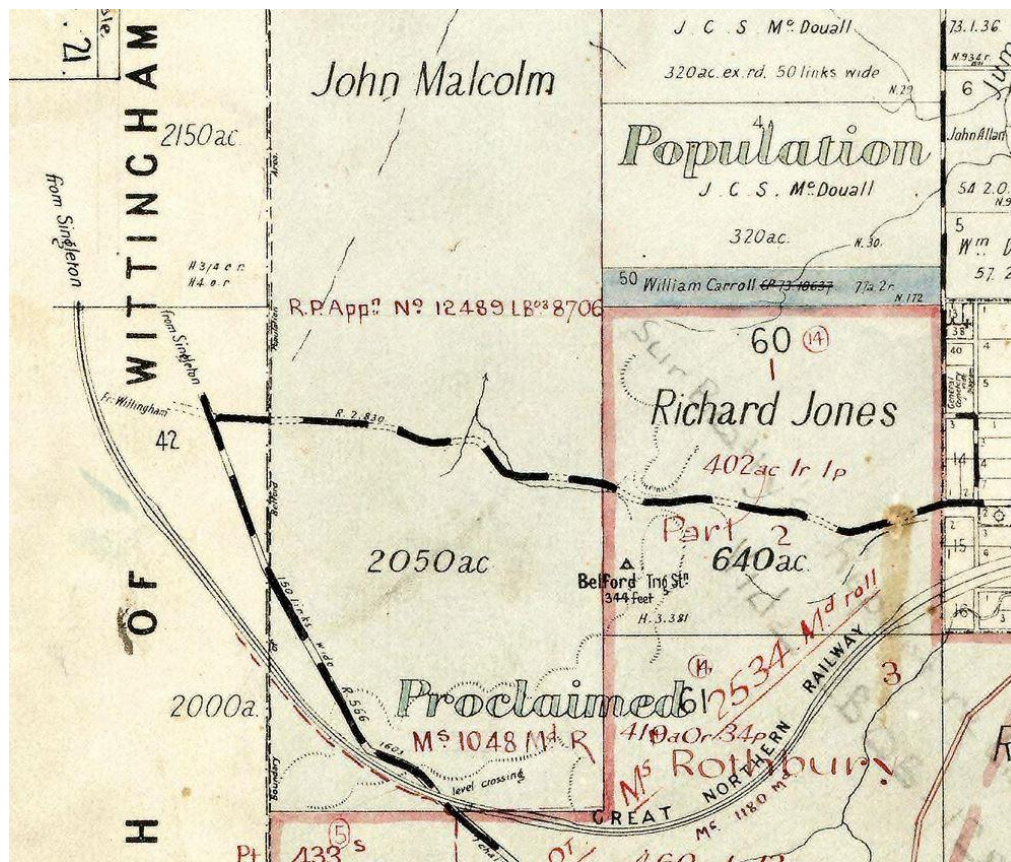


Figure 8: Detail of a 1911 map of the Parish of Belford (LPI).

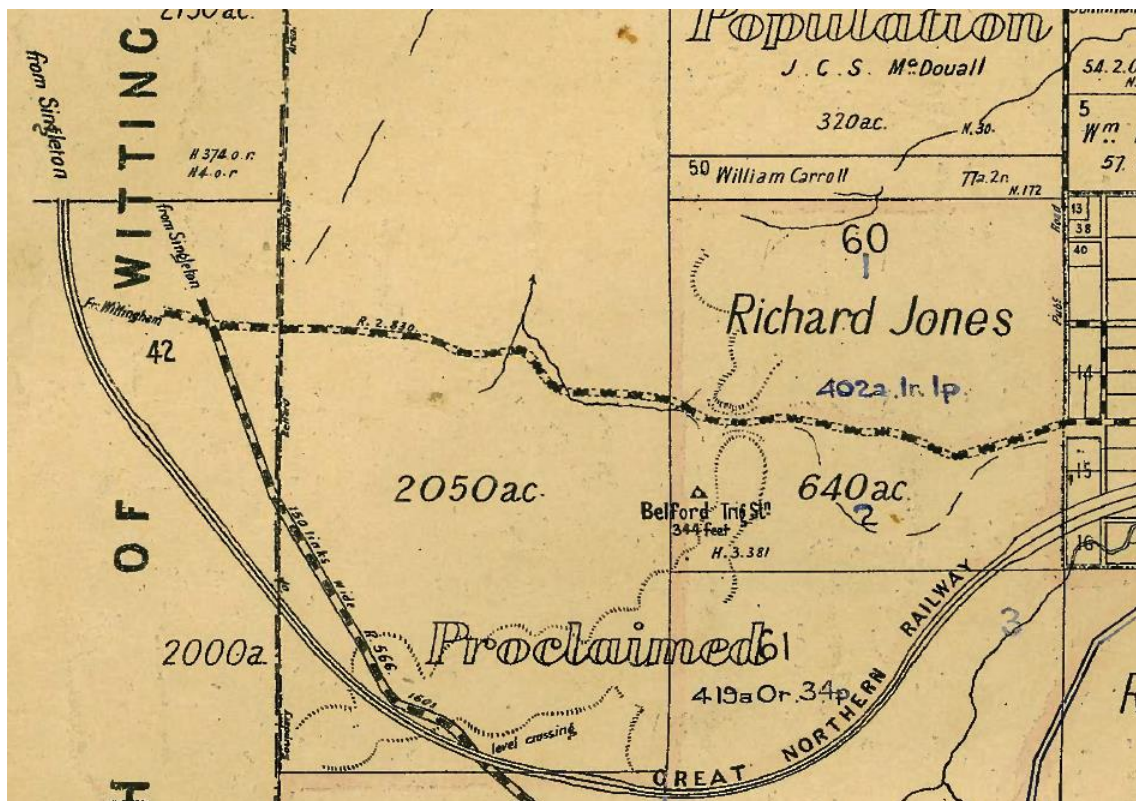


Figure 9: 1916 (Parish of Belford, LPI, Crown Plan 2534.3070).

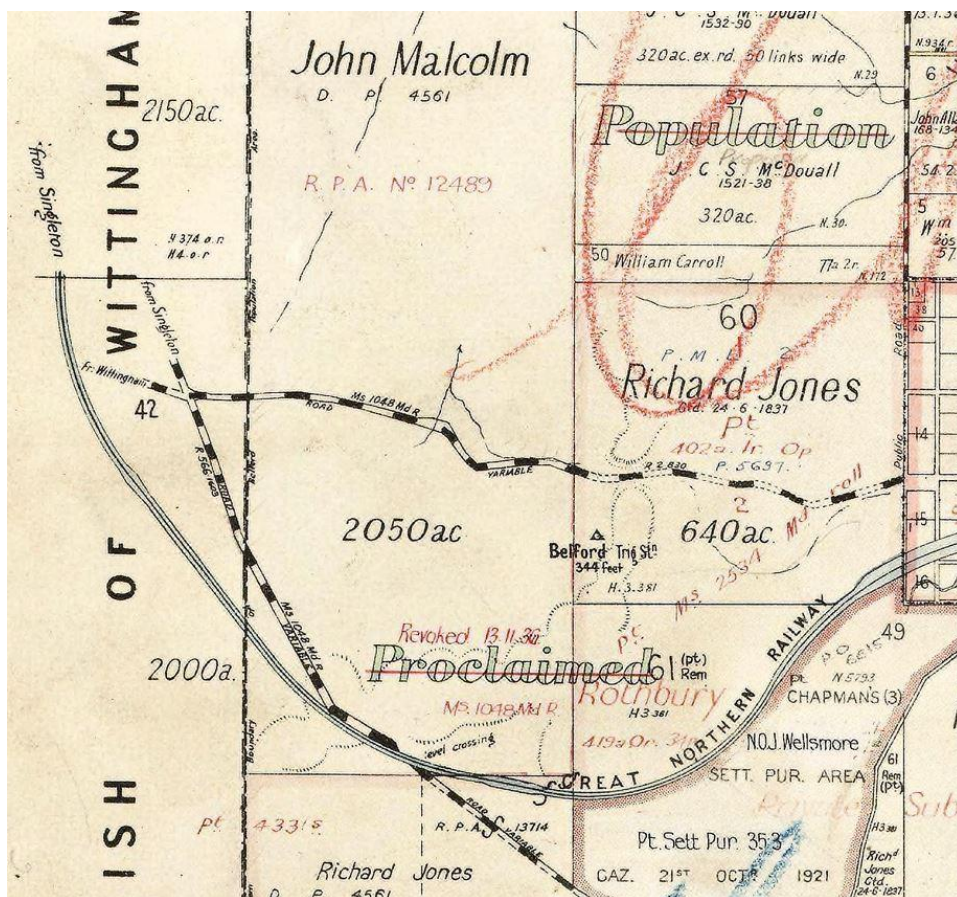


Figure 10: Detail of a 1926 map of the Parish of Belford (LPI).

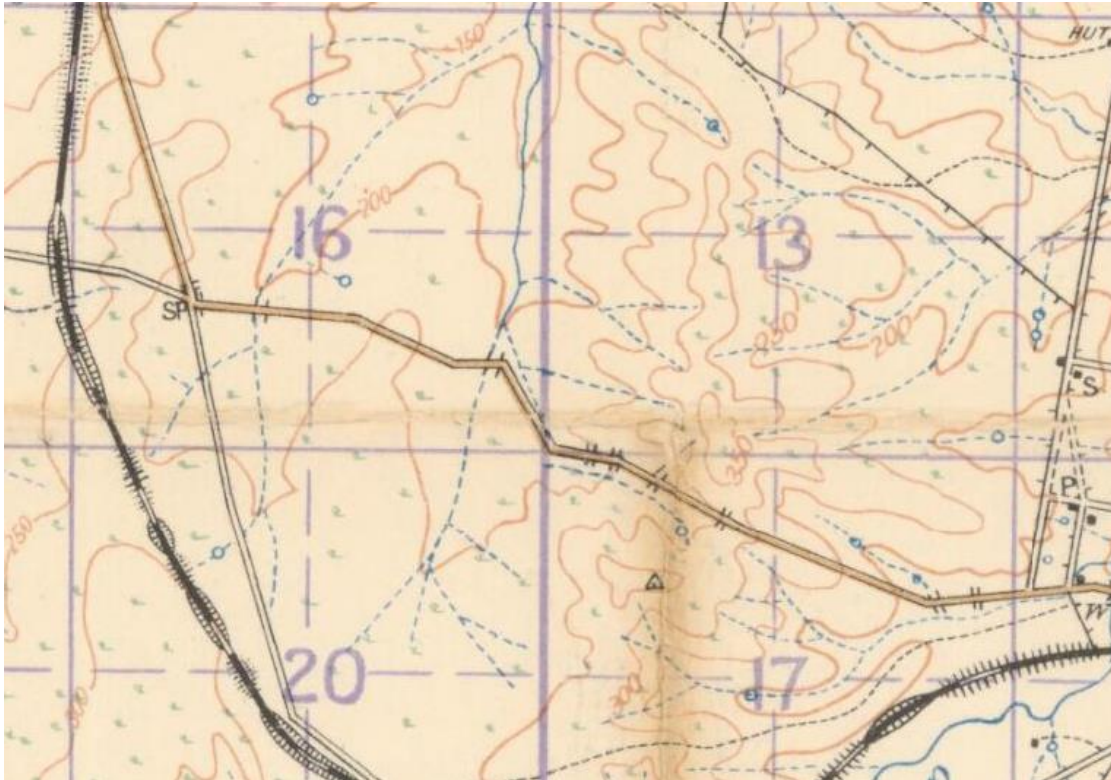


Figure 11: 1927 (Australian Section Imperial General Staff, Singleton New South Wales, National Library of Australia, MAP G8960 s63).

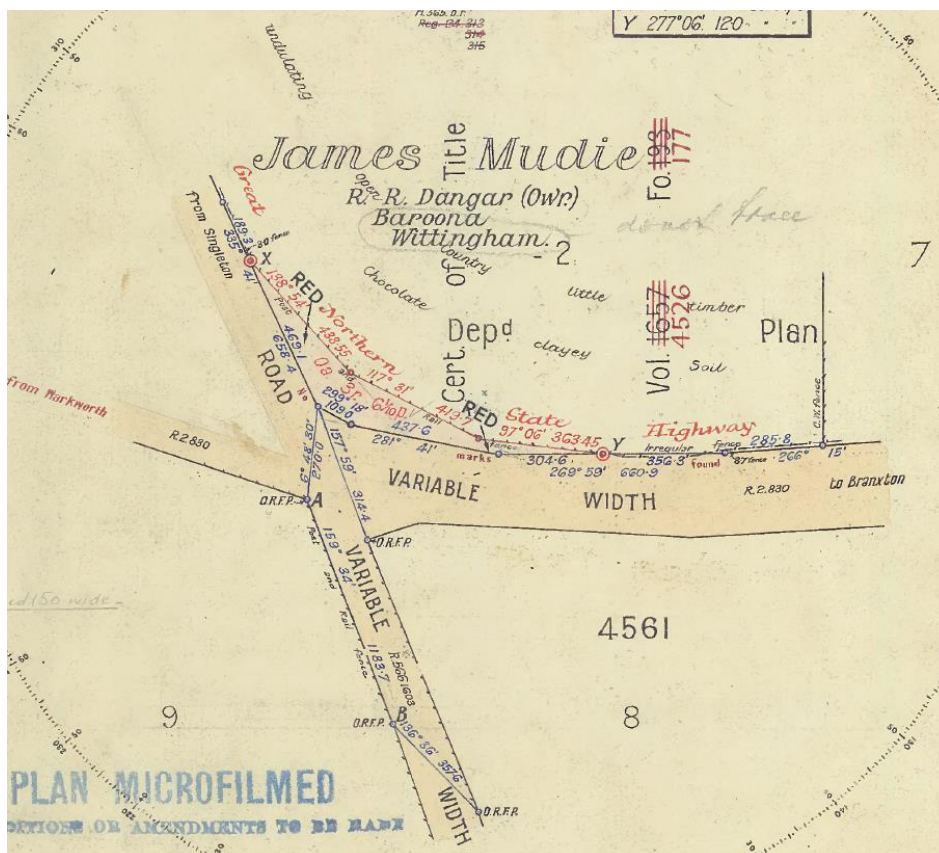


Figure 12: 1932 (Plan of land to be resumed ... in connection with the proposed widening of the Great Northern State Highway at Warkworth Turnoff, LPI, Crown Plan 18942.1603).



Figure 13: The New England Highway near Singleton in 1933 (Main Roads, Vol. 4 No. 8, April 1933).

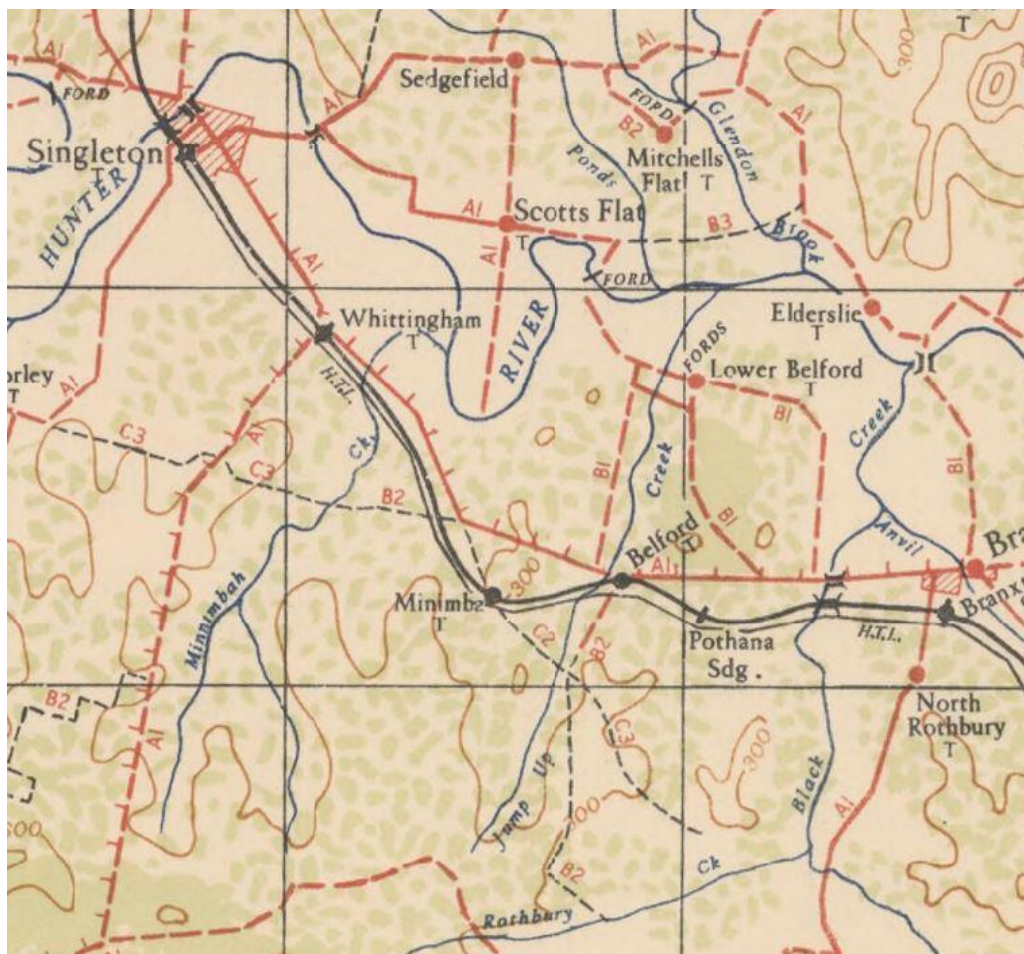


Figure 14: 1942 (A.H.Q. Cartographic Coy, Singleton New South Wales, National Library of Australia, MAP G8960 s253 (Copy 1)).

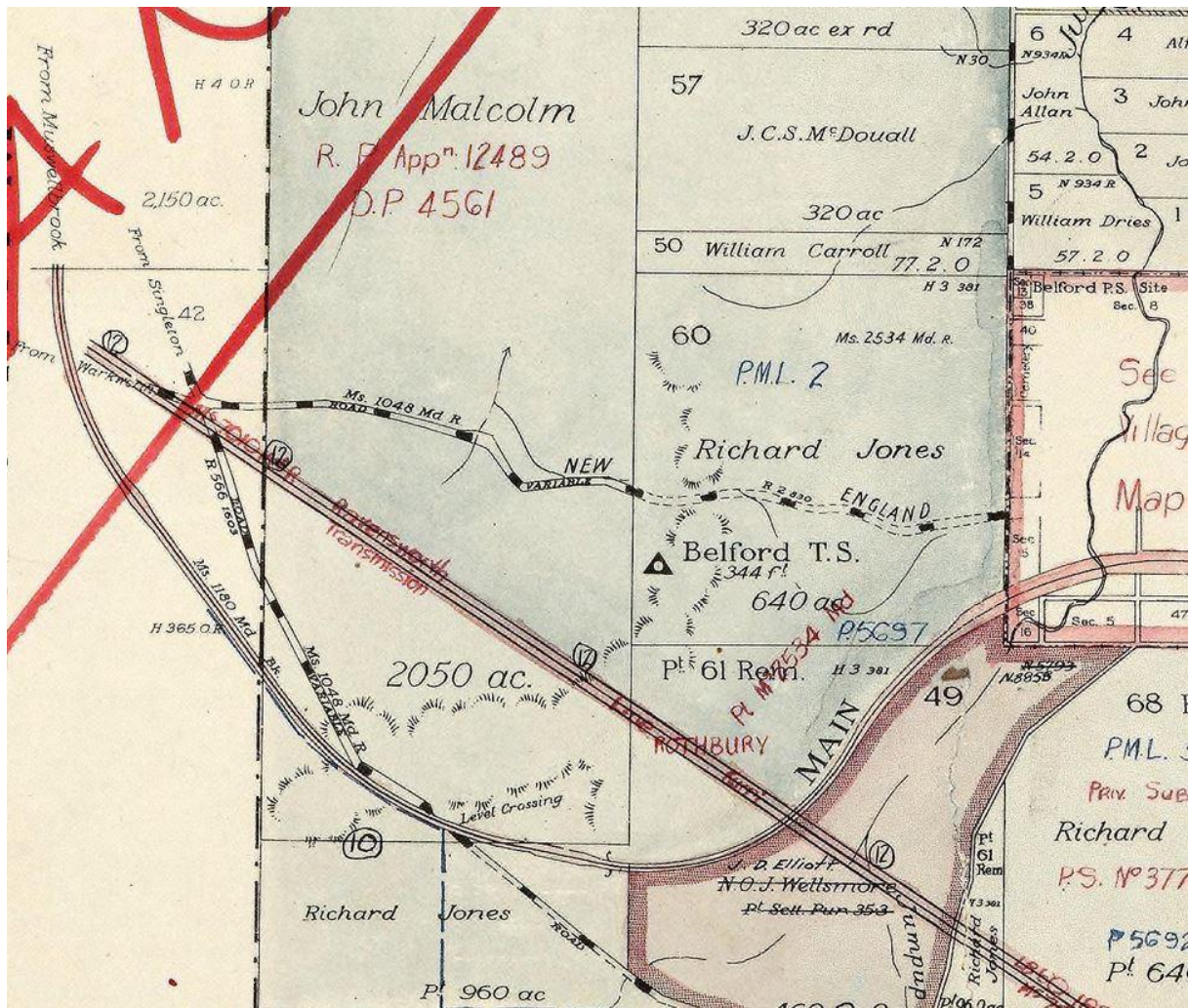


Figure 15: Detail of a 1943 map of the Parish of Belford (LPI).



Figure 16: The study area in 1952 (LPI).

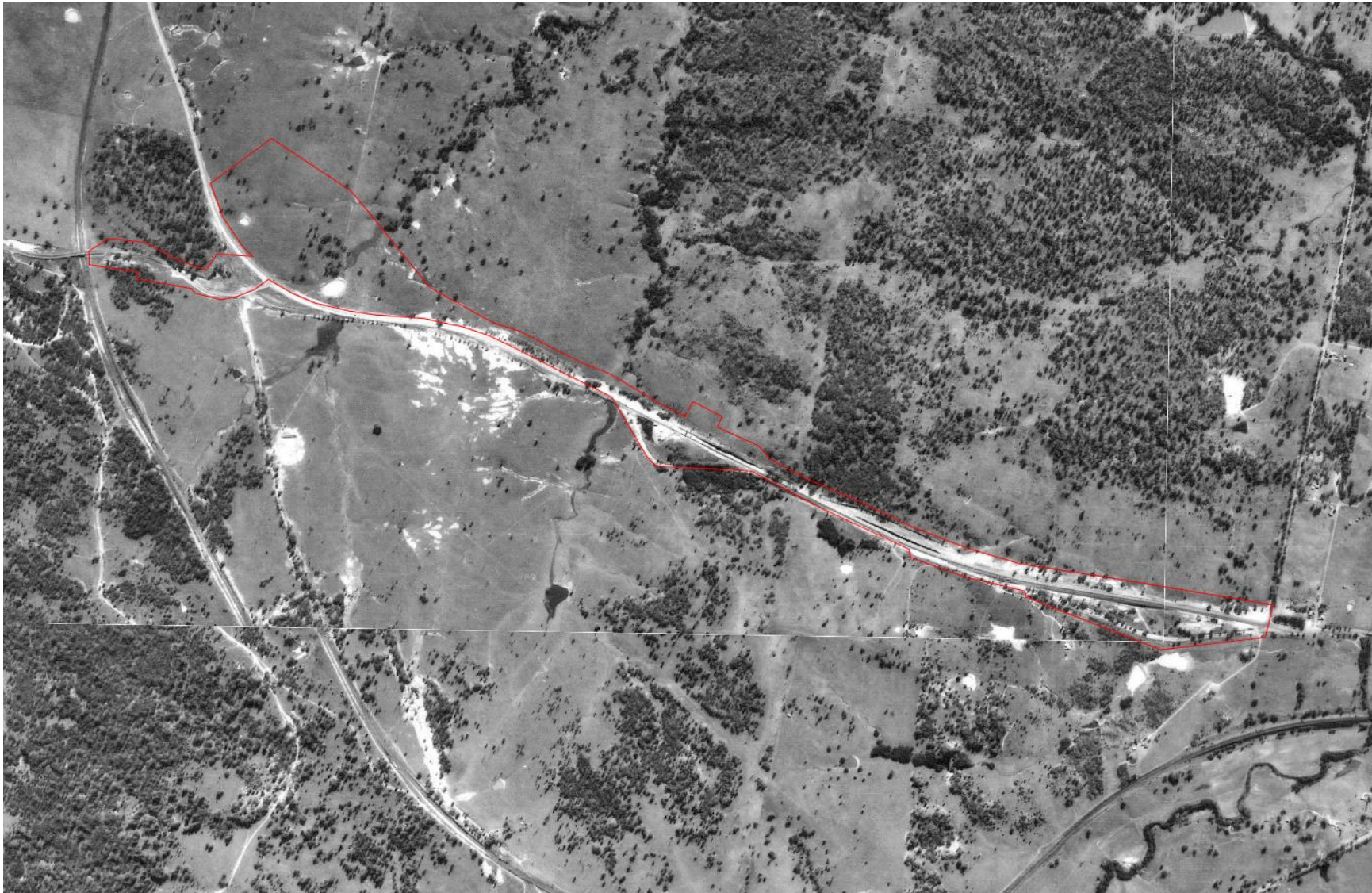


Figure 17: The study area in 1984 (LPI).

4.0 SURVEY

The study area was surveyed by Fenella Atkinson and Alyce Haast on 16 December 2015 and 13-14 January 2016. Also present for parts or all of the survey were Roads and Maritime Services representatives, and site officers from Wanaruah Local Aboriginal Land Council and Tocomwall, as the survey was undertaken in conjunction with the Aboriginal cultural heritage assessment site survey.

In the following description, the study area is divided into three sections (Figure 18):

- Golden Highway
- New England Highway
- Land north-east of the intersection of the Golden and New England Highways

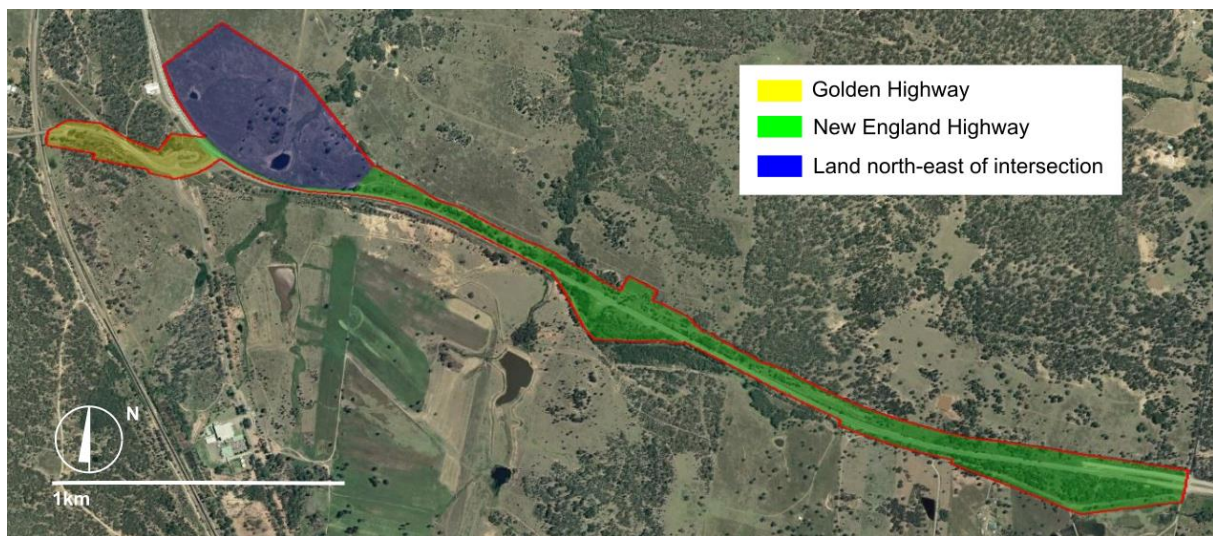


Figure 18: The three survey sections.

Golden Highway

This section of the study area includes two paved road alignments, from the present and former alignments of the Golden Highway (Figure 19). The present alignment is a two-lane carriageway, with an asphalt concrete pavement and paved shoulders (Figure 20). There are safety barriers in places. The ground on either side of the road appears heavily disturbed and compacted. A large embankment has been constructed to carry the highway over the railway line to the west (Figure 21). To the east of this, the highway runs through a cutting (Figure 22). The former alignment curves away to the north from the current alignment. It is a two-lane carriageway, with an asphalt concrete pavement and paved shoulders (Figure 23). Construction of this alignment has also involved excavation of cuttings.

There is a wide gravel shoulder to the south of the Golden Highway, just to the west of the intersection with the New England Highway, which has been used as a compound area for the realignment of the road (Figure 24). An asphalted drive leads south of the highway to the abattoir; this diverges from the original alignment of the Great North Road (Figure 25). An electricity transmission line crosses this part of the study area, and there also appear to be a number of sub-surface services.

The rest area is located on the north side of the Golden Highway, just to the west of the intersection with the New England Highway (Figure 26). It consists of an asphalted loop, with an access drive leading west to the former highway alignment, and another leading south to the current alignment

(Figure 27). A gravel drive also leads north, to access a compound area (located outside the study area). It appears that fill has been introduced for the construction of the rest area. Structures include a toilet block and a picnic table (Figure 28).

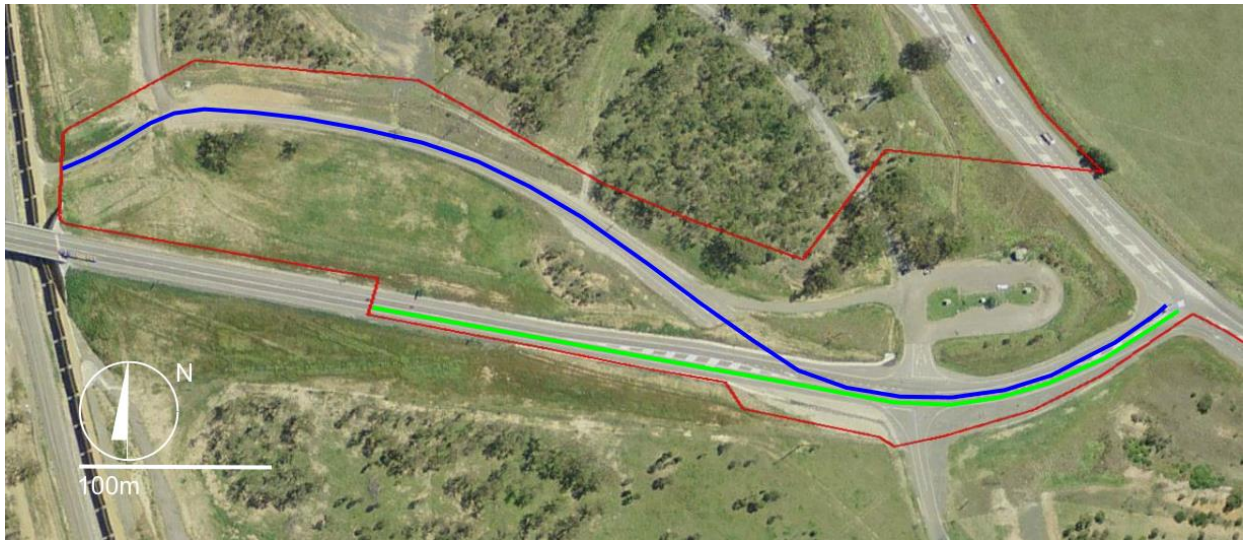


Figure 19: Detail of the Golden Highway, showing the current alignment in green and the former alignment in blue (base image: LPI).



Figure 20: The current Golden Highway alignment.

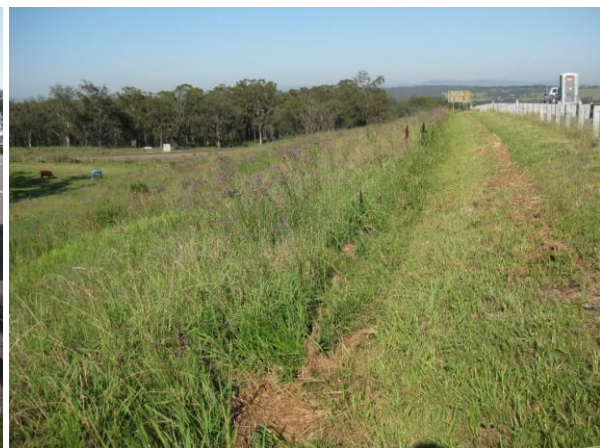


Figure 21: The Golden Highway embankment.



Figure 22: The Golden Highway cutting.



Figure 23: Former Golden Highway alignment.



Figure 24: Gravel shoulder.



Figure 25: Private road to the abattoir.



Figure 26: The rest area, in the background of the photograph.



Figure 27: Access from the rest area to the former alignment of the Golden Highway.



Figure 28: Toilet block in the rest area.

New England Highway

The New England Highway through the study area is a three-lane carriageway, with an asphaltic concrete surface and gravel shoulders. There are safety barriers, of various types, along sections of the highway (Figure 29), and in places there are concrete dish drains on either side with gutters to subsurface stormwater services. The road passes through substantial cuttings and along embankments (Figure 30 and Figure 31), and culverts have been constructed to allow watercourses to pass under the road (Figure 32).

On the south side of the highway (outside the study area) an alignment of sandstone blocks was found (Figure 33). No former road surface was noted in proximity to this feature. However, in places former road pavement was observed adjacent to the current highway (Figure 34). There is a dirt access track along the northern side of the highway, and a subsurface gas main (Figure 35).

Two sections of former alignment were identified within the study area; these are located on the south side of the New England Highway (Figure 36). In relation to the highway, these former alignments form curves to the south, and now outline triangular areas that are potential compound locations for the proposed works. These former alignments were in use until the substantial program of re-alignment that took place in the late 1970s or early 1980s.

The western one of the two is no longer in use for traffic and in places is overgrown with regrowth vegetation and weeds. The western end has a surface of bitumen and gravel (Figure 37). Much of the remainder has only a compacted dirt or gravel surface, or bedrock in places. Cuttings are evident, and also areas where fill has been introduced (Figure 38). The road crosses a watercourse by way of a concrete culvert (Figure 39). To the east of the bend in the alignment, there appear to be two parallel former alignments; a northern one which is slightly higher, and a southern which appears to be the more recent of the two (Figure 40). This may reflect a minor realignment that took place in the mid 1930s.

The eastern section of former alignment is presently in use as an access road, for properties to the south of the New England Highway. The road has an asphalt pavement, with gravel shoulders (Figure 41). Cuttings have been made in places for the construction of the former alignment (Figure 42). There are several concrete culverts under the road (Figure 43). An overgrown bitumen track leads from the former alignment to the current highway, although access to the highway is no longer possible (Figure 44).

In between the two sections of former alignment to the south of the present highway, the pre-c1980 alignment ran along the northern side of the current line. An unsurfaced access track presently runs along this line, and may represent the former alignment (Figure 45). No fabric relating to the earlier road was identified, but the cutting alongside the track may be associated. This area has been impacted by the installation of a subsurface gas main, which runs along the north side of the New England Highway.



Figure 29: New England Highway, looking east from near the intersection with the Golden Highway.



Figure 30: Cutting on the New England Highway.



Figure 31: Embankment for the New England Highway.



Figure 32: Culvert under the New England Highway.



Figure 33: Stone alignment observed to the south of the New England Highway (outside the study area).



Figure 34: Former road pavement on the south side of the New England Highway (outside the study area).



Figure 35: Access track running along the northern side of the New England Highway.

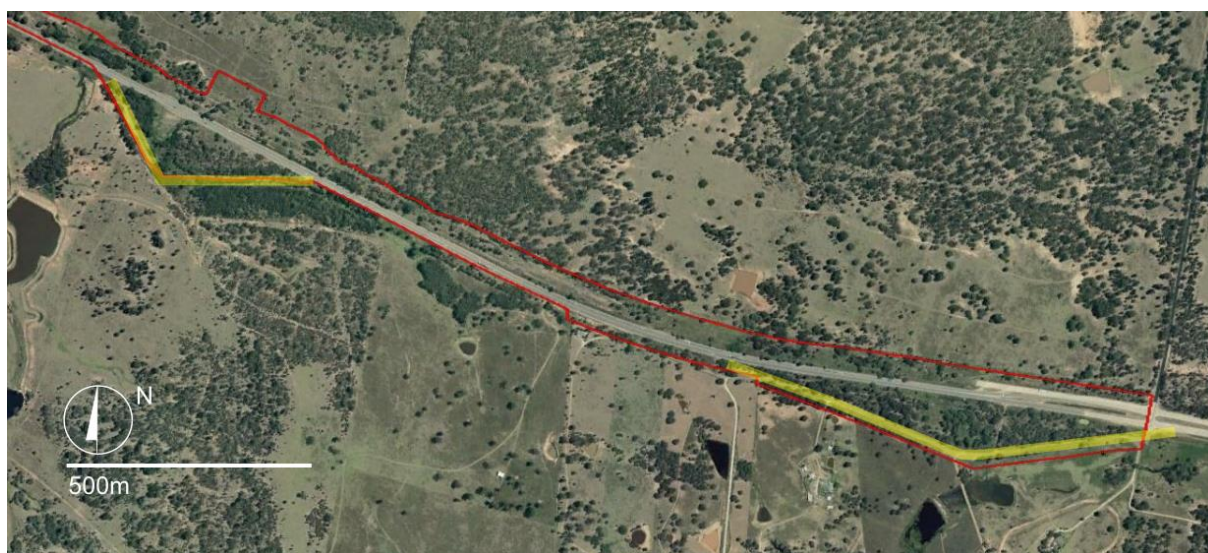


Figure 36: Detail of the New England Highway, showing the sections of former alignment to the south, shaded yellow (base image: Google Earth).



Figure 37: Road pavement on the western section of former alignment.



Figure 38: Cutting alongside the western section of former alignment.



Figure 39: Culvert on the western section of former alignment.



Figure 40: The change in level between the two parallel former road alignments.



Figure 41: Eastern section of former alignment.



Figure 42: Cutting.



Figure 43: Culvert under the eastern section of former alignment.



Figure 44: Road between the eastern section of former alignment and the highway.



Figure 45: Access track along former alignment to the north of the New England Highway.

Land north-east of the intersections of the Golden and New England Highways

This part of the study area comprises undulating land, largely covered with dense grass, with sparse tree cover, which appears to be largely or entirely regrowth (Figure 46). This area is crossed by one main watercourse, and several minor drainage lines (Figure 47). There are areas of erosion, largely along drainage lines, and dirt tracks for animals and vehicles. The main track running through this area, leads roughly north to access New Freugh Lane. Two dams have been created; one on the main watercourse and one on a minor tributary (Figure 48 and Figure 49). The property has been divided into large paddocks, with post-and-wire fencing with timber posts and metal fence droppers. There is a stock yard in the southern part of this area, adjacent to the New England Highway (Figure 50).



Figure 46: General view.



Figure 47: The main watercourse running through the western part of the study area.



Figure 48: Dam on the main watercourse.



Figure 49: Dam on the minor watercourse.



Figure 50: Stockyard, in the background of the photograph.

5.0 HERITAGE SIGNIFICANCE

5.1 Historical heritage resource

The following section provides an outline of the elements of the study area that are likely to have historical heritage value. The heritage significance of these elements are addressed in Section 5.2.2.

Rural landscape

The study area includes part of three properties that were first alienated and occupied in the 1820s and 1830s. These properties have been used for agricultural purposes through to the present, and a homestead is thought to have been built on each of the three. The documentary evidence does not indicate that there was any associated development within the study area specifically. The results of the survey indicate that a number of related features are present, particularly within the western part of the study area; the land to the north-east of the intersection of the Golden and New England Highways. These include two dams, a stockyard, fencing and tracks. Most of these features appear to belong to the second half of the twentieth century. However the vehicle track running through this part of the study area, south from New Freugh Lane, appears to have been in existence earlier. The line of this track follows the property boundary between Portions 10 and 62, and may have been created when these properties were originally occupied in the 1820s or 1830s. The overall landscape, characterised by grassed rolling hills with sparse tree cover, also appears to have been in this form from the first half of the twentieth century, and probably earlier.

Roads

Alignments

The documentary evidence indicates that the routes through the study area were in existence by the early to mid 1830s (Figure 51). The section of the New England Highway to the north of the intersection with the Golden Highway was part of a branch of the Great North Road, probably laid out by Mitchell. The other section of the New England Highway (to the east of the intersection) and the Golden Highway were part of Jerrys Plains Road, running along the Hunter from Maitland / Morpeth to Jerry Plains. The whole of the New England Highway, within the study area, was later incorporated into the Great North Road.

The roads have remained in use for approximately 180 years, through to the present. They have been subject to ongoing construction, re-alignment and maintenance works, and the proposed development can be seen as the latest in the same line. The section of the Golden Highway that is included in the study area, and the intersection with the New England Highway, have been re-aligned on at least three occasions. The New England Highway has also been subject to realignment. A program of upgrading was completed in the 1830s and substantial works were undertaken to straighten the road in the late 1970s or early 1980s.

Potential archaeological remains

The last alignment of the Golden Highway remains in place in the study area. With this exception, it is likely that the substantial earthworks involved in the re-alignments have involved removal of earlier road remains of the Golden Highway (formerly part of Jerrys Plains Road), either completely or almost entirely.

With regard to the New England Highway, two sections of the former alignment remain evident in the study area, located to the south of the present alignment. As these sections were in use until relatively recently (c.1980), it is likely that ongoing maintenance and reconstruction has resulted in removal of most or all of the remains of earlier phases of the road. However, fragmentary remains

have been identified in places within and in close proximity to the study area. These include an earlier alignment, fragmentary road pavement, a stone alignment that may represent road edging, and cuttings. It is likely that further fragmentary remains are present within the study area. The exact location of such remains cannot be predicted, as the exact alignment of the road is likely to have fluctuated substantially since c1835. However, drainage lines are considered to be areas of higher potential, as more substantial structures would have been constructed to carry the road over these low points (Figure 51).

Apart from the roads and associated features, no historical structures are known to have been located within or adjacent to the road corridors. Construction of the early roads through the colony prompted establishment of public houses along the routes, to cater to travellers. One such hotel, the Crown and Anchor, was established on the New Freugh estate from at least 1843. The study area includes that part of the New England Highway that passes through the New Freugh estate, and it is therefore possible that the hotel was located within or adjacent to the study area. However, the results of the documentary research and survey undertaken for the present report have not provided any indication of the exact location of the hotel.



	Former Road Alignment	SCALE 1:17,685	SIZE @A4	DATE 10/02/2016		
	AJ150913 NEH Golden Highway LGA: Singleton					

Figure 51: Approximate line of the former road alignments through the study area, with circles indicating approximate locations of water crossings.

5.2 Significance assessment

The following section assesses the heritage significance of the potential historical archaeological resource within the study area. The following points should be noted:

- The assessment does not address the Aboriginal values of the study area.
- The assessment of the historical archaeological remains likely to be present is based on documentary sources and surface evidence.

5.2.1 NSW heritage assessment guidelines

Determining the significance of heritage items or a potential archaeological resource is undertaken by utilising a system of assessment based on the *Burra Charter* (Australia ICOMOS 2013). The principles of the Charter are relevant to the assessment, conservation and management of sites and relics. The assessment of heritage significance for sites in New South Wales is outlined through legislation in the Heritage Act and implemented through the *NSW Heritage Manual* and the *Archaeological Assessment Guidelines* (NSW Heritage Office 1996: 25-27).

The Heritage Division specifies assessment using seven heritage criteria (Table 1). If an item meets one of the seven criteria, and retains the integrity of its key attributes, it can be considered to have heritage significance. The significance of an item or potential archaeological site can then be assessed as being of Local or State significance. If a potential archaeological resource reaches the local or State significance threshold, then it is a relic as defined and protected by the *Heritage Act 1977*.

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

However, it should be noted that if archaeological remains are defined as works rather than relics, then they are not protected by the relics provisions of the Heritage Act, regardless of significance. The distinction has been explained as follows (Heritage Branch 2009: 7):

Relevant case law and the general principles of statutory interpretation strongly indicate that a 'relic' is properly regarded as an object or chattel.

A relic can, in some circumstances, become part of the land and be regarded as a fixture (a chattel that becomes permanently affixed to land).

Table 1: NSW heritage assessment criteria.

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

5.2.2 Significance assessment

The Heritage Division suggests using four groupings of the seven significance criteria to assess historical archaeological sites and relics (Heritage Branch 2009: 11-13):

- Archaeological research potential (Criterion E)
- Association with individuals, events or groups of historical importance (Criteria A, B & D)
- Aesthetic and technical significance (Criterion C)
- Ability to demonstrate the past through archaeological remains (Criteria A, C, F & G).

These groupings have been used in the following section, as they minimise duplication and allow for a concise assessment of significance.

Rural landscape

- Association with individuals, events or groups of historical importance (Criteria A, B & D)

The study area falls within a large corridor of land along the Hunter River that was taken up for agricultural purposes in the 1820s and 1830s. This formed the basis for the non-Indigenous settlement and economy of the area. The properties through which the study area passes are associated with a number of figures of importance in the history of the local area. James Mudie, John Larnach, Richard Jones and J.S.C McDouall all played roles in the establishment of agriculture and a non-Indigenous community in the Singleton region.

- Aesthetic and technical significance (Criterion C)

The rural landscape of the western part of the study area demonstrates characteristics of the rural land of the local region. This includes the undulating topography, largely cleared vegetation, dammed and somewhat degraded drainage lines, large paddocks and a stockyard. The area within the study area is a small section of a much broader landscape, and has been encroached upon by two successive realignments of the New England Highway at the intersection with the Golden Highway

The western part of the study area is of local heritage significance.

Roads

- Archaeological research potential (Criterion E)

To the west of the intersection of the Golden Highway and the New England Highway, the study area has been subject to substantial earthworks, and it is unlikely that remains of earlier phases of the road exist. The exception is the former alignment of the Golden Highway, which is still present. This section of road was constructed in the late twentieth century, is well documented, and is unlikely to have research potential.

To the east of the intersection, the study area does contain remains relating to earlier phases of the New England Highway. The known remains are unlikely to provide information that is unavailable from documentary sources and/or other sections of the road. However, there is some potential that unidentified remains are also present. If these date to the period before c.1850, they may provide information that is otherwise unavailable and relates to the construction, maintenance and use of one of the main regional roads.

- Association with individuals, events or groups of historical importance (Criteria A, B & D)

That branch of the Great North Road that passes through the study area is likely to have been planned by Mitchell. The location of this particular alignment has since been subject to substantial earthworks, and it is unlikely that road remains relating to the Mitchell period survive. The current alignment of the New England Highway was later incorporated into the Great North Road. This was in c.1850, while Mitchell was still Surveyor General, but was not part of the major period of planning and construction of the main routes through the colony.

- Aesthetic and technical significance (Criterion C)

There is some potential that remains relating to earlier phases of the New England Highway may demonstrate technical achievement relating to the construction of the road through the local landscape.

- Ability to demonstrate the past through archaeological remains (Criteria A, C, F & G).

If archaeological remains relating to the pre-c.1850 roads are present in the study area, these would be rare aspects of the history of the development of the region. Although the roads through the study area are part of much more extensive routes, these have been subject to continued maintenance and reconstruction which has resulted in the removal of much of the earlier fabric. The documentation from this early period is sparse, and any material evidence therefore has the potential to provide additional historical evidence. This is likely to relate largely to materials and techniques used in the construction and maintenance of the road.

5.2.3 Statement of significance

The western part of the study area is considered to be of local heritage significance as it forms a small part of a wider rural landscape that is characteristic of the history of the local area.

The road alignments within the study area are also of local heritage significance, as they run along the routes of main regional roads that have been in use since the 1830s (Figure 51). Although the New England Highway was incorporated into the Great North Road, it was not included in the original alignment of the route, and is not considered to be of State heritage significance for this reason.

The former road remains known to be present within the study area date to the later twentieth century, and are not considered to be of heritage significance. However, there is some potential for the presence of fragmentary road remains from the early to mid-nineteenth century. This period is not as well documented, and such remains could provide historical information. These potential remains are of local heritage significance.

6.0 POTENTIAL HISTORICAL HERITAGE IMPACT

6.1 Proposed development

The proposed development consists of the following elements:

- Duplication of a 3.2km section of the New England Highway between Belford and the Golden Highway:
 - Modification of the existing single three lane carriageway to a dedicated two lane westbound carriageway.
 - New two lane eastbound carriageway.
 - Provision of median separation between carriageways.
- Grade separation of the right-turn movement out of the Golden Highway:
 - Right turn flyover embankment ramps including tie-ins.
 - Modification of the existing at grade intersection to remove right turn.
 - Two-lane bridge over the existing New England Highway alignment.
- Allowance for access to existing and future adjoining land uses (e.g. modifications / additions to existing accesses).
- Utility adjustment such as; underground high pressure gas, overhead electricity and underground telecommunication conduits.
- Provision of a permanent Variable Message Sign (VMS) adjacent to the westbound carriageway at Belford (i.e. opposite the existing eastbound VMS).
- Provision of a CCTV camera at the New England / Golden Highway intersection.

6.2 Impact assessment

The assessment of impact has been undertaken in accordance with the Heritage Division guidelines (Heritage Office & DUAP 2002), and the level of impact is assessed as outlined in Table 2.

The overall proposal provides for the ongoing use of the New England Highway, which is a route that has been in use since the 1830s. However, elements of the proposed development will result in impact to the identified heritage value of the study area. The assessed impact is summarised in Table 3.

Rural landscape

Construction of the flyover will encroach onto the rural landscape adjacent to the road. The property has already been subject to impact from two previous realignments of this section of the New England Highway. In addition, the area to be impacted is a small part of a much larger landscape, which will remain unaffected.

This is considered to be a minor heritage impact.

Roads

Alignment

The proposed works will result in a major realignment of the intersection of the Golden Highway and the New England Highway. This intersection is known to have been substantially altered on at least two former occasions.

This is considered not to be a heritage impact.

Archaeological remains

Construction of the duplication, and relocation of utilities, is likely to result in the complete removal of any archaeological remains within the footprint of the works. The known remains appear to be relatively late in date, from c.1934 onwards and are well represented in documentary records; but the potential exists for the presence of earlier fabric. Any such remains are likely to be fragmentary in nature, as they will have been affected by earlier roadworks.

This is considered to be a moderate heritage impact. Note that this assessment of impact is based on the assumption that remains relating to the nineteenth century roads are present within the study area, which may not be the case.

Table 2: Assessed scale of heritage impact.

Level of impact	Description
Major	The proposed works would directly impact defining elements inherent to the item's heritage significance such as built fabric, archaeological remains, defining landscape characteristics and/or associated aesthetic elements. This would permanently impact the integrity/intactness of the item and the heritage significance of the item would be lost.
Moderate	The proposed works would impact defining elements inherent to the item's heritage significance such as built fabric, archaeological remains, defining landscape characteristics and/or associated aesthetic elements. Although the integrity/intactness of the item would be impacted, some defining elements of the item would be retained. Therefore, there is potential for the heritage significance of the item to be retained.
Minor	The proposed works would impact defining elements inherent to the item's heritage significance such as built fabric, archaeological remains, defining landscape characteristics and/or associated aesthetic elements. However, these impacts are not considered to detract from the heritage significance of the item.
Nil	The proposed works would not impact defining elements inherent to the item's heritage significance such as built fabric, archaeological remains, defining landscape characteristics and associated aesthetic elements. The works are not considered to detract from the heritage significance of the item.

Table 3: Summary of heritage impact.

Impact	Discussion
What aspects of the proposal respect or enhance the heritage significance of the study area?	The proposal contributes to the ongoing use of the New England Highway, which has been an important overland route through the region since the 1830s. Any archaeological remains which exist under the present road pavement will be retained.
What aspects of the proposal could have a detrimental impact on the heritage significance of the study area?	The proposal includes construction of a flyover through an area which is presently agricultural land. It will result in impact to a section of the rural landscape which is characteristic of the local area and associated with its history. However, this particular area has previously been encroached upon by two successive realignments of the New England Highway at the intersection with the Golden Highway. Earthworks undertaken for the proposed development may result in impact to archaeological remains relating to earlier phases of road construction and use.
Have more sympathetic options been considered and discounted?	Options for the proposal are constrained by the existing road alignments, the topography of the area, the nature of the use of the road, and current road design requirements. It may be possible to select compound locations and/or manage their construction, use and decommission in such a way as to avoid or minimise heritage impact.

6.3 Statutory implications

There are no heritage items listed on statutory registers that will be affected by the proposed development.

The proposal may result in harm to historical archaeological remains. Historical archaeological relics are protected by the *Heritage Act 1977*, which defines relic as:

any deposit, artefact, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and

(b) is of State or local heritage significance.

The archaeological remains that are likely to be present within the study area relate to previous phases of the road and are defined by the Heritage Division as works rather than relics (Heritage Branch 2009: 7):

Relevant case law and the general principles of statutory interpretation strongly indicate that a 'relic' is properly regarded as an object or chattel.

A relic can, in some circumstances, become part of the land and be regarded as a fixture (a chattel that becomes permanently affixed to land).

These remains are therefore not protected by the relics provisions of the Heritage Act, and it is not necessary to apply for an Excavation Permit prior to impact. It should be noted that unexpected archaeological relics may be present within the study area, and that these remain protected.

The heritage values of the agricultural landscape of the western part of the study area are not provided with any statutory protection.

6.4 Recommendations

The following recommendations are based on an assumption that the proposed development will involve impact to the whole of the study area. It is expected that these recommendations will be slightly revised once more detail of impact, particularly the nature and location of the compounds, is known.

- An archival record should be made of the known elements relating to earlier phases of the road. This comprises the section of former alignment of the New England Highway that is located on the north side of the highway.
- During geotechnical investigation within the current road pavement, where this appears to follow the earlier alignment, a record should be made of any elements of the former road that are encountered. This will provide an indication of what is likely to be encountered during construction works.
- During construction, a stop-work procedure should be followed in accordance with the *Standard management procedure: Unexpected heritage items* (RMS 2015). Any unexpected archaeological relics remain protected by the *Heritage Act 1977* and should be managed accordingly.
- Following completion of the proposed works, the archival record and any additional records required in the course of the work should be compiled into a report. Copies of the report should be lodged with the Heritage Council of NSW, Roads and Maritime Services, Singleton Council, and the Singleton Historical Society and Museum.

7.0 REFERENCES

- Andrews, Tony, n.d., 'Singleton Index', accessed 8 January 2016, http://portal.singleton.nsw.gov.au/eplanning/Temp/ViewedDocs/TrimDocumentViewer_svFBE MSnxh.PDF
- Artefact Heritage, April 2016, 'New England Highway Upgrade, Belford to Golden Highway: Aboriginal Archaeological Survey Report (PACHCI Stage 2)', for Arup.
- Attenbrow, V. (2010). *Sydney's Aboriginal Past: Investigating the Archaeological and Historical Records*. University of New South Wales Press Ltd, Sydney.
- Australia ICOMOS, 2013, *The Burra Charter: The Australia ICOMOS Charter for places of cultural significance*, Australia ICOMOS, Burwood.
- Benson, D. and Howell, J. (1990) . *Taken for granted: the bushland of Sydney and its suburbs*. Sydney, Kangaroo Press (in assoc) with the Royal Botanic Garden.
- Butlin, N. (1983) *Our original aggression: Aboriginal populations in southeastern Australia 1810-150*, Melbourne, Cambridge University Press.
- Callaghan, Terry, n.d., 'Singleton and District Place Names', accessed 12 January 2016, <http://www.terrycallaghan.com/resources-3/singleton-patricks-plains/singleton-district-place-names/>
- Collins, D. 1798. (1975). *An Account of the English Colony of New South Wales*, Volume 1, edited by B.H. Fletcher, A.H. & A.W. Reed in association with the Royal Australian Historical Society, Terry Hills, NSW.
- Dowd, Bernard T., & Averil F. Fink, 1967, 'Mudie, James (1779-1852)', *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, accessed 12 January 2016, <http://adb.anu.edu.au/biography/mudie-james-2487>
- ERM, May 2014, 'Mount Thorley operations 2014 and Warkworth continuation 2014 mining proposals: Historic heritage assessment', for Rio Tinto Coal Australia.
- 'For absolute private sale: New Freugh Estate', *The Australasian*, 14 November 1903, p. 55.
- Heritage Branch, 2009, *Assessing significance for historical archaeological sites and 'relics'*, Heritage Branch, NSW Department of Planning.
- Heritage Office and DUAP, 2002, *Statements of heritage impact*, Heritage Office and DUAP.
- Hills Environmental, June 2014, 'Preliminary Environmental Investigation: SH9 New England Highway Upgrade – Belford Deviation to SH27 Golden Highway Junction', for Roads and Maritime Services.
- 'Historic houses in the Singleton area', Singleton Visitor Information and Enterprise Centre, accessed 8 January 2016, <http://visitsingleton.com/wp-content/uploads/2014/05/DL-Brochure-Historical-Houses-Singleton-Visitor-Information-and-Enterprise-Centre-FINAL-low-res-June-2013.pdf>
- 'Historical roads of New South Wales: The story of the New England Highway', *Main Roads*, Vol. 17, No. 3, March 1852, pp. 68-76.
- 'John Larnach and James Mudie', *Free Settler or Felon?*, accessed 8 January 2016, http://www.jenwillets.com/john_larnach.htm

- 'Lower Northern', *Main Roads*, Vol. 5, No. 4, August 1934, p. 84.
- Nexus Archaeology and Heritage, 2010, 'Non-Indigenous heritage study: Maitland to Minimbah third track project', for Hunter 8 Alliance on behalf of Australian Rail Track Corporation.
- 'Northern district', *Main Roads*, Vol. 4, No. 3, November 1932, p. 34.
- NSW Heritage Office, 2001, *Assessing Heritage Significance*, update to the *NSW Heritage Manual*.
- 'Pound and poundkeeper at New Freugh, Patricks Plains', *The Maitland Mercury and Hunter River General Advertiser*, 27 November 1850, p. 1.
- 'Reconstruction of the New England Highway between Branxton and Scone', *Main Roads*, Vol. 9, No. 2, pp. 77-82.
- 'Richard Jones – John Brown – Peter McIntyre', Free Settler or Felon?, accessed 8 January 2016, http://www.jenwilletts.com/richard_jones.htm
- Roads and Maritime Services, 2015, *Standard management procedure: Unexpected heritage items*, RMS.
- Shineberg, D., 1967, 'Jones, Richard (1786-1852)', Australian Dictionary of Biography, National Centre of Biography, Australian National University, accessed 12 January 2016, <http://adb.anu.edu.au/biography/jones-richard-2280>
- 'The Crown and Anchor Inn', Free Settler or Felon?, accessed 12 January 2016, <http://www.jenwilletts.com/Crwn%20Anchor%20New%20Freugh.htm>
- Thorp, Wendy, 1994, 'Draft thematic history: Singleton and Jerrys Plains conservation study'.



artefact

Artefact Heritage

ABN 73 144 973 526
Level 4, Building B
35 Saunders Street
Pyrmont NSW 2009
Australia

+61 2 9518 8411
office@artefact.net.au
www.artefact.net.au