

6.8 Non-Aboriginal heritage

This section summarises the results of the non-Aboriginal heritage assessment that was completed for the proposal. The detailed assessment is provided in Appendix C.

6.8.1 Methodology

Desktop Research

Heritage database searches were conducted on 22 March 2018 to identify any heritage items located within the proposal area.

Searches of the following were undertaken:

- World Heritage List (World Heritage Committee, UNESCO)
- National Heritage List (Australian Heritage Council)
- Commonwealth Heritage List (Australian Heritage Council)
- NSW State Heritage Register (Heritage, Department of Premier & Cabinet)
- NSW State Heritage Inventory (Heritage, Department of Premier & Cabinet)
- NSW section 170 Heritage and Conservation Registers (hereafter referred to as S170 Registers) compiled by Roads and Maritime, Sydney Water, Sydney Trains and Transport for NSW and other government agencies as relevant
- Singleton Local Environment Plan 2013 (LEP 2013)
- Register of the National Estate (Australian Heritage Council) (non-statutory).

The desktop research also included:

- Review of historic materials to determine the historic context of the proposal area and to recognise any potential for heritage items
- Assessment of mapped historic heritage listings to establish properties within the proposal area with possible direct and indirect impacts during construction and operation of the project.

Field Survey

A field survey of the proposal area was undertaken over six days from 26 to 29 March and on 3 April and 31 October 2018, with the survey team including two archaeologists from AECOM. The survey was conducted on foot with a total of 31 transects, focusing on areas with previously recorded historic heritage sites.

The location of each transect completed during the survey, including start and end points, was recorded using a handheld differential GPS unit, with associated transect data entered directly into the same unit upon the completion of each transect. All known and newly identified historic sites and items found during the survey were recorded and comprehensively photographed.

Significance Assessment

An assessment of significance is undertaken for relevant items in accordance with the guideline *Assessing Heritage Significance*, part of the NSW Heritage Manual (Heritage Branch, Department of Planning 2001), to understand why it is culturally significant. Where an existing assessment was not available, AECOM carried out their own assessment in accordance with the guidelines, which included assessments for the Coke Ovens, Singleton Hunter River Underbridge, the Woolpack Inn, and an updated assessment for Bebeah.

Environmental heritage means those places, buildings, works, relics, moveable objects, and precincts, of state or local heritage significance (Section 4, *Heritage Act 1977*). An item would be considered to be of State (or local) heritage significance if, in the opinion of the Heritage Council of NSW, it meets one or more of the criteria detailed in the NSW Heritage Manual.

Statement of Heritage Impact

Following the identification of heritage items that may be affected by the proposal, a Statement of Heritage Impact (SoHI) was prepared for each identified item. A SoHI provides a structured examination and assessment of the impacts of a proposed development or activity upon known and potential heritage items. The objective of a SoHI is to evaluate and explain how the proposed development, rehabilitation or land use change will affect the value of the heritage item and/or place. The SoHI also addresses how the heritage value of the item/place can be conserved or maintained, or preferably enhanced by the proposed works.

The applicable standards for the presentation of a SoHI are:

- *The Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance* (Australia ICOMOS, 2013)
- *NSW Heritage Manual* (NSW Heritage Office & NSW Department of Urban Affairs and Planning, 1996b)
- *Statements of Heritage impact* (NSW Heritage Office, 2002).

The NSW Heritage Manual provides a model format for the structure of a SoHI and includes prompts for questions to be addressed within a SoHI. The key components of a SoHI are:

- The identification of the potential heritage resource, which may or may not be listed in statutory instruments
- Assessment of the significance of the item
- Assessment of the impact of the proposed development, work, or activity upon the item
- Recommendations for avoiding or mitigating impacts to the item.

6.8.2 Existing environment

History

The Hunter region was originally identified as an area of rich resources in 1797 when Lieutenant John Shortland found coal at the mouth of the Hunter's River. A convict settlement was established at the mouth of the river in 1801 to gather coal and timber and burn shells for lime. European settlement of the greater Singleton area commenced in late 1820s. At this time, the Singleton area was known as "Saint Patrick's Plains". This was so named because of John Howe's 1820 expedition which reached the Hunter River on 15 March, two days before Saint Patrick's Day (17 March).

While the European settlement of St Patrick's Plains commenced soon after the district's "discovery" by Howe and his team, the present day township of Singleton was founded in 1836, when Benjamin Singleton received the deeds for his 200 acre land grant adjacent to the Hunter River, which was to be called "Singleton". Containing a natural ford over the Hunter River, known locally as "Singleton's Ford", Singleton first took up residence on his grant in 1823, improving it over time through the construction of a residence, an inn and the area's first flour mill.

Known historical industrial developments in the Singleton area were associated with mining and farming. Early land development was associated with wheat cropping, tobacco production, dairy farming and timber cropping. From the 1870's onwards the land was predominantly cleared and has been used since for both mining and grazing activities, which have substantially affected the physical environment of the area (Whitelaw, 1971).

In 1863, the Great Northern Railway was extended from Black Creek (Branxton) to Singleton and the municipality of Singleton was officially proclaimed in 1866. The Great Northern Railway was further extended from Singleton to Muswellbrook in 1869. The informal track used to access the Singleton area from Newcastle developed over time into the Great Northern Road. In August 1928 it was gazetted as part of state highway 9, which was then renamed the New England Highway in 1933.

Results of Desktop Research and Field Survey

Heritage database searches were carried out on 22 March 2018. Table 6-39 summarises the heritage items within the proposal area and Figure 6-25 and Figure 6-26 shows their locations. The search identified a total of five previously recorded sites within the proposal area. An archaeological survey was then undertaken to identify and record any historic sites within the proposal area. The sites recorded during the survey (including those that had been previously registered) are summarised in Table 6-39 and described in detail in the following sections, along with details of their heritage significance.

Table 6-39: Historic sites within the proposal area

Item	Item ID	Listing	Significance
Coke Ovens	I45	Singleton LEP 2013	Local
Great Northern Railway section	Unlisted	Not Listed	Local
Singleton Hunter River Underbridge	SRA844	State Rail Authority of NSW Heritage and Conservation Register	Local
Former Pumping Station	I21	Singleton LEP 2013	Local
Bebeah	I120	Singleton LEP 2013	Local
The Woolpack Inn	I151	Singleton LEP 2013	Local

In addition to the historic sites identified in Table 6-39, other observations were made during the survey. Scatters of glass, ceramic and brick material and landscape modification were observed across the proposal area. These findings were not recognised as having heritage significance when examined in relation to the NSW heritage significance criteria.

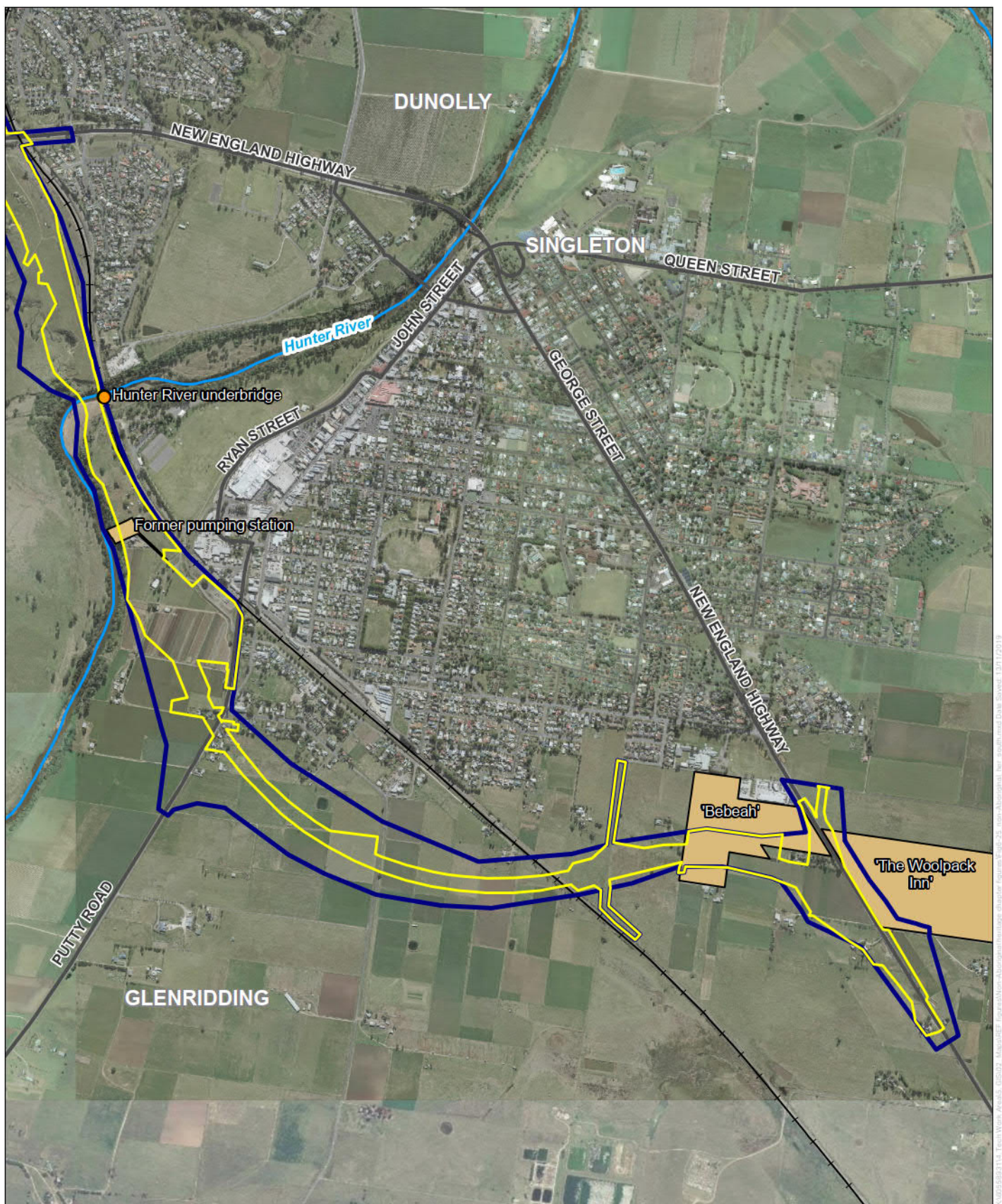
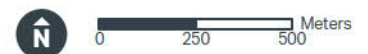


FIG. 6-25 Listed non-Aboriginal heritage items within the proposal area (south)



Legend

Proposal features

— Proposal area

— Disturbance area

Items listed under State Rail Authority of NSW and Conservation Register

● Hunter River underbridge

Items listed under Singleton LEP 2013

■ Item - General

Other features

— State roads

— Watercourse

— Main North railway line

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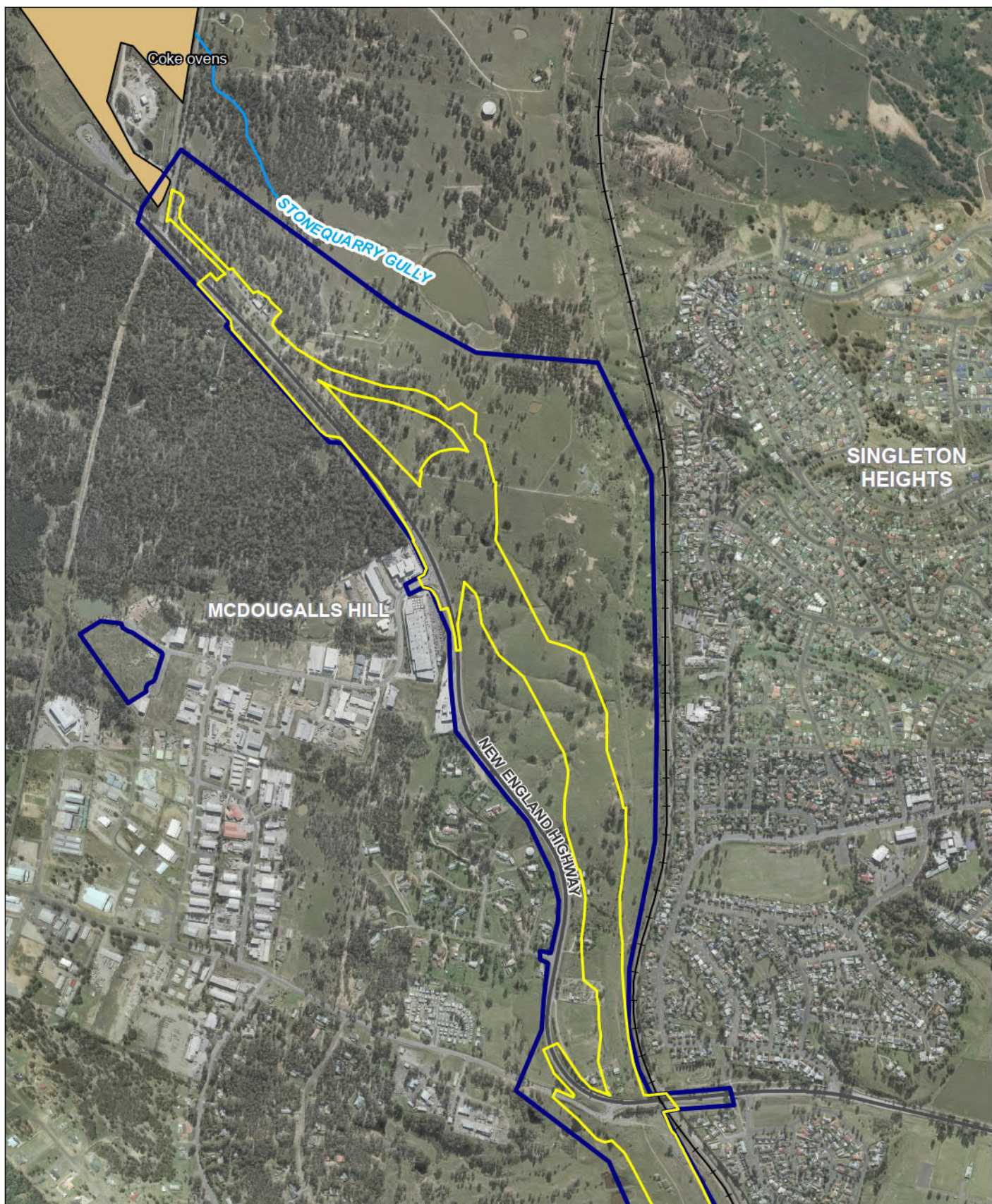


FIG. 6-26 Listed non-Aboriginal heritage items within the proposal area (north)



Legend

Proposal features

— Proposal area

— Disturbance area

Items listed under Singleton LEP 2013

■ Item - General

Other features

— State roads

— Watercourse

— Main North railway line

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Coke Ovens

The item Coke Ovens (I45) is listed on the Singleton LEP 2013 as having local significance. The curtilage for this item is about 48 hectares in size, crossing slightly into the proposal area at its northern extent, but will not be directly impacted by the proposal. A conservation management plan for the ovens was produced in 2007, due to their local heritage significance (Lonergan, 2007). The assessment of significance for this item is presented in full at Section 8.1 of Appendix C.

Great Northern Railway section

During the field survey a linear section of former rail corridor was identified. This was part of the Great Northern Railway corridor that was constructed after the rail line reached Singleton in 1863. It was in active use from around 1869, when the railway was extended to Muswellbrook, up until the Great Northern Railway was deviated in December 1952. The rails have been removed from this original section of rail corridor, however it still contains earth embankments, cuttings and culverts that were all part of the extant physical structure. The former rail corridor has been assessed as one heritage item, inclusive of these multiple elements.

The linear corridor extends from McDougalls Hill in the south (within the proposal area) to Rixs Creek in the north (outside the proposal area), running parallel to the current rail corridor. It passes the disused Rixs Creek Rail Platform and the connection point to the remnant corridor of the Rixs Creek tramway, which connects to the Coke Ovens situated to the west. Approximately two kilometres of the former rail corridor, including the four culverts along with embankments and cuttings, are located within the bounds of the proposal area. The assessment of significance for this item is presented in full at Section 8.2 of Appendix C.

Singleton Hunter River Underbridge

The item 'Singleton Hunter River Underbridge' was listed on the State Rail Authority of NSW in-house Heritage and Conservation Register (SRA844). This item is not listed on the current S170 Heritage and Conservation Register managed by RailCorp.

The bridge is about 150 metres long and 10 metres wide and was originally made of riveted iron and timber, comprising five arches mounted on stone piers. The original bridge was replaced in 1902 by one made of welded deck plate web girders. The original sandstone abutments either side of the Hunter River appear to have been left intact and reused for the replacement underbridge.

An inspection of the bridge and its surrounding area carried out on 28 March 2018 identified two adjacent items that were assessed as being associated with the underbridge. These were a concrete base and timber, brick and metal items. The underbridge was in use and appeared to be in good condition. Graffiti was evident in places. The assessment of significance for this item is presented in full at Section 8.3 of Appendix C.

Former Pumping Station

The Former Pumping Station comprises a twin gabled corrugated steel shed of timber stud construction with pump equipment still in place. Other features present include the battered bank, willow tree plantings and the well. There is the likelihood that archaeological deposits and relics as well as subsurface infrastructure associated with the Former Pumping Station may be present near the existing shed and on its western side (closest to the Hunter River). The area adjacent to the listed curtilage is currently in use as the Singleton Water Depot, demonstrating a continuity of water management activities at this location since 1909.

A site inspection was carried out on 29 March 2018. Only one of the twin gabled sheds clad in corrugated steel mentioned in the listing description was present at the site at the time of inspection. Aerial imagery shows there were originally three sheds abutting each other, however two of these have since been demolished. The remaining shed was observed to be in poor condition exhibiting rust, boarded up and covered sections and graffiti. The assessment of significance for this item is presented in full at Section 8.4 of Appendix C.

Bebeah

The Bebeah residence was built in the Federation Queen Anne style, suggesting construction sometime between 1885 and 1915. The following description of Bebeah has been taken from the Singleton LEP 2013 item entry included under Section 3 of the NSW State Heritage Inventory. This description was last updated 16 August 2010.

“Brick and corrugated steel roof. Seemingly original. Residence. Exterior in seemingly original condition but with replaced roof sheeting” (NSW Office of Environment & Heritage, 2018).

A site inspection was carried out on 3 April 2018. In addition to the residence, which was confirmed to be in good condition, other associated structures and features were also investigated. These included garden plantings, such as fruit trees, two corrugated steel sheds, a brick and corrugated steel shed, a brick structure, three tanks, one silo and enclosures fenced with corrugated steel. The assessment of significance for this item is presented in full at Section 8.5 of Appendix C.

The Woolpack Inn

The Woolpack Inn listed on the Singleton LEP 2013 (I151) is located at 3 Newington Lane, Whittingham. It consists of a building, currently used as a suburban home, located on a rise, with other associated structures. The outlook from the building to the south-west and north-west is across to the New England Highway, across paddocks and on towards Singleton.

The Woolpack Inn was one of several establishments that provided accommodation, food and drink within the Singleton area. The Inn was also used to house other events, such as the auction of furniture and other general merchandise. The assessment of significance for this item is presented in full at Section 8.6 of Appendix C.

6.8.3 Potential impacts

Construction

There are a number of listed heritage items or sites within the proposal area. SoHIs were prepared for the identified items listed in Table 6-39 to assess the impacts of the proposal on the heritage significance of these items. The SoHIs are detailed in Section 8 of Appendix C and summarised in Table 6-40.

It is anticipated that direct impacts during construction may include ground disturbance and indirect impacts may include vibration or ground settlement generated by construction activity. As a result of ground disturbance, one item is anticipated to require complete removal, as discussed below in Table 6-40.

Table 6-40: SoHI summary for historic sites

	Heritage item					
Impact Type	Coke Ovens	Great Northern Railway	Singleton Hunter River underbridge	Former Pumping Station	Bebeah	Woolpack Inn
Major negative impacts (substantially affects values of state significance)	None	None	None	The proposal would require the removal of the item.	None	None
Moderate negative impacts (irreversible loss of values of local significance, minor impacts on state significance)	None	The proposal would result in disruption of the linear corridor through destruction of 300 metres of its extent.	None	None	None	None
Minor negative impacts (reversible loss of local significance or where mitigation retrieves some value)	None	None	None	None	Proposed road works would occur to the south of the property, within the item's curtilage but without impacting on the established public view lines or the fabric of the item.	Proposed road works will occur to the north west of the property, within the item's curtilage but without impacting on the established public view lines or the fabric of the item.
Negligible or no impacts (does not affect heritage values either negatively or positively)	No direct impacts are proposed within the curtilage of the coke ovens. There will be no impacts to views to or from the heritage item as a result of these works	None	None	None.	None	None
Minor positive impacts (enhances values of local significance)	None	None	Current view lines from the western side towards the item would be altered. Presently this area is largely limited to private property landowners. If views are left open from the proposed new bridge crossing the Hunter River, the proposal could allow drivers and passengers on the road to view the underbridge from its western side, which is currently largely inaccessible, while retaining the prominent public view lines from the public park area to the east.	None	None	None
Major positive impacts (enhances values of state significance)	None	None	None	None	None	None

Consideration of proposed construction activities in relation to the identified historical sites within the proposal area are summarised below in Table 6-41. The consequence of harm refers to impacts that are likely to alter the existing significance level of the item. Construction activities would be guided by a CEMP to ensure construction works are carried out to Roads and Maritime specifications and the recommendation of this REF.

Table 6-41: Impact summary for historic sites

Item name	ID	Type of harm	Degree of harm	Consequence of harm
Cokes Ovens	I45	None	None	No impact to existing heritage significance
Great Northern Railway section	Unlisted	Direct	Moderate	Would impact existing heritage significance
Singleton Hunter River Underbridge	SRA844	Indirect	Low	Unlikely to impact existing heritage significance
Former Pumping Station	I21	Direct	High	Would impact existing heritage significance
Bebeah	I120	Direct	Low	Unlikely to impact existing heritage significance
The Woopack Inn	I151	Direct	Low	Unlikely to impact existing heritage significance

Operation

Potential impacts to non-Aboriginal heritage (either direct or indirect) during the operation of the proposal largely relate to impacts to urban design landscape character and visual amenity. These potential impacts are expected to be minor and would be managed in accordance with the recommended safeguards set out in Section 6.8.4. Operational impacts such as increased noise, vibration or air quality are not considered likely to affect any of the known heritage-listed sites.

6.8.4 Safeguards and management measures

Table 6-42: Summary of non-Aboriginal heritage mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Non-Aboriginal Heritage	<p>A heritage management plan should be produced and included with in the Construction and Environment Management Plan measures to manage the identified heritage items in relation to the proposed works, including:</p> <ul style="list-style-type: none"> Heritage protection measures. An induction program for construction personnel on the management of non-Aboriginal heritage values. Procedures to be implemented if previously unidentified non-Aboriginal relics or heritage items are discovered during construction, in accordance with the Roads and Maritime's Standard Management Procedure - Unexpected 	Contractor	Construction

Impact	Environmental safeguards	Responsibility	Timing
	Archaeological Finds.		
Non-Aboriginal Heritage	<p>If the use of vibration intensive plant cannot be avoided within the minimum working distance for cosmetic damage the following procedure would occur as a minimum:</p> <ul style="list-style-type: none"> • Notification of the works to the affected residents and community • Works would not proceed until attended vibration measurements are undertaken. Vibration monitors are to provide real-time notification of exceedances of levels approaching cosmetic damage criteria. • If ongoing works are required a temporary relocatable vibration monitoring system would be installed, to warn operators (via flashing light, audible alarm, short message service (SMS) etc) when vibration levels are approaching the cosmetic damage objective. 	Contractor	Detailed design and Construction
Non-Aboriginal Heritage	Singleton Council should be informed of the proposed impacts to heritage items and their records relating to the corresponding LEP listings should be updated accordingly.	Roads and Maritime	Construction
Non-Aboriginal Heritage	Should any heritage items, archaeological remains or potential relics of Non-Aboriginal origin be encountered, then construction work that might affect or damage the material will cease and notification provided to Roads and Maritime's as per Roads and Maritime Standard Management Procedure - Unexpected Archaeological Finds. Work will only re-commence once the requirements of that Procedure have been satisfied.	Contractor	Construction
Non-Aboriginal Heritage	Roads and Maritime will investigate the need to salvage heritage fabric from listed items removed by the proposal for possible reuse in heritage reinterpretation in consultation with Singleton Council.	Roads and Maritime	Detailed design
Non-Aboriginal Heritage	An archival recording of the Former Pumping Station (I21) will be prepared prior to the removal of the item. The recording will be prepared in accordance with guidelines published by the Heritage Division, Department of Premier & Cabinet.	Contractor	Construction
Heritage impacts	Prior to ground disturbance impacts at the Former Pumping Station (I21), a permit under Section 140 of the <i>Heritage Act 1977</i> would be obtained given the potential for archaeological relics at this location.	Roads and Maritime / contractor	Detailed design and construction