Hexham Relief Roads Project: Historic Heritage Impact Assessment Addendum

Prepared by Australian Museum Business Services for KMH Environmental

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AMBS
Australian Museum Business Services - 6 College Street, Sydney NSW 2010, Ph (02) 9320 6311, Fax (02) 9320 6428
australianmuseum.net.au/AMBS ambs@austmus.gov.au

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Recipient:	Marina Mickaeal, Environmental Consultant, KMH Environmental
Approved by:	Jennie Lindbergh, Senior Project Manager, AMBS

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1 Introduction

Australian Museum Business Services (AMBS) has been commissioned by KMH Environmental (KMH) to prepare an Addendum to the *Hexham Relief Roads Project: Historic Heritage Impact Assessment* prepared by AMBS in 2012. The Addendum is to address potential impacts to the Minmi – Hexham Railway, which may arise from the proposed construction of a private access road along its alignment. The Addendum has been requested by the Department of Planning & Infrastructure (DP&I) and will be appended to the UHVA Hexham Relief Roads Submissions Report. The HIA and Addendum form part of the Environmental Impact Statement (EIS) prepared by KMH for the Australian Rail Track Corporation (ARTC) under Part 5.1 of the Environmental and Planning Assessment Act 1979 (EP&A Act).

As part of the Hexham Relief Roads Project, ARTC proposes to construct a vehicle access track along a section of the Minmi to Hexham Railway, to the west of a wetland area identified by SEPP 14. The Minmi – Hexham Railway is listed on the Newcastle Local Environmental Plan (LEP) as a local heritage item also having archaeological potential.

1.1 Study Area and Context

The Project study area is to the west of the Main Northern Line, within the Newcastle Local Government Area (LGA), approximately 16km north-west of the town of Newcastle (Figure 1.1). The current study area is a small part of the larger Project study area, comprising a section of the Minmi – Hexham Railway (Figure 1.2).

The Minmi – Hexham railway was constructed in 1853–1854 by John Eales to transport coal from his Minmi Colliery to the port at Hexham. The Railway was expanded by James and Alexander Brown who had begun mining at Minmi adjacent to Eales colliery in 1853, buying out Eales in 1857. Extensions to the railway included branch lines to the Browns' many mining operations in the region, establishing collieries at Duckenfield, New Lambton, Stockrington, Pelaw Main and Richmond Main. By 1859, the Brown brothers had constructed an exchange loop and junction to the Hexham railway, which was the starting point of the Richmond Vale Railway. Following the 1910 duplication of the Great Northern Railway, three additional loop sidings were constructed on the north side of the Minmi – Hexham Railway, at its junction with the Great Northern Line. By 1947 there were eight sidings as well as associated infrastructure for the railway line and the operation of the colliery, established at the railway junction along the alignment of the Minmi – Hexham branch line. Expansion of the railway continued into the mid-twentieth century until a series of business contractions saw the railway close in 1988.

1.1.1 Significance

The Minmi – Hexham railway line is listed in Schedule 5 'Environmental Heritage' on the *Newcastle Local Environmental Plan* (LEP) 2012 as a local heritage item. In addition, the railway line has identified archaeological research potential arising from the potential for archaeological relics associated with the nineteenth century construction and operation of the railway to be present (Figure 1.3; Item no.1332, Minmi – Hexham Railway).

The Richmond Main Colliery, of which the Richmond Vale Railway is an element, has identified state heritage significance and is listed on Schedule 5 Environmental Heritage of the Cessnock LEP 2011 (Item no. 1221) and the SHR (Listing No. 00016). The Richmond Vale Railway is an extension of the Minmi – Hexham Railway.

1.2 Methodology

This report is consistent with the principles of the Burra Charter (*The Australia ICOMOS charter for the conservation of places of cultural significance*) and has been informed by the *NSW Heritage Manual* (1996), published by the Heritage Office and Department of Urban Affairs and Planning (now the Heritage Branch, OEH), and the supplementary documents *Archaeological Assessments* (1996) and *Assessing Significance For Historical Archaeological Sites and 'Relics'* (2009).

This report has been informed by the *Hexham Relief Roads Project: Historic Heritage Impact Assessment* prepared by AMBS in 2012.

A survey of the additional study area was carried out by AMBS Senior Project Manager Jennie Lindbergh and AMBS Project Officer Bernadette McCall on 14 January 2013, escorted by Ben Robilliard, KMH Environmental Officer. The survey entailed walking the full extent of the Project area, photographing and recording the extant heritage items and archaeological potential.

1.3 Authorship

This report has been prepared by AMBS Project Officer Bernadette McCall. AMBS Senior Project Manager Jennie Lindbergh has provided technical advice and input, and reviewed the report for quality and consistency.

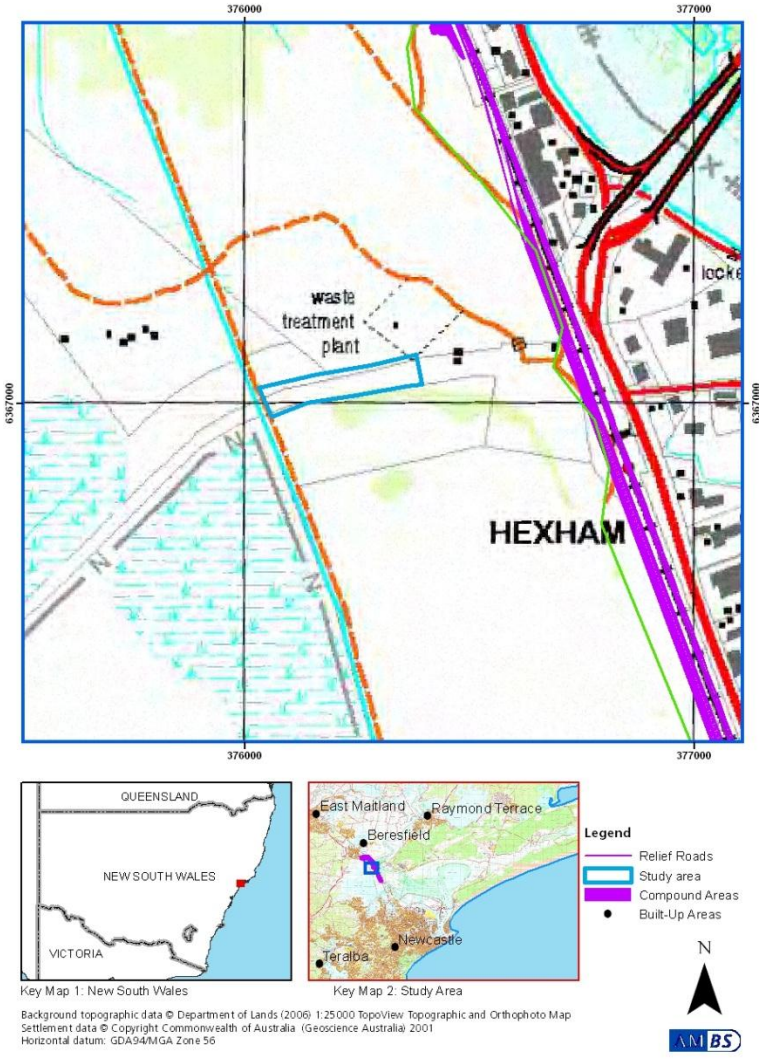

Figure 1.1 The study area.

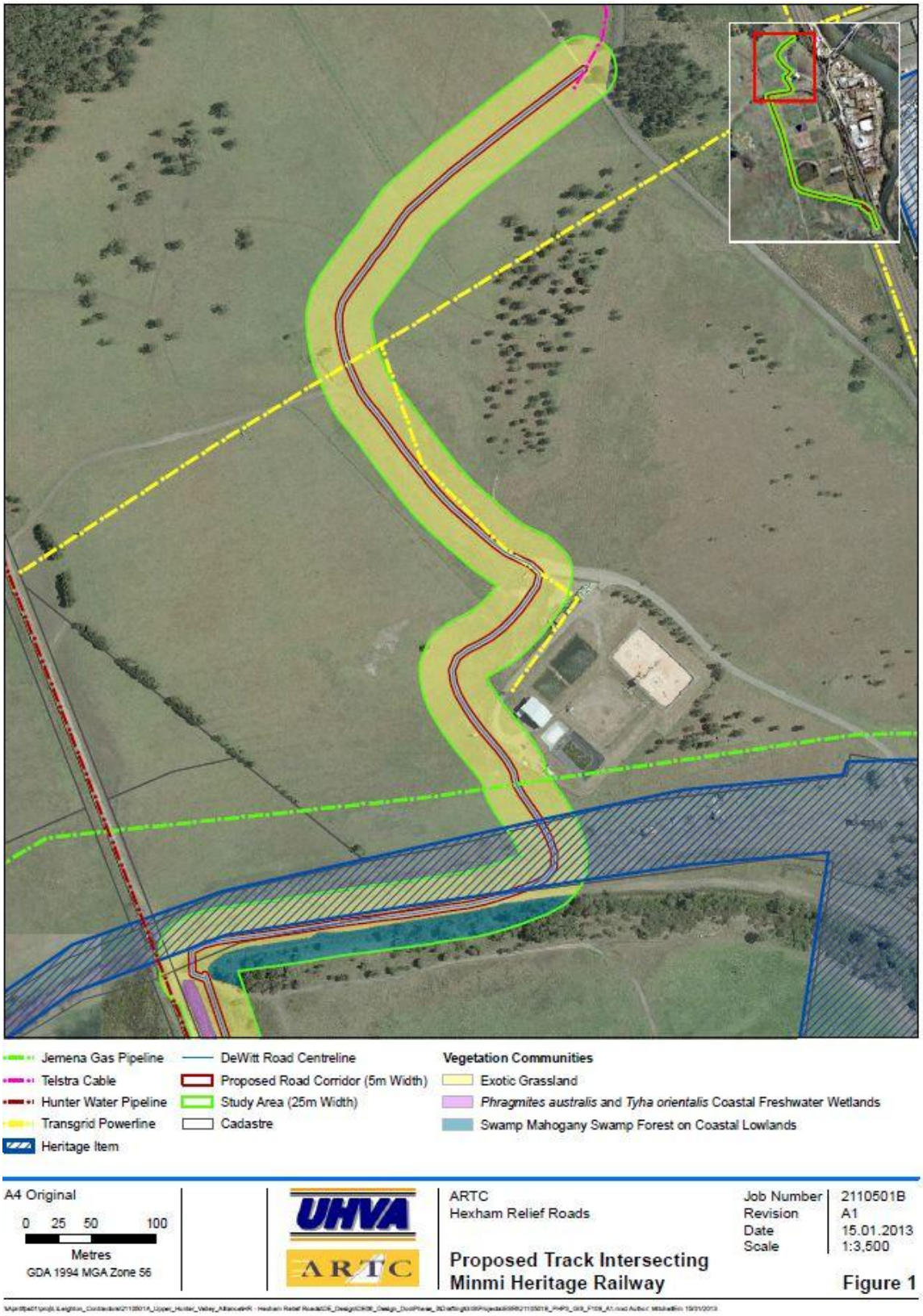

Figure 1.2 Current study area with proposed access road marked in red (UHVA ARTC).

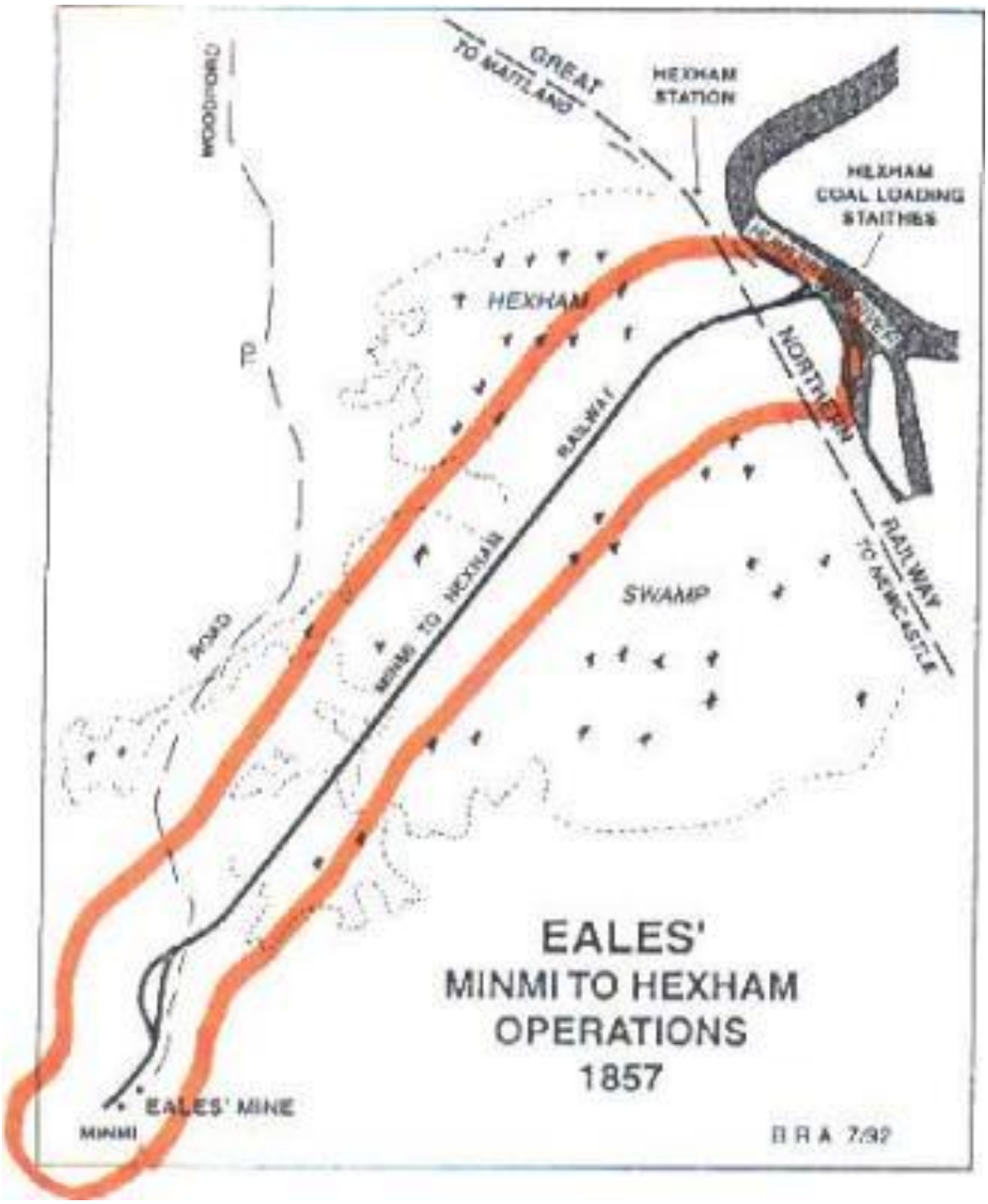

Figure 1.3 The Minmi to Hexham Railway curtilage map identifying the area of archaeological sensitivity (Heritage Branch itemid=2173887&imageid=47272547).

2 Physical Assessment

The study area is approximately 540m long generally following the east-west alignment of the former Minmi – Hexham rail corridor. The remains of the railway itself are scattered across a low built-up embankment, which is approximately 20m wide at the western end widening to approximately 55m at the eastern end (Figure 2.1). The southern edge of the embankment is defined by a drainage channel before rising to a high embankment made up of coal waste on the slopes of which is remnant Swamp Mahogany Forest toward the west. The northern edge of the railway embankment is not as well defined due to erosion and slopes down to the surrounding farmland with grazing cattle and the treatment plant beyond (Figure 2.2). Although the railway continues to the west, the western boundary of the study area is defined by the Hunter Water pipeline with the Hexham Swamp Nature Reserve to the southwest and private properties to the northwest.

Figure 2.1 View west along the railway corridor with vegetation, drainage channel and embankment to the left.

Figure 2.2 View east along the railway embankment from the western property boundary showing its eroded northern edge with drainage channel and embankment to the right.

Scattered across the railway embankment are relics of the former railway and infrastructure. The railway and sidings are partially covered by the low ground cover and grasses or by later tracks which have formed over the railway (Figure 2.3). In addition to items associated with the railway, are also signs that modern detritus has been dumped within the study area (Figure 2.4).

Figure 2.3 View from the western property boundary along the former Minmi – Hexham railway as it curves away to the south. The Pipeline Road is in the foreground.

Figure 2.4 Relics associated with the former Minmi – Hexham railway line recorded during field survey; some rubbish such as tyres and other debris were also noted. View south across the railway corridor to the spoil mound.

Items associated with the railway have been disturbed and in some instances been removed from their original position, perhaps inadvertently or by grazing cattle (Figure 2.5). Notable are railway sleepers and associated fittings (baseplates, fishplates, dog spikes, split pins) and other structural elements, including a concrete base for an upright structural member, perhaps the base of a signal (Figure 2.6).

The relatively large size of the river pebble aggregate in the concrete indicates that it likely dates to the 1930s (Figure 2.7).

Figure 2.5 In addition to the extant railway, displaced structural elements and fittings were scattered across corridor. View west along the railway corridor.

Figure 2.6 Detail view of sleepers base plates and split pins.

Figure 2.7 Detail of split pin in a sleeper and the concrete base within the rail corridor.

An existing access track runs along much of the length of the railway corridor, adjacent to the drainage channel at the southern edge of the study area (Figure 2.8). Several smaller tracks have been formed which cross over the former railway lines, including a vehicle track which curves north from the southern edge of the rail corridor, towards the sewage treatment plant (Figure 2.9).

Figure 2.8 View west of existing access track along southern edge of railway corridor

Figure 2.9 Another track curves away from the southern edge of the rail corridor in the direction of the sewage treatment plant.

At the eastern end of the railway corridor, several low stones were observed at ground level in a linear east-west arrangement. The full extent of the original stone feature could not be determined but the previous alignment is marked by the line of darker soil that appears to extend west along the rail corridor for some distance (Figure 2.10). Similar isolated stones were found at various intervals along the length of the railway corridor, confirming the former extent of the stones, indicating they belong to a larger structural feature associated with the railway line or associated colliery infrastructure.

Figure 2.10 Traces of a low stone feature and previous alignment were more visible at surface level at the eastern end of the study area with similar isolated finds further to the west.

Along the north side of the railway corridor and the east of the treatment plant is a group of structures associated with the operation of the railway and colliery in the1940s. However, as these are outside the current study area, they were not inspected in detail (Figure 2.11 and Figure 2.12).

Figure 2.11 View to east of corrugated steel structures along the north side f the rail corridor.

Figure 2.12 Two brick structures east of the corrugated steel structures and adjacent to the SEPP 14 lands.

3 Conclusion

The physical analysis has confirmed that archaeological relics remain within the study area which are likely to be associated with the nineteenth and twentieth century construction and operation of the Minmi – Hexham Railway.

The following archaeological management strategy has been developed to provide guidance to the project with regard to the protection of heritage significance.

3.1 Archaeological Management Strategy

In addition to the recommendations in the 2012 AMBS report, the following outlines the appropriate management of archaeological relics associated with the proposed road construction:

- The preferred option is that the archaeological relics associated with the Minmi – Hexham Railway are retained in situ.
- Where surface elements remain that will affect the construction of the proposed track, such as the concrete base identified during the survey, these can be relocated to the side of the embankment or to its eastern end, in consultation with AMBS.
- Prior to construction of the road, the section of railway embankment to be developed for the road should be covered with geotextile, or similar, and the road base laid across this to protect the integrity of the underlying archaeological relics.
- The precise alignment of the road and an appropriate buffer zone should be determined before works commence in consultation with AMBS. It may be appropriate that the work is monitored by an AMBS archaeologist to ensure that no inadvertent damage will be caused to the archaeological relics.