

# Statement of Heritage Impact: Addendum Great Western Highway East Upgrade Medlow Bath to Blackheath (M2B) Revised Design Assessment

Prepared for Aurecon Group

Prepared by Niche Environment and Heritage | 7 October 2022



## Executive summary

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### Project outline

Transport for NSW (TfNSW) is proposing to widen the Great Western Highway, between Rowan Lane in Katoomba to Tennyson Road in Blackheath, from one to two lanes in each direction (the proposal). The proposal is part of the Great Western Highway Upgrade Program which aims to provide a safer, more efficient connection between the Central West region of New South Wales (NSW), the Blue Mountains and Sydney.

The proposal consists of two sections:

- Katoomba to Medlow Bath – approximately 3.5 kilometres of highway between Rowan Lane at Katoomba and Bellevue Crescent at Medlow Bath
- Medlow Bath to Blackheath – approximately 1.8 kilometres of highway between Station Street, Medlow Bath and Tennyson Road, Blackheath.

TfNSW prepared a review of environmental factors (REF) to assess the potential environmental impacts of the proposal.

Following exhibition of the REF, the proposal design has been refined (referred to as the ‘revised design’) in response to stakeholder feedback and further design development to either realise social benefits earlier or to allow construction efficiencies.

The design changes in the revised design include:

- Extending the new separate eastbound carriageway and the upgrade of the westbound carriageway to connect back to the existing Great Western Highway just to the east of Tennyson Road.
- Continuing the Active Transport Trail in the Medlow Bath to Blackheath section to Valley View Road, Blackheath. The Active Transport Trail would also serve as maintenance access to utilities, water quality basins, the national park (for approved access only).
- High voltage electricity, optical fibre and water main relocations between Medlow Bath and Blackheath have been extended and connected back to existing utility networks at Blackheath.

The revised design would require an extension to the REF proposal area at the western end of the Medlow Bath to Blackheath section only. The revised proposal area has been developed as the footprint required for the construction of the revised design.

### Conclusions

This SOHI Addendum has found that the Subject Area (the area of the revised Proposal Design) contains no heritage items but is within a nominated heritage item of National significance. The Subject Area contains areas which have potential for archaeological deposits; however, these have been removed from the revised design footprint. The heritage values within the Subject Area are directly linked to the identified local historical themes of:

- Early Exploration
- The Western Road
- Recreation, Health and Tourism
- Industry

This assessment has found that the Subject Area has the potential to encompass archaeological evidence relating to these themes. The extent, nature and integrity of the various archaeological profiles cannot be accurately defined from the existing evidence, although is considered to be associated with areas of previous settlement within the Subject Area. The majority of the Subject Area has very low potential for archaeological deposits outside of these identified settlement patterns.

The proposed works have been assessed to have minor levels of impact across the Subject Area (not including the area previously assessed in the SoHI undertaken for this project (Niche 2022)). It is considered that the Subject Area development would have an overall minor impact on heritage values present.

## Recommendations

Based on the assessment provided in this SoHI Addendum, the following additional recommendations have been developed. Please note that these do not subtract from the existing recommendations for this project and are supplemental in nature only (See Table 13).

### Proposed recommendations for scope of works

Section	Location	Number	Recommendation
M2B	Section 5: Blackheath	19.	Works can proceed with caution in this section (the Subject Area), including the Active Transport Trail Extension and the re-stringing of conductors along Evans Lookout Road.
		20.	All workers should be inducted to gain an understanding of the heritage significance of the Subject Area.
		21.	If an unexpected relics or potential relics (unexpected finds) are uncovered during works, the Transport (2016) <i>Unexpected Heritage Finds Guideline</i> is followed.
		22.	Removal of vegetation within the Greater Blue Mountains Area- Additional Values areas is to be minimised as far as practicable.
		23.	That the works within this area continue to avoid the identified areas of previous settlement at BH001, BH002 and BH005. If design changes force these areas closer to the proposed works, potential heritage impacts to these areas should be re-assessed.

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## 1 Introduction

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### 1.1 Project background

Transport for NSW (TfNSW) is proposing to widen the Great Western Highway, between Rowan Lane in Katoomba and Tennyson Road in Blackheath, from one to two lanes in each direction (the proposal). The proposal is part of the Great Western Highway Upgrade Program which aims to provide a safer, more efficient connection between the Central West region of New South Wales (NSW), the Blue Mountains and Sydney.

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The revised design would require an extension to the REF proposal area at the western end of the Medlow Bath to Blackheath section only. The revised proposal area has been developed as the footprint required for the construction of the revised design.

### 1.2 Location of the revised design: Subject Area

The location of the revised design (the ‘Subject Area’ for this SoHI addendum) is located within the Blue Mountains Local Government Area (LGA) and includes the Great Western Highway as well as 92 individual lots located to the east of the Great Western Highway Road reserve and south of Blackheath in NSW. These lots are mostly historical in nature and are not delineated from each other by boundary fencing or roads and consist mainly of current WaterNSW catchment and Blue Mountains National Park lands. This area is located to the north of the previous SoHI’s Subject Area (henceforth the ‘REF proposal area’ when mentioned in this SoHI).

See Figure 1 for further details of the Subject Area and the revised design.





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### 1.3 Objectives of the SoHI Addendum

Niche Environment and Heritage Pty Ltd (Niche) was commissioned by Aurecon (on behalf of TfNSW) ('the Proponent') to undertake an Addendum to the existing Statement of Heritage Impact (SoHI), dated 19/04/2022, to assess the revised design outlined above.

It is not the purpose of this addendum report to replace or supersede the original SoHI, tendered with the Review of Environmental Factors (REF). Rather this addendum should be read in conjunction with the original documents as it provides additional information, and supplementary assessment to address the proposal and to support an update to the REF prepared by TfNSW under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This document will evaluate the potential impacts from the revised design on the cultural values and significance of the Subject Area and heritage components within and in proximity to it. In accordance with *Assessing Heritage Significance (Heritage Office (former), 2001)* and TfNSW *Cultural Heritage Guidelines* (2015), this SoHI Addendum will address:

- Identification of heritage significance of the additional Subject Area and any identified heritage items associated with this area,
- Assessment of potential impacts to cultural heritage value as a result of the revised design proposal.
- Consideration of sympathetic solutions to mitigate potential heritage impacts, and any modifications to the recommendations of the original SoHI based on the revised design.

### 1.4 Methodology

This SoHI Addendum has been prepared in accordance with the conservation principles and methodology contained in *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (2013)* and in accordance with the best practice standards set out by the Heritage NSW. The relevant best practice guidelines include:

- *Statement of Heritage Impact* (Heritage Council of NSW, 2002)
- *NSW Heritage Manual*
- *Assessing Heritage Significance* (Heritage Office (former), 2001)
- *Assessing Significance for Historical Archaeological Sites and 'Relics'* (Heritage Council of NSW, 2009)
- *Cultural Heritage Guidelines* (TfNSW, 2015).

The literature review, database searches and desktop assessment undertaken for this addendum relied on the previous assessment of the SoHI (Niche, 2022) to which this report is appended. Where needed, to accommodate the additional Subject Area land and to assess the revised design, the previous methodology was used, and previous research supplemented where required. This report will not reproduce materials presented in the previous assessment, unless connected with new information garnered for this addendum.

#### 1.4.1 Site inspection

A site inspection was conducted for this addendum on the 4 and 5 August 2022. This was to supplement the original site inspection, which had the purpose of:

- Confirming those places already identified from previous studies or re-evaluating those lists, and



- Identifying physical evidence that could indicate archaeological evidence, structures or other works that may not have been identified in other sources within or adjacent to the two project sections.

The site inspection was conducted by Samuel Ward (Heritage Consultant, Niche) and Olivier Rochecouste (Heritage Consultant, Niche).

### **1.5 Authorship and acknowledgements**

This SoHI Addendum has been written by Samuel Ward (Historical Heritage Consultant, Niche), with support from Catriona Graham (Heritage Consultant, Niche) and document review and quality control provided by Deirdre Lewis-Cook (Senior Heritage Consultant, Niche). Technical assistance was provided by Penelope Geering (GIS Consultant, Niche). Unless otherwise attributed, images used in this report are produced by Niche.

## 2 Regulatory and assessment framework

This section provides a summary of the supplemental register searches which were undertaken of the Subject Area. The searches of the REF Proposal Area were replicated for the Subject Area under assessment in this SoHI Addendum, with the results provided below.

The following heritage registers were searched for this addendum with regards to the Subject Area:

- *World Heritage List (WHL)*
- *National Heritage List (NHL)*
- *Commonwealth Heritage List (CHL)*
- *NSW State Heritage Register (SHR)*
- *State Heritage and Conservation (s.170) Registers*
- *City of Blue Mountains Local Environment Plan 2015/ 2016 review (LEP 2015)*

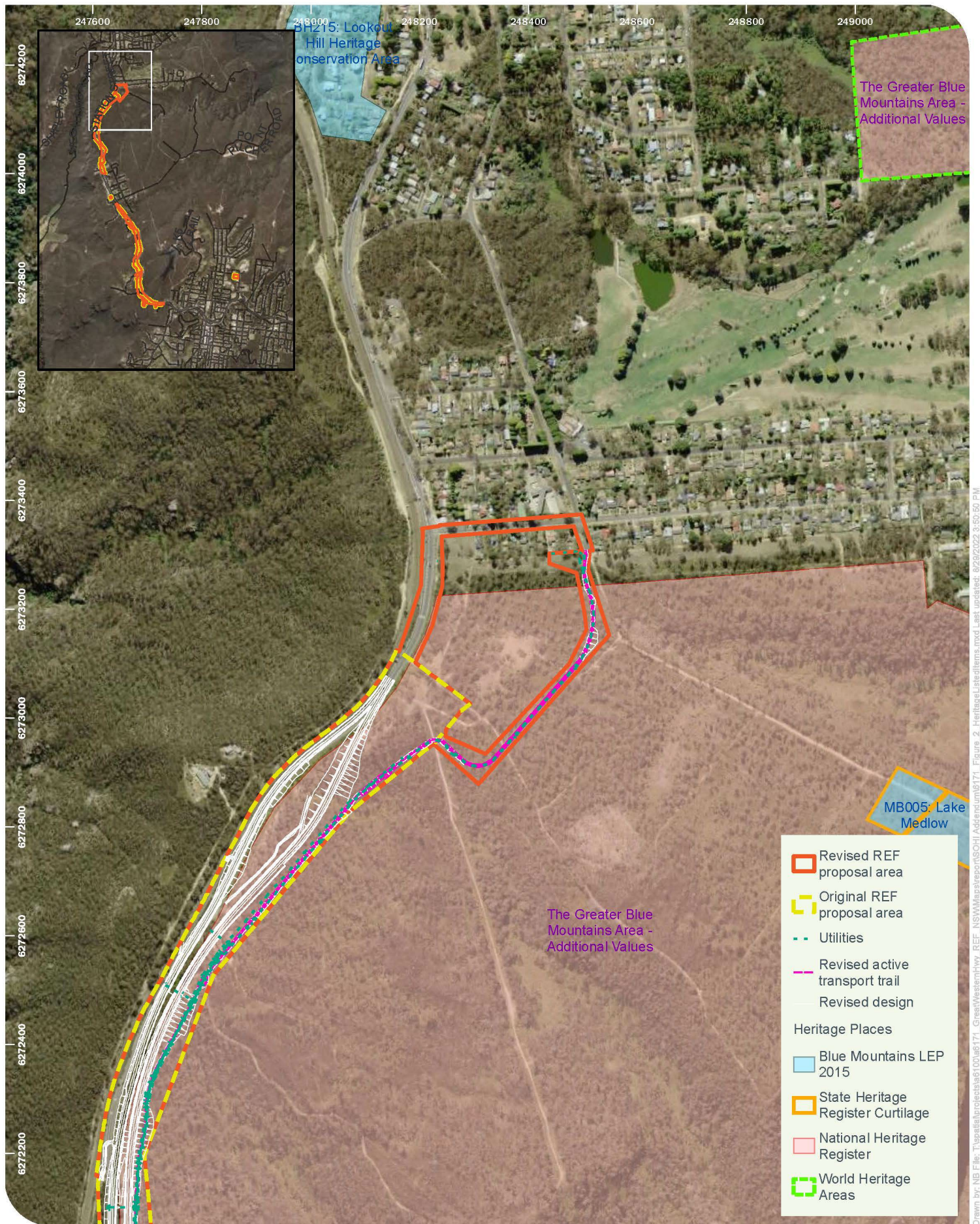
These searches found that there were no additional heritage items located within the Subject Area. Table 1 shows the heritage items which were identified in the previous SoHI (Niche 2022).

**Table 1: Heritage items assessed within this SoHI**

Item #	Item Name
105696	Greater Blue Mountains Area- Additional Values
K079	Bonnie Doon Reserve
K166	Pulpit Hill and Environs
K039	Stone Arrangements
K082	Shepherd and His Flock Inn (site only)
K031	Explorer's Tree and Environs
MB016	The Pines
MB006	Gatekeeper's Cottage

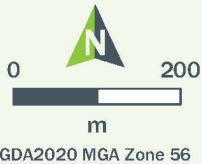
Of the above identified heritage items, only item #105696 Greater Blue Mountains Area – Additional Values is present within the additional Subject Area south of Blackheath. This National Heritage List item is within the Subject Area, just as it is within the eastern portions of the REF Proposal Area (See Figure 2).





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- Revised REF proposal area
- Original REF proposal area
- Utilities
- Revised active transport trail
- Revised design
- Heritage Places**
- Blue Mountains LEP 2015
- State Heritage Register Curtilage
- National Heritage Register
- World Heritage Areas



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**Heritage listed items**  
 Great Western Highway Upgrade- SOHI

**Figure 2**



### 3 Historical context

This section of the SoHI Addendum supplements the historical context section (Section 4) of the original SoHI assessment (Niche 2022) and provides additional information regarding the regions immediately south of Blackheath.

#### 3.1 Historical context of the Subject Area

##### 3.1.1 Village of Blackheath

The area of Blackheath was initially referred to as 41 Mile Tree. The first building in the area was 'The Scotch Thistle Inn', built in 1831 by Andrew Gardener. In 1844 a large convict stockade was built in Blackheath to house convicts engaged in road construction under Captain Bull (Karskens 1988).

The railway line was completed through the area by the late 1860s, with a platform built in 1869 (CRM 2002). As with other townships in the mountains, the establishment of a rail platform saw a focus of settlement in the immediate area. The village of Blackheath was surveyed in 1878 and declared in 1885. A subdivision plan from 1881 shows residential lots to the north of the original survey plan (CRM 2002).

The change in alignment of the Great Western Highway in 1902 (proposed in 1894 – see Plate 1) modified the approach to Blackheath from the south and remains the current alignment of the Great Western Highway, which forms the western boundary of the Subject Area.



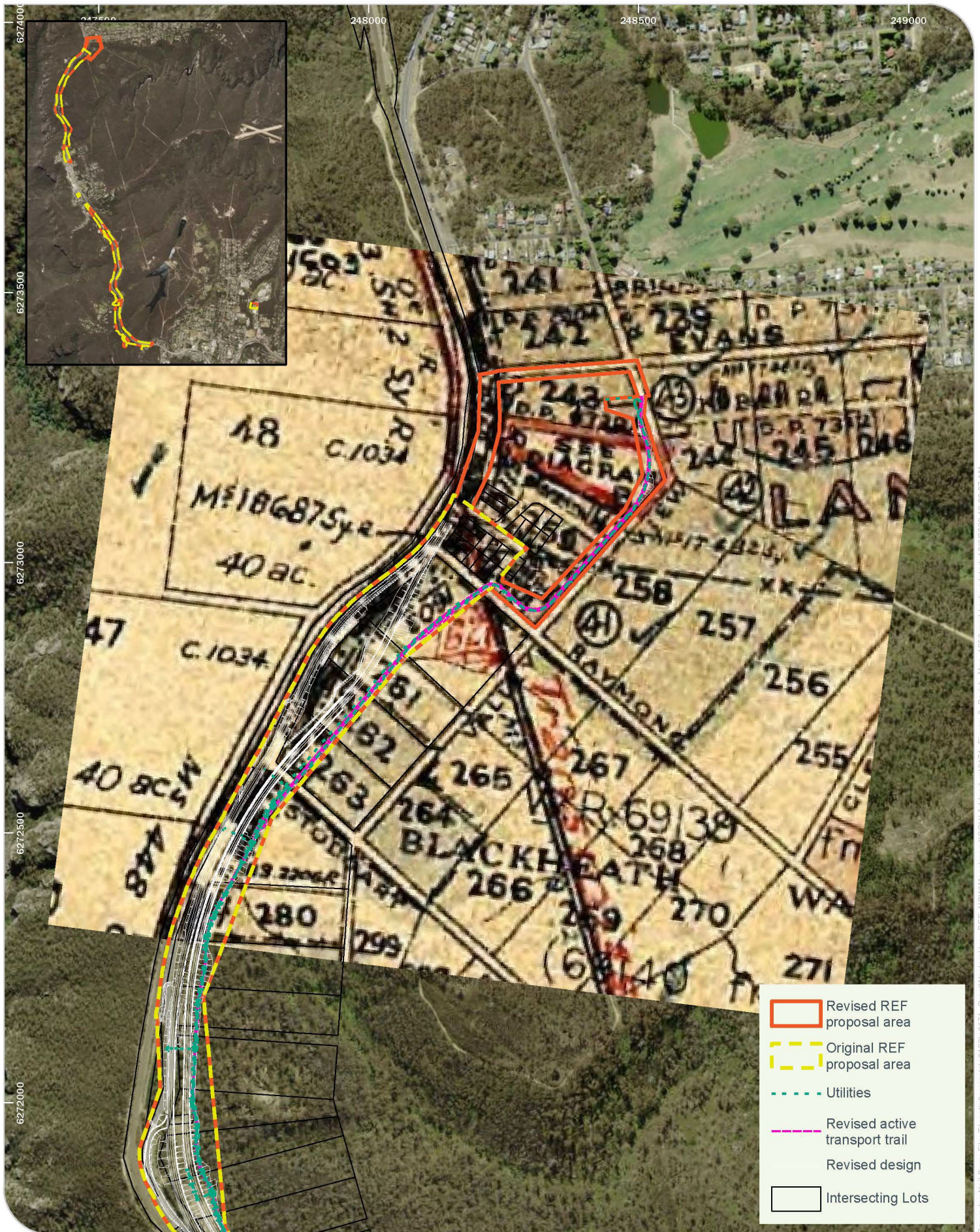
**Plate 1: 1894 Plan showing areas proposed to be realigned. Note the square- corner as noted in the 1887 plan is proposed to be rounded off, as is accurate with the modern alignment (Source: LPI Crown Plan 1.2532)**

By the turn of the 20<sup>th</sup> century, the permanent population of Blackheath was still low; however, in the following decades the village became one of the principal tourist destinations in the mountains. In the interwar period, Blackheath saw a commercial boom with many of the main commercial buildings constructed during this time (Artefact 2016). The 1889 plan of the Village of Blackheath shown in Plate 2 provides an overview of the subdivisions of land made on the eastern side of the Great Western Highway south of Blackheath towards Katoomba, including the Subject Area. Many of these lot and property boundaries are still legally in force for this land, even though the Subject Area has been declared part of National Park lands. This land division is also recorded on Parish Maps of the area Figure 3.



Plate 2: 1889 Plan of Blackheath showing planned property divisions and declared boundaries, with outline of the Subject Area indicated (source HLRV-NSW LPI and Niche).





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 Client: Aurecon

Parish Maps - 1952  
 Great Western Highway Upgrade- SOHI

Figure 3



### 3.1.2 Convergence of tracks and cleared land

The previous SoHI (Niche 2022) identified points of historical interest known as a ‘convergence of tracks’ which are present at the intersection of both the REF Proposal Area and the current Subject Area:

*Aerial photographs from 1958 show widespread land clearance immediately south of the Blackheath township (Plate 4), as well as a convergence of bush tracks leading south and south-east from this area (Plate 3). The large-scale clearing and the series of tracks is indicative of industrial activities in the area, however the historical resources did not provide any clarity to this activity. (Niche 2022).*



**Plate 3: 1958 aerial showing convergence of tracks south of Blackheath.**



**Plate 4: 1958 aerial showing widespread land clearance south of Blackheath**

Further research, however, has indicated that these tracks are related to rural patterns of settlement within the Subject Area. While the subdivision indicated in the 1889 plan was undertaken, the uptake in settlement and the creation of housing south of Blackheath was not completed to the extent of this plan, with larger lots occupied by houses and other structures (see Plate 5, Plate 6 and Figure 4).

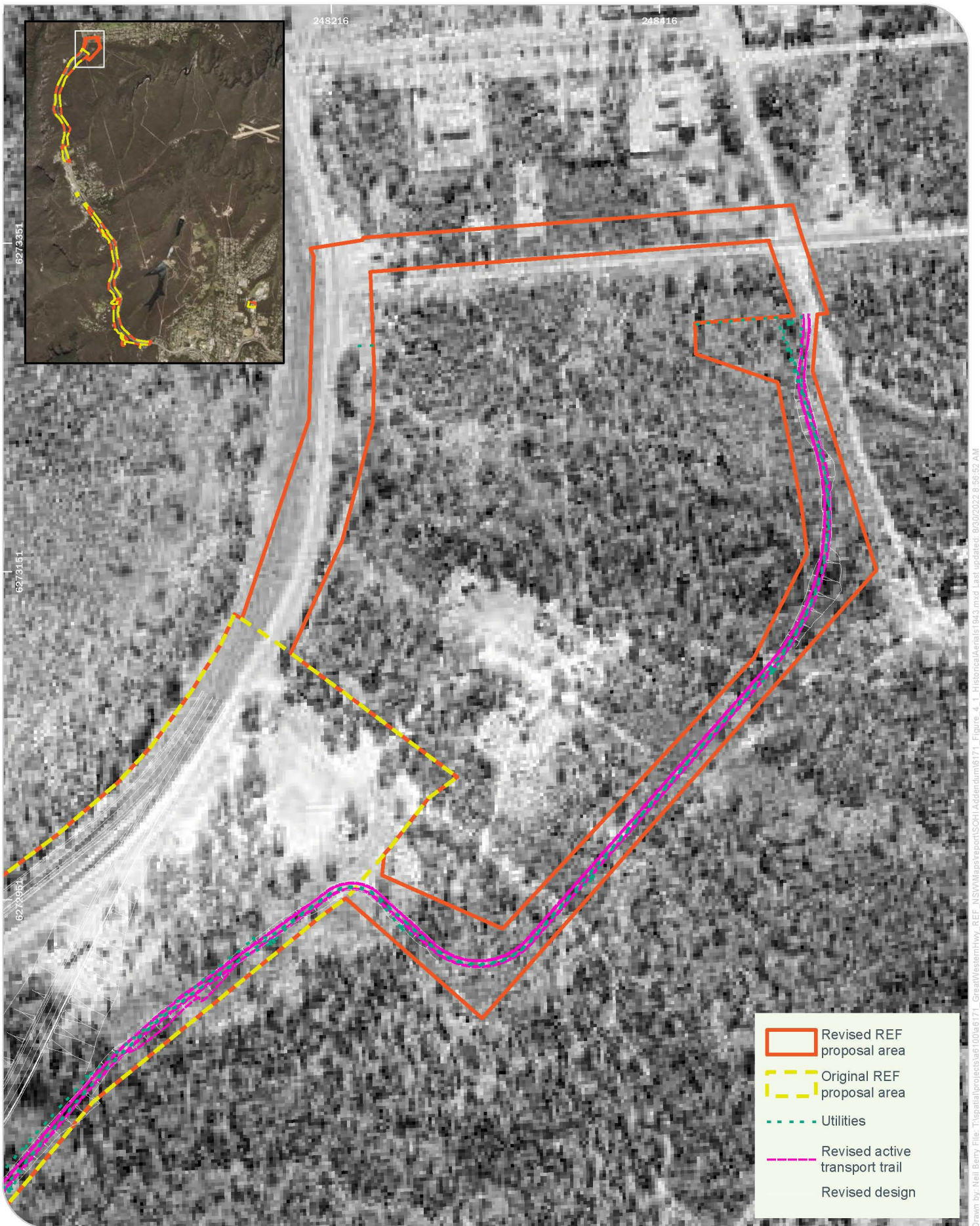


**Plate 5: evidence of settlement in 1943 near the 'convergence of tracks' feature (Source: NSW Spatial Services)**



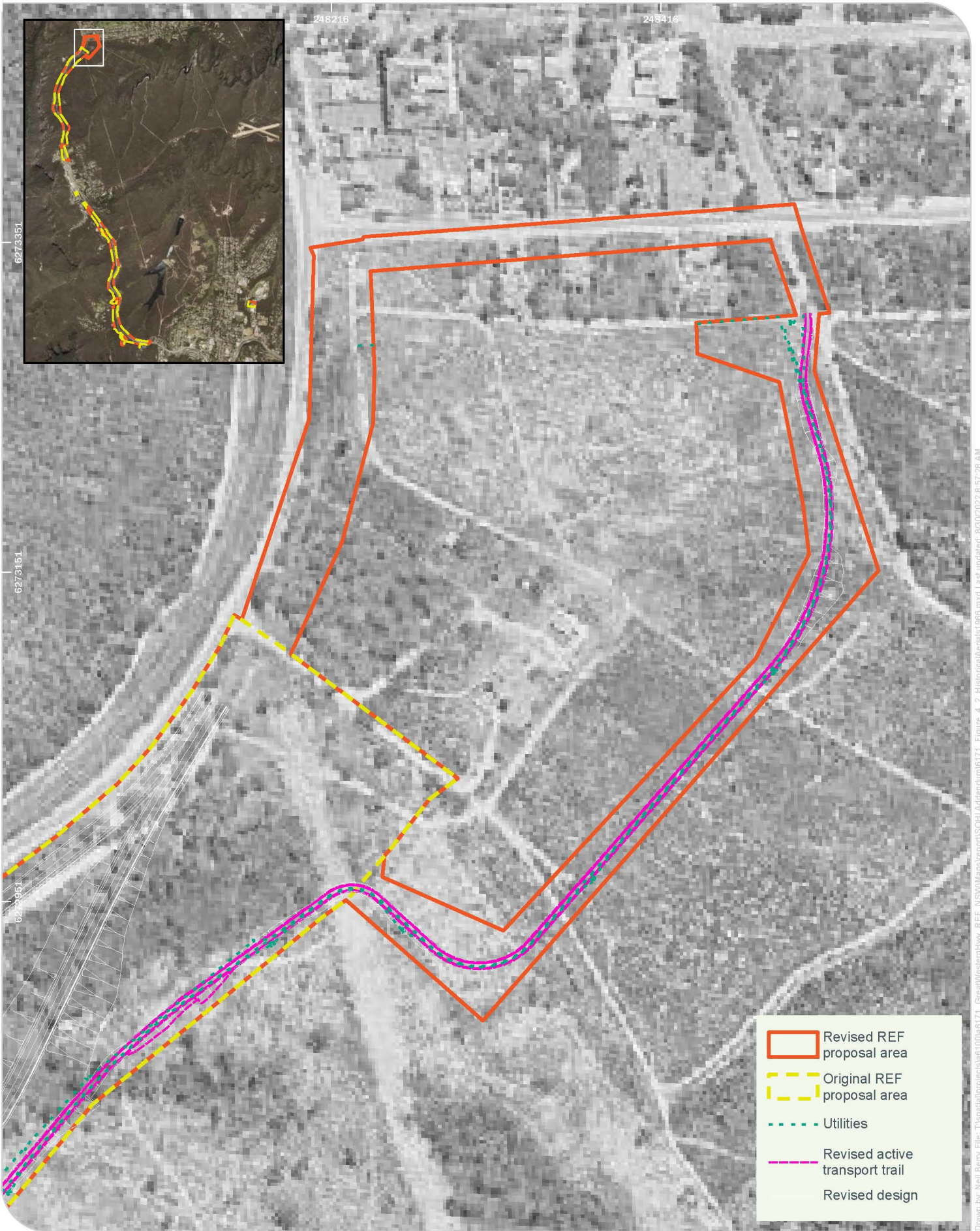
**Plate 6: evidence of settlement in 1943 within the Subject Area (Source: NSW Spatial Services)**





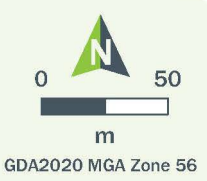
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- Revised REF proposal area
- Original REF proposal area
- Utilities
- Revised active transport trail
- Revised design

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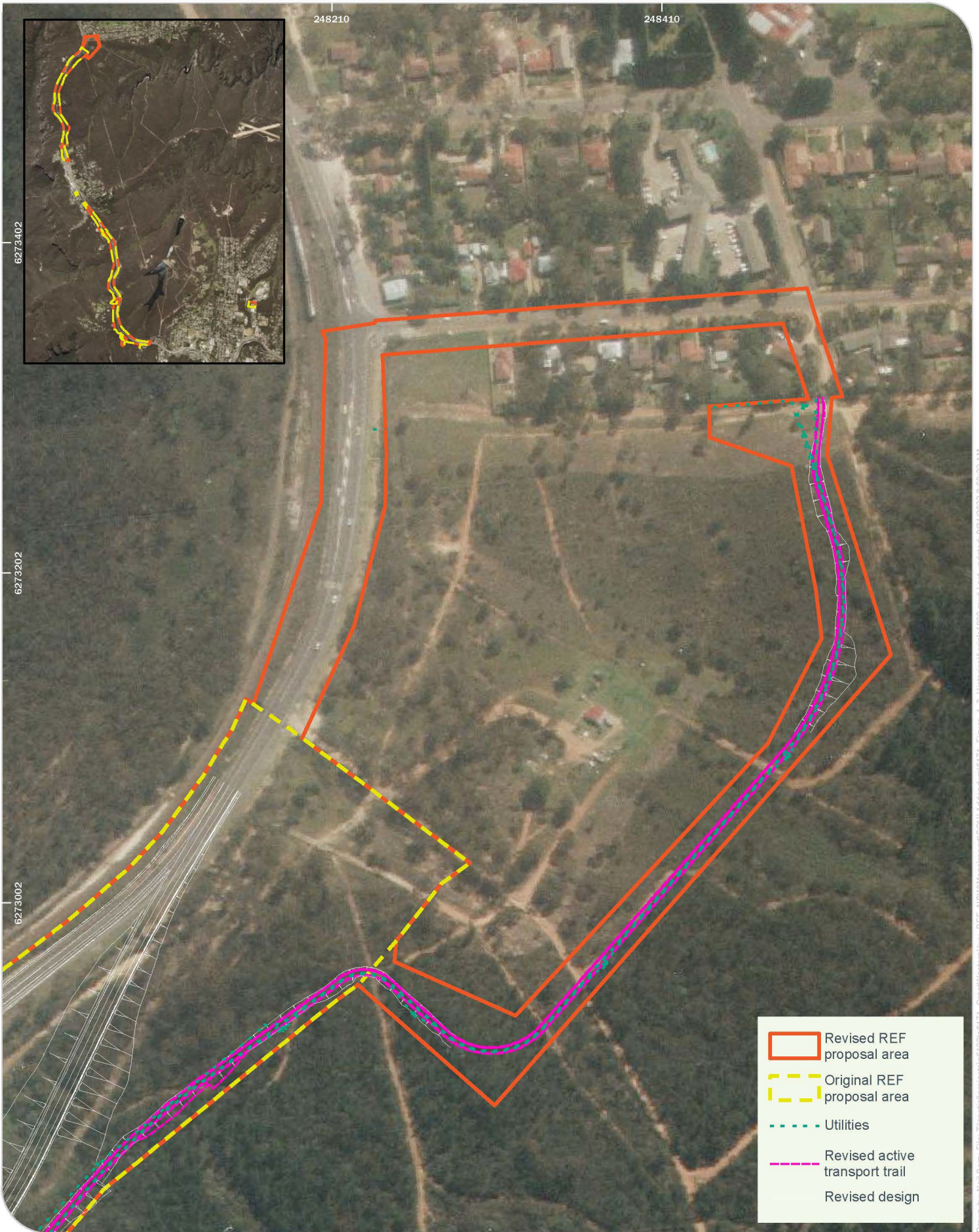


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### Historical Aerial Photographs - 1966 Great Western Highway Upgrade- SOHI

**Figure 4.2**





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The historical aerials presented in Figure 4-4.3 show that the area south of Blackheath was largely cleared and used for some housing of a rural or semi-urban density at the most. The evidence from the historical aerial photography in addition to the parish and historical maps show that while a subdivision of this land was undertaken, lots were not used for suburbs of Blackheath as was presumably originally intended.

The large easement identified as part of a ‘convergence of tracks and cleared land’ is shown on the 1952 parish map as an electrical transmission line, also seen to be present on the historical aerials except the 1943. The other tracks visible are aligned with the subdevelopment lot boundaries, with the pattern of settlement corresponding to trails which were preserved and maintained through use.

### 3.1.3 Water NSW Catchment Reserve Land

While the Subject Area is currently also national park lands, it has been associated with water catchment areas from the beginning of the 20<sup>th</sup> century. The Parish maps from this time show that the area was considered to be a water catchment area, supplying the upper Blue Mountains communities with drinking water. The State Heritage Registered Medlow Dam, located outside of and to the east of the Subject Area, is fed by creeks and drainage lines (such as Greaves Creek) which run through the Subject Area. This dam was constructed in 1907, with Greaves Dam, built in 1941, adding to this use. It is likely that the lack of development undertaken in the Subject Area was a result of the desire to retain useable drinking water for the rest of the community. Control of the catchment area for the dam was originally invested in council from 1940, but in 1980 was moved to The Metropolitan Water Sewerage and Drainage Board (MWS&DB). The current area is managed by Water NSW, and National Parks. The structures visible in the 1990 Historical Aerial (which were reduced from the previous structures visible in 1966) have subsequently been demolished.

## 3.2 Conclusions

The analysis of the historical context of the Subject Area identified some areas of settlement within the Subject Area, identified the general historical chronology of the Subject Area, and provided more clarification to explain the ‘convergence of tracks’ potential historical feature identified by the previous SoHI. These potential heritage items are discussed below in Table 2.

**Table 2: Potential heritage items identified during the historical analysis**

Section	Area	Item	Listing Number	Source	Site Type	Historic Theme
M2B	Section 5: Blackheath and surrounds	Convergence of tracks	N/A	Historic Aerial	Not of historic value – electrical transmission line intersection with former unsealed roads	Settlement of NSW Industrial Development of NSW
		Greater Blue Mountain World Heritage Area- Additional Values	105696	NHL	Landscape	Landscape-naturally evolved
		Former Building remains	N/A Report Ref #BH005	Historic Aerial/Maps	Demolished remains of rural housing	Settlement of NSW
		Former settlement remains (scattered)	N/A Report Ref #BH001/2	Historic Aerial/Maps	Remains of garden edging associated with historical settlement	Settlement of NSW

## 4 Physical analysis

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The following section details the physical description of the Subject Area as well as outlining any areas of potential archaeological sites. This section will also provide evidence of the conditions of known extant heritage items and describe the history of land use of the Subject Area.

### 4.1 Site inspection

A site inspection was conducted over two days, from the 4 August 2022 to 5 August 2022, by Samuel Ward (Historical Heritage Consultant, Niche) and Olivier Rochecouste (Heritage Consultant, Niche) for this report. The site inspection consisted of a targeted walkover of the Subject Area to identify any evidence of remaining archaeological deposits that could be seen from the surface and identify any potential heritage items not found through the desktop research. The site inspection also included taking photographic records of the Subject Area. A descriptive overview of the location visited during the site inspection is presented in the following sections.

#### 4.1.1 General description of Subject Area

The Subject Area is located within a portion of WaterNSW and Blue Mountains National Park land which is heavily vegetated with light scrub and woodland and is located to the north of the REF proposal area (Plate 7 & Plate 8). There is a shallow valley running from north-west to east-south-east through the site. The Subject Area is described as being highly disturbed in context.

#### 4.1.2 Surface conditions

During the site inspection it was determined that ground-surface visibility (GSV) was poor, with the majority of the Subject Area being highly vegetated with 100% coverage. Vegetation was inclusive of tall grasses, low shrubs and trees inclusive of eucalypts (Plate 7 & Plate 8).

Within the homestead site in the Subject Area, it was identified that an oak tree remains within what would have been the backyard (Plate 22). In the north-eastern portion of the Subject Area, low concrete borders were identified to be present which possibly relate to garden edging and the former buildings known to have been previously present within the Subject Area (Plate 12 & Plate 20). Additional items associated with household activities were also identified and recorded (Plate 19).

Areas of higher GSV included areas along the four-wheel drive (4WD) vehicle tracks present, but within these sections the surface tended to be disturbed, with the overall area being determined to be a highly disturbed context (Plate 14).

Moveable items, including glass bottles, metal sheeting and other metal items, were also identified on the surface which may have been used during the occupancy of the buildings (Plate 9, Plate 11 & Plate 13).

#### 4.1.3 Built heritage items

During the site inspection, the remains of a small cottage and homestead were identified to be located at this site. Evidence of this was inclusive of: brick with concrete covering front stairs; remains of brick pilings (foundations) and remains of concrete foundations south of stairs, possibly for other structures associated with the homestead (Plate 12, Plate 17, Plate 21 & Plate 22). The former building on the site were identified as being demolished, with associated bricks being shattered and broken up. The bricks identified contain a frog motif, various colours and some evidence of glazing.

During the site inspection there were also potential archaeological resources which were identified due to the presence of the cottage and homestead remains within the Subject Area. These potential resources are

inclusive of subsurface building remains; detritus from previous occupants of the buildings and farming and rural equipment scattered around the buildings which have become subsurface deposits.

#### 4.1.4 Services

During the site inspection of the Subject Area services included stormwater drains with there being a likelihood that additional telecommunication and other infrastructure services could be present (Plate 15 & Plate 16).

#### 4.1.5 Moveable heritage

During the site inspection it was assessed that there were no moveable heritage items identified to be present in the Subject Area. In term of the building material present, these are broken up and could be removed easily (Plate 20 & Plate 21).

#### 4.1.6 Imagery



**Plate 7: Indication of vegetative environment within sections of the Subject Area**



**Plate 8: Example of low ground surface visibility (GSV) present within the Subject Area**



**Plate 9: Metal sheeting on surface identified in Subject Area**



**Plate 10: platform associated with previous buildings in Subject Area**





**Plate 11: Example of glass items identified on the surface within the Subject Area**



**Plate 12: Example of concrete edging in Subject Area**



**Plate 13: Example of metal remnants identified within Subject Area**



**Plate 14: Example of vehicle tracks and higher surface visibility**



**Plate 15: Services identified in Subject Area**



**Plate 16: Services identified in Subject Area**





**Plate 17: Platform likely associated with past buildings in Subject Area**



**Plate 18: Detritus present on surface in Subject Area**



**Plate 19: Metal remnants and low surface visibility in Subject Area**



**Plate 20: Secondary example of concrete edging in Subject Area**





**Plate 21: Remnants of steps from view of where homestead would have been within the Subject Area**



**Plate 22: Vista from homestead identified within Subject Area into backyard with oak tree to the right of photo**

#### 4.1.7 Identified heritage items

There were additional listed heritage items identified within the Subject Area during the site inspection. The Subject Area is part of the NHL item Greater Blue Mountains, which is listed primarily for its natural landscape qualities. The Subject Area shows signs of regrowth, indicating it was largely cleared across much of this area.

#### 4.2 Identified viewpoints

Within the Subject Area, there were no identified viewpoints located during the site inspection. It was noted that the identified oak tree within the Subject Area is likely associated with the now demolished homestead/cottage and creates an identifiable vista due to its location within a clearing in the likely past backyard (Plate 21 & Plate 22).

#### 4.3 Summary of site inspection

During the site inspection of the Subject Area conducted by Niche on 4 August 2022 to 5 August 2022, no heritage items were identified.

GSV is considered to have been 100%, with a number of surface items, services and remnants associated with past occupation of the Subject Area being recorded, including past garden beds, remains of a house in a clearing, fence posts and identifiable vistas.

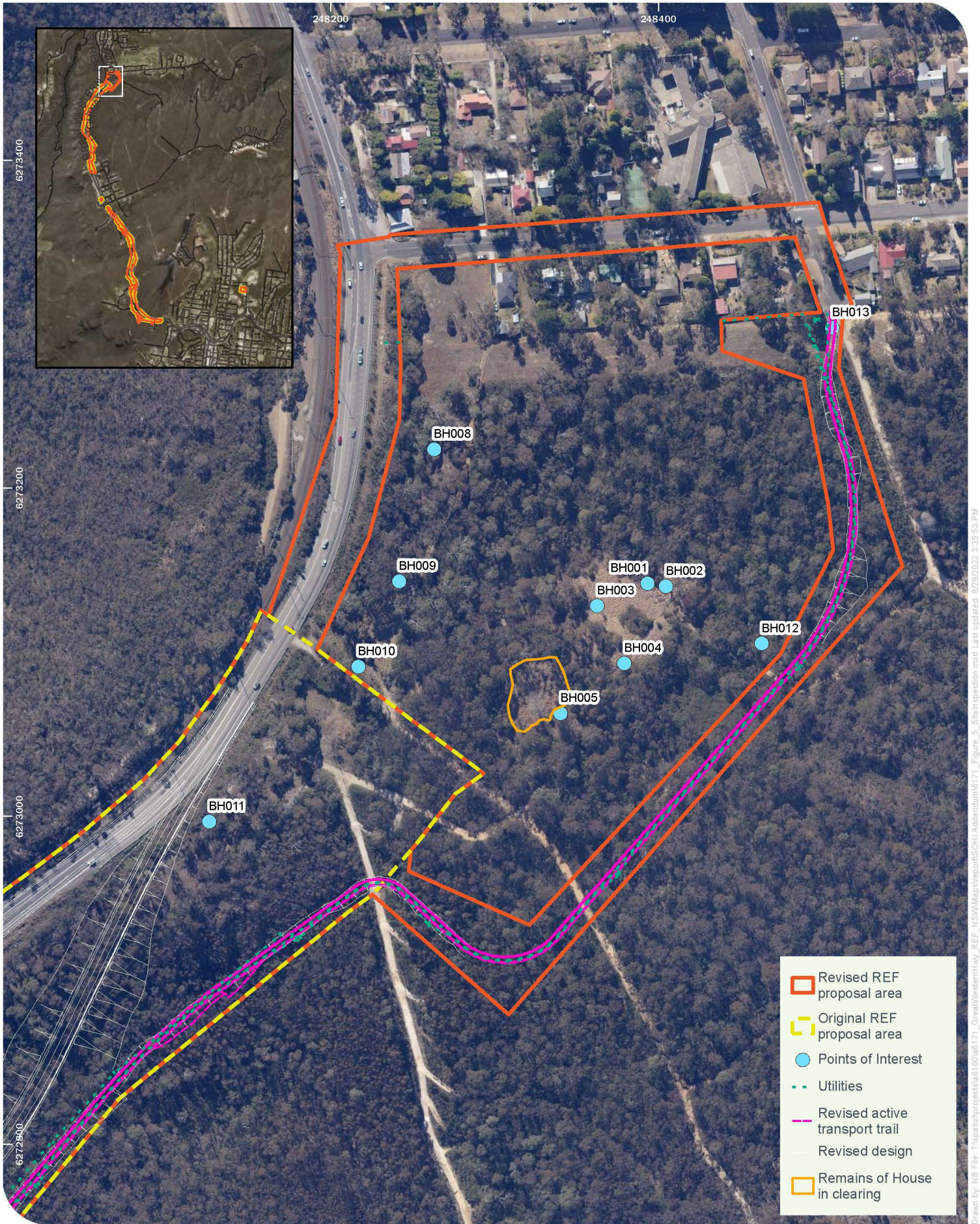
Table 3 outlines points of interest which were recorded during the site inspection (Figure 5).

**Table 3: Blackheath (BH) Points of Interest during Site Inspection**

Point of interest	Recorded	Notes	Relationship to the Subject Area
BH001	04/08/2022	Potential sewer pipe with bent star picket.	Located in an area of former settlement – not within the revised proposal area.
BH002	04/08/2022	Piece of broke garden bed made from concrete. four metres south-east, a piece of broken fencing with chicken wire.	Located in an area of former settlement – not within Revised Proposal Area.

Point of interest	Recorded	Notes	Relationship to the Subject Area
BH003	04/08/2022	Possible remnants of a garden bed. Possibly 1950s.	Located in an area of former settlement – not within the revised proposal area.
BH004	04/08/2022	Old clothesline remains made of steel pipes and wire. Piece of angled steel pipe nearby. Possibly 1930s.	Located in an area of former settlement – not within the revised proposal area.
BH005	04/08/2022	Remains of house in clearing. Broken bricks, front porch steps, pipes, debris, sink, wooden pieces, oak tree, foundational remains. Old fence posts near Highway.	Located in an area of former settlement – not within the revised proposal area.
BH008	05/08/2022	Drains	Located outside of revised proposal area – associated with highway drainage works
BH009	05/08/2022	Drain infrastructure for highway.	Located outside of revised proposal area – associated with highway drainage works
BH010	05/08/2022	Fence post remains.	Located outside of revised proposal area – associated with highway drainage works
BH011	05/08/2022	Drains, agaric.	Located outside of revised proposal area – associated with highway drainage works
BH012	05/08/2022	44 Gallon Drum remains.	Located near to proposed Active Transport Trail near the revised proposal area, in an area of dense regrowth.
BH013	05/08/2022	Drain infrastructure.	Located near to proposed Active Transport Trail entrance and powerline works, associated with other identified drainage works in the Subject Area.





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## 5 Archaeological profile

This section provides a supplement to the archaeological profile identified in the previous SoHI assessment, specific to the Subject Area. The methodology for assessing archaeological potential is the same as in that report.

### 5.1 Archaeological assessment of the Subject Area

The potential archaeological resource relates to the reasonable level of preservation of archaeological resources within the Subject Area. Archaeological potential is shaped by the local geographical and topographical factors, the level of development and the possible following impacts, levels of on-site fill and any factors that influence the preservation of archaeological deposits such as soil type. An assessment of archaeological potential has been derived from the historical analysis undertaken during the preparation of this report.

These archaeological relics are irreplaceable and have the potential to contribute to our knowledge and understanding of history using information otherwise unavailable.

Assessment of the research potential of a site also relates to the level of historical documentation of a site and of the nature of the research done so far (previous archaeological and heritage assessments), to produce a contextual baseline to which any potential research into archaeological remains can add.

The assessed potential for the preservation of archaeological relics can range from very low to high. They are defined as follows:

**Table 4: Grades of archaeological potential**

Grade	Definition
Very Low	The degree of ground disturbance suggests minimal or no potential for any archaeological evidence to survive
Low	It is unlikely that any archaeological evidence survives
Moderate	Some archaeological evidence associated with a particular historical phase or feature survives. It may be subject to some disturbance
High	It is likely that archaeological evidence associated with this historical phase or feature survives intact

**Table 5: Archaeological deposits relating to historical phases**

Historical theme	Analysis of archaeological potential associated with historical phase	Potential archaeological evidence as identified by the historical record	Grade
Early Exploration	There may be archaeological evidence of the early phase of exploration within the Subject Area. This would mostly likely be in the form of surveyor's marks and campsites	Not within the Subject Area – it is unlikely that evidence from this phase remains intact	Very Low



Historical theme	Analysis of archaeological potential associated with historical phase	Potential archaeological evidence as identified by the historical record	Grade
<b>The Western Road</b>	<p>It is probable that the original line of Cox’s Road overlaps the Subject Area at certain points, particularly at Pulpit Hill (this section is not within the Subject Area) where it is suggested that the road alignment traversed the hill to the east and then to the north. Further, evidence of road gangs including their sites of habitation, work, and interment (as in the case of Church) may be identified within the Subject Area.</p> <p>Evidence of Cox’s Road phase within the Subject Area would likely be in the form of rock cuttings, survey marks, culverts, embankments, road base, road gang camps and graves.</p> <p>The development of the Great Western Highway to its current formation occurred over much of the 20<sup>th</sup> century. Evidence of previous alignments and infrastructure is likely to be in the form of road cuttings, embankments, road base, fencing, cleared vegetation and earthworks.</p>	<p>Old road alignments – unlikely that elements from this phase of development still remain intact. The alignment of the old western road corresponds to the west of the Subject Area – the unmade dirt access tracks identified within the Subject Area are unlikely to exist from this period and have been substantially altered and remade over time.</p>	Very Low
<b>The Railway</b>	<p>The Subject Area may have archaeological evidence of the construction and on-going use of the railway. Evidence would likely be contained to within the rail corridor and may have been impacted by construction of embankments and later additions or changes to the rail line.</p>	<p>There is little evidence for this within the Subject Area – and the Subject Area has been substantially altered since this period.</p>	Very Low
<b>Recreation, Health and Tourism And Residential Development</b>	<p>The Subject Area may have archaeological evidence associated with various phases of settlement, recreational and tourist use including the route to Medlow Dam and the identified rural settlements.</p> <p>These settlement sites have been subject to demolition events but could be associated with subsurface deposits dating back to the late 19<sup>th</sup> Century. There is likely to be archaeological profiles associated with the settlement and use of those areas. This evidence is likely to be in the form of outbuildings, occupation deposits, earthworks, material culture, walking trails, gardens, and landscaping.</p>	<p>Tracks and evidence of occupation within Subject Area, may have subsurface deposits associated with these sites.</p> <p>Roads/tracks have been subject to erosion and re-grading and are unlikely to have associated deposits of significance.</p>	Moderate/Low
<b>Industry</b>	<p>The second half of the 20<sup>th</sup> Century presents evidence of power infrastructure routed through the Subject Area but is unlikely to be associated with an archaeological profile.</p>	<p>Powerlines, water management infrastructure and drains associated with previous Great Western Highway development.</p>	Very Low

## 5.2 Conclusions

There is low potential for subsurface archaeological deposits of significance to be located within the Subject Area. There is a likelihood for moderate grading of archaeological deposits to be associated with sites of former settlement; however, these are largely outside of the revised proposal footprint.

## 6 Assessment of archaeological significance

### 6.1 Methodology for assessing significance

The NSW Heritage Manual guideline, ‘Assessing Heritage Significance’ (NSW Heritage Office 2001), provides the following significance assessment and Statement of Significance framework. These guidelines incorporate the seven aspects of cultural heritage value identified in the *Australia ICOMOS Charter for Places of Cultural Significance*, The Burra Charter, 2013 into a framework currently accepted by the NSW Heritage Council.

#### 6.1.1 Criteria for assessing significance

The SHR criteria are outlined in *Assessing Heritage Significance* (Heritage Office 2000) and are summarised in Table 6. Using this criterion, a place can be assessed to be of local, state or no heritage significance.

**Table 6: Heritage Assessment Criteria**

Criteria	Value	Description
<b>Criterion A)</b>	Historical Significance	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>Criterion B)</b>	Associative significance	An item has strong or special association with the life or works of a person or group of persons, of important in NSW’s cultural or natural history (or the cultural or natural history of the local area).
<b>Criterion C)</b>	Aesthetic significance	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW (or the local area).
<b>Criterion D)</b>	Social significance	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.
<b>Criterion E)</b>	Research potential	An item has the 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)
<b>Criterion F)</b>	Rarity	An item possesses uncommon, rare or endangered aspects of the area’s cultural or natural history (or the cultural or natural history of the local area).
<b>Criterion G)</b>	Representativeness	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.)

#### 6.1.2 Grading of significance

A five-tier system detailing levels of significance is outlined in *Assessing Heritage Significance* (Heritage Office 2000). The grading system is used to identify the overall significance of items or sites being assessed. The levels of significance and their justification to be applied to items is listed in Table 7 below.



**Table 7: Gradings of significance**

Grading	Justification	Status
<b>Exceptional</b>	Rare or outstanding element directly contributing to an item’s local or State listing.	Fulfills criteria for local and/or State significance.
<b>High</b>	High degree of original fabric. Demonstrates a key element of the item’s significance. Alterations do not detract from significance.	Fulfills criteria for local and/or State significance.
<b>Moderate</b>	Altered or modified elements. Elements with little heritage value, but which contribute to the overall significance of the item.	Fulfills criteria for local and/or State significance.
<b>Little</b>	Alterations detract from significance. Difficult to interpret.	Does not fulfill criteria for local or State listing.
<b>Damaging</b>	Damaging to the item’s heritage significance.	Does not fulfill criteria for local or State listing.

## 6.2 Previous report assessment of significance for items

The following statements were identified for the items related to the Subject Area as presented by the previous SoHI report (Niche 2022).

### 6.2.1 General Subject Area

#### 6.2.1.1 The Great Western Highway

*The Great Western Highway is historically significant as the primary historical route west from Sydney, following the earliest European lines of exploration and migration over the Blue Mountains. The associated elements such as culverts, retaining, road cuttings and kerbing contribute to the significance of the road.*

#### 6.2.1.2 The Greater Blue Mountains Area- Additional Values (Nominated)

Refer Statement of Significance Table in Niche 2022:

*The Greater Blue Mountains Area (GBMA) is a deeply incised sandstone tableland that encompasses 1.03 million hectares of eucalypt-dominated landscape just inland from Sydney, Australia’s largest city, in south-eastern Australia. Spread across eight adjacent conservation reserves, it constitutes one of the largest and most intact tracts of protected bushland in Australia. It also supports an exceptional representation of the taxonomic, physiognomic and ecological diversity that eucalypts have developed: an outstanding illustration of the evolution of plant life. A number of rare and endemic taxa, including relict flora such as the Wollemi pine, also occur here. Ongoing research continues to reveal the rich scientific value of the area as more species are discovered.*

*The geology and geomorphology of the property, which includes 300 metre cliffs, slot canyons and waterfalls, provides the physical conditions and visual backdrop to support these outstanding biological values. The property includes large areas of accessible wilderness in close proximity to 4.5 million people. Its exceptional biodiversity values are complemented by numerous others, including indigenous and post-European-settlement cultural values, geodiversity, water production, wilderness, recreation and natural beauty.*

## 6.2.2 Section 5: Blackheath

### 6.2.2.1 Convergence of tracks

This area was found to have no historic value. *The Physical analysis has identified that this area has no historical significance.*

## 6.3 Assessment of significance for the Subject Area

### 6.3.1 Heritage criteria

Below is the assessment of the Subject Area using the guidelines *Assessing Significance for Historical Archaeological Sites and 'Relics'* (Heritage NSW 2009) and *Assessing Heritage Significance* (Heritage NSW 2001):

Heritage NSW Criteria	Assessment
<p>Criterion (a) an item is important in the course, or pattern, of NSW's cultural or natural history (or the local area)</p>	<p>The Subject Area is not associated with a specific historical period, nor is it representative of any one period, having undergone significant transformational processes over time.</p> <p>The Subject Area does not meet this criterion at state, local or national significance</p>
<p>Criterion (b) an item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history (or the local area)</p>	<p>The Subject Area is not associated with the life or works of a person or group of historical importance.</p> <p>The Subject Area does not meet this criterion at state, local or national significance</p>
<p>Criterion (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)</p>	<p>The Subject Area was largely cleared and does not retain original areas of natural vegetation. It is crossed by several access tracks and is not representative of the technical achievement of the Medlow or Greaves Creek Dams.</p> <p>The Subject Area does not meet this criterion at state, local or national significance</p>
<p>Criterion (d) an item has strong or special association with a particular community or cultural group in NSW for social, cultural, or spiritual reasons (or the local area)</p>	<p>The Subject Area does not retain an association with a particular group or community and is largely reserved for the catchment of water for the general community.</p> <p>The Subject Area does not meet this criterion at state, local or national significance</p>
<p>Criterion (e) an item has potential to yield information that will contribute to an</p>	<p>The Subject Area does contain elements of moderate archaeological potential within it, even though these are located away from the Revised Proposal Area, and the majority of the Subject</p>



Heritage NSW Criteria	Assessment
understanding of NSW's cultural or natural history (or the local area)	<p>Area is of very low grading for archaeological potential.</p> <p>The Subject Area meets this criterion at local level of significance</p>
Criterion (f) an item possesses uncommon, rare, or endangered aspects of NSW's cultural or natural history (or the local area)	<p>The Subject Area contains elements which are of a standard type and are not considered a rare or endangered structure or feature.</p> <p>The Subject Area does not meet this criterion at state, local or national significance</p>
Criterion (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 the local area)	<p>The Subject Area has undergone several stages of development, with demolition events associated with the latter phase of development as WaterNSW/National Parks managed lands. The Subject Area therefore does not retain a level of integrity.</p> <p>The Subject Area does not meet this criterion at state, local or national significance</p>

#### 6.4 Statement of cultural significance

The Subject Area is within the Greater Blue Mountains National Park and is therefore a Nationally listed heritage item (The Greater Blue Mountains Area) over much of its extent. However, it does not display the natural landscape features unique to this listing, but rather exhibits evidence of revegetation after historical clearing and rural residential development.

The Subject Area has elements of demolished structures and other indicators of potential archaeological deposits in some parts of its extent, and so there is potential for developing further understanding of the nature of settlement in early catchment areas near to Blackheath.

The Subject Area is otherwise unremarkable and is not associated with the other heritage items identified in the previous SoHI assessment.

## 7 Heritage impact assessment

This section provides the assessment of potential impacts to heritage value within the Subject Area based on the previous understanding from the previous SoHI, and the supplemental assessment of significance, physical inspection and historical context provided in this SoHI Addendum.

### 7.1 The proposed concept designs

The Revised Design Concept under assessment for this SoHI Addendum are identified in Table 8. These works are in addition to those assessed as part of the previous assessment for the REF.

**Table 8: Summary of Proposed Works**

Section	Area	Proposed Works
M2B	Section 5: Blackheath	Earthworks, roadwork and ancillary facilities to Connect the new eastbound carriageway back to the existing Great Western Highway just to the east of Tennyson Road
		Extending the new separate eastbound carriageway and the upgrade of the westbound carriageway to connect back to the existing Great Western Highway just to the east of Tennyson Road.
		Continuing the Active Transport Trail in the Medlow Bath to Blackheath section to Valley View Road, Blackheath. The Active Transport Trail would also serve as maintenance access to utilities, water quality basins, the national park (for approved access only).
		High voltage electricity, optical fibre and water main relocations between Medlow Bath and Blackheath have been extended and connected back to existing utility networks at Blackheath. This would involve the Re-stringing of conductors on existing power poles along a section of Evans Lookout Road

### 7.2 Quantifying heritage impact(s)

Based upon the discussion of impact(s) to heritage items identified in this Section, the impacts to these items can be quantified under three main categories: direct impacts, indirect impacts, and no impact. These kinds of impacts are dependent on the proposed impacts, nature of the heritage item and its associated curtilage.

#### 7.2.1 Assessed scale of heritage impact

**Table 9: Scale of heritage impact**

Level of Impact	Description of scale
<b>Nil</b>	The proposed works will not impact any elements of the item's significance, including archaeological deposits, built fabric, visual and aesthetic elements. The works have been assessed to not impact the significance of the item.
<b>Minor</b>	The proposed works will impact elements of the item's significance including archaeological deposits, built fabric, visual and aesthetic elements, however these impacts have been assessed to not affect the heritage significance of the item.
<b>Moderate</b>	The proposed works will impact defining elements of the item's significance including archaeological deposits, built fabric, visual and aesthetic elements. The proposed works may impact the integrity of the item's significance, however some defining elements of significance will be retained.



<b>High</b>	The proposed works will directly impact defining elements integral to the heritage significance of the item. The proposed works will permanently impact the integrity of the items, resulting in the permanent loss of heritage significance.
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### 7.2.2 No impact

This is where the project does not constitute a measurable direct or indirect impact to the heritage item.

### 7.2.3 Direct impacts

Direct impacts are where the completion of the proposed development will result in a physical loss or alteration to a heritage item which will impact the heritage value or significance of the place. Direct impacts can be divided into whole or partial impacts. Whole impacts essentially will result in the removal of a heritage item as a result of the development whereas partial impacts normally constitute impacts to a curtilage or partial removal of heritage values. For the purposes of this assessment direct impacts to heritage items have been placed into the following categories:

**Physical impact - whole:** where the development will have a whole impact on a heritage item resulting in the complete physical loss of significance attributed to the item.

**Physical impact - partial:** where the project will have a partial impact on an item which could result in the loss or reduction in heritage significance. The degree of impact through partial impacts is dependent on the nature and setting of a heritage item.

### 7.2.4 Indirect impacts

Indirect impacts to a heritage item relate to alterations to the environment or setting of a heritage item which will result in a loss of heritage value. This may include permanent or temporary visual, noise or vibration impacts caused during construction and after the completion of the development. Indirect impacts diminish the significance of an item through altering its relationship to its surroundings; this in turn impacts its ability to be appreciated for its historical, functional, or aesthetic values. For the purposes of this assessment impacts to heritage items have been placed into the following categories:

- Visual impact
- Noise impact
- Vibration impact

### 7.2.5 Cumulative impacts

Cumulative impacts relate to minimal or gradual impacts from a single or multiple developments upon heritage values. A cumulative impact would constitute a minimal impact being caused by the proposed development which over time may result in the partial or total loss of heritage value to the study area or associated heritage item. Cumulative impacts may need to be managed carefully over the prolonged period of time

## 7.3 Assessment of impacts and proposed mitigation

Table 10 below outlines all heritage impacts within the Subject Area. This table is designed to be supplemental to the table of potential impacts in the previous SoHI. Like the previous heritage impacts table, proposed works assessed to have a high impact have been indicated in red, proposed works assessed to have a moderate impact indicated in orange, proposed works assessed to have a minor impact indicated in yellow and works assessed to have no impact indicated in green. Proposed mitigation measures are outlined according to the heritage item and impact.

While the item Greater Blue Mountains Heritage Area- Additional Values is a nominated heritage item only, it has been assessed for impact in this section to follow best practice.



**Table 10: Summary of Heritage Items and Proposed Works**

Section		Item	Summary of works	Direct Impact Y/N	Indirect Impact Y/N	Nature of Impact	Level of Impact	Proposed Mitigation Measures
K2M M2B	General Subject Area	The Great Western Highway	The proposed works will involve duplication and modification of the Great Western Highway between Katoomba to Medlow Bath, and Medlow Bath to Blackheath.	Y	-	Physical Impact-partial	Minor	Photographic Archival Recording of the current state of the highway is undertaken prior to works.
M2B	Section 3: Medlow Bath to Blackheath	Greater Blue Mountains Area- Additional Values	The proposed works will involve removal of vegetation along the existing road verge and along the peripheries of the Greater Blue Mountains Area- Additional Values curtilage and construction of drainage basins in association with the road widening.	Y	-	Physical Impact-partial	Minor	Vegetation removal within the reserve is reduced to be as little and as unobtrusive as possible.
	Section 5: Blackheath	Archaeological Potential within the Subject Area	The proposed works will involve trenching and modification to subsurface geology within the Subject Area, although these works are mainly within areas which already have paths/trails associated. The areas where archaeological potential has been identified are not near to the proposed works.	Y	-	Physical Impacts to general lands/ potential impacts to areas where potential subsurface deposits have been identified is unlikely.	Minor	Use of unexpected finds protocol for works within the Subject Area (Revised Proposal Area)
Key:		High Impact	Moderate Impact	Minor Impact		No Impact		

### 7.3.1 Guideline questions

The Heritage Council guidelines for preparing *Statements of Heritage Impacts* pose a range of questions for consideration which must be answered when assessing impacts to the heritage values of a heritage item. The following Consideration of Assessment Questions apply to the identified heritage items and potential archaeological deposits within the Subject Area – these are supplemental and do not replace the considerations of these questions in the previous SoHI (Niche 2022).

**Table 11: Impact Assessment – New development adjacent to a heritage item**

Considerations	Response
Why is the new development required to be adjacent to a heritage item?	The proposed alignment follows the existing Great Western Highway Road Alignment, allowing for duplication within and adjacent to an existing road corridor.
How does the new development affect views to, and from, the heritage item? What has been done to minimise negative effects?	An assessment of views to and from heritage items has been undertaken in this document. The assessment has found that the proposed works are unlikely to affect the views, as the proposed works will largely be contained within the existing corridor.  The replacement of power lines on Evans Lookout Road is unlikely to impact heritage values.
Is the development sited on any known, or potentially significant archaeological deposits? If so, have alternative sites been considered? Why were they rejected?	Yes, the proposed works have an unlikely chance to impact potential archaeological deposits associated with the former settlement within the Subject Area.  The alignment proposed for the Active Transport Trail extension is the most appropriate available – and follows as much as possible existing paths and trails to avoid any impacts within this area.
Will the additions visually dominate the heritage item? How has this been minimised?	Generally, the proposed works will be contained within an existing corridor and accordingly will not visually dominate any heritage items more than the current alignment.
Will the public, and users of the item, still be able to view and appreciate its significance?	Yes. The proposed road alignment has been generally designed to complement the heritage significance of the Subject Area by following the original alignment and creating spaces for interpretation and community access, as with the Active Transport Trail.

## 7.4 Statements of heritage impact

As a result of this impact assessment, a summary of all potential heritage impacts to items within or adjacent to the Subject Area is provided in Table 12. A Statement of Heritage Impact for each item is also outlined in Table 12.



**Table 12: Statement of Heritage Impacts**

Section	Area	Item	Statement of Heritage Impact
<b>K2M</b> <b>M2B</b>	<b>General Subject Area</b>	The Great Western Highway	<p>The proposed works would involve road duplication and ancillary works in direct relation to the existing road corridor. The proposed works would reduce the overall significance of the item.</p> <p>The potential heritage impact of this item is assessed to be minor.</p>
<b>M2B</b>	<b>Area 3: Medlow Bath to Blackheath</b>	Greater Blue Mountains Area- Additional Values	<p>The proposed works would involve vegetation clearance, road widening and construction of associated drainage basins along the western periphery of the Greater Blue Mountains Area- Additional Values area.</p> <p>The proposed works would involve the removal of established native trees that contribute to the overall significance of the heritage item however the loss of these elements will not reduce the overall significance of the item.</p> <p>The potential heritage impact of this item is assessed to be minor.</p>
	<b>Area 5: Blackheath</b>	Archaeological Potential within the Subject Area	<p>The proposed works will involve trenching and modification to subsurface geology within the Subject Area, although these works are mainly within areas which already have paths/trails associated. The areas where archaeological potential has been identified are not near to the proposed works.</p> <p>Physical Impacts to general lands/ potential impacts to areas where potential subsurface deposits have been identified is unlikely</p> <p>The potential heritage impact to this item is assessed to be minor.</p>

## 8 Conclusions and recommendations

### 8.1 Conclusions

This SOHI Addendum has found that the Subject Area (the area of the revised Proposal Design) contains no heritage items but is within a nominated heritage item of National significance. The Subject Area contains areas which have potential for archaeological deposits, however these are removed from the revised design footprint. The heritage values within the Subject Area are directly linked to the identified local historical themes of:

- Early Exploration
- The Western Road
- Recreation, Health and Tourism
- Industry

This assessment has found that the Subject Area has the potential to encompass archaeological evidence relating to these themes. The extent, nature and integrity of the various archaeological profiles cannot be accurately defined from the existing evidence, although is considered to be associated with areas of previous settlement within the Subject Area. The majority of the Subject Area has very low potential for archaeological deposits outside of these identified settlement patterns.

The proposed works have been assessed to have minor levels of impact across the Subject Area (not including the area previously assessed in the SoHI undertaken for this project (Niche 2022). It is considered that the Subject Area development would have an overall minor impact on heritage values present.

### 8.2 Recommendations

Based on the assessment provided in this SoHI Addendum, the following additional recommendations have been developed. Please note that these do not subtract from the existing recommendations for this project and are supplemental in nature only (See Table 13).

**Table 13: Proposed recommendations for scope of works**

Section	Location	Number	Recommendation
M2B	Section 5: Blackheath	19.	Works can proceed with caution in this section (The Subject Area), including the Active Transport Trail Extension and the re-stringing of conductors along Evans Lookout Road.
		20.	All workers should be inducted to gain an understanding of the heritage significance of the Subject Area.
		21.	If an unexpected relics or potential relics (unexpected finds) are uncovered during works, the Transport (2016) <i>Unexpected Heritage Finds Guideline</i> is followed.
		22.	Removal of vegetation within the Greater Blue Mountains Area- Additional Values areas is to be minimised as far as practicable.
		23.	That the works within this area continue to avoid the identified areas of previous settlement at BH001, BH002 and BH005. If design changes force these areas closer to the proposed works, potential heritage impacts to these areas should be re-assessed.



## References

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- Australia ICOMOS (2013). *The Burra Charter, the Australia ICOMOS Charter for Places of Cultural Significance*, ICOMOS Australia.
- Commonwealth of Australia (1999). *Environment Protection and Biodiversity Act (EPBC Act) 1999*, Canberra, Australia.
- Croft and Associates (1985). *Blue Mountains Heritage Study*. Blue Mountains City Council.
- Department of Planning, Industry and Environment. *Medlow Bath Soil Landscape*. Retrieved June 28 from <https://www.environment.nsw.gov.au/Salis5app/resources/spade/reports/8930mb.pdf>
- Department of Planning, Industry and Environment. *Wollangambe Soil Landscape*. Retrieved June 28 from <https://www.environment.nsw.gov.au/Salis5app/resources/spade/reports/8930mb.pdf>
- Heritage NSW (2009) *Archaeology Management Plan*
- Heritage NSW (2006) *Historical Archaeology Code of Practice*
- Heritage Office (former) (2001). *Assessing Heritage Significance*. Heritage Council of NSW.
- Heritage Office and Department of Urban Affairs & Planning (former), (1996 revised 2002). *Statements of Heritage Impact*.
- Kibblewhitea, M; Tóthb, G and Hermannb, T (2015). Predicting the preservation of cultural artefacts and buried materials in soil. *Science of the Total Environment* 529, 249–263.
- Lavelle, S. (2003). A tree and a legend: the making of past and place in the Blue Mountains, New South Wales. *Journal of the Royal Australian Historical Society*, 89(1), 1–25. <https://search.informit-org.ezproxy.sl.nsw.gov.au/doi/10.3316/ielapa.200306258>
- Lesson, R. P., Journal, in Havard, O. and Havard, W. L. (trans.), ‘*Some early French visitors to the Blue Mountains and Bathurst*’, *Royal Australian Historical Society Journal and Proceedings*, 1938, vol. xxiv, part iv, pp. 245–290
- Museum of London Archaeology Services (MoLAS) (1996) *Archaeology Site Manual*.
- Niche 2022. *Statement of Heritage Impact: Great Western Highway East, Katoomba to Medlow Bath (K2M), Medlow Bath to Blackheath (M2B)*. Report for Aurecon Group and Transport for NSW published April 2022.
- NSW State Government (1974). *National Parks and Wildlife Act (NPW Act) 1974*, NSW.
- NSW State Government (1977). *NSW Heritage Act 1977 (Heritage Act) 1974*, NSW.
- NSW State Government (1979)., *Environmental Planning and Assessment Act (EP&A Act) 1979*, NSW.
- NSW State Government (2007). *State Environmental Planning Policy (Mining) 2007 (Amended 2015)*, NSW.
- OEH Office for Environment and Heritage 2021, eSpade viewer
- TfNSW (2020) *Guideline for landscape character and visual impact assessment*.

RPS (2021) *Great Western Highway Medlow Bath Statement of Heritage Impact*. Report for Transport for NSW.

Smith, J., Beaver, D. & Betteridge, C. 2004, *Tracks into History Conservation Management Plan for Walking Tracks of State Heritage Significance in the Blue Mountains*, NSW National Parks and Wildlife Service

Spackman Mossop Michael (2021). *Great Western Highway Upgrade East: Katoomba to Blackheath Urban, Design Concept, Landscape Character and Visual Impact Assessment Report*.

Stockton, E., & Holland, W. (1974). *Cultural Sites and Their Environment in the Blue Mountains*. *Archaeology & Physical Anthropology in Oceania*, 9(1), 36-65. Retrieved June 28, 2021, from <http://www.jstor.org/stable/40386215>

Transport (2015) *Roads and Maritime Services Cultural Heritage Guidelines*.

Transport (2020) *Guideline for landscape character and visual impact assessment*.

UNESCO (2008) *Operational Guidelines for the Implementation of the World Heritage Convention*. United Nations Educational, Scientific and Cultural Organisation: Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage.

Williams. S. (2000) *Subsurface investigations using Ground Penetrating Radar to identify possible grave locations in a cemetery on Pulpit Hill*. Commissioned for RTA Technical Services

New South Wales. Department of Lands & New South Wales. Government Tourist Bureau. 1909, *Tourists' sketch map of Katoomba showing routes to Leura Falls, Katoomba Falls, Nelly's Glen, Minni Ha Ha Falls etc, etc* Compiled drawn & printed at the Dept. of Lands : & Issued by the N.S.W. Immigration & Tourist Bureau, Sydney viewed 30 June 2021 <http://nla.gov.au/nla.obj-231839988>



## Contact Us

**Niche Environment and Heritage**  
02 9630 5658  
info@niche-eh.com

NSW Head Office – Sydney  
PO Box 2443 North Parramatta  
NSW 1750 Australia

QLD Head Office – Brisbane  
PO Box 540 Sandgate  
QLD 4017 Australia

Sydney  
Brisbane  
Cairns  
Port Macquarie  
Illawarra  
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## Our services

### Ecology and biodiversity

Terrestrial  
Freshwater  
Marine and coastal  
Research and monitoring  
Wildlife Schools and training

### Heritage management

Aboriginal heritage  
Historical heritage  
Conservation management  
Community consultation  
Archaeological, built and landscape values

### Environmental management and approvals

Impact assessments  
Development and activity approvals  
Rehabilitation  
Stakeholder consultation and facilitation  
Project management

### Environmental offsetting

Offset strategy and assessment (NSW, QLD, Commonwealth)  
Accredited BAM assessors (NSW)  
Biodiversity Stewardship Site Agreements (NSW)  
Offset site establishment and management  
Offset brokerage  
Advanced Offset establishment (QLD)