

The background is a solid blue color. On the right side, there is a large, stylized letter 'K' composed of several overlapping geometric shapes in various shades of blue. A horizontal line with a circular dot at its right end is positioned near the top of the page. Another horizontal line with a circular dot at its left end is positioned near the bottom of the page.

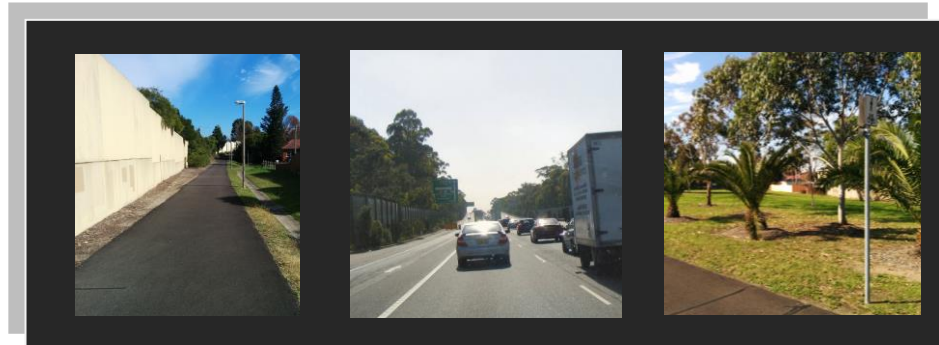
# Appendix K

# WestConnex - King Georges Road: M5 Interchange Upgrade. Environmental Impact Statement

## Non-Aboriginal Heritage Assessment and Statement of Heritage Impacts

Canterbury and Hurstville Local Government Area  
Report to the WestConnex Delivery Authority

October 2014



Artefact Heritage  
ABN 73 144 973 526  
Lvl 1/716 New South Head Rd  
Rose Bay 2029  
PO BOX 772 Rose Bay  
NSW Australia 2029  
+61 2 9025 3958  
[office@artefact.net.au](mailto:office@artefact.net.au)  
[www.artefact.net.au](http://www.artefact.net.au)



## Document history and status

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
Draft	20/06/2014	Sandra Wallace	Sandra Wallace	23 June 2014	Internal review
Draft	23/06/2014	Damian Williams	Damian Williams	25 June 2014	Review of draft report
Final	08/07/2014	NA	NA	NA	Final report with updated edits
Final	2/10/2014	Sandra Wallace	Sandra Wallace	2 October 2014	DPE comments addressed

<b>Printed:</b>	NA
<b>Last saved:</b>	2 October 2014 04:39 PM
<b>File name:</b>	WestConnex SoHI
<b>Author:</b>	Alexander Timms/Sandra Wallace
<b>Project manager:</b>	Sandra Wallace
<b>Name of organisation:</b>	Artefact Heritage
<b>Name of project:</b>	WestConnex – King Georges Road interchange upgrade
<b>Name of document:</b>	Non-Indigenous Heritage Assessment and Statement of Heritage Impacts
<b>Document version:</b>	Final



## Executive summary

---

Artefact Heritage was commissioned by WestConnex Delivery Authority (WDA), to prepare a non-Indigenous heritage assessment for the King Georges Road M5 interchange upgrade project (the project) which forms part of the WestConnex scheme. The project has been determined to have a potentially significant impact on the environment and therefore by virtue of Part 5.1 of the (NSW) *Environmental Planning and Assessment Act 1979* (EP&A Act) is classified as 'State Significant Infrastructure'. Approval from Minister for Planning and Environment is required and will be based on the assessment of an Environmental Impact Statement (EIS) for the project. This heritage assessment has been prepared to support the EIS.

The project would tie into the completed M5 South West widening three lane dual carriageway. Works to the west facing ramps are required to accommodate the future WestConnex M5 configuration. The study area therefore includes the section of the M5 Motorway between Karne Street on the west to and Kooemba Road on the east, in the suburb of Beverly Hills.

Two heritage listed items are located in the immediate vicinity of the study area. The two items are listed on the Register of the National Estate as indicative places on the non-statutory archive.

### Summary statement of heritage impacts

The proposed works would largely be confined to the existing M5 Motorway corridor or its immediate environs. This assessment has found that there will be no direct heritage impacts as a result of the proposal. Any removal of mature trees adjacent to the RNE listed Pallamanna Parade Urban Conservation Area and Welfare Avenue Urban Conservation Area may have minor visual impacts to the setting of these items. No other indirect impacts to listed or unlisted heritage items are proposed.

There will be no Impacts on listed or unlisted heritage items as a result of vibration, demolition, altered historical arrangements, access, and architectural noise treatments.

Where works are proposed outside the existing road corridor they are largely limited to areas that have already been subject to significant disturbance through the construction of the motorway from the 1980s onwards. The project is unlikely to have any impacts on intact archaeological material.

### Recommendations

On the basis of background research and a site inspection it was recommended that:

- There are no constraints to the proposal in regard to non-Indigenous heritage, and no further investigation of non-Indigenous heritage will be required prior to development.



- If any unanticipated archaeological deposits are identified within the study area during construction, works should cease in the immediate area and the Roads and Maritime *Unexpected Archaeological Finds Procedure 2012* should be followed.



# Contents

---

Executive summary.....	ii
Contents.....	iv
Figures.....	vi
Tables.....	vi
1.0 Introduction.....	1
1.1 Background.....	1
1.2 The project description.....	1
1.3 The study area.....	6
1.4 Limitations and constraints.....	9
1.5 Report authorship.....	9
2.0 Legislative requirements.....	10
2.1 Approvals process.....	10
2.2 Relevant legislation.....	11
3.0 Methodology.....	13
3.1 Statutory heritage listings.....	15
3.1.1 World Heritage List.....	15
3.1.2 The State Heritage Register.....	15
3.1.3 Section s170 Registers.....	15
3.1.4 Local planning instruments.....	15
3.2.1 Non-statutory heritage listings.....	15
3.2.1 Register of the National Trust.....	15
3.2.2 Register of the National Estate.....	15
3.3 Summary of heritage items.....	16
4.0 Historical context.....	17
4.1 European settlement and growth.....	17
5.0 Site Inspection.....	19
5.1 Background.....	19



5.2	Site Inspection.....	19
6.0	Assessment of Significance .....	21
6.1	Fulfilment of the NSW heritage assessment criteria .....	21
6.2	Statement of heritage significance of the study area .....	22
7.0	Archaeological potential .....	23
7.1	Discussion of archaeological potential .....	23
8.0	Overall Statement of Heritage Impact.....	24
9.0	Conclusions and Recommendations .....	26
10.0	References .....	27



## Figures

---

Figure 1 – The study area .....	7
Figure 2 – The proposal .....	8
Figure 3 - Study Area over 1943 Aerial, source imagery from NSW Globe .....	18
Figure 4: View to the East, showing cuttings to construct access tracks within the road reserve. ....	19
Figure 5: View to the West, showing pedestrian paths, road and residential areas within study area. ....	19
Figure 6: View to the West, artificial drainage line. ....	20
Figure 7: View to the East, signage showing presence of subsurface infrastructure. ....	20

## Tables

---

Table 1: Summary of the fulfillment of the Secretary’s Requirements.....	10
Table 2: LGAs within the study area and respective local planning instruments.....	12
Table 3: NSW heritage assessment criteria.....	14
Table 4: Summary of heritage items in the vicinity of the study area .....	16
Table 5: Consideration against NSW heritage assessment criteria.....	21



## 1.0 Introduction

---

### 1.1 Background

Artefact Heritage was commissioned by WestConnex Delivery Authority (WDA), to prepare a non-Indigenous heritage assessment for the upgrade of the M5 Motorway interchange at King Georges Road (the project) which forms part of the WestConnex scheme (Figure 1 & 2). The project is being assessed under Part 5.1 of the (NSW) *Environmental Planning and Assessment Act 1979* (EP&A Act), and this document will form part of the Environmental Impact Statement (EIS) for the project.

The aims of this study were to assess the impacts of the project on items of heritage significance, outline opportunities and constraints on the proposed development regarding non-Indigenous heritage, and recommend if further action is required to fulfil statutory heritage obligations.

### 1.2 The project description

The project would tie into the completed M5 South West Motorway Widening project in the west. Minor treatment would be required to the existing M5 dual carriageways to retain two through lanes in each direction and accommodate the possible future construction of WestConnex M5. The eastern end of the project would tie into the existing M5 East Motorway, near Kooemba Road, Beverly Hills.

To the west of King Georges Road, work would be required to the eastbound off-ramp and the westbound on-ramp to make provision for the possible future construction of the WestConnex M5 project and tie in with the completed M5 South West Motorway widening project respectively.

To the east of King Georges Road the eastbound on-ramp would be extended by shifting the merge further to the east and a new bridge span would be constructed to the north of Cooloongatta Road overbridge. Similarly the westbound off-ramp diverge would be shifted further to the east and a new bridge span would be constructed to the south of Cooloongatta Road overbridge.

The project description presented in this EIS is based on the WestConnex Delivery Authority (WDA) concept design. That design would be refined during detailed design. It may also be modified in response to any submissions received following the exhibition of the environmental impact statement or to minimise environmental impacts. The final design of the project that is built could therefore vary from its description in this chapter.

The M5 Motorway was constructed in three stages, M5 South West in 1992 and 1996 and the M5 East in 2001. The parameters utilised in developing the design for the project were guided by the criteria applied for development of the existing motorway. The concept design for the project has been developed to:



- Utilise the space within the motorway corridor provided as a result of the original design.
- Deliver a design that meets the project objectives.
- Consider community and environmental constraints.

The project has been designed generally in accordance with Australian Standards, Austroads Design Standards, Guides and Codes and the Roads and Maritime supplements. Other parameters applied to the design include:

- Existing roads and structures would not be modified to meet current standards.
- The design speed for the main carriageways is generally 100 km/h.
- Lane widths, shoulder widths and crossfall would be variable.

### **West facing ramps**

In the west the project would tie into the completed M5 South West Widening three lane dual carriageway. In addition to tie-in with the M5 South West Widening project, work to the west facing ramps to / from King Georges Road are required to integrate the project with any future WestConnex M5 configuration.

The diverge for the eastbound off-ramp to King Georges Road would be lengthened. This would require widening of the eastbound carriageway from above 300 m west of Penshurst Road. The nearside eastbound lane of the motorway would exit to King Georges Road and two lanes would continue eastbound under King Georges Road. The layout of the eastbound off-ramp would be reconfigured to improve vehicle storage

The M5 South West Widening project provides for three lanes in each direction. The westbound motorway carriageway is two lanes in each direction under King Georges Road and the westbound on-ramp from King Georges Road would become the third motorway lane.

Any design configuration for WestConnex M5 would require an increase in the number of lanes passing underneath King Georges Road from two to three. Work to the westbound off-ramp and widening of the bridge over Penshurst Road is proposed as part of this project in order to accommodate all future WestConnex M5 configurations.

### **East facing ramps**

In the east, work to the east facing ramps to / from King Georges Road are required to meet the project objectives and to integrate the project with any future WestConnex M5 configuration.



The eastbound on-ramp from King Georges Road would be extended by moving the merge about 160 m further to the east. The on-ramp would be realigned and widened, merging to a single lane prior to passing below Cooloongatta Road overbridge via a new bridge span at its northern end.

The length of the westbound off-ramp to King Georges Road would be increased by moving the diverge of the off-ramp with the motorway about 190 m further to the east. The off-ramp would be realigned passing below Cooloongatta Road overbridge via a new bridge span at its southern end.

### **Road Surface**

At opening the project would tie into the existing M5 East Motorway two lane dual carriageway. Work to widen the motorway would include the provision of motorway 'stubs' that would accommodate any design configuration for WestConnex M5 at the eastern extent of the project. Where road widening is required, new road surface would be constructed to match the M5 South West and M5 East motorway surfaces.

Within the project extent, the motorway would need to be re-surfaced. This work may include milling and re-sheeting or just re-sheeting of the full length and width of the road surface prior to line marking. The finished surface would be consistent across all project elements, including for the motorway carriageways and the on- and off-ramps. The road surface material is subject to further investigation and detailed design, however it is likely that an open grade asphalt would be used.

### **Bridges**

Work to the west facing ramps (eastbound off-ramp and westbound on-ramp) would extend west of Penshurst Road, and therefore require work to the bridge over Penshurst Road. Widening of the existing structure would be required to its north and south.

Additional bridge spans would be required on both the northern and southern ends of the Cooloongatta Road overbridge to accommodate the east facing ramp configurations.

### **Structures**

The alignment of the west facing ramps would require the introduction of new cut retaining walls on the outside of the ramps to provide maintenance bay access to infrastructure such as Variable Speed Limit Signs (VSLs) that would be required by WestConnex M5.

Fill retaining walls would be required to support the widened motorway east and west of the bridge over Penshurst Road.

New cut retaining walls would be required to support the existing and / or realigned shared path and noise walls above motorway ramp level to the north and south of the motorway.\



### **Noise attenuation**

Existing noise walls on both sides of the motorway may require adjustment, relocation and/or extension. The indicative heights and extents of noise walls would be reviewed during the detailed design process, however it is proposed that:

- Existing noise walls to the north and south of the motorway would be replaced immediately east and west of the bridge over Penshurst Road to suit the widened bridge and motorway.
- The existing noise mound south of the motorway between Kooemba Road and Cooloongatta Road requires removal and may be replaced with a noise wall or a combined noise mound / noise wall.
- The existing noise walls between Kirrang Street and Cooloongatta Road on the north side of the motorway require realignment to accommodate the proposed retaining wall and eastbound on-ramp alignment.
- The existing noise walls between King Georges Road and Cooloongatta Road, north and south of the motorway, may require upgrade to meet noise design guidelines.

### **Drainage Work**

Some adjustments and extensions to motorway cross drainage would be required to accommodate the project. New surface and subsurface drainage and / or improvements to the existing system would be required in areas where the motorway would be widened.

### **Pedestrian and Cyclist Facilities**

Cyclists can currently use the M5 Motorway for travel in both directions west of Bexley Road. Shared paths are also available north and south of the motorway east of King Georges Road. Construction and operation of the project would not allow cyclists to use the motorway shoulder east of King Georges Road. This permanent change would be implemented at the start of construction.

Eastbound cyclists would use the shoulder on the upgraded eastbound off-ramp and signalised crossing facilities at the King Georges Road intersection to access the shared path facility located to the east of King Georges Road. Westbound cyclists would not be allowed to access the motorway at Bexley Road and would be required to use the existing shared path and would be able to access the motorway at King Georges Road via the westbound on-ramp.

Some realignment of the existing shared path network would be required between Cooloongatta Road and Beverly Park to accommodate the motorway widening work. Minor work may also be required between Bexley Road and King Georges Road, and is subject to further investigation.



### **Operational Management Control Systems**

The M5 East Motorway currently has Operational Management Control Systems to support management of the motorway. The existing system would be upgraded to make provision for the future WestConnex M5 configuration including relocation of Variable Speed Limit Signs (VSLs) and Variable Message Signs (VMS).

### **Emergency facilities**

While moving slightly to accommodate widening of the motorway, breakdown bays between King Georges Road and Cooloongatta Road would be retained generally in their current location. The breakdown bays opposite Kooemba Street would not be affected by the work.

In addition to the breakdown bays referenced above, maintenance bays that will be introduced to provide access to additional operational management control infrastructure can also be utilised as breakdown bays.

There are no emergency vehicle crossovers within the project area.

### **Road furniture, street lighting and signage**

Existing kerbs, barriers and fencing would be upgraded where required to accommodate any future WestConnex M5 configuration. Existing static signage would be relocated to accommodate the project footprint and would also be positioned to make provision for WestConnex M5.

Lighting at the interchange, including on- and off-ramps currently extends from Penshurst Road to Kirrang Street and at other selected locations along the motorway corridor. Any new lighting or modifications to existing lighting would be designed in accordance with *AS4282-1997 Control of the Obtrusive Effects of Outdoor Lighting*.

### **Other Infrastructure**

Provision for tolling infrastructure as part of WestConnex M5 (ie footings and base plates) forms part of this project, however the installation of toll gantries or collection of tolls from road users does not form part of this project.

### **Utility adjustments and protection**

Telecommunications, gas and sewer lines cross the M5 Motorway within the project area. Utility modifications and/or protection would be required as part of the project..

### **Ancillary facilities**



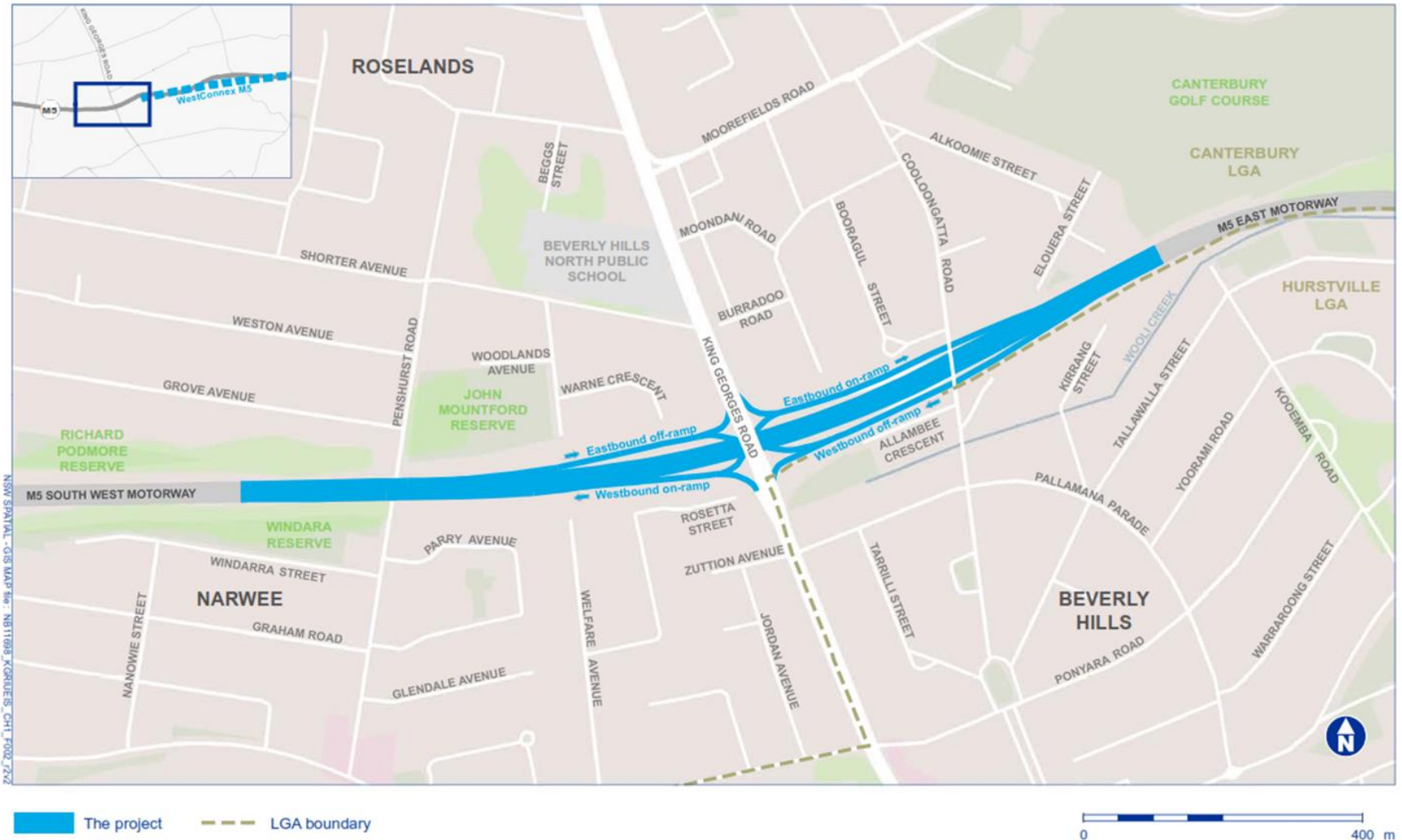
Temporary work areas such as construction site compounds, stockpiles and storage areas would be established at locations inside and outside the existing motorway corridor.

### 1.3 The study area

The 'study area' for this assessment is defined as the study area including the works footprint as provided by the WDA (Figure 1 & Figure 2). The databases of various heritage registers were searched as part of this assessment (outlined in section 3.0). The database 'search area' for this assessment consisted of the study area boundary, with a surrounding buffer of 100 metres. Any heritage item wholly or partially within study area was assessed in this document. The site inspection area for the project which was inspected by Artefact Heritage was defined by the study area boundaries.



Figure 1 – The study area



Information on any changes to noise walls, retaining walls, drainage features and temporary construction facilities is subject to detailed design



Figure 2 – The proposal





## 1.4 Limitations and constraints

This report is a non-Indigenous assessment only and does not address Indigenous heritage matters.

During the site inspection, a number of fenced areas were not able to be accessed along the road reserve on the western side of the study area. These areas are related to current construction activities associated with the widening of the M5 South West Motorway. The areas were viewed from the fence line during the site inspection. It appeared that all of these areas had been subject to previous ground disturbance by the construction of maintenance access tracks and drainage lines and were unlikely to contain items of non-Indigenous heritage significance.

## 1.5 Report authorship

Archaeologist Alexander Timms wrote this report with management input from Principal Archaeologist Dr Sandra Wallace. The project was directed by Dr Sandra Wallace and the site inspection undertaken by Alexander Timms and Stacey Kennedy on 19 June 2014.



## 2.0 Legislative requirements

### 2.1 Approvals process

The project has been determined to have a potentially significant impact on the environment and therefore by virtue of Part 5.1 of the EP&A Act is classified as 'State Significant Infrastructure' (SSI). Approval from Minister for Planning and Environment is required and will be based on the assessment of an EIS for the project. This heritage assessment has been prepared to support the EIS. As such the Secretary of (NSW) Dept. Planning and Environment has prepared Secretary's Environmental Assessment Requirements (SEARs) which need to be addressed in the EIS. The SEARs specify that 'direct and/or indirect impacts to state and local heritage' should be assessed. The particular aspects of this assessment to be addressed according to the SEARs, and where they are addressed in this report are listed in Table 1.

The SEARs state that impacts to State and local historic heritage (including heritage items and archaeology) should be assessed. The SEARs for this project are outlined in Table 1. However, it is important to note that no impacts to State or locally significant historic heritage items were identified within this assessment.

**Table 1: Summary of the fulfillment of the Secretary's Requirements.**

SEARs for the assessment of Non-Indigenous heritage within the study area	Fulfilment of requirements
outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the guidelines in the <i>NSW Heritage Manual</i> (Heritage Office and Department of Urban Affairs and Planning 1996),	Section 9.0
a statement of heritage impact for all heritage items/areas to be impacted (including significance assessment), and	Section 6.0 and Section 8.0
consider the impacts from vibration, demolition, altered historical arrangements and access, and architectural noise treatment.	Section 8.0



## 2.2 Relevant legislation

There are several items of State legislation that are relevant to the current study. A summary of these Acts and the implications for the proposed development follow.

### (NSW) Heritage Act 1977

The *NSW Heritage Act 1977* (the Heritage Act) is the primary piece of State legislation affording protection to items of environmental heritage (natural and cultural) in New South Wales. Under the Heritage Act, 'items of environmental heritage' include places, buildings, works, relics, moveable objects and precincts identified as significant based on historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic values. State significant items are listed on the NSW State Heritage Register (SHR) and are given protection under the Heritage Act against any activities that may damage an item or affect its heritage significance.

### The State Heritage Register

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

### Section 170 Registers

The Heritage Act requires all government agencies to identify and manage heritage assets in their ownership and control. Under Section 170 of the Heritage Act, government agencies must establish and keep a register which includes all items of environmental heritage listed on the SHR, an environmental planning instrument or which may be subject to an interim heritage order that are owned, occupied or managed by that government body.

### (NSW) Environmental Planning and Assessment Act 1979

The EP&A Act establishes the framework for cultural heritage values to be formally assessed in the land use planning and development consent process. The EP&A Act requires that environmental impacts are considered before land development; this includes impacts on cultural heritage items and places as well as archaeological sites and deposits. The EP&A Act also requires that local governments prepare planning instruments (such as Local Environmental Plans (LEPs) and Development Control Plans (DCPs)) in accordance with the EP&A Act to provide guidance on the level of environmental assessment required. The current study area falls within the boundaries of two LGAs and is subject to their LEPs and DCPs, as shown in Table 2.



**Table 2: LGAs within the study area and respective local planning instruments**

LGA	LEP	DCP
Canterbury	Canterbury LEP 2012	Canterbury DCP 2012
Hurstville	Hurstville LEP 2012	Hurstville DCP 2012

The project will be assessed under Part 5.1 of the EP&A Act, which establishes an assessment and approval regime for SSI. Part 5.1 applies to development that is declared to be SSI by a State Environmental Planning Policy (SEPP). Section 115ZG of the EP&A Act specifies that approvals or permits under Part 4 or Section 139 of the Heritage Act are not required for approved SSI. However, approval from the Minister of Planning and Environment is required and an EIS must be submitted. The EIS must address the impact of the project on heritage items, through the framework of existing heritage legislation including the Heritage Act, and the local LEPs and DCPs.

#### State and Regional Development (SRD) SEPP

The SRD SEPP identifies development that is State significant infrastructure.

Schedule 3 Clause 1 of SRD SEPP provides that the following general public authority activities are SSI:

‘Infrastructure or other development that (but for Part 5.1 of the Act and within the meaning of Part 5 of the Act) would be an activity for which the proponent is also the determining authority and would, in the opinion of the proponent, require an environmental impact statement to be obtained under Part 5 of the Act.’

As outlined in section 2.1, the King Georges Road M5 interchange upgrade was considered to be within the category of SSI. As such, the WDA must prepare an EIS before the project can proceed, pursuant to Section 112(1) of the EP&A Act.

#### Implications of legislation

The project is classified as SSI under Part 5.1 of the EP&A Act, and therefore approvals or permits under the Heritage Act are not required. However, an EIS is required to be prepared and submitted for assessment by the Minister for Planning and Environment. The EIS must address the impact of the project on heritage items in accordance with the SEARs, considering the framework of heritage legislation, including the Heritage Act and the Canterbury and Hurstville LEPs. WDA is to demonstrate that an assessment of the significance of heritage-listed sites, including considerations of fabric, settings, and views, has been undertaken.



## 3.0 Methodology

---

Statutory registers provide legal protection for heritage items. In NSW the Heritage Act and the EP&A Act provide legal protection. The SHR, the s170 registers, and heritage schedules of LEPs are statutory listings. Places on the National Heritage List are protected under the (Commonwealth) *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In addition, a number of the heritage items are also listed on non-statutory heritage registers. Listings on these registers do not have any statutory implications, but further demonstrate the recognised heritage value of the items.

Previously identified heritage items in the study area were located through a search of heritage registers. This search was undertaken on the 10 June 2014 and included the following heritage registers:

- World Heritage List – The World Heritage List is maintained by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and includes items of international heritage significance.
- National Heritage List (Formerly the Register of the National Estate) - The National Heritage List has been established to list places of outstanding heritage significance to Australia. It includes natural, historic and Indigenous places.
- State Heritage Register - The SHR is a list of places and objects of particular importance to the people of NSW and is administered by the Heritage Division of Planning and Infrastructure. The register lists a diverse range of over 1500 items, in both private and public ownership. To be listed, an item must be deemed to be of heritage significance for the whole of NSW.
- Section 170 Registers – Section 170 (s170) Registers are created by government bodies and are registers of all heritage listed items that are owned, occupied or managed by those bodies.
- Canterbury LEP 2012 – The Canterbury LEP 2012 includes a schedule and maps of local heritage items within the LGA.
- Hurstville LEP 2012 – The Hurstville LEP 2011 includes a schedule and maps of local heritage items within the LGA.
- Register of the National Estate - The Register of the National Estate (RNE) is a list of natural, Indigenous and historic heritage places throughout Australia. It was originally established under the *Australian Heritage Commission Act 1975*. Under that Act, the Australian Heritage Commission entered more than 13,000 places in the register. Following amendments to the (Commonwealth) *Australian Heritage Council Act 2003*, the RNE was frozen on 19 February 2007, and ceased to be a



statutory register in February 2012. The RNE is now maintained on a non-statutory basis as a publicly available archive and educational resource.

- Register of the National Trust - The Register of the National Trust was established in 1949 and is maintained by the National Trust of Australia. It is a non-statutory register.

A site survey was conducted to ground truth the desktop assessment and to allow an accurate assessment of potential heritage impacts. The site survey was undertaken by Archaeologists Alexander Timms and Stacey Kennedy (Artefact Heritage) on 19 June 2014. The survey included physical inspections of all potential impact areas within the study area. A photographic record was kept, with photographs taken of all areas inspected.

These guidelines are included in the NSW Heritage Office (1996) *NSW Heritage Manual* and are founded on the NSW heritage assessment criteria, which aim to minimise ambiguity and maintain consistency in the assessment process. The criteria encompass the four values identified in the Australia International Council on Monuments and Sites (ICOMOS) Burra Charter: historical significance, aesthetic significance, scientific significance, and social significance. They also include consideration of rarity and representativeness values. The criteria are summarised in Table 3 below. The heritage assessment guidelines also include two thresholds (state or local) for assessing the relative level of significance of heritage items.

**Table 3: NSW heritage assessment criteria**

Criteria	Description
<b>A – Historical Significance</b>	An item is important in the course or pattern of the local area's cultural or natural history.
<b>B – Associative Significance</b>	An item has strong or special associations with the life or works of a person, or group of persons, of importance in the local area's cultural or natural history.
<b>C – Aesthetic Significance</b>	An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in the local area.
<b>D – Social Significance</b>	An item has strong or special association with a particular community or cultural group in the local area for social, cultural or spiritual reasons.
<b>E – Research Potential</b>	An item has potential to yield information that will contribute to an understanding of the local area's cultural or natural history.
<b>F – Rarity</b>	An item possesses uncommon, rare or endangered aspects of the local area's cultural or natural history.
<b>G – Representative</b>	An item is important in demonstrating the principal characteristics of a class of NSWs (or the local area's):



Criteria	Description
	<ul style="list-style-type: none"> <li>- cultural or natural places; or</li> <li>- cultural or natural environments.</li> </ul>

### 3.1 Statutory heritage listings

#### 3.1.1 World Heritage List

No sites in or near the study area are included on the World Heritage List.

#### 3.1.2 The State Heritage Register

No sites in or near the study area are included on the SHR.

#### 3.1.3 Section s170 Registers

No sites in or near the study area are included on the s170 Registers.

#### 3.1.4 Local planning instruments

No sites in or near the study area are included on the Canterbury LEP 2012 or Hurstville LEP 2012.

### 3.2.1 Non-statutory heritage listings

#### 3.2.1 Register of the National Trust

No item in the vicinity of the study area is included in the Register of the National Trust (RNT).

#### 3.2.2 Register of the National Estate

Two items in the vicinity of the study area are included in the Register of the National Estate (RNE). However these sites are listed as an indicative place on the non-statutory archive.

- Pallamanna Parade Urban Conservation Area (Place ID 102089)  
The Pallamanna Parade Urban Conservation Area is located adjacent to the eastern portion of the study area. The general boundaries of the area are delineated by Moorefields Road to the north, Tallawalla Street to the east, Tooronga Terrace to the south and King George Road to the west. The boundary of the area was determined by the presence of 1930s bungalows. As the current study area is delineated by the M5 road reserve and immediate surrounds; the Urban Conservation Area does not fall within the study area.
- Welfare Avenue Urban Conservation Area (Place ID 102085)



The listing for the Welfare Avenue Urban Conservation Area makes reference to a map from an Interwar Housing Study conducted in 1995. The map could not be identified. However there is a Welfare Avenue North and a Welfare Avenue South that run perpendicular to alignment of the study area. The boundary of the area was determined by the presence of 1930s bungalows. There are no 1930s bungalows within the study area; therefore the Conservation Area does not fall within the current study area.

### 3.3 Summary of heritage items

Table 4 summarises the heritage items located in the vicinity of the study area, including statutory and non-statutory listings.

**Table 4: Summary of heritage items in the vicinity of the study area**

Suburb	Item	Lot/DP	Listings	Within study area?
Beverly Hills	Pallamanna Parade Urban Conservation Area	n/a	RNE	No
Beverly Hills	Welfare Avenue Urban Conservation Area	n/a	RNE	No



## 4.0 Historical context

---

### 4.1 European settlement and growth

The earliest land grant in the Beverly Hills area, was given to John Townson in 1808 (Austin 1967, Thorp 1994:9). However the land was regranted by Governor Lachlan Macquarie in 1810, due to Townson's severe illness (Austin 1967). One of the first properties in the area was Dumbleton Farm, an orchard settled in the 1830s. The Beverly Hills region was originally called Dumbleton after the orchard (Parker n.d.).

The area remained rural until the construction of the East Hills railway line. The railway line connecting the area to Sydney was first proposed by the Public Works Committee in 1924, as a way of opening up the area for development. A ceremony was held for the commencement of the East Hills line in 1927, with the Premier Jack Lang undertaking a ceremony *turning over the first sod* (OEH 2009). However the track was not completed until 1931; Dumbleton Station was open the same year (OEH 2009). An American influence had been growing in the outskirts of Sydney after the introduction of cinema and in 1940 the St James movie theatre was opened on King Georges Road. In 1940 Dumbleton was renamed to Beverly Hills, partly due to the American cinema influence, but also to improve the image of the region to encourage real estate growth (Parker n.d., Wayne 2013). An aerial photograph from the 1943 demonstrates that the study area at this time had been significantly cleared (Figure 3). However residential subdivision had clearly commenced in the area, most notably to the north and south of the railway corridor.

The area was further opened up by the M5 motorway. The construction of the M5 motorway began in the 1980's and has continuously undergone improvement works; including a full duplication of two lanes in both directions in 1999, the construction of M5 East tunnel in 2001 and the installation of the Moorebank Avenue overpass in 2002 which removed the last set of traffic lights between Sydney and Canberra (M5 2007: online).



Figure 3 - Study Area over 1943 Aerial, source imagery from NSW Globe





## 5.0 Site Inspection

---

### 5.1 Background

An inspection of the study area was undertaken by Alexander Timms and Stacey Kennedy (Heritage Consultants) on 19 June 2014.

### 5.2 Site Inspection

The survey area consisted of the M5 road corridor and areas to either side ('study area' in Figure 2). The southern side of M5 was found to be disturbed throughout. Severe disturbances included landscape modifications in the form of cuttings and redistribution of soils (Figure 4), the construction of houses, roads, footpaths (Figure 5), park reserve facilities and sub-surface services. Evidence of soil redistribution is evident with large amounts of disturbance throughout the study area, especially within the road corridor. The northern side of the M5 was found to have been subject to similar disturbances, residential areas, footpaths, roads, drainage lines (Figure 6) and associated subsurface utilities (Figure 8). No unlisted heritage items were identified during the survey.

**Figure 4: View to the East, showing cuttings to construct access tracks within the road reserve.**

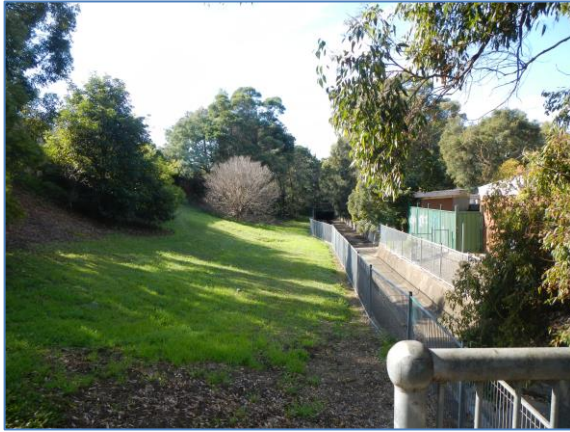


**Figure 5: View to the West, showing pedestrian paths, road and residential areas within study area.**





**Figure 6: View to the West, artificial drainage line.**



**Figure 7: View to the East, signage showing presence of subsurface infrastructure.**





## 6.0 Assessment of Significance

### 6.1 Fulfilment of the NSW heritage assessment criteria

The assessment of the significance of the potential archaeological resource contained within the study area against the NSW heritage assessment criteria is outlined in Table 3.

**Table 5: Consideration against NSW heritage assessment criteria**

Criteria	Description									
A – Historical Significance	<p>Identified NSW Historical Themes relevant to the study area include:</p> <table border="1"> <thead> <tr> <th>National theme</th> <th>State theme</th> <th>Demonstrated by:</th> </tr> </thead> <tbody> <tr> <td>Developing local, regional and national economies</td> <td>Agriculture</td> <td>European settlement related to orchards and farms</td> </tr> <tr> <td>Building settlements, towns and cities</td> <td>Land tenure</td> <td>Subdivision pattern, Eastern Hills Railway Line</td> </tr> </tbody> </table> <p>The pattern of subdivision focused on the Eastern Hill railway line which opened up the area and demonstrates the pattern of development of the area from the early 20th century. The original subdivision pattern within the study area has been removed with the construction of the M5. There is still residential development patterns within areas surrounding the study area. Therefore, although the study area has some limited significance under this criterion, <b>the study area does not meet the Local significance threshold under this criterion.</b></p>	National theme	State theme	Demonstrated by:	Developing local, regional and national economies	Agriculture	European settlement related to orchards and farms	Building settlements, towns and cities	Land tenure	Subdivision pattern, Eastern Hills Railway Line
National theme	State theme	Demonstrated by:								
Developing local, regional and national economies	Agriculture	European settlement related to orchards and farms								
Building settlements, towns and cities	Land tenure	Subdivision pattern, Eastern Hills Railway Line								
B – Associative Significance	<p>The study area does not have strong or special associations with the life or works of a person, or group of persons, of importance in the local area’s cultural or natural history. Historical owners of properties within the area do not appear to have been notable local personalities.</p> <p><b>The study area does not meet the local significance threshold under this criterion.</b></p>									
C – Aesthetic Significance	<p>The study area has lost all rural and early 20th century residential aesthetic due to the construction of the M5.</p> <p><b>The study area does not meet the local significance threshold under this criteria.</b></p>									
D – Social Significance	<p>The study area is unlikely to have strong or special associations with a particular community or cultural group in the local area for social, cultural or spiritual reasons.</p> <p><b>The study area does not meet the local significance threshold under this criteria.</b></p>									



Criteria	Description
E – Research significance	<p>The study area is unlikely to meet this criterion as it holds limited potential to provide substantial archaeological or scientific information that cannot be gained from other sources. Whilst it is likely that some portions of the study area were used as orchards or farms throughout the late 19th and early 20th century, subsequent use, subdivision and the construction of the M5 indicates that there is limited potential for evidence of these activities to remain intact.</p> <p><b>The study area does not meet the local significance threshold under this criteria.</b></p>
F – Rarity	<p>The study area does not possess uncommon, rare or endangered aspects of the local area’s cultural or natural history.</p> <p><b>The study area does not meet the local significance threshold under this criteria.</b></p>
G – Representative	<p>The study area is not important in demonstrating the principal characteristics of a class of NSWs cultural or natural places or environments.</p> <p><b>The study area does not meet the local significance threshold under this criteria.</b></p>

## 6.2 Statement of heritage significance of the study area

The study area does not meet the threshold for Local Significance under the NSW Heritage assessment criteria. The study area has two indicative, non-statutory listings for Urban Conservation Areas located near its boundaries. However these Urban Conservation Areas are significant due to the presence of 1930s bungalows. There are no 1930s bungalows located within the study area.

The study area consists of the M5 road corridor and areas to either side, which has been subject to significant ground disturbance through the construction of the M5 and associated pedestrian paths, access roads, drainage lines and subsurface utilities. No items of heritage significance were located within the study area.



## 7.0 Archaeological potential

---

### 7.1 Discussion of archaeological potential

Archaeological potential is defined as the potential of a site to contain archaeological relics, as classified under the *NSW Heritage Act 1977*. Archaeological potential is assessed by identifying former land uses and associated features through historical research, and evaluating whether subsequent actions (either natural or human) may have impacted on evidence for these former land uses.

The study area has associations with early European settlement of the Beverly Hills area. It was used for pastoral and agricultural activities from the mid-19th century to the early 20th century. The settlement of the area, however, is poorly documented. It is likely that the study area crossed over a number of early settled farms; until the construction of the East Hills railway line opened up the area for residential development and changed the fabric of the region. Residential development was further increased with the construction of the M5 motorway in 1980s.

There is very limited potential that archaeological remains of structures associated with early 20th century occupation of the area. Examination of the 1943 aerial photograph of Sydney reveals that very few structures were located within the study area, and was mostly made up of vacant land. The study area has also been subject to numerous impacts which are likely to have damaged or removed any archaeological remains. These impacts include the construction of the M5 and associated footpaths and drains, the installation of subsurface services and landscaping.

Overall, the study area has limited to no potential to contain archaeological remains associated with occupation of the study area.



## 8.0 Overall Statement of Heritage Impact

---

The overall potential heritage impact of the King Georges Road M5 interchange upgrade project on the study area is assessed below.

This assessment has found that there will be no direct heritage impacts as a result of the proposal. Any removal of mature trees adjacent to the RNE listed Pallamanna Parade Urban Conservation Area and Welfare Avenue Urban Conservation Area may have minor visual impacts to the setting of these items. No other indirect impacts to listed or unlisted heritage items are proposed.

There will be no Impacts on listed or unlisted heritage items as a result of vibration, demolition, altered historical arrangements, access, and architectural noise treatments.

### What aspects of the development project respect or enhance the heritage significance of the study area?

The proposed works would largely be confined to the existing M5 Motorway corridor or its immediate environs and would have no direct physical or visual impacts on the majority of the adjacent areas.

Where works are proposed outside the existing road corridor they are largely limited to areas that have already been subject to significant disturbance through the construction of the motorway. The King Georges Road M5 interchange upgrade project is unlikely to have any impacts on intact archaeological material.

### What aspects of the project could have a detrimental impact on the heritage significance of the study area?

No items of heritage significant were identified within the study area. Two items in the vicinity of the study area are included in the Register of the National Estate (RNE). However these sites are listed as an indicative place on the non-statutory archive; the sites are:

- Pallamanna Parade Urban Conservation Area (Place ID 102089)
- Welfare Avenue Urban Conservation Area (Place ID 102085)

Welfare Avenue which was identified on a non-statutory list as having heritage significance due to the presence of 1930s bungalows. The Welfare Avenue Conservation Area is adjacent the study area boundaries. It currently has a physical and visual buffer from the M5 (study area) as a result of mature tree plantings and sound barriers. Any impact and/or removal of the trees would have a minor visual impact on the setting of the properties along Welfare Avenue. It should be noted however that this is a non-statutory listing.

Pallamanna Parade is located to the north and south of the eastern portion of the study area. As the boundaries of the Conservation Area were delineated by the presence of 1930s bungalows; it does not



fall within the study area. It currently has a physical and visual buffer from the M5 (study area) as a result of mature tree plantings and sound barriers. Any impact and/or removal of the trees would have a minor visual impact on the setting of the properties along Welfare Ave. It should be noted however that this is a non-statutory listing.



## 9.0 Conclusions and Recommendations

---

On the basis of background research and a site inspection it was concluded that:

- No listed or unlisted items of heritage significance were located within the study area.
- The study area was found to be highly disturbed.
- There will be no direct or indirect impacts to heritage items as a result of the proposal.
- It is unlikely that intact non-Indigenous archaeological material would be encountered during the proposed works.

Therefore it is recommended that:

- There are no constraints to the proposal in regard to non-Indigenous heritage, and no further investigation of non-Indigenous heritage will be required prior to development.
- If any unanticipated archaeological deposits are identified within the study area during construction, works should cease in the immediate area and the Roads and Maritime *Unexpected Archaeological Finds Procedure 2012* should be followed.



## 10.0 References

---

- Austin, M. (1967) 'Townson, John (1759–1835)', *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/townson-john-2742/text3877>, published in hardcopy 1967, accessed online 10 June 2014
- M5 South-West Motorway (2007). 'Celebrating 15 years of the M5', M5 Motorway, <http://www.m5motorway.com.au/news/default.asp?article=71>, accessed online 11 June 2014.
- NSW Heritage Office (2001) 'Assessing Heritage Significance' from the NSW Heritage Manual.
- OEH, Office of Environment and Heritage (2009) Beverly Hills Railway Station Group, <http://www.environment.nsw.gov.au/heritageapp/ViewHeritageItemDetails.aspx?ID=4801120>, accessed online 10 June 2014.
- Parker, E. (n.d.). Beverly Hills Primary School, School Centenary 1892-1992, <http://www.reocities.com/Athens/Olympus/4799/centenarymag.html>, accessed online 11 June 2014.
- Roads and Maritime (2012) Unexpected Archaeological Finds Procedure. ([http://www.rta.nsw.gov.au/environment/downloads/unexpected\\_archaeological\\_finds\\_procedure.pdf](http://www.rta.nsw.gov.au/environment/downloads/unexpected_archaeological_finds_procedure.pdf)).
- Thorp, W. (1994) M5 East Motorway Environmental Impact Statement, European Heritage Issues. Report to Manidis Roberts Consultants.
- Wayne, M. (2013) 'St. James Theatre/Beverly Hills Cinemas – Beverly Hills, NSW', Past/Lives, <http://pastlivesofthefuture.com/2013/02/16/st-james-theatrebeverly-hills-cinemas-beverly-hills-nsw/>, accessed online 11 June 2014.