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# **M12 Motorway**

Non-Aboriginal heritage supplementary  
technical memorandum

October 2020

**Issued by** Jennifer Chandler (Senior Archaeologist, Jacobs)

**Subject** M12 Motorway Non-Aboriginal Heritage Supplementary Technical Memorandum

**Client** Transport for New South Wales

**Project** M12 Motorway

**Date** October 2020

## 1. Introduction and background

### 1.1 Overview

Transport for New South Wales (TfNSW; formerly Roads and Maritime Services) proposes to build the M12 Motorway between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham (the project), over a distance of about 16 kilometres. The project would provide the main access from the Western Sydney International Airport at Badgerys Creek to Sydney's motorway network and is expected to be opened to traffic before the opening of the Western Sydney International Airport.

TfNSW is seeking approval under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) to construct and operate the project. An environmental impact statement (EIS) was prepared to assess the potential impacts of the project and recommend management measures to appropriately address those impacts. The key features of the project as described in the EIS is provided in Section 1.1 of the amendment report. This EIS was placed on public exhibition from 16 October to 18 November 2019.

TfNSW proposes to amend the project following further design development since the exhibition of the EIS. The proposed changes include design changes and construction updates. These provide functional improvements to the design and improved integration with surrounding major transport infrastructure projects and potential future development. They also respond to issues raised in community and stakeholder submissions, and, in some instances, further reduce the potential impacts of the project as described in the EIS.

The proposed changes are described in **Section 1.2**.

### 1.2 Proposed design changes

The proposed changes to the project as described in the EIS are summarised below and are described in detail in Chapter 3 and Chapter 4 of the amendment report:

- Amendments to the motorway-to-motorway interchange at the M7 Motorway, including:
  - Changes to Elizabeth Drive and Cecil Road intersections, proposed exit ramps, the Wallgrove Road connection to Elizabeth Drive and proposed shared user path realignments
  - The widening of Elizabeth Drive under the M7 Motorway and approaches
- An option to provide a new connection between the M12 Motorway and Elizabeth Drive near the M7 Motorway interchange
- Two new signalised intersections into the Western Sydney International Airport, with provisions for future connection to potential developments north of the Western Sydney International Airport
- Additional ancillary facilities to support the delivery of the project.

Refinements have also been made as part of the ongoing development of the project since the EIS was exhibited. Refinements are changes that are consistent with the parameters of the project description as described in the EIS. For completeness, however, these refinements have been factored into the amended construction and operational footprint and included in the impact assessment described in this supplementary technical memorandum. The refinements are described in Section 3.3 and Section 4.2 of the amendment report and include:

- Lowering the height of the M12 Motorway in and around the Western Sydney International Airport interchange
- Reduction in the scope of work associated with the M12 Motorway and The Northern Road intersection
  - This intersection would still be constructed, but the main infrastructure work would be delivered as part of The Northern Road upgrade project
- Relocation of utilities
- Changes to property access and acquisition
- Changes to drainage
- Adjustments to construction access, hours, haulage, timing and material quantities.

The project with all proposed changes is referred to as the amended project.

### **1.3 Amended project**

#### **1.3.1 Overview**

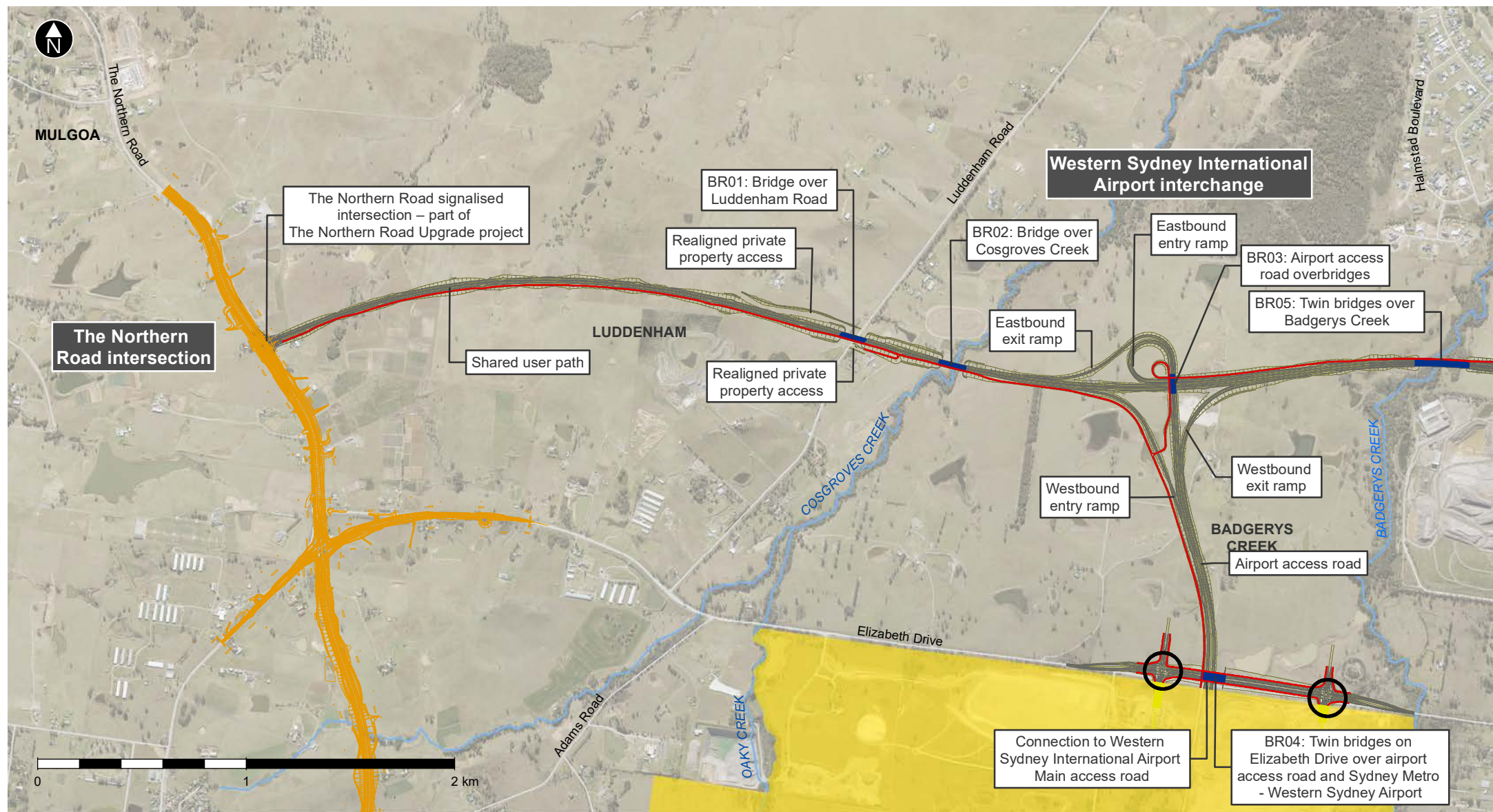
The amended project would continue to provide the main access from the Western Sydney International Airport at Badgerys Creek to Sydney's motorway network and be located between The Northern Road in the west and the M7 Motorway in the east. The amended project includes an option for a direct connection between the M12 Motorway and Elizabeth Drive at the eastern extent of the project. This option would include some realignment of Wallgrove Road and widening of Elizabeth Drive at the motorway-to-motorway interchange at the M7 Motorway to facilitate the connection. Therefore, two options are being proposed for the amended project at the interchange with the M7 Motorway.

The two options for the amended project would be consistent from The Northern Road in the west until Duff Road in the east. At the motorway-to-motorway interchange with the M7 Motorway, the project is proposed to be either:

- Option 1 – Without Elizabeth Drive connection
  - Interchange provides entry and exit ramps between the M12 Motorway and the M7 Motorway; in addition, it would maintain the existing connection of the M7 Motorway to Elizabeth Drive with new entry and exit ramps
- Option 2 – With Elizabeth Drive connection
  - Interchange as per option 1 and also provides entry and exit ramps between the M12 Motorway and Elizabeth Drive, Cecil Road and Wallgrove Road.

This section of the amended project is shown in **Figure 1-1** with the Elizabeth Drive connection associated with option 2 shown in a different colour and detailed in inset A. The decision on which option would be built is dependent on funding being available to include the Elizabeth Drive connection. This will be determined during the detailed design and construction phase of the project. The key features of each option are described in the following sections.

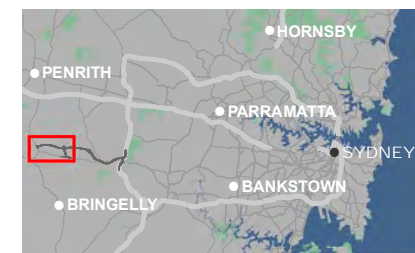
The proposed changes (see **Section 1.2**) would result in an amended construction footprint (**Figure 1-2**) and an amended operational footprint (**Figure 1-3**). The footprints would be the same for both options, with each footprint assuming the worst case scenario (ie option 2).



- The amended project
- Existing roads
- Part of The Northern Road upgrade project
- Waterways
- Shared user path
- Bridges
- Western Sydney International Airport
- Signalised intersections into the Western Sydney International Airport  
Note: Indicative, subject to detailed design

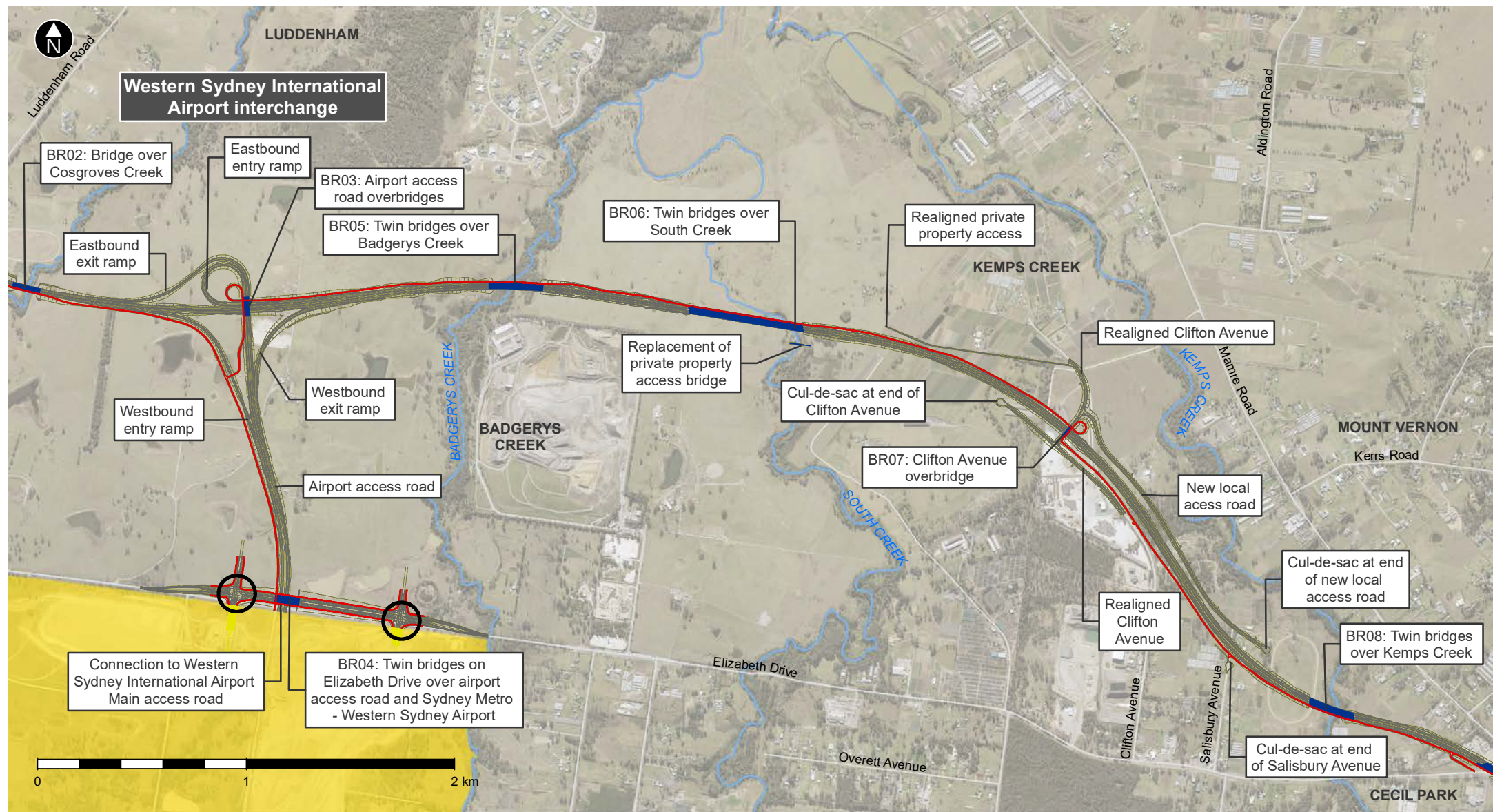


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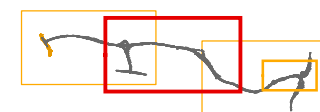


**Figure 1-1** Key features of the amended project

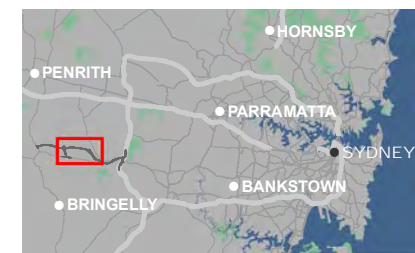




- The amended project
- Existing roads
- Western Sydney International Airport
- Shared user path
- Waterways
- Signalised intersections into the Western Sydney International Airport
- Note: Indicative, subject to detailed design
- Bridges

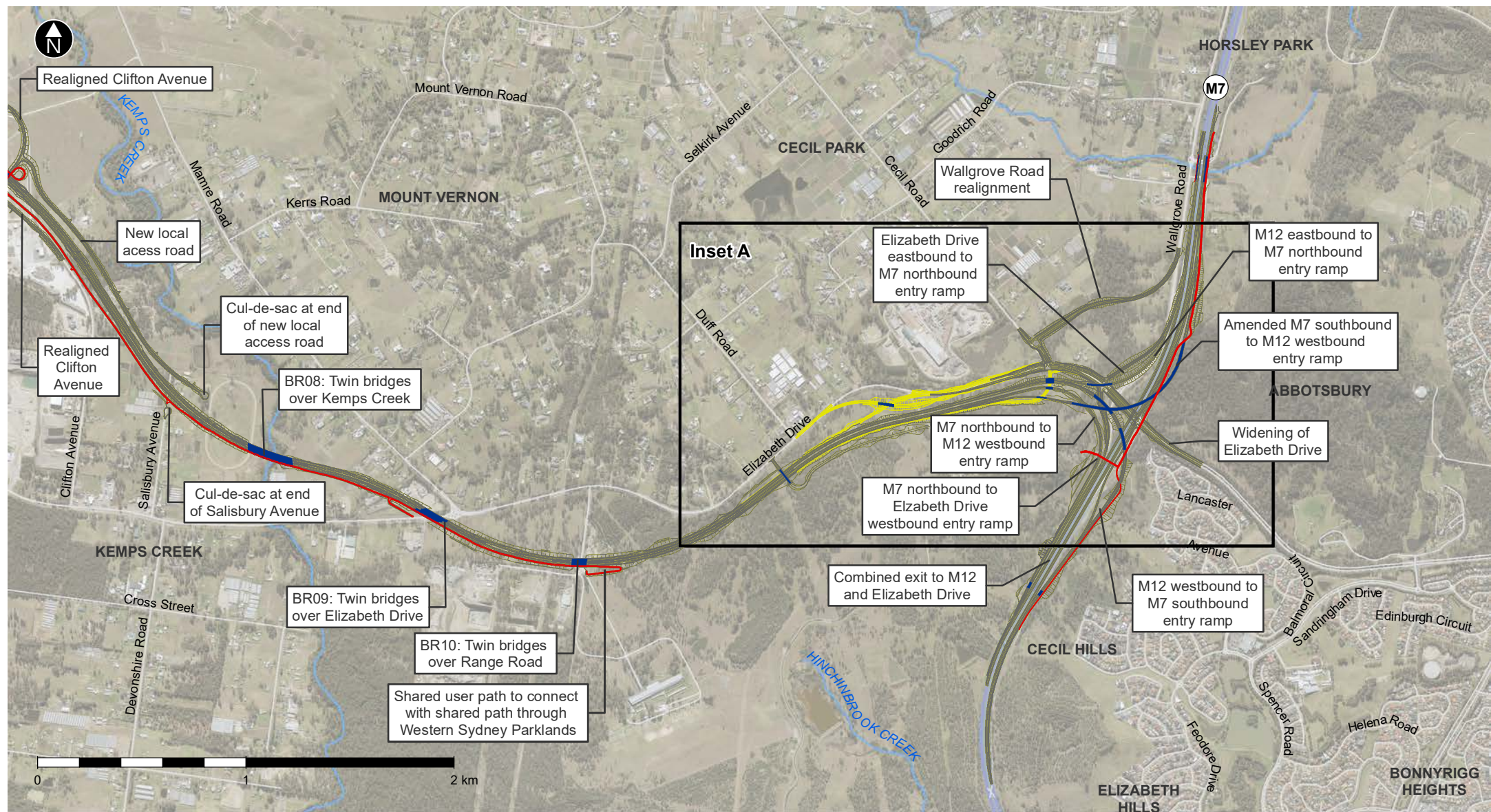


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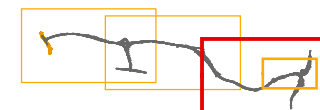


**Figure 1-1** Key features of the amended project





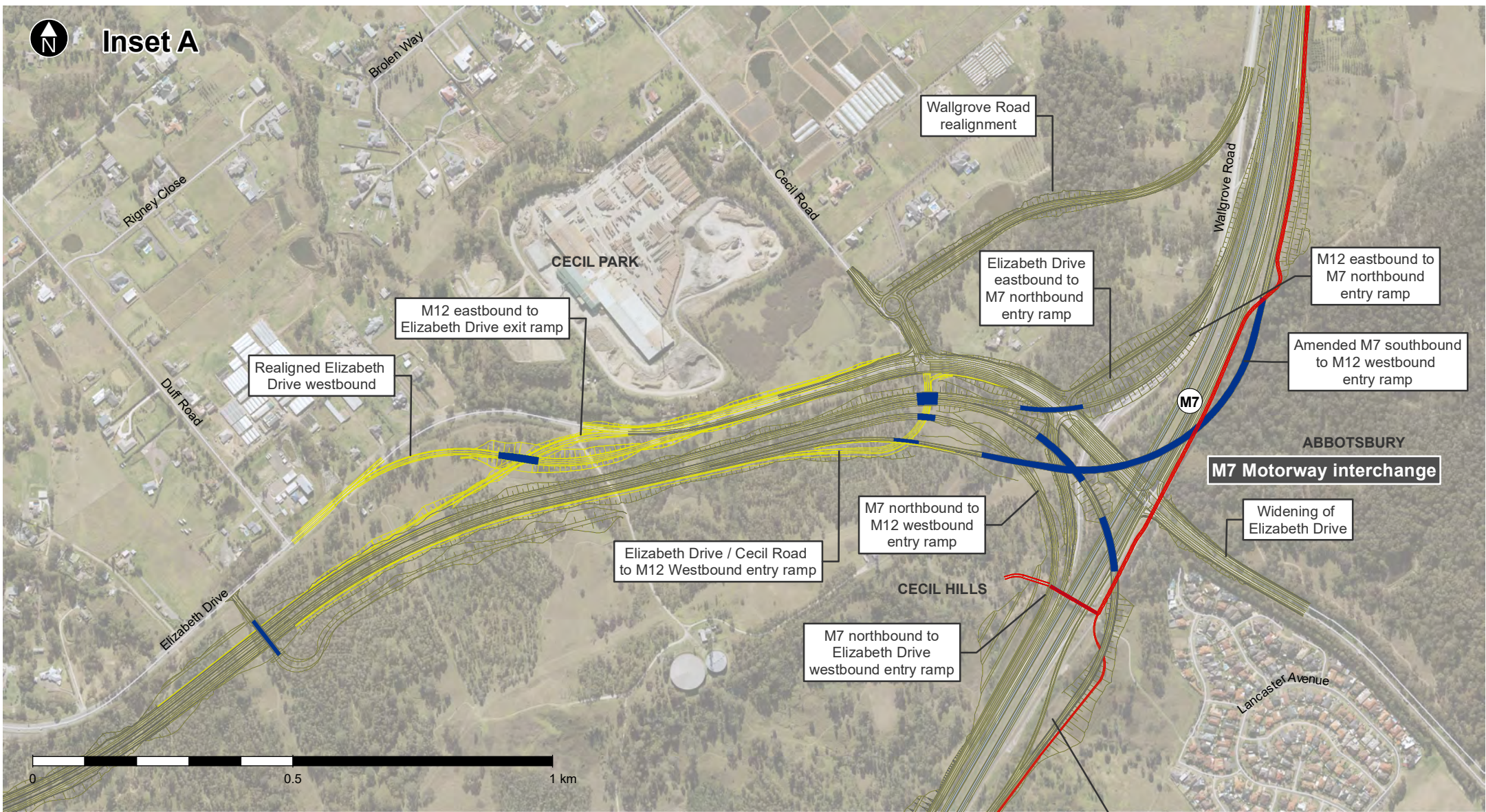
- The amended project
- The amended project (Elizabeth Drive connection)
- Shared user path
- Bridges
- Motorway
- Existing roads
- Waterways



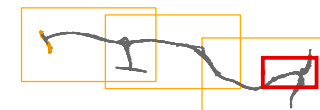
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**Figure 1-1** Key features of the amended project

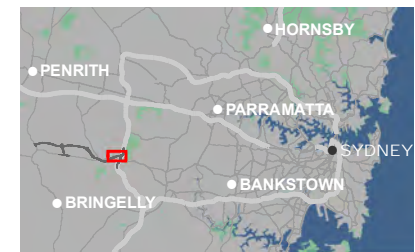




- The amended project
- The amended project with Elizabeth Drive connection
- Shared user path
- Bridges
- Motorway
- Existing roads

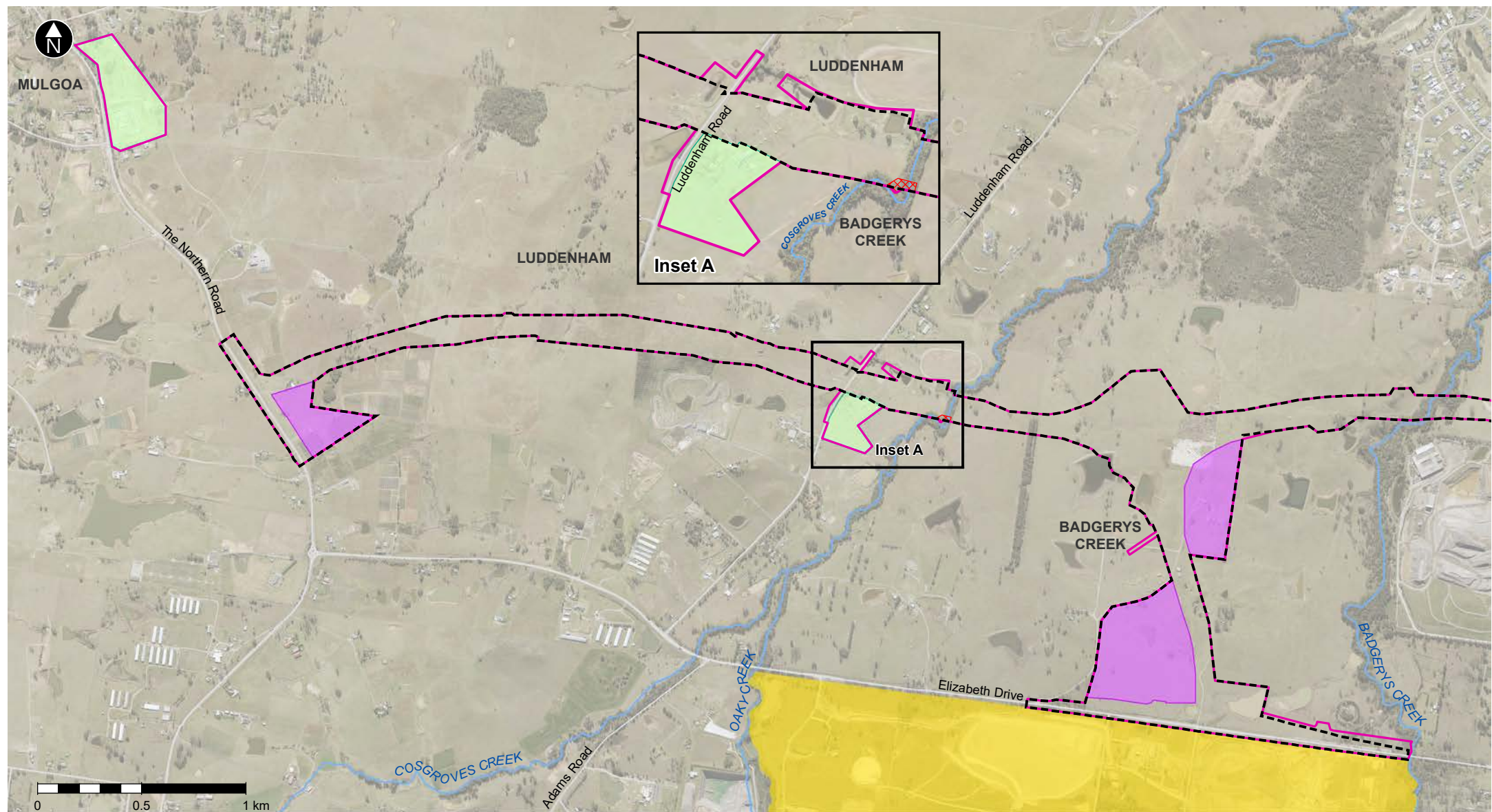


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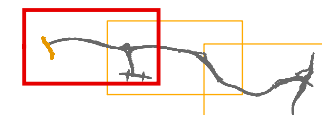
**Figure 1-1** Key features of the amended project



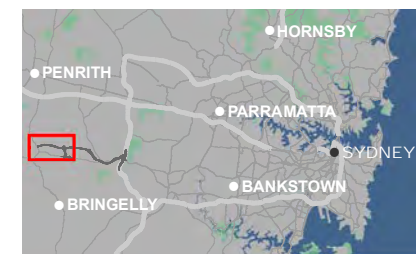


- The project construction footprint as per the EIS
- The amended project construction footprint
- The amended project exclusion zones

- Ancillary facilities as per the EIS
- Additional ancillary facilities
- Western Sydney International Airport
- Waterways
- Motorway
- Existing roads

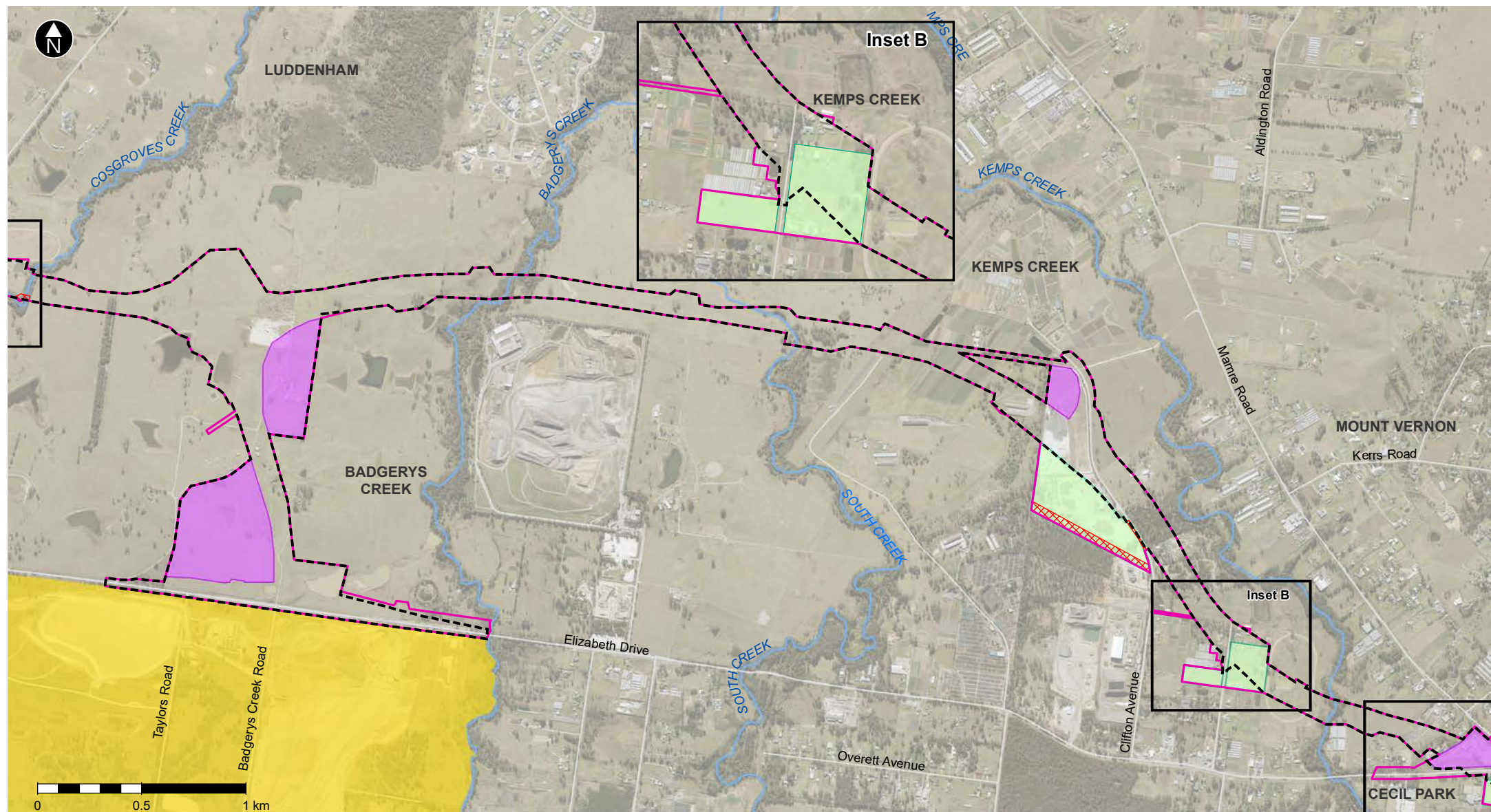


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**Figure 1-2** Construction footprints of the amended project and the project as described in the EIS

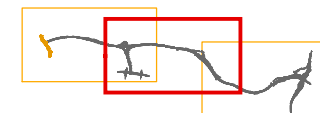




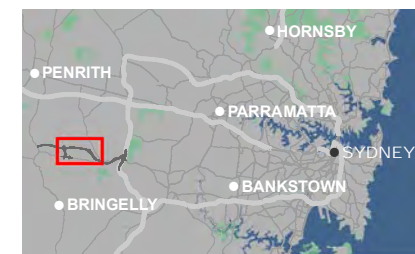
- The project construction footprint as per the EIS
- The amended project construction footprint
- The amended project exclusion zones

- Ancillary facilities as per the EIS
- Additional ancillary facilities
- Western Sydney International Airport

- Waterways
- Motorway
- Existing roads

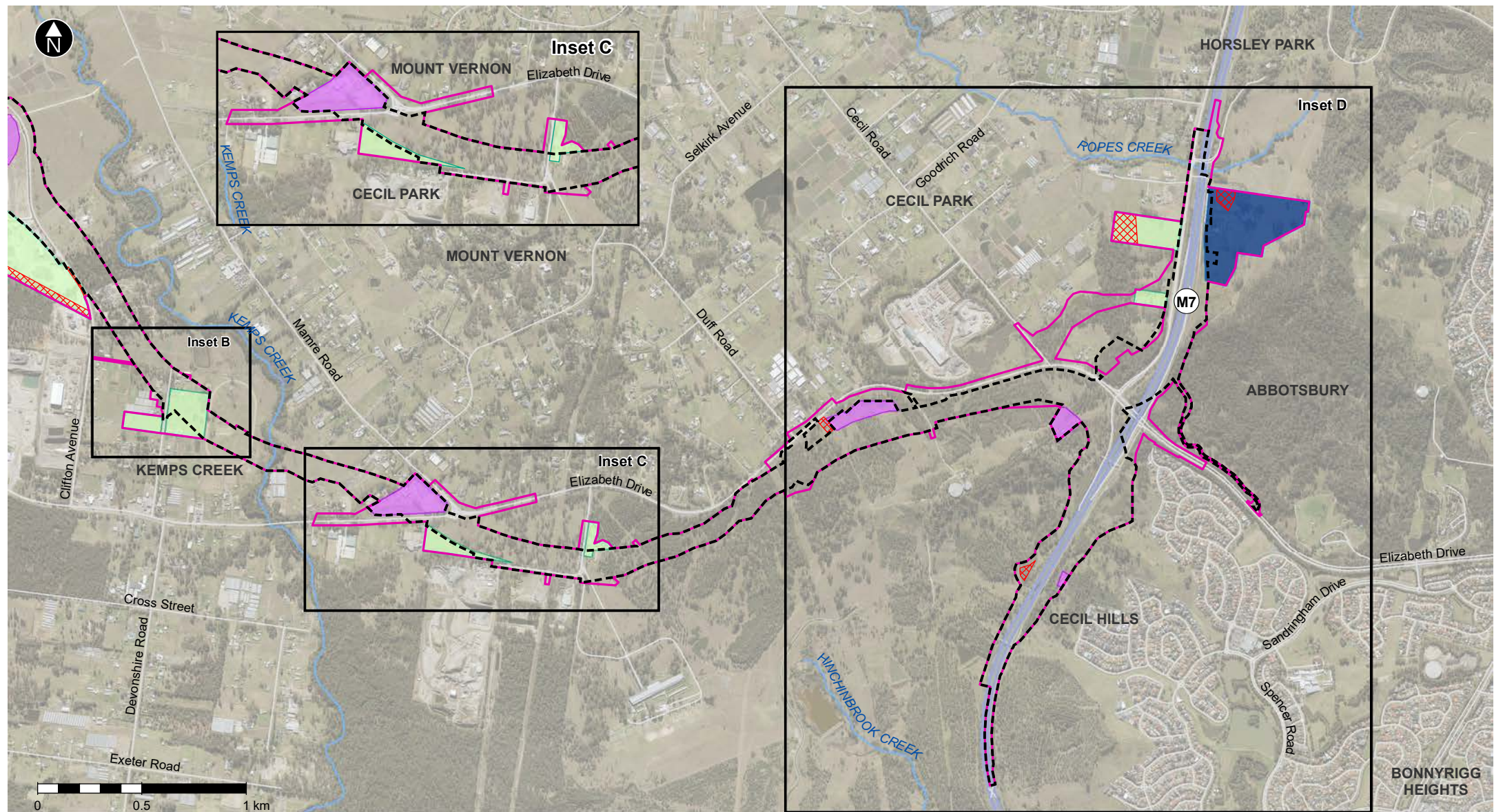


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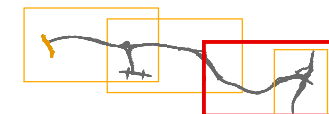
**Figure 1-2** Construction footprints of the amended project and the project as described in the EIS



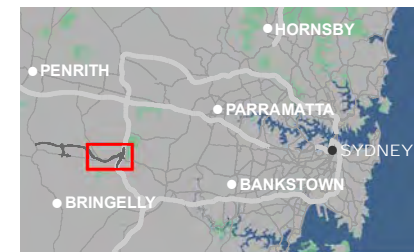


- The project construction footprint as per the EIS
- The amended project construction footprint
- The amended project exclusion zones

- Ancillary facilities as per the EIS
- Additional ancillary facilities
- Amended ancillary facilities
- Waterways
- Motorway
- Existing roads

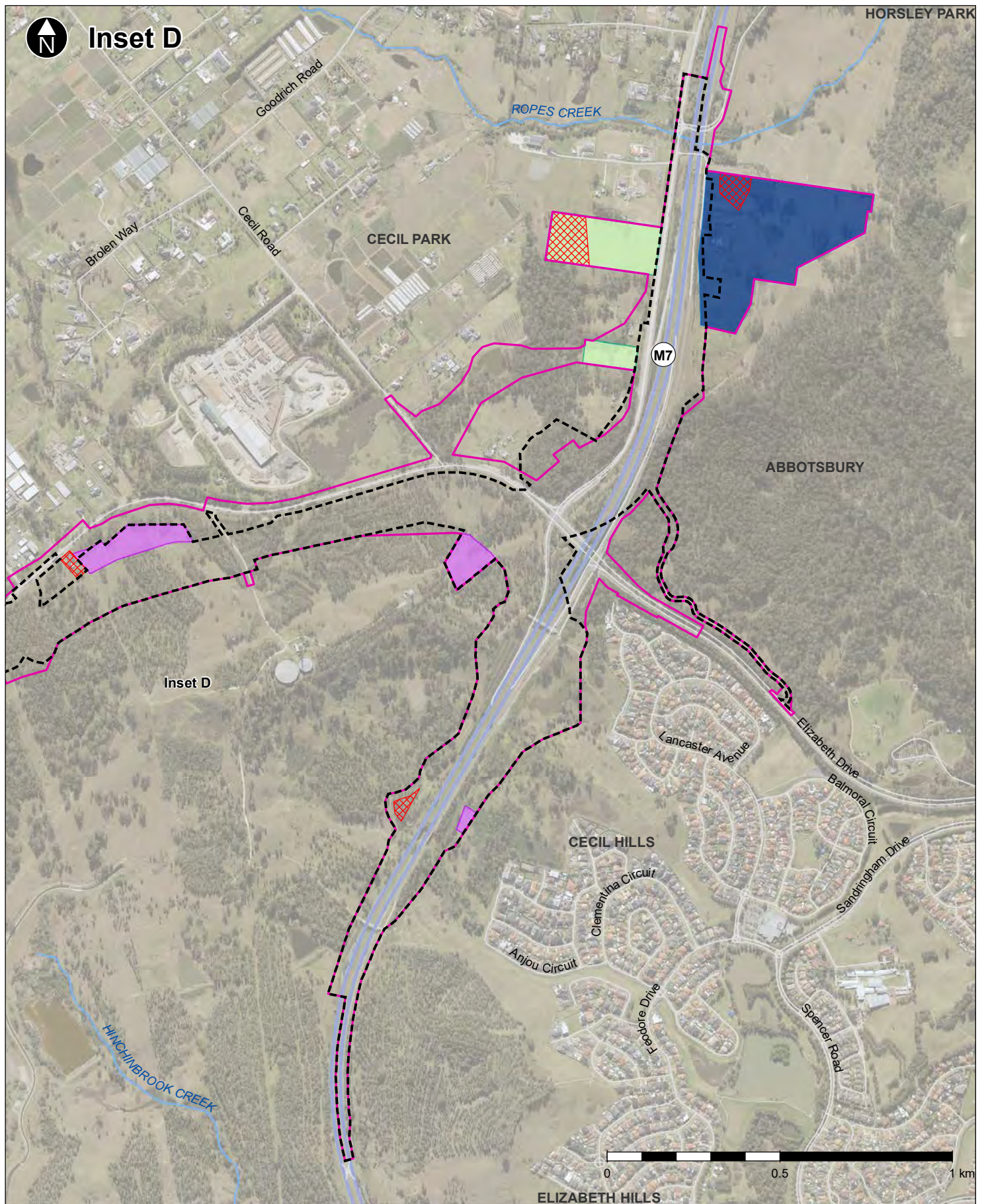


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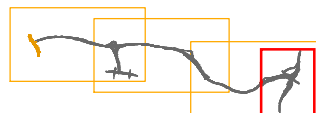


**Figure 1-2** Construction footprints of the amended project and the project as described in the EIS

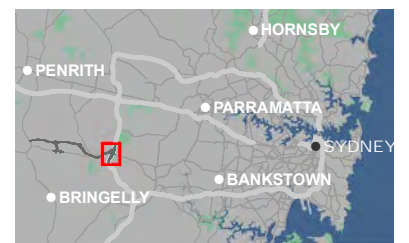




- The project construction footprint as per the EIS
- The amended project construction footprint
- The amended project exclusion zones
- Ancillary facilities as per the EIS
- Additional ancillary facilities
- Amended ancillary facilities

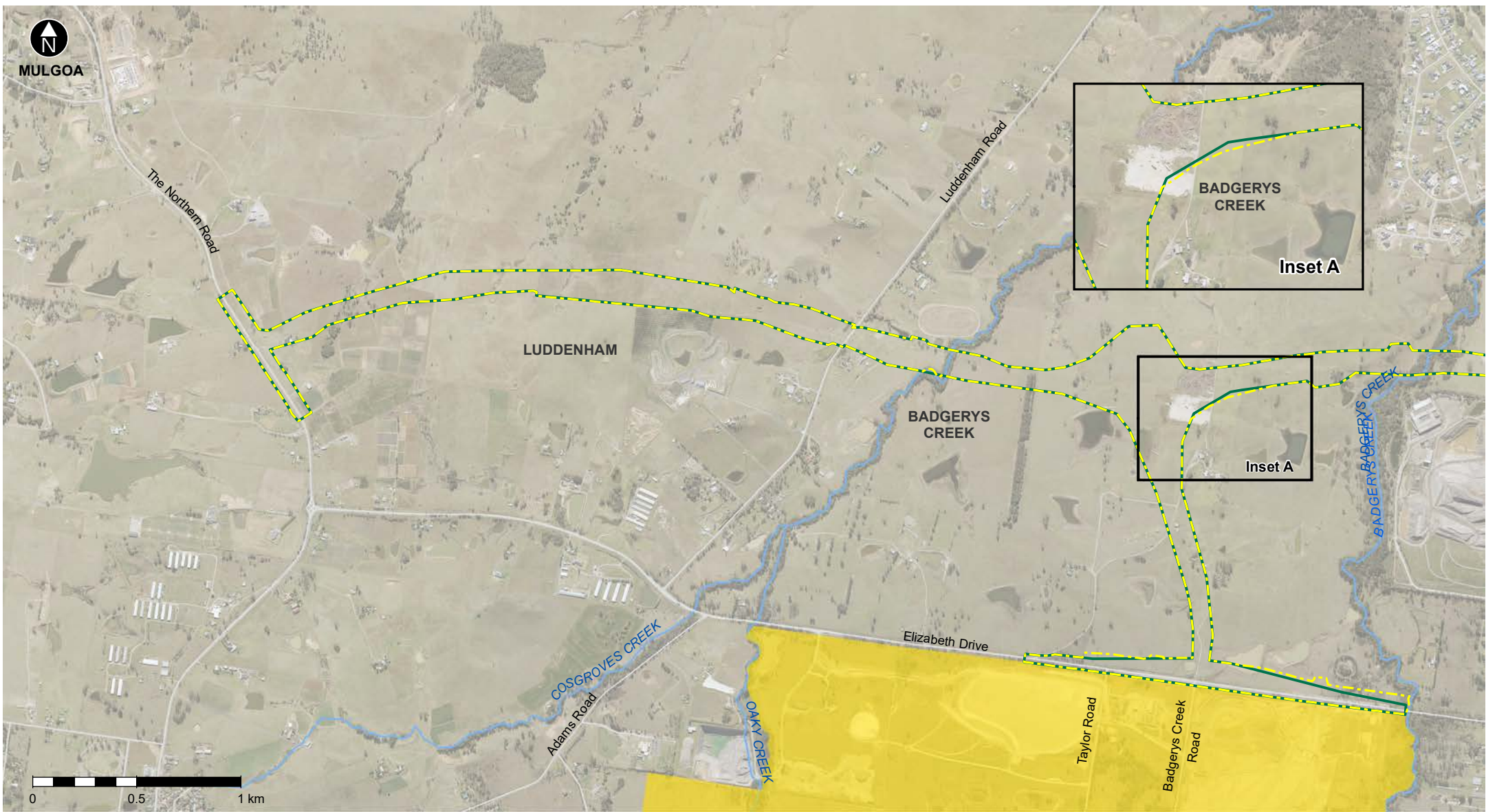


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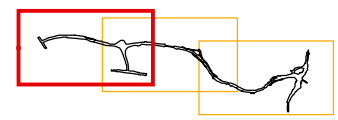


**Figure 1-2** Construction footprints of the amended project and the project as described in the EIS

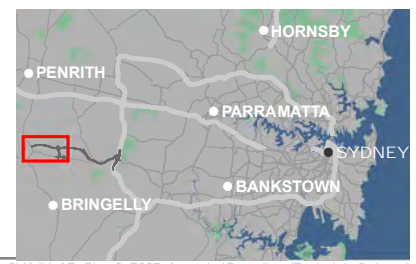




- The project operational footprint as per the EIS
- The amended project operational footprint
- ~~~~~ Waterways
- Western Sydney International Airport
- Existing roads

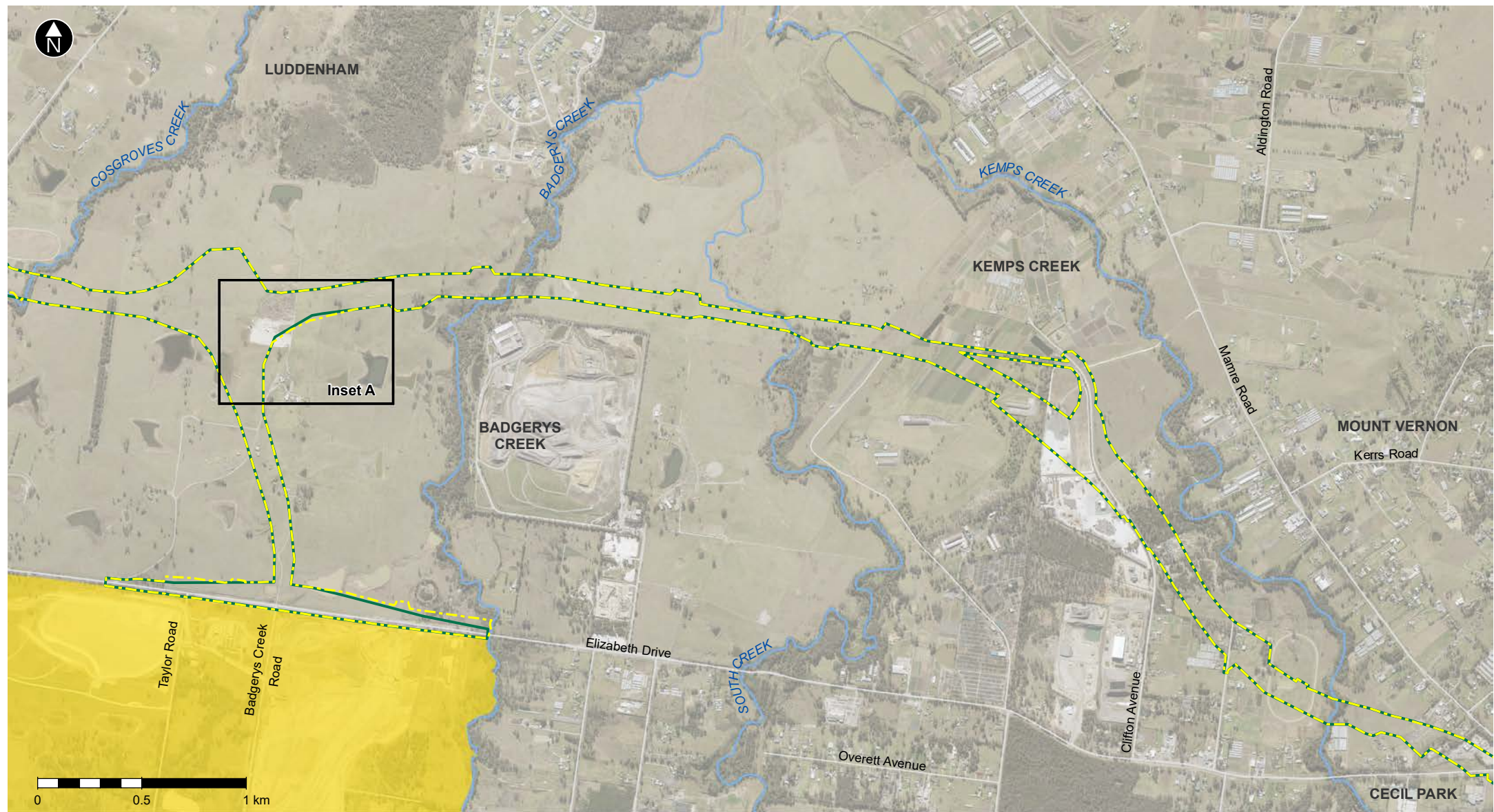


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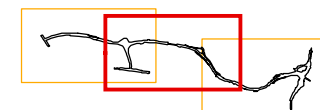


**Figure 1-3** Operational footprints of the amended project and the project as described in the EIS

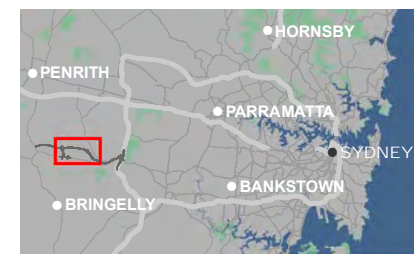




- The project operational footprint as per the EIS
- The amended project operational footprint
- ~~~~~ Waterways
- Western Sydney International Airport
- Existing roads

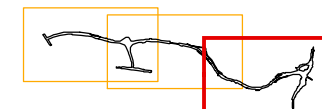
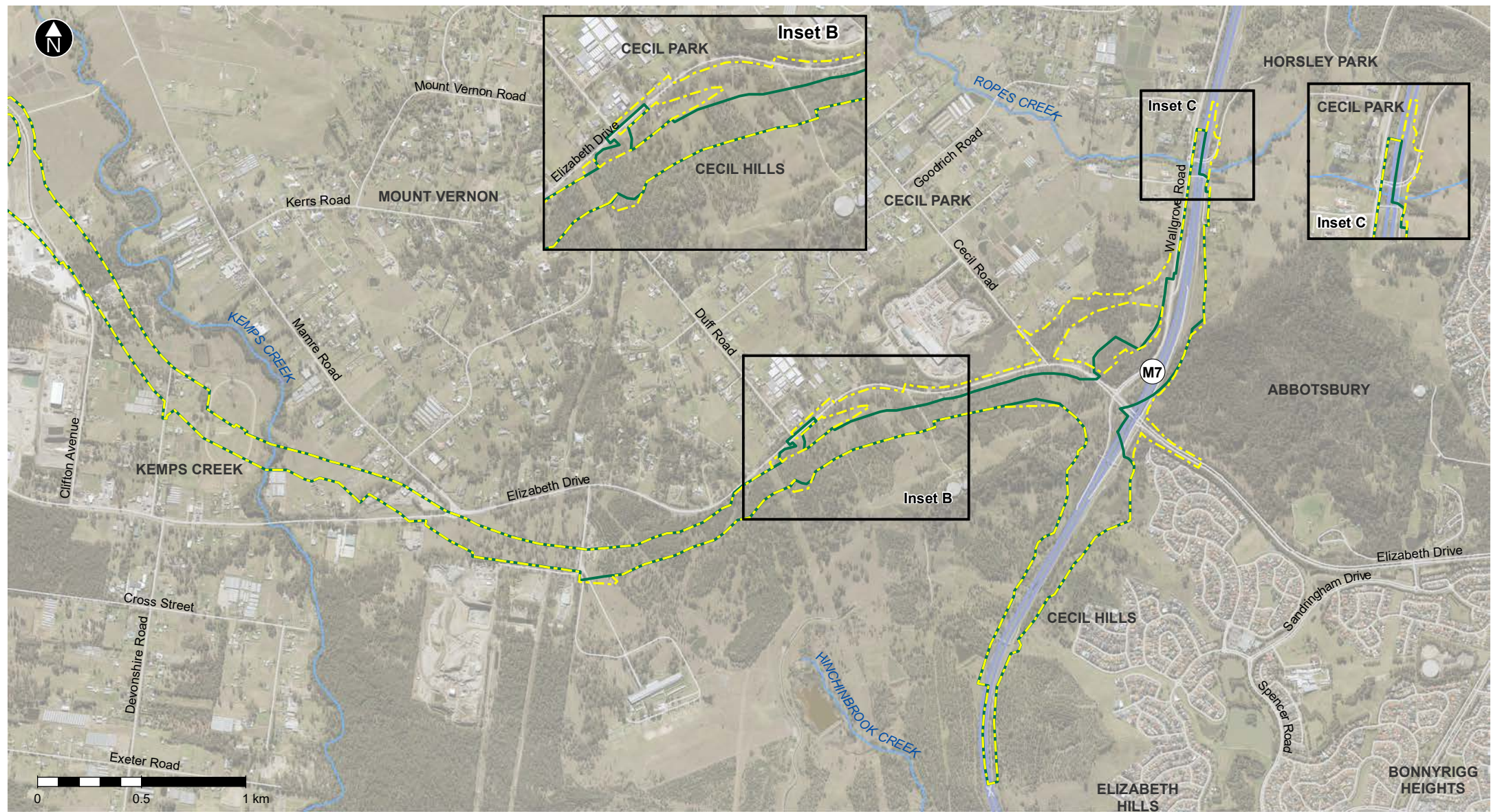


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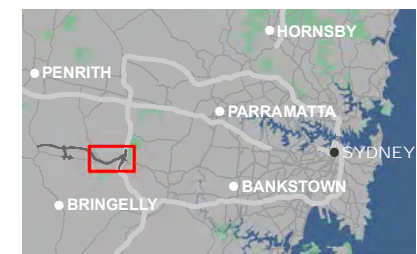


**Figure 1-3** Operational footprints of the amended project and the project as described in the EIS





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**Figure 1-3** Operational footprints of the amended project and the project as described in the EIS

The assessment of potential impacts described in **Section 4** relates to the worst case scenario and covers both options, unless stated otherwise.

The key features of the amended project are listed in **Section 1.3.2** and include both options.

### **1.3.2 Key features of the amended project**

The key features of the amended project are listed below. Where the description of the proposed amended project key features differs from the description listed in the EIS (see Section 1.1 of the amendment report), those changes are shown in **bold text**:

- A new dual-carriageway motorway between the M7 Motorway and The Northern Road with two lanes in each direction with a central median allowing future expansion to six lanes
- Motorway access via three interchanges/intersections:
  - A motorway-to-motorway interchange at the M7 Motorway and associated works (extending about four kilometres within the existing M7 Motorway corridor) **with the following options:**
    - **Option 1 – without connection between the M12 Motorway and Elizabeth Drive**
    - **Option 2 – with connection between the M12 Motorway and Elizabeth Drive**
  - A grade-separated interchange referred to as the Western Sydney International Airport interchange, including a dual-carriageway four-lane airport access road (two lanes in each direction for about 1.5 kilometres) connecting with the Western Sydney International Airport Main Access Road
  - A signalised intersection at The Northern Road with provision for grade separation in the future
- Bridge structures across Ropes Creek, Kemps Creek, South Creek, Badgerys Creek and Cosgroves Creek
- A bridge structure across the M12 Motorway into the Western Sydney Parklands to maintain access to utilities, including the existing water tower and mobile telephone/other service towers on the ridgeline in the vicinity of Cecil Hills, to the west of the M7 Motorway
- Bridge structures at interchanges and at Clifton Avenue, Elizabeth Drive, Luddenham Road and other local roads to maintain local access and connectivity
- Inclusion of active transport (pedestrian and cyclist) facilities through provision of pedestrian bridges and an off-road shared user path, including connections to existing and future shared user path networks
- Modifications to the local road network, as required, to facilitate connections across and around the M12 Motorway including:
  - Realignment of Elizabeth Drive at the Western Sydney International Airport, with Elizabeth Drive overpassing the airport access road and rail infrastructure
  - **Two new signalised intersections from Elizabeth Drive into the Western Sydney International Airport, with provisions for future connection to potential developments to the north**
  - **Widening of Elizabeth Drive under the M7 Motorway and approaches**
  - Realignment of Clifton Avenue over the M12 Motorway, with associated adjustments to nearby property access

- Relocation of the Salisbury Avenue cul-de-sac, on the southern side of the M12 Motorway
- **Realignment of Wallgrove Road to connect to Cecil Road, including a connection between Elizabeth Drive and Wallgrove Road via Cecil Road with a signalised intersection with Elizabeth Drive**
- Adjustment, protection or relocation of existing utilities
- Ancillary facilities to support motorway operations, smart motorways operation in the future and the existing M7 Motorway operation, including gantries, electronic signage and ramp metering
- Other roadside furniture, including safety barriers, signage and street lighting
- Adjustments of waterways, where required, including Kemps Creek, South Creek and Badgerys Creek
- Permanent water quality management measures including swales and basin
- Establishment and use of temporary ancillary facilities, temporary construction sedimentation basins, access tracks and haul roads during construction
- Permanent and temporary property adjustments and property access refinements as required.

An overview of the amended project is shown in **Figure 1-1**.

#### **1.4 Purpose of document**

This supplementary technical memo has been prepared in accordance with the Secretary's Environmental Assessment Requirements (SEARs) issued 30 October 2018 to support the EIS. The purpose of this memo is to identify and assess the potential construction, operation and cumulative non-Aboriginal heritage impacts of the amended project against the impacts documented in the M12 Motorway EIS and, where required, recommend any changes or feasible and reasonable additions to the management measures.

## **2. Assessment methodology**

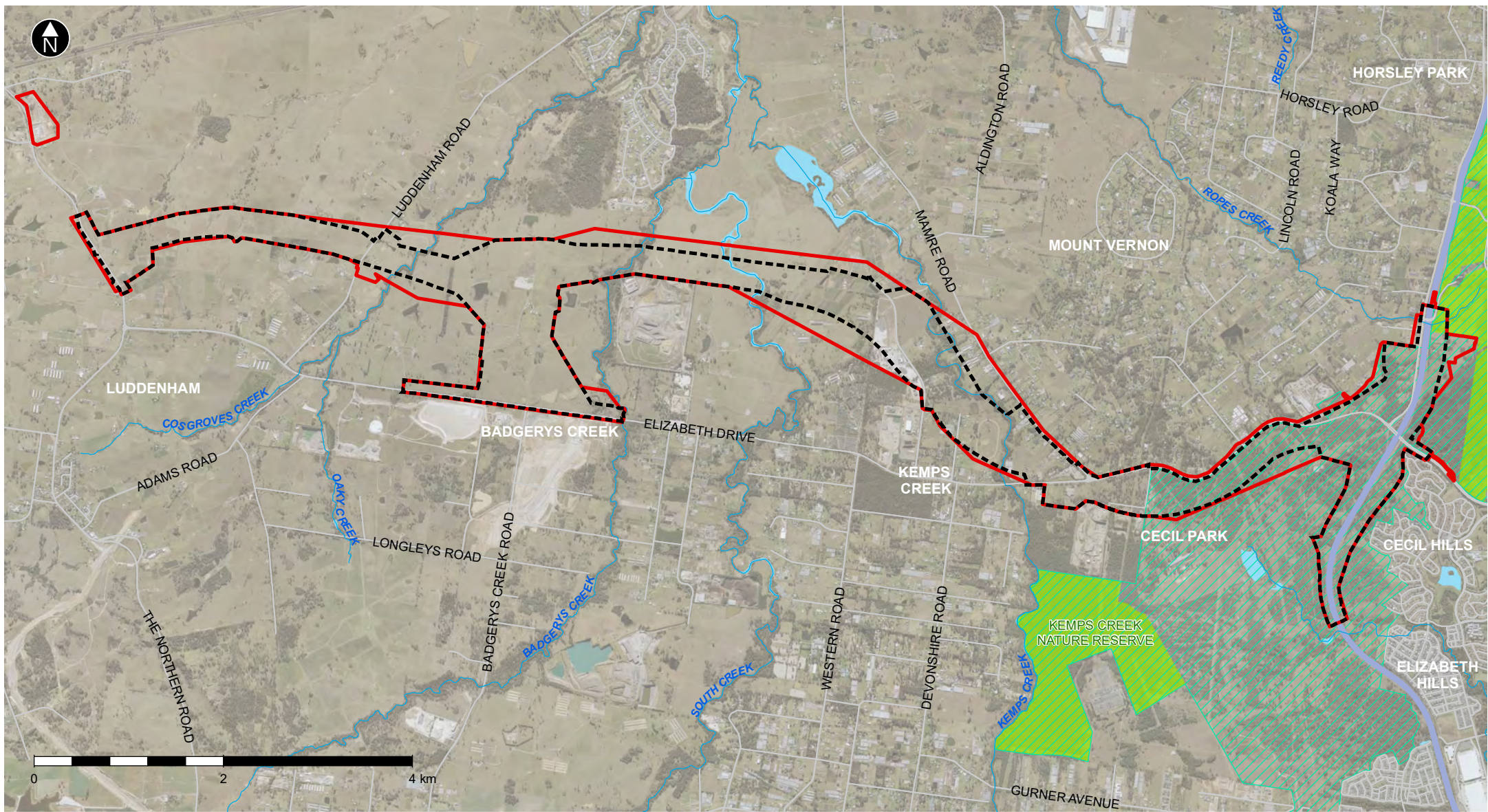
The methodology for the supplementary non-Aboriginal heritage assessment was prepared in accordance with the policy and planning setting detailed in Section 7.6.1 of the EIS. This assessment focuses on the changes in potential impacts associated with the amended project. The assessments detailed in **Section 4** relate to both options, unless stated otherwise.

The supplementary assessment involved an amended study area, desktop assessment and impact assessment. No site investigations or assessments of significance were undertaken, as no new non-Aboriginal heritage items were identified within the study area (see **Section 2.1**).

### **2.1 Amended study area**

The study area presented in the EIS has been increased to reflect the amended construction footprint shown in **Figure 1-2**. The amended study area is shown in **Figure 2-1**.





- Study area as per the EIS
- Amended project study area
- Western Sydney Parklands
- NPWS estate / reserves
- Waterways
- Motorway
- Main roads

**Figure 2-1** Location of the amended study area



## 2.2 Desktop assessment

A search of all available non-Aboriginal heritage registers was carried out to identify known heritage items within the amended study area and to identify any newly listed heritage items within the EIS study area. The following registers were searched using a combination of online databases, and, where available, using spatial data in Global Information System (GIS) format by Jennifer Chandler (Senior Archaeologist, Jacobs) on 9 January 2020:

- NSW State Heritage Inventory (SHI)
- NSW State Heritage Register (SHR)
- Section 170 Registers (on SHI)
- National Trust Register (NTR)
- Register of the National Estate (RNE)
- Commonwealth Heritage List (CHL)
- National Heritage List (NHL)
- World Heritage List (WHL)
- Fairfield Local Environmental Plan 2013 (Fairfield LEP)
- Liverpool Local Environmental Plan 2008 (Liverpool LEP)
- Penrith Local Environmental Plan 2010 (Penrith LEP).

The desktop assessment also included a review of previous heritage assessments and local heritage studies to identify previously identified, unregistered items which may have heritage significance. A review of aerial imagery was also undertaken to identify the potential for previously unidentified heritage items in the amended study area.

## 2.3 Impact assessment

### 2.3.1 Level of impact

The level of impact on the heritage significance of each heritage item in the amended study area has been assessed based on the definitions and framework for assessing severity of impacts from the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Significant Impact Guidelines 1.2 (Department of Sustainability Environment Water Population and Communities 2013) as there are currently no NSW or other guidelines for identifying the level of impacts on heritage places.

The following criteria were used to assess the level of impact:

- The scale of the proposed works and its impacts
- The intensity of the proposed works and its impacts
- The duration and frequency of the proposed works and its impacts.

The levels of impact used in this assessment are defined in **Table 2-1**. For impacts to meet a certain level they generally need to have two or more of the characteristics noted. The level of impact assigned to each heritage item is based on the level assessed following implementation of management measures.



Table 2-1 Definitions of levels of impacts

Two or more characteristics	Scale	Intensity	Duration/Frequency
Major	Medium - large	Moderate - high	Permanent / irreversible
Moderate	Small - medium	Moderate	Medium – long term
Minor	Small / localised	Low	Short term / reversible
Negligible	Little or no physical impact; or little or no impact on heritage significance from physical impacts; or potential physical impacts are able to be prevented through implementation of management measures (eg vibration).		

### 2.3.2 Statement of Heritage Impact

A Statement of Heritage Impact (SOHI) was used to identify what impact the amended project would have on the heritage items identified in the assessment. The SOHI, together with supporting information, addressed:

- Why the item is of heritage significance
- What impact the proposed works would have on that significance
- What measures are proposed to mitigate negative impacts
- Why more sympathetic solutions are not viable (NSW Heritage Office 2002).

The SOHI has been amended from the SOHI prepared for the EIS for the two heritage items potentially impacted by the amended project in accordance with the NSW Heritage Office (2002) *Statements of Heritage Impact Guidelines*. The two SOHI's were amended to identify the change in impacts associated with the amended project and include:

- Item 3: Luddenham Road Alignment (Penrith LEP 843)
- Item 8: Cecil Park School, Post Office and School Church.

### 2.4 Authorship

This assessment has been prepared by Jennifer Chandler (Senior Archaeologist, Jacobs). Mapping was prepared by Ajay Arcot (Senior Spatial Consultant, Jacobs). Supervision of the assessment was undertaken by Dr Karen Murphy (Technical Director, Archaeology and Cultural Heritage, Jacobs) and technical review of the assessment was undertaken by Rose Overberg (Principal Heritage Consultant / Archaeologist, Jacobs).

The qualifications of each heritage consultant are provided in **Table 2-2**.

Table 2-2 Heritage consultants undertaking this assessment

Name	Qualifications	Role
Dr Karen Murphy	PhD (Historical Archaeology) Bachelor of Arts (Honours) (Archaeology)	Management and direction of overall assessment
Jennifer Chandler	Master of Cultural Heritage Bachelor of Archaeology (Honours) Honours thesis: Historical heritage	Writing and preparation of report
Rose Overberg	Masters of Archaeology and Heritage Management Bachelor of Arts (Archaeology) Bachelor of Science (Geology) (Honours)	Technical review of report

### **3. Existing environment**

Section 7.6.3 of the EIS provides a detailed description of the existing environment. A section of the amended study area has been subject to survey previously, due to its proximity to the EIS study area.

#### **3.1 Recent heritage assessments**

Urbis prepared a Heritage Impact Statement (HIS) for a proposed subdivision, site establishment and enabling works to facilitate a range of uses on a property located at 1111 Elizabeth Drive (Lot 2 DP2954) which overlaps with part of the amended study area (Urbis Pty Ltd 2018). Urbis completed an assessment of heritage significance for the property and did not identify any heritage values associated with the property that would warrant the retention of the existing building and ancillary structures on the site nor maintaining the existing boundaries of the allotment. The desktop assessment included detailed research including the history of the property. The assessment also noted that the proposed subdivision, site establishment and enabling works to facilitate a range of uses would not generate any adverse impacts to the Upper Canal System (Pheasants Nest to Prospect Reservoir) (SHR 01373), located in the vicinity of the property.

The results of this HIS have no implications for the amended project.

#### **3.2 Heritage context**

The non-Aboriginal heritage assessment carried out as part of the EIS identified nine heritage items within or adjacent to the EIS study area (see Section 7.6.3 of the EIS). The curtilage of two of these heritage items extends into the amended study area:

- Item 3: Luddenham Road Alignment
  - About 65 metres of the amended study area overlaps with previously identified Item 3: Luddenham Road Alignment, which is listed on the Penrith LEP (PLEP 843)
  - The Luddenham Road Alignment was also previously identified as being located within the EIS study area
- Item 8: Cecil Park School, Post Office and School Church
  - The amended study area extends further into the curtilage of Item 8: Cecil Park School, Post Office and School Church than previously identified in the EIS.

#### **3.3 Review of aerial imagery**

A review of recent (July 2019) and historical (1947) aerial imagery was completed to identify areas of potential heritage items or archaeological sensitivity within the amended study area. No particular areas of potential heritage items or archaeological sensitivity were identified.

Recent aerial imagery (2019) indicates the amended study area comprises cleared paddocks, dams, areas of vegetation and road reserve (Elizabeth Drive, Luddenham Road and the M7 Motorway). No structures apart from two small buildings were noted. One of these structures is likely relating to a nearby dam.

Historical aerial imagery (1947) shows the other building was present at this time. This property is part of Karingal Training Stables which was assessed for significance in the EIS non-Aboriginal heritage assessment report as Item 9. The property was assessed as having no heritage significance. The historical aerial imagery otherwise indicated that the amended study area was cleared in places, but also contained areas of vegetation. Drainage lines were present where there are now dams.

### **4. Assessment of potential impacts**

This section provides an assessment of the potential non-Aboriginal heritage impacts that may result due to the construction and operation of the amended project. These impacts are discussed in relation to the non-Aboriginal heritage impacts documented in the EIS.



The assessment of potential impacts described in this section relates to both options presented in **Section 1.3** unless stated otherwise.

#### **4.1 Statements of heritage impact**

During the EIS assessment, only nine of the 13 heritage items within or adjacent to the study area were assessed as having either local, State or National heritage significance. There would be no change to impacts to the following seven heritage items as a result of the amended project:

- Item 1: McGarvie Smith Farm (Penrith LEP 857)
- Item 2: Fleurs Radio Telescope Site (Penrith LEP 832)
- Item 4: Upper Canal System (Pheasants Nest Weir to Prospect Reservoir) (SHR 01373)
- Item 6: McMaster Field Station
- Item 7: Fleurs Aerodrome
- Item 10: Exeter Farm archaeological site
- Item 12: South, Kemps and Badgerys Creek Confluence Weirs Scenic Landscape.

The following two heritage items would be impacted by both amended project options presented in **Section 1.3**:

- Item 3: Luddenham Road Alignment (Penrith LEP 843)
- Item 8: Cecil Park School, Post Office and School Church.

The impact assessment of these two heritage items, including construction and operation impacts, has been updated below.

##### **4.1.1 Item 3: Luddenham Road Alignment (Penrith LEP 843)**

The amended project includes a new construction ancillary facility adjacent to Luddenham Road (**Figure 4-1**). While this facility is located within the boundaries of the EIS study area, the project footprint has changed and now extends around 65 metres further south into this heritage item than it did previously (**Figure 4-1**). Therefore, the impact assessment for this heritage item has been amended accordingly.

#### **Proposed works**

The proposed works as part of the amended project that would potentially impact this heritage item include:

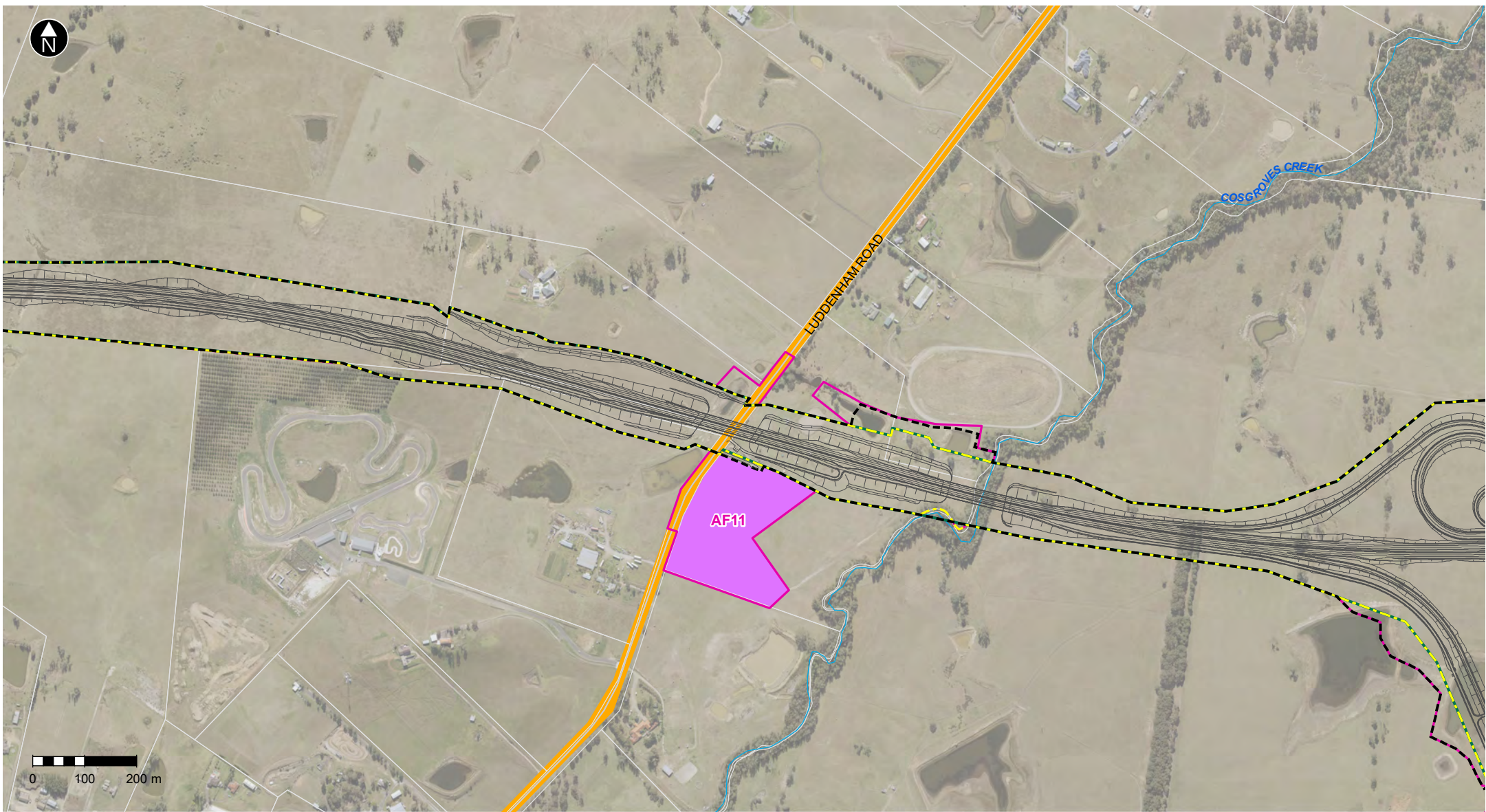
- Construction of dual carriageway motorway with two lanes in each direction on a bridge over Luddenham Road
- Provision of a construction ancillary facility adjacent to Luddenham Road
- Relocation of existing overhead powerlines underground along Luddenham Road
- New property access and potential drainage culverts to cater for this access.

#### **Heritage values**

The Luddenham Road Alignment has historical significance as a late nineteenth century road connecting the western settlements of Luddenham and St Marys as part of the growing development in this part of western Sydney and the need for infrastructure to support economic development in the area.

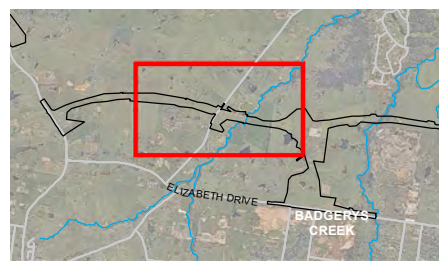
#### **Impact assessment**

Luddenham Road is registered on the Penrith LEP (843) and intersects the amended study area for about 65 metres to the south of the EIS construction footprint.



- The amended project
- - - The project construction footprint as per the EIS
- The amended project construction footprint
- The project operational footprint as per the EIS
- - - The amended project operational footprint
- Waterways
- Amended project ancillary facilities
- Luddenham Road Alignment

**Figure 4-1** Luddenham Road Alignment (Penrith LEP 843) (Item 3) in relation to the proposed works



The Luddenham Road Alignment heritage item was previously surveyed for the EIS on 16 November 2017 including the section in the amended study area which was traversed while travelling to the EIS study area. The Luddenham Road Alignment heritage item within both the EIS and amended study areas comprises modern asphalt, and the original fabric associated with the early road no longer exists due to modifications and renewal of the road surface over time. The current Luddenham Road is located within the original cadastral location with road reserve either side.

The overlap of an additional 65 metres of Luddenham Road Alignment as a result of the amended study area would not impact on the significance of the heritage item which relates to the road's historical significance as a late nineteenth century road.

*The following aspects of the project respect or enhance the heritage significance of the item for the following reasons:*

The amended project would not impact on the significance of the Luddenham Road alignment as the significance of the road relates to the historical significance of the original cadastral reserve and road alignment, which would not change.

*The following aspects of the project could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:*

There would not be any adverse impacts on the Luddenham Road Alignment based on the amended project design.

## **Conclusion**

Direct physical impacts on the heritage item relate to the installation of underground utilities, new property access points and culverts within the cadastral reserve. As such, the level of impact on this heritage item, during construction and operation of the amended project, both options 1 and 2, would be **negligible**. This is consistent with the assessment carried out as part of the EIS and, as such, there is no change in impact as described in the EIS

### **4.1.2 Item 8: Cecil Park School, Post Office and School Church**

The amended construction and operational footprints extend further into the curtilage of this heritage item than the previous EIS boundary (**Figure 4-2**). The amended construction footprint has been extended around 58 metres further north resulting in around 18 metres of the amended construction footprint overlapping with the southern curtilage of the heritage item. Therefore, the impact assessment for this heritage item has been amended accordingly.

## **Proposed works**

The widening of Elizabeth Drive under the M7 Motorway and approaches and the amendment of the exit ramps from the M7 Motorway to the M12 Motorway overlap with the former Cecil Park School, Post Office and School Church (historical complex).

These works would disturb or destroy archaeological relics associated with the former historical complex. An archaeological test excavation undertaken at the historical complex confirmed the presence of archaeological relics (EIS Annexure B) which can yield information about the past relating to development of education and postal and telecommunications infrastructure in the late 19th century and early 20th century.

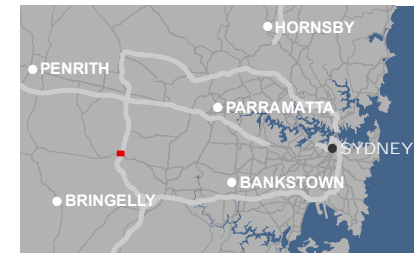
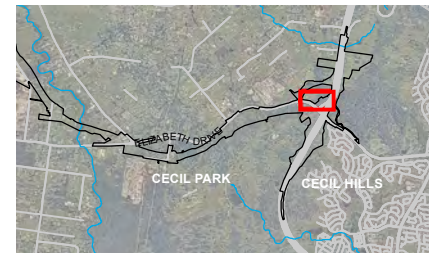
## **Heritage values**

The Cecil Park School, Post Office and School Church historical complex is significant at a local level for its historical heritage value, research potential and for its potential social heritage values.





- The amended project
- The amended project construction footprint
- - - The amended project operational footprint
- Subject site boundary
- Cecil Park former building locations
  - A Cecil Park School
  - B Teacher's Residence
  - C Cecil Park Post Office
  - D School Church of St Paul



**Figure 4-2** Cecil Park School, Post Office and Church (Item 8) in relation to the proposed works



## Impact assessment

*The following aspects of the project respect or enhance the heritage significance of the item for the following reasons:*

The amended project would have a direct impact on archaeological deposits of the Cecil Park School, Post Office and School Church historical complex. A detailed archaeological salvage excavation investigation of the entire complex prior to its disturbance may enhance its significance through the realisation of its research potential.

Undertaking further archaeological investigation of the complex under an archaeological research design by an appropriately qualified historical archaeologist has the potential to reveal further information on the development of education and postal and telecommunications in western Sydney from the late 19th century and into the 20th century.

An Archaeological Research Design (ARD) for archaeological salvage of Item 8: Cecil Park School, Post Office and School Church has been prepared and is presented in

### **Attachment A.**

*The following aspects of the project could detrimentally impact on heritage significance. The reasons are explained as well as the measures to be taken to minimise impacts:*

The amended project would have a direct impact on archaeological relics of the whole complex including the former Cecil Park School, former Cecil Park Post Office and the former School Church of St Paul due to ground disturbance from construction which would destroy archaeological deposits. The works outlined in the EIS would have a direct impact on archaeological deposits of the Cecil Park Post Office and the former Church of St Paul. However with the amended construction footprint extending further to the north, the archaeological deposits of the Cecil Park School would now be completely impacted, rather than partially impacted. By following the management measures outlined in the EIS, as much information as possible will be obtained, contributing to our knowledge and significance of the heritage item.

To mitigate impacts to the site and maximise the opportunity for realising its research potential, archaeological salvage excavation of impact areas should be undertaken in accordance with the archaeological research design and methodology (see **Attachment A**).

The following impacts have been assessed:

- Vibration – This item would not be impacted by vibration as the archaeological deposits would be salvaged prior to construction commencing.
- Demolition – Relics associated with the former Cecil Park School, former Cecil Park Post Office and the former School Church of St Paul would be disturbed or removed. Archaeological salvage excavation of all components of the item would mitigate this impact.
- Archaeological disturbance – Potential relics of the former Cecil Park School, former Cecil Park Post Office and the former School Church of St Paul would be subject to disturbance as they are located within the amended construction footprint and would likely be removed or disturbed during excavation. Given the nature of the site as a complex, archaeological salvage excavation of all components of the site would mitigate this impact.
- Altered historical arrangements and access – Given the archaeological nature of the item the potential impacts would be limited to potential relics. The site of the heritage item is not currently accessed via formal roads so access to the site would not be affected.
- Visual amenity – As the heritage significance of this heritage item is related to subsurface archaeological remains, and the site does not have aesthetic significance, assessment of visual impacts is not relevant to this item.

- Landscape and vistas – As the heritage significance of this heritage item is related to subsurface archaeological remains, and the site does not have aesthetic significance, assessment of visual impacts is not relevant to this item.
- Curtilages – Not relevant to this heritage item, as much of the area of archaeological potential would be removed and no longer exist following archaeological investigation and construction of the amended project, and the site would no longer be of significance.
- Subsidence – Not applicable to this project.
- Architectural noise treatment – Not relevant to this heritage item.

## Conclusion

As identified in Section 7.6.4 of the EIS, construction impacts to Cecil Park School, Post Office and School Church historical complex would cause physical damage to the entire area of archaeological potential within the heritage item. Construction of the project as described in the EIS, would remove all of the archaeological values of the heritage item. This would be the same for the amended project and therefore there is no change in impact to that as described in the EIS.

The proposed works within the Cecil Park School, Park Post Office and School Church historical complex would still be of medium-large scale and moderate-high intensity, with the changes being permanent and irreversible. As such, the level of impact on the heritage item overall would be unchanged from the EIS at **major**.

Due to other factors, there were limited options to avoid the Cecil Park historical complex. The concept design for the project was developed through a multi-disciplinary process that identified and assessed a number of potential road corridor options against a wide range of engineering, environmental, social, land use and economic criteria. This process, which is documented in Chapter 4 of the EIS, ultimately determined that the project's design as currently proposed, represented the best balance after a multi-criteria analysis of all of the known constraints and opportunities.

While permanent and irreversible impacts would occur through the destruction of the area of archaeological potential, undertaking archaeological salvage investigations in accordance with the archaeological research design and methodology (see **Attachment A**) would provide opportunity to obtain information about the archaeology and history of the site not available from other sources.

## 4.2 Cumulative impacts

The cumulative non-Aboriginal heritage impacts would be likely to remain unchanged from the assessment undertaken as part of the EIS and presented in Section 7.6.5 of the EIS. The contribution of the M12 Motorway project to cumulative impacts on non-Aboriginal heritage in the area is minor, considering the heritage impacts would be addressed and managed through the implementation of a range of environmental mitigation measures.

## 5. Revised environmental management measures

Non-Aboriginal heritage impacts associated with the proposed design modifications are generally consistent with impacts described in the EIS and would therefore be managed through the implementation of the proposed management measures described in Chapter 7 of the amendment report. In addition, environmental management measure NAH09 has been revised as shown in **Table 5-1** to acknowledge the preparation of the archaeological research design and methodology for Item 8: Cecil Park School, Post Office and School Church (see **Attachment A**). Changes to the measure as presented in the EIS are shown in **bold** and strikethrough text.



Table 5-1 Revised environmental management measures

Impact	Reference	Environmental management measure	Responsible	Timing
Cecil Park School, Post Office and Church Site (Item 8)	NAH09	<ul style="list-style-type: none"> <li>Roads and Maritime will liaise with local museums and/or historical societies to arrange a long-term secure artefact repository for the artefact assemblage. Once that arrangement has been made, DPC (Heritage) will be notified for their records. In the short term, Roads and Maritime will provide secure short-term secure storage for the assemblage.</li> <li><b>Archaeological salvage excavations will be carried out for the Cecil Park School, Post Office and Church Site (Item 8) in accordance with the research design and methodology outlined in the <i>M12 Motorway: Former Cecil Park Historical Complex Historical Archaeological Salvage Research Design and Methodology</i> (Jacobs, 2020).</b></li> <li><del>An Archaeological Research Design (ARD) for archaeological salvage of the former historical complex will be prepared and implemented prior to construction commencing by a suitably qualified historical archaeologist who fulfils the Heritage Council's Excavation Director Criteria to conduct open area excavation of a locally significant archaeological site. The ARD will include a revised impact assessment, revised research questions and a methodology to ensure archaeological relics within the project construction footprint are adequately investigated in accordance with standard NSW archaeological practice.</del></li> </ul>	Contractor / Roads and Maritime	Detailed design

## 6. Conclusion

The supplementary non-Aboriginal heritage assessment for the amended project has determined the following:

- No additional known heritage items were identified within the amended construction and operational footprints
- The amended study area does not have potential for unidentified heritage items
- There is no change in impact to the following heritage items:
  - Item 1: McGarvie Smith Farm (Penrith LEP 857)
  - Item 2: Fleurs Radio Telescope Site (Penrith LEP 832)
  - Item 4: Upper Canal System (Pheasants Nest Weir to Prospect Reservoir) (SHR 01373)
  - Item 6: McMaster Field Station
  - Item 7: Fleurs Aerodrome
  - Item 10: Exeter Farm archaeological site
  - Item 12: South, Kemps and Badgerys Creek Confluence Weirs Scenic Landscape.

- There is one registered non-Aboriginal heritage item and one known heritage item located within the amended study area, which extends outside the EIS study area:
  - The Luddenham Road Alignment (Item 3) (Penrith LEP 843) bisects the EIS study area and overlaps with around 65 metres of the amended study area. The impact assessment for this heritage item has been amended to reflect the changes and the **negligible** impact level for Luddenham Road Alignment remains unchanged from the EIS study area.
  - The change in design has resulted in the amended construction and operational footprints extending around 18 metres further into the curtilage of the Cecil Park School, Post Office and School Church site (Item 8). The impact assessment for this heritage item has been amended but the overall **major** level of impact remains unchanged from the EIS study area.
- There are no changes to the cumulative impact assessment
- No additional or amended environmental management measures are required from those already identified in the EIS, including the archaeological salvage excavation of impact areas of Item 8 should still be undertaken in accordance with an archaeological research design and methodology.

It has been concluded that the amended project would not lead to any additional unacceptable non-Aboriginal heritage impacts to that defined in the EIS (see Section 7.6.4 of the EIS). This conclusion is based on the assessment of potential impacts to non-Aboriginal heritage items during both construction and operational stages, including potential cumulative impacts, of both options 1 and 2 of the amended project. Impacts to non-Aboriginal heritage items will be avoided or minimised where reasonable and feasible. Where impacts are unavoidable, works will be undertaken in accordance with the measures for individual non-Aboriginal heritage items.

## 7. References

Department of Sustainability Environment Water Population and Communities 2013 *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies: Significant impact guidelines 1.2, Environment Protection and Biodiversity Conservation Act 1999*. Canberra: Commonwealth of Australia.

NSW Heritage Office 2002 *NSW Heritage Manual: Statements of Heritage Impact*. Sydney: NSW Government.

Roads and Maritime Services 2019a *M12 Motorway Environmental Impact Statement*.

Roads and Maritime Services 2019b *M12 Motorway Environmental Impact Statement. Appendix J Non-Aboriginal Heritage Assessment Report*.

Urbis Pty Ltd 2018 *European Heritage Impact Statement. 1111 Elizabeth Drive, Cecil Park NSW 2178*. A report to Elizabeth Drive Pty Ltd.



**Attachment A M12 Motorway: Former Cecil Park Historical Complex Historical  
Archaeological Salvage Research Design**



**M12 Motorway: Former Cecil Park Historical Complex**  
**Historical Archaeological Salvage Research Design and Methodology**

| V2

6 April 2020

Transport for NSW

IA145100





## M12 Motorway: Former Cecil Park Historical Complex

Document Title: Historical Archaeological Salvage Research Design and Methodology  
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### Document history and status

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## **Abbreviations**

DPC	Department of Premier and Cabinet
DPIE	NSW Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EP&A Act	Environment Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
Heritage Act	Heritage Act (NSW) 1977
HARD	Historical Archaeological Research Design
JAJV	Jacobs Arcadis Joint Venture
NSW	New South Wales
SEARs	Secretary's Environmental Assessment Requirements
SHR	State Heritage Register
TfNSW	Transport for NSW



## Executive Summary

This report presents an historical archaeological research design (HARD) for a former historical complex identified in Cecil Hills (previously known as Cecil Park), Western Sydney NSW (Lot 1 DP724970, Lot 2 DP922940). The complex consists of a former school, church and post office that occupied the site from 1895 to 1965 which contains historical archaeological relics associated with that phase of occupation. The preparation of this HARD was undertaken after the completion of test excavation and subsequent archaeological report (Roads and Maritime Services 2019) which recommended salvage excavation at the site.

The former historical complex was initially identified as Item 8: Cecil Park School, Post Office and Church Site by Jacobs during preparation of a non-Aboriginal heritage assessment for the Environmental Impact Statement (EIS) for the proposed M12 Motorway (the project). The M12 Motorway will be a new motorway between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham, over a distance of about 16 kilometres. The motorway will be initially two lanes in each direction, with capacity to widen into the median for a future third lane in each direction. The M12 Motorway has been declared to be a Critical State Significant Infrastructure project and Secretary's Environmental Assessment Requirements (SEARs) were issued by the Department of Planning, Industry and Environment (DPIE) for the project on 30 October 2018.

Historical research has confirmed that the subject site once housed a complex of former buildings associated with the village of Cecil Park, including the school and teacher's residence, the post office and the School Church of St Paul. The predominantly timber buildings were progressively added to the site from 1895 through to 1903 and became a social hub for the small rural location. The buildings were occupied until the 1950s prior to their demolition or removal. The subject site has been assessed to be significant at a local level for its historical heritage value, research potential and for its potential social heritage values.

Archaeological survey and subsequent archaeological test excavation revealed that the site is relatively undisturbed apart from a gas main alignment which traverses the site. The undisturbed portion of the site contains archaeological remains, with potential for further archaeological remains of the Former Cecil Park Historical Complex to be identified and recorded. If substantially intact archaeological relics have survived, their analysis may provide some insights into the changing layout of the building complex and the lives of the children, teachers and worshippers who lived at Cecil Park during the late nineteenth and early twentieth centuries.

Given that the proposed construction of an interchange and ramp at the junction of the M7 Motorway and Elizabeth Drive is likely to destroy any archaeological evidence of the Cecil Park historical complex, a HARD has been prepared to identify appropriate research questions, which guide the strategy and archaeological methods recommended for the salvage excavation.

The following actions are recommended:

- A copy of this report should be provided to the Department of Premier and Cabinet (DPC) (Heritage), as part of the non-Aboriginal heritage assessment for the broader M12 Motorway project.
- A permit under Section 140 of the *Heritage Act 1977* is not required for critical State significant infrastructure projects, however DPC (Heritage) should be notified of the archaeological salvage program (by letter).
- Following project approval, TfNSW must engage a suitably qualified historical archaeologist who fulfils Heritage Council's Criteria for the Assessment of Excavation Directors (Heritage Council of NSW 2011) to conduct archaeological salvage excavation of the Cecil Park Historical Complex in accordance with this HARD included as Section 4 of this report.

### **Important note about this report**

The sole purpose of this report and the associated services performed by Jacobs is to complete a historical archaeological research design (HARD) of the Cecil Park historical complex in accordance with the scope of services set out in the contract between Jacobs and Transport for NSW (TfNSW). That scope of services, as described in this report, was developed with TfNSW.

In preparing this report, Jacobs has relied upon, and presumed accurate, any information (or confirmation of the absence thereof) provided by TfNSW and/or from other sources. Except as otherwise stated in the report, Jacobs has not attempted to verify the accuracy or completeness of any such information. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that our observations and conclusions as expressed in this report may change.

Jacobs derived the data in this report from information sourced from TfNSW and/or available in the public domain at the time or times outlined in this report. The passage of time, manifestation of latent conditions or impacts of future events may require further examination of the project and subsequent data analysis, and re-evaluation of the data, findings, observations and conclusions expressed in this report. Jacobs has prepared this report in accordance with the usual care and thoroughness of the consulting profession, for the sole purpose described above and by reference to applicable standards, guidelines, procedures and practices at the date of issue of this report. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this report, to the extent permitted by law.

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## 1. Introduction

### 1.1 Purpose and scope of this report

The Jacobs-Arcadis Joint Venture (JAJV) has been engaged by Transport for NSW (TfNSW) to prepare an Historical Archaeological Research Design (HARD) of the Former Cecil Park Historical Complex, identified in Cecil Hills (previously known as Cecil Park), Western Sydney NSW (the subject site or site). The complex consists of a former school, church and post office that occupied the site from 1895 to 1965. The preparation of this HARD was undertaken after the completion of test excavation and subsequent archaeological report (Roads and Maritime Services 2019) which recommended salvage excavation at the site.

The former historical complex was initially identified by Jacobs as Item 8: Cecil Park School, Post Office and Church Site during preparation of a non-Aboriginal heritage assessment in October 2019 for the Environmental Impact Statement (EIS) for the proposed M12 Motorway (the project). The M12 Motorway will be a new motorway between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham, over a distance of about 16 kilometres. The motorway will be initially two lanes in each direction, with capacity for a future third lane in each direction. The M12 Motorway has been declared to be a Critical State Significant Infrastructure project and Secretary's Environmental Assessment Requirements (SEARs) were issued by the Department of Planning, Industry and Environment (DPIE) for the project on 30 October 2018.

This HARD has been prepared to satisfy the SEARs issued for Heritage (**Table 1.1**).

This HARD has been prepared at the request of TfNSW and subsequent to the test excavation to support project approval for the project. This report has been prepared in accordance with the NSW Heritage Council's *Archaeological Assessment Guidelines* (1996) and refers to the *Guidelines for the preparation of Archaeological Management Plans* (2009). It is designed to be included as an attachment to the M12 Motorway Non-Aboriginal Heritage Supplementary Technical Memo prepared by Jacobs for the project which forms part of the M12 Motorway amendment report.

The following report includes:

- A summary of the results of the test excavation at the site to date
- A summary of the archaeological potential of the Former Cecil Park Historical Complex
- Provision of a HARD, which includes: a research framework based on historical themes identified for the Former Cecil Park Historical Complex, and a method for archaeological investigation of the site during the salvage excavation.

### 1.2 Site location

The Former Cecil Park Historical Complex is located on Lot 1 DP724970 and Lot 2 DP922940 which is a vacant, heavily vegetated property located at 1097-1109 Elizabeth Drive and 33 Wallgrove Road, near the intersection of Elizabeth Drive and Wallgrove Road, Cecil Hills (**Figure 1.1**).

### 1.3 Proposed activity

Construction of the M12 Motorway between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham (the project), over a distance of about 16 kilometres. The M12 Motorway works include the widening of Elizabeth Drive under the M7 Motorway and approaches and construction of exit ramps from the M7 Motorway to the M12 Motorway which overlaps with the Former Cecil Park Historical Complex (**Figure 1.2**). As shown in **Figure 1.2** construction of interchanges and ramps for the project would impact the subject site.

## 1.4 SEARs

On 30 October 2018, the Secretary of the DPIE issued SEARs to TfNSW for the M12 Motorway EIS. The SEARs include the Commonwealth requirements under the *Environment Protection and Biodiversity Conservation Act* (Commonwealth) (EPBC Act). **Table 1.1** lists those requirements relating specifically to the assessment of the project's potential impacts on the Former Cecil Park Historical Complex.

Table 1.1: SEARs issued for M12 Motorway for Heritage

Secretary's requirement	
5. Heritage	
2. Where impacts to State or locally significant heritage items are identified, the assessment must:	
a.	include a statement of heritage impact for all heritage items including the Fleurs Radio Telescope Site and the McGarvie-Smith Farm Site (including significance assessment)
b.	consider impacts to the item of significance caused by, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, visual amenity, landscape and vistas, curtilage, subsidence and architectural noise treatment (as relevant)
c.	outline measures to avoid and minimise those impacts in accordance with the current guidelines; and
d.	be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria).

In addition to the SEARs, a submission made to the DPIE about the project by the NSW Heritage Council dated 8 June 2018 requested that:

*In areas identified as having potential archaeological significance or 'relics', undertake a comprehensive archaeological assessment and management plan in line with Heritage Council guidelines which includes a methodology and research design to assess the impact of the works on the potential archaeological resource and to guide physical archaeological test excavations and include the results of these excavations.*

*This is to be carried out by a suitably qualified archaeologist and is to discuss the likelihood of significant historical and Aboriginal archaeology on the site, how this may be impacted by the project, and include measures to mitigate impacts."*

## 1.5 Statutory context

In addition to satisfying the SEARs issued by DPIE, the project is subject to certain provisions of the *Heritage Act 1977* (the Heritage Act). The Heritage Act provides several mechanisms by which items and places of heritage significance may be protected. The Heritage Act is designed to protect both listed heritage items, such as standing structures and potential archaeological remains or relics.

Approvals under Part 4 (or an excavation permit under s139) of the Heritage Act are not required for an approved project (or investigations required to meet the SEARs) under Division 5.2 of the *Environment Planning and Assessment Act* (EP&A Act), however, assessments such as this HARD for the salvage excavation follows the intent of the Heritage Act.



Part 6 Division 9 of the Heritage Act protects archaeological 'relics' from being 'exposed, moved, damaged or destroyed' by the disturbance or excavation of land. This protection extends to the situation where a person has 'reasonable cause to suspect' that archaeological remains may be affected by the disturbance or excavation of the land. It applies to all land in NSW that is not included in the State Heritage Register (SHR). A 'relic' is defined by the Heritage Act as:

*"Any deposit, artefact, object or material evidence that (a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and (b) is of State or local heritage significance."*

Section 139 of the Heritage Act requires any person who knows or has reasonable cause to suspect that their proposed works will expose or disturb a 'relic' to first obtain an Excavation Permit from the Heritage Council of NSW (pursuant to Section 140), unless there is an applicable exception (pursuant to Section 139(4)). In cases where a Section 139 permit is not required for projects assessed under Division 5.2 of the EP&A Act, works would need to be conducted in accordance with the intent of the Heritage Act.

A Section 140 Heritage Act permit is not required for this project as it has been declared critical State Significant infrastructure (SSI).

Section 146 of the Heritage Act requires any person who is aware or believes that they have discovered or located a relic must notify the Heritage Council of NSW providing details of the location and other information required.

Following the discovery of archaeological relics during the test excavation, a Section 146 Notification was prepared by Jacobs and submitted to the NSW Heritage Division (now DPC (Heritage) by TfNSW. A copy of that Notification is included as Annexure B in the test excavation report (Roads and Maritime Services 2019).

## **1.6 Aims**

The aim of this report is to assess the archaeological potential of the Former Cecil Park Heritage Complex and provide a strategy to mitigate any impacts proposed by construction of the M12 Motorway. The report includes a HARD which provides a research framework, research questions and a methodology for archaeological salvage excavation.

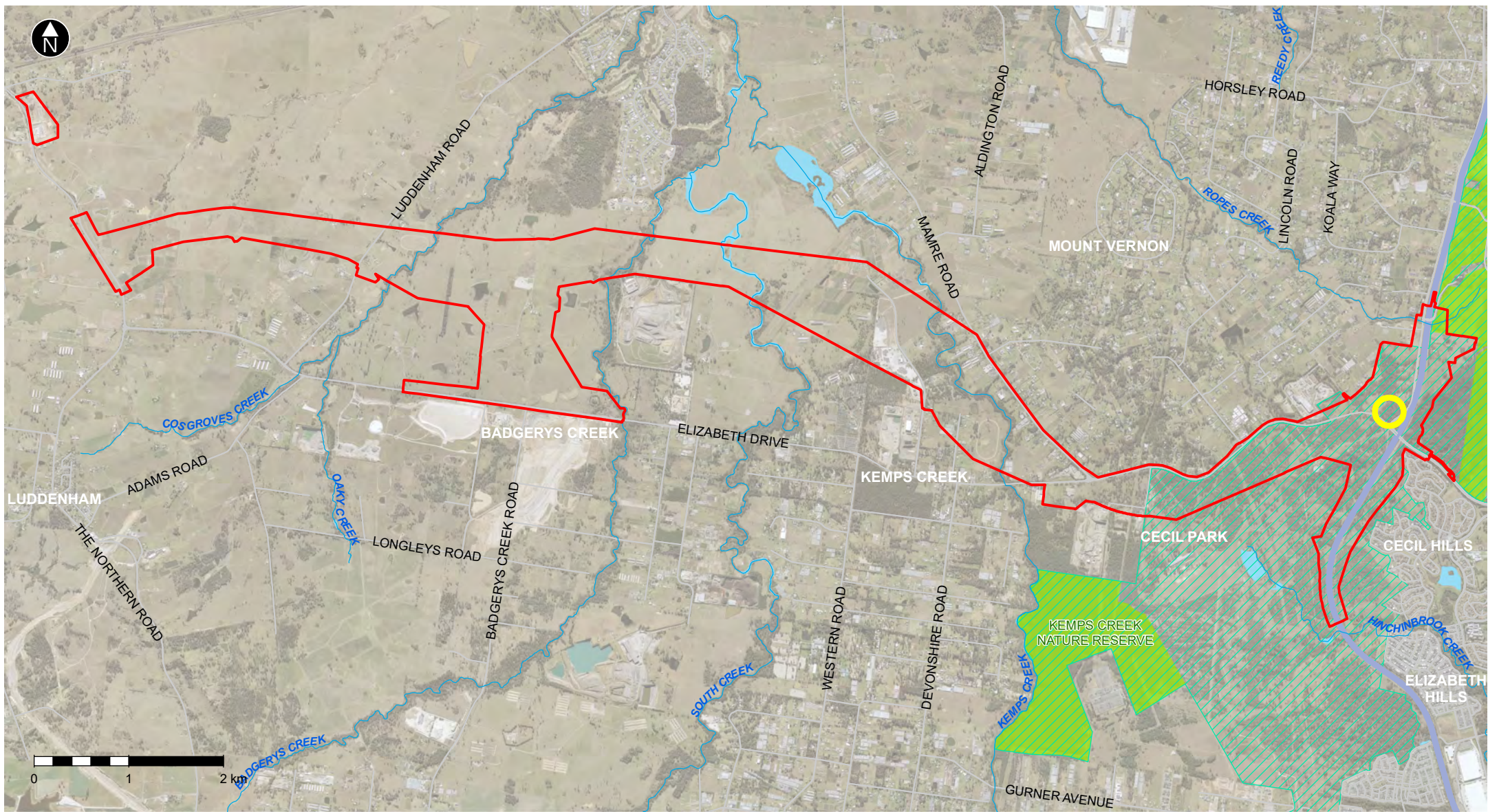
## **1.7 Authorship**

This HARD has been prepared by Jennifer Chandler (Senior Archaeologist, JAJV) and includes information from the *Former Cecil Park Historical Complex Historical Archaeological Assessment, Research Design and Test Excavation* (Roads and Maritime Services 2019), prepared by Fiona Leslie (Principal Archaeologist, JAJV, Excavation Director for the test excavation). Technical review of the HARD was undertaken by Dr Karen Murphy (Technical Director, JAJV).

Table 1.2: Heritage consultants undertaking this assessment

<b>Name</b>	<b>Qualifications</b>	<b>Role</b>
Jennifer Chandler	Master of Cultural Heritage Bachelor of Archaeology (Honours) Honours thesis: Historical heritage	Writing and preparation of report
Fiona Leslie	Bachelor of Arts Honours thesis: Historical archaeology	Writing of report
Dr Karen Murphy	PhD (Historical Archaeology) Bachelor of Arts (Honours) (Archaeology)	Technical review of report



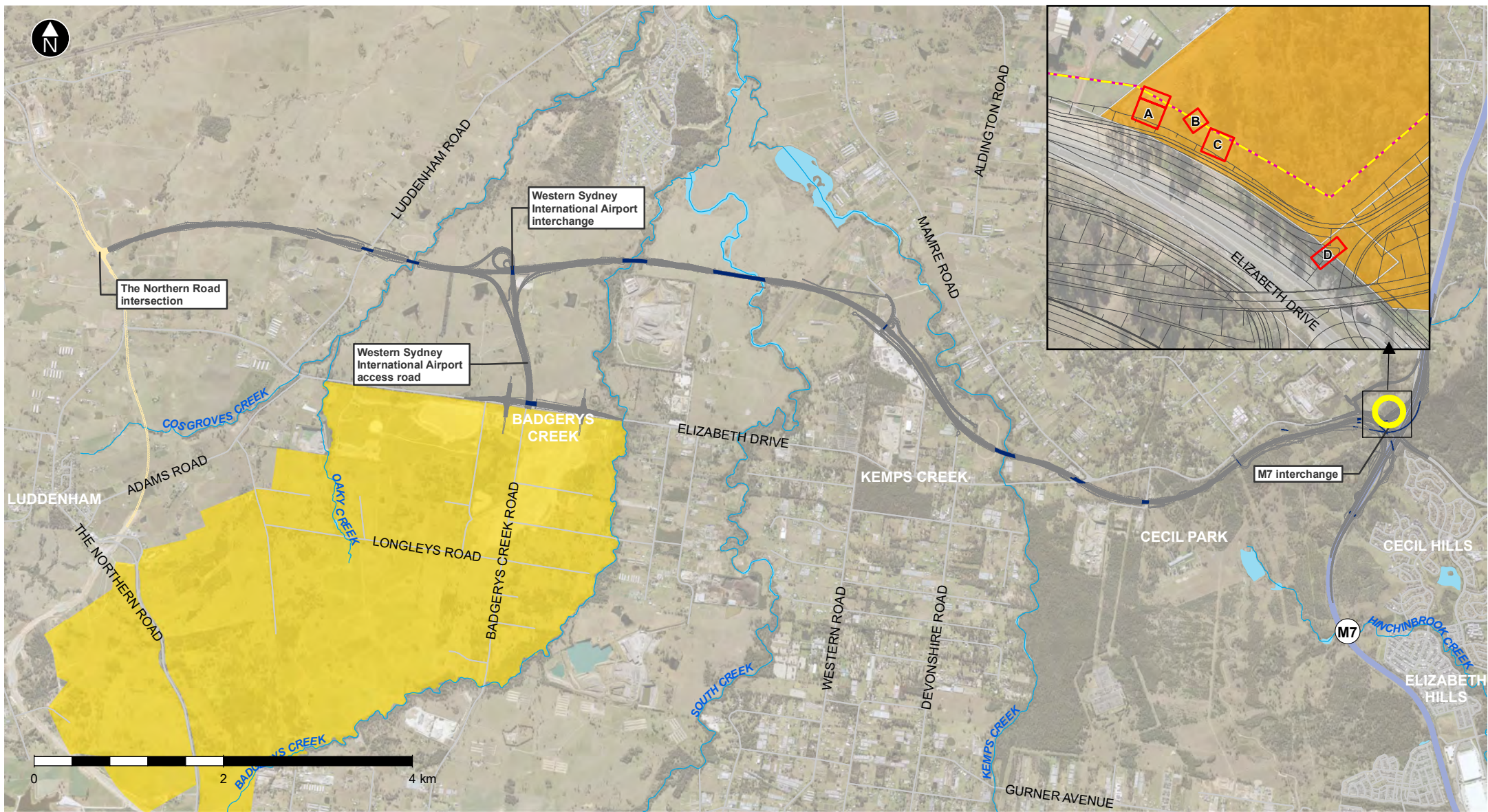


- M12 study area
- Western Sydney Parklands
- ~~~~~ Waterways
- NPWS Reserves
- Motorway
- Main roads



**Figure 1.1** Location of the EIS study area. The subject site is circled in yellow





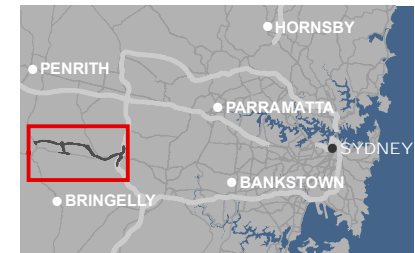
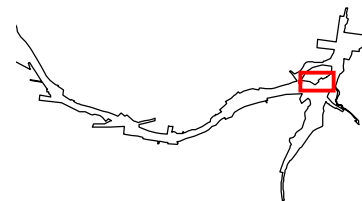
— The amended project  
 — Bridges  
 — Western Sydney International Airport

— Waterways  
 — Motorway  
 — Main roads

#### Inset legend

— The amended project construction footprint  
 — The amended project operational footprint  
 — Subject site boundary

— Cecil Park former building locations  
 A Cecil Park School  
 B Teacher's Residence  
 C Cecil Park Post Office  
 D School Church of St Paul



**Figure 1.2** The proposed M12 Motorway and Cecil Park Historical Complex

## 2. Site History

### 2.1 Introduction

This section of the report provides a summary of the history of the subject site, including a chronological timeline, and is reproduced from the Former Cecil Park Historical Complex Historical Archaeological Assessment, Research Design and Test Excavation (Roads and Maritime Services 2019). This provides a context for the research framework.

### 2.2 Historical background

**Table 2.1** outlines a brief timeline of events for the Cecil Park property.

Table 2.1: Brief timeline of events – Cecil Park property

Year	Events
1817-1886	Agricultural land associated with Macquarie Park (later Cecil Park)
1886	Subdivided lot sold to Thomas Hussey Kelly
1895	Subdivided Lot 1, Section 4, Deposited Plan 2954 sold to Queen Victoria (the Crown)
c.1895	Cecil Park Public School opened. Includes residence.
1896	Teacher's residence constructed of weatherboard
1897	Cecil Park post office opens
1898-1899	Brick school building constructed
1899	Full six acres of school block cleared and fenced
1903	School Church of St Paul opened adjacent to school by the Archbishop of Sydney
1905	Repairs made to school and teacher's residence
1940	School closed
1947	Residence of School removed from Cecil Park School to Tahmoor Public School
c.1950s	Closure of St Pauls Cecil Park
1963	Cecil Park post office closed
1964	Lease of site and buildings to Mr C A White



Cecil Park was part of a large land grant made to Thomas Wylde in 1817, then known as “Macquarie Park”. His son, Sir John Wylde, inherited this land on his father’s death in 1821 and the land was annexed to his own grant known as “Cecil Hills”. The land stayed within the Wylde family until the late-19<sup>th</sup> century, when it was subdivided in 1886 into farmlets, then again in 1906 into smaller market garden lots (**Figure 2.1**). The lot comprising the school, post office and church was transferred to the Crown in 1895. The Certificate of Title, Volume 1156 Folio 195, specifically states that the transfer is “for the purposes of the *Public Instruction Act 1880*”.



Figure 2.1: Further subdivision of Cecil Park, c.1906. The areas shaded dark grey represent sold lots. The approximate location of the school post office is circled in red (Courtesy: State Library of New South Wales)

Of interest, the 1906 Army reconnaissance map (**Figure 2.2**) shows a second post office on George Shipley’s land on the other side of the Upper Canal, opposite the site. This appears to have been in error, as according to the existing archives of Cecil Park Post Office, held by the National Archives of Australia, Mr Flood was appointed teacher and postmaster at Cecil Park in 1897. He held this post until 1904, when Mrs Alice Jones took over both roles until 1909. The file states that the post office was to come to the school, ‘being one block to the west of Shipley’s store’ (Galbraith 1909).

A newspaper article in 1938 describes the locality:

*Cecil Park is situated nine miles out of Liverpool. It is a very small place, with a post-office and a public school. The public school holds about 25 pupils. The dance hall is almost next to the school, and dances are held here every Saturday night. The people of Cecil Park go in mostly for poultry farming, but some have orchards and cattle. There is a sheep station also. Altogether, Cecil Park is a very lovely place.* (The Sun, 1938:3)

The configuration of the former school, teacher’s residence, post office and church is shown in the c1947 aerial photograph of the subject site (**Figure 2.3**).



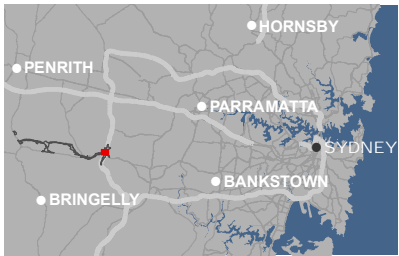
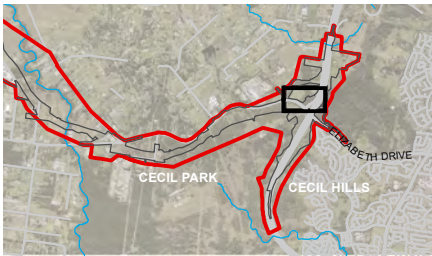
Figure 2.2: Extract from 1906 reconnaissance map for Liverpool Army Camp. The site of the Cecil Park School, Post Office and St Paul's Church is circled red. (Source: Aurecon (2016:116))





- |  |              |                              |
|--|--------------|------------------------------|
| — The amended project                        | — Motorway   | A = Cecil Park School        |
| — The amended project construction footprint | — Main roads | B = Teacher's Residence      |
| — The amended project operational footprint  |              | C = Cecil Park Post Office   |
|  |              | D = School Church of St Paul |

**Figure 2.3** 1947 historical aerial of site (Courtesy: NSW Department of Finance, Services and Innovation)



## 2.3 Former Cecil Park Historical Complex

### 2.3.1 Cecil Park Public School

The land was resumed for educational purposes in 1895 from T H Kelly to the Crown, with the school built the same year by McDermott and Murphy for the sum of £89 (Aurecon 2016:111). In October 1896 a tender was advertised by the Department of Public Instruction for the construction of a teacher's residence, to be made of wood, at the school premises.

A report in the *Nepean Times* set out complaints regarding the school building made by the local member, Mr T R Smith, to parliament in November 1897:

*There was also a school at Cecil Park, which was only 20 feet by 14 feet. It had an iron roof and was a weatherboard building without any lining. In the winter time it was so cold that the children could not remain in the school, and in the summer time, with sixty-five children on the roll, hon. members could imagine what the condition of the atmosphere was like. As the population in that locality had increased very rapidly, before the next twelve months there would be 100 children attending the school. An application was made for an addition to the school and he thought the inspector recommended that 12 feet should be added to the building. But that would be of no use at all. It was necessary that 90 feet at least should be added (Nepean Times 1897:8).*

Correspondence from the Department of Public Instruction on 10 March 1898 indicated that rather than improve the existing school building, a new school building was proposed (Nepean Times 1898:7). Articles in the local newspapers throughout 1898 noted that the new building had not been constructed (The Cumberland Argus and Fruitgrowers Advocate 1898b). A tender was advertised in November 1898 calling for the "Erection of a School Building (Brick) (Hogue 1898:8630). The tender was later awarded to H A Baglee of Canley Vale for £330 (Department of Public Instruction 1898:9048).

A visit by the school board occurred on 2 December 1898, which found that the school was in a satisfactory condition under "...the energetic teacher's (Mr Flood's) charge". However, the student body was noted as slight, which was attributed to a measles outbreak (The Cumberland Argus and Fruitgrowers Advocate 1898a:3). In September 1899, it was reported that the entire land that had been resumed for the recreation of pupils of the school had been cleared and fenced with a "substantial two-rail fence" (The Cumberland Argus and Fruitgrowers Advocate 1899:3). In 1905, tenders were sought for the improvement to both the school and the teacher's residence and the project awarded to A E Gould of Parramatta in February 1906 (Department of Public Works 1906:800). In 1911, tenders were again sought for "renovations, painting, improvements, etc." for the school (Department of Public Works 1911:3750).

The first school master was Mr William Flood, who also served as postmaster, stayed at the school until 1904. Mr Joseph Kenniff was schoolmaster from 1904 until his retirement in 1921. The last school master was Alderman Wilf Davis, a member of the local council, who taught at the school for eleven years until its closure in 1940.



### 2.3.2 Cecil Park Post Office

Shortly after the opening of the school, the Cecil Park District & Progress Association began petitioning the Postmaster General to establish a post office in the vicinity of the school. Mr Bossley inspected the location in 1897 and reported that:

*...there are about 18 households in the neighbourhood of the public school, all of whom live off the mail road and to them the establishment of an office would be a great convenience. Their correspondence - at present left at the school - is from 40 to 50 letters a week. (Bossley 1897:61).*

The post office was approved and the school master, Mr William Flood, was appointed as post master. This was done over the objections of Mr George A. Shipley, the proprietor of the nearby store.

Mr Flood held the position of post master until he was transferred to Minto public school in 1904, after which his successor, Mrs Alice Jones, took the position. In correspondence to the Deputy Postmaster General on 6 September 1909, it was noted that Mrs Jones had been removed to another school, and that details of the new teacher was needed to continue the post office duties, as the school was "where the post office is kept" (Galbraith 1909). The practice of the head teacher taking on the postmaster duties remained until the closure of the school in the 1940s. The post office continued to operate until 1963.



Figure 2.4: Cecil Hills Post Office, c. 1950 (Courtesy: National Archives of Australia of Australia)

### **2.3.3 School Church of St Paul, Cecil Park**

In 1903, a church was constructed to the east of the school and post office. Anglican religious services had, until then, been held at the “creamery”; which at the time of the church’s opening, was not in use (The Cumberland Argus and Fruitgrowers Advocate 1898b:3). The new church was opened by the Archbishop of Sydney, Dr William Saumarez Smith, on 17 October 1903 and dedicated to St Paul. The cost of construction was funded partially by the Church Society, but mostly by residents. According to newspaper reports of the time, the church was constructed of weatherboard with an iron roof, internally lined with timber. The capacity of the church was estimated to be for 100 people, and as with other nearby localities, such as the first Methodist Church at Badgerys Creek, doubled as a community hall (Liverpool Herald 1903:3) (RPS Manidis Roberts 2015:118). The church was formally named the “School Church of St Paul, Cecil Park” at the dedication ceremony, although later publications refer to the church as “St Paul’s, Cecil Park”.

No historical information was found regarding the exact dates of the closure of the church. The church celebrated its Golden Jubilee in 1953, however an absence of advertised sermon times at the church would suggest that it closed shortly thereafter.



### 3. Assessment of archaeological potential

#### 3.1 Former Cecil Park Historical Complex Historical Archaeological Assessment, Research Design and Test Excavation (Roads and Maritime Services 2019)

##### 3.1.1 Archaeological potential prior to test excavation

An archaeological assessment of the Former Cecil Park Historical Complex was undertaken in 2019 (Roads and Maritime Services 2019). The archaeological potential of the subject site prior to the test excavation in 2019 was assessed to be moderate for the following reasons:

- The subject site appears to be largely intact with the ground surface relatively undisturbed, apart from localised areas of disturbance that relate to rubbish dumps or possible archaeological features. There is also a gas main that traverses the site. Vegetation regrowth was observed across the property
- The location of many of the features observed during the site inspection correlates with the location of the former buildings shown in the c1947 aerial photograph
- At least two large levelled areas are visible in the landscape and appear to indicate where former buildings once stood
- An intact section of brick footing was observed at the rear of the property and may be the remains of an outbuilding at the rear of the teacher's residence.

It should be noted that an active gas pipeline was identified running SE-NW across the subject site (**Figure 3.1**). However, disturbance associated with its installation is thought to be localised and likely to have impacted potential archaeological relics within the service corridor only.

According to available historical records, Cecil Park School was constructed c1895 and was open until 1940. The school building may have originally been timber, but by 1898 was replaced by a brick building with a timber teacher's residence constructed nearby. By 1906 the timber Post Office building and St Paul's Church had been added to the complex. The church was also a weatherboard building with iron roof, internally lined with timber. The church was open until the 1950s and the Post Office until the 1960s.

Based on this available information, it was predicted that archaeological remains would be limited to:

- Structural remains associated with the former buildings. These are likely to include brick strip and pier footings that supported the former school buildings and brick pad footings used to support the timber teacher's residence, post office buildings and church
- Very limited underfloor deposits associated with domestic occupation. Given the age of the buildings it is likely that the floors were constructed using tongue-and-groove floorboards. The likelihood that artefacts accumulated within the building footprints is therefore low
- Miscellaneous artefacts associated with use of the school buildings. These may include slate pencil fragments
- Deeper sub-surface features, including wells, rubbish pits and cess-pits at the rear of the property. Depending on when they were abandoned, these features may be filled with artefact-rich deposits. Analysis of artefacts recovered from these features may provide some insights into the former use of the former complex and more broad insights into the development of education, religious buildings and postal and telecommunication infrastructure during the late 19<sup>th</sup> and early 20<sup>th</sup> century.

It should be noted that there is no known cemetery attached to the former School Church of St Paul.

### 3.1.2 Test excavation results and discussion

The archaeological test excavation at the Former Cecil Park Historical Complex was undertaken in 2019 (Roads and Maritime Services 2019). The investigation involved the excavation of five strip trenches, measuring 1.5 metres wide by 5 metres long, placed in strategic locations across the subject site (**Figure 3.1**). A summary of the results is reproduced here. A full description of the details of each trench can be found in the Historical Archaeological Assessment, Research Design and Test Excavation report (Roads and Maritime Services 2019: Chapter 5).

**Table 3.1** lists the various phases of occupation / use identified at the subject site, as documented by the historical record. During the test excavation the stratigraphic relationship between archaeological contexts was recorded and each context attributed to a particular phase, where possible.

Table 3.1: Phases of occupation/use identified at the subject site

Phase	Phase Description
A	Pre-European / natural topsoil and subsoil (pre 1895)
B	Construction of the first weatherboard school (c1895)
C	Occupation / use of the school (c1895 – 1898)
D	Demolition of the weatherboard school (c1898)
E	Construction of the brick school building, timber post office and St Pauls Church (c1898 – 1906).
F	Occupation / use of the brick school building, timber post office and church (c1898 – c1963)
G	Demolition of the school buildings (c1940 – 1963)
H	Subsequent levelling and use as vacant land (1963 onwards)

In summary, the following archaeological relics were identified during the test excavation:

- Intact brick footings of the former c1898 Cecil Park school in Test Trench 1. The footings appear to be associated with an annex attached to the main school building and include a former brick and mortar base, possibly for a stove. The footings were found below and in association with demolition fill and a number of artefacts, including ceramic, glass and metal pieces, were collected as part of the process of exposing the in situ structural remains. Of particular note, was the presence of buttons, animal bone pieces with cut marks and a marble. Given the integrity of the footings, it is likely that some in situ deposits associated with occupation of the school will survive within the broader building footprint.
- An artefact and charcoal rich deposit in Test Trench 5, which was exposed and left in situ. The deposit was found in association with bricks and may be the remains of a disturbed fireplace of the former c1906 St Paul's timber church. Further investigation, including manual excavation of the deposit, is needed to confirm this initial interpretation. Other brick piles were noted in the immediate vicinity and are also likely related to the former church and its outbuildings.

In Test Trench 3 a demolition fill and associated cut into the natural ground was identified and is likely to be associated with the former Teacher's Residence shown in the c1947 aerial photo of the subject site (**Figure 2.3**). No in situ archaeological deposits or structural remains, however, were identified. Similarly, in Test Trenches 2 and 4 demolition fill and an embedded stone was identified but no in situ archaeological relics were found.



The archaeological test excavation has confirmed the presence of archaeological relics within the subject site, not surprisingly in the location of the former school and church as shown in the c1947 aerial photograph. Given that the project would impact on the subject site, further archaeological salvage excavation is now required to further investigate relics prior to project works commencing. Given the condition of the footings of the former brick school and annex and the presence of an *in situ* artefact-rich deposit associated with the former church, the relics clearly have integrity and research potential. Further analysis of both the school and church site may provide some insight into former occupation and use of the complex by local residents, teachers and students.

Given the presence of the active gas main, which traverses the subject site (**Figure 3.1**), it is likely that some portions of the complex have been significantly disturbed. However, as demonstrated by the results of this test excavation, this area of disturbance is likely to be restricted to the gas main corridor only, with intact relics present in surrounding deposits.

### 3.1.3 Test excavation research questions and responses

The main aim of the archaeological investigation carried out in 2019 was to determine the nature and extent of archaeological relics within the subject site by undertaking archaeological test excavation. A number of research questions were formulated to guide the strategy and archaeological methods employed during the investigation and these along with the answers are provided below.

#### **Is there any evidence of undocumented pre-1880s European and/or Aboriginal activity on the site?**

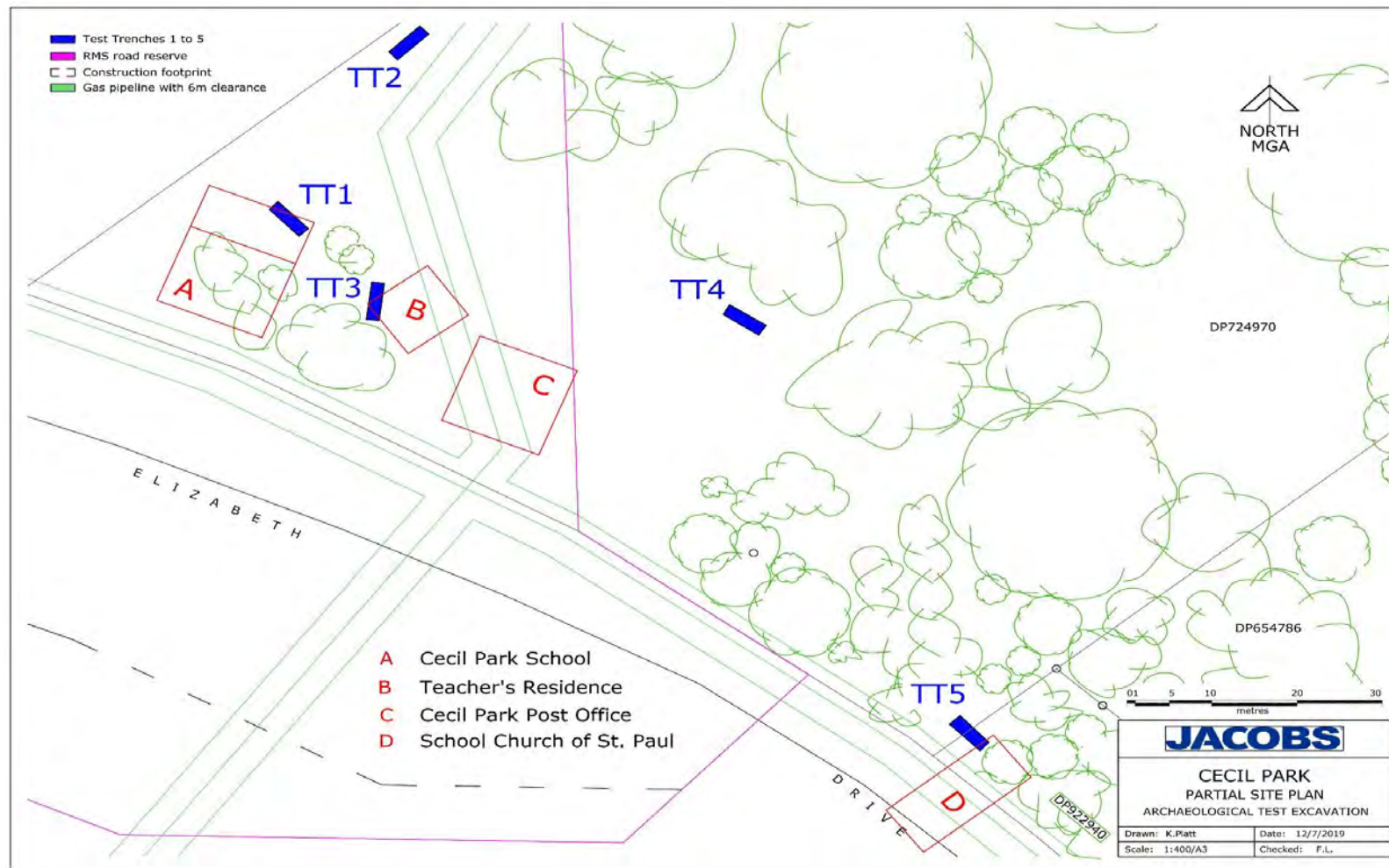
No. No evidence of any undocumented pre-1880s European or Aboriginal activity was observed during the archaeological test excavation.

#### **Have archaeological relics relating to the original school building constructed c1896 survived at the subject site? If so, what are their condition, nature, extent and significance? Does the evidence indicate the size of the original building and how does that compare to the later school shown in the 1940s aerial photograph? Does the evidence provide any information about former students and their use of the Cecil Park public school?**

No. No evidence of the original timber school building constructed in c1896 has been found at the subject site. Based on the results from Test Trench 1, it is likely that remains of the original timber building would be situated closer to Elizabeth Drive, if they have survived.

Despite the absence of evidence of the original school building, substantially intact brick footings of the later brick school building constructed c1898 were found within Test Trench 1. The remains include intact brick footings of an annex attached to the main school building and include a former brick and mortar base, possibly for a stove. The footings were found below, and in association with, demolition fill that contained occasional ceramic, glass and metal pieces. Of particular note, was the presence of buttons, animal bone pieces with cut marks, and a marble. These artefacts suggest that domestic activities, including cooking and eating, were being conducted at the school site. The structural remains were found in good condition and extend beyond the boundaries of the trench towards Elizabeth Drive.

Overlays of the location of Test Trench 1 and the former locations of the buildings, as shown in the c1947 aerial photo, (**Figure 2.3**) suggest that the brick footings align with the rear wall of the former brick school building and appear to have supported part of an annex. Given the integrity of the footings, more substantial brick footings of the main school building are likely to be present towards Elizabeth Drive and may be found in association with *in situ* occupation and yard deposits. If artefact-rich deposits are present in this location, their excavation and analysis would likely provide further insights into the lives of the former teachers and children that attended Cecil Park school during the late 19<sup>th</sup> and early 20<sup>th</sup> century. Such remains are considered to be locally significant for their historical heritage value and research potential.



Note: Construction footprint and RMS road reserve shown is as per the EIS. This figure is reproduced from the Former Cecil Park Historical Complex Historical Archaeological Assessment, Research Design and Test Excavation report (Roads and Maritime Services 2019)

Figure 3.1: Location of test excavation trenches within the Former Cecil Park Historical Complex

**Is there any archaeological evidence of the timber teacher's residence? If so, what is the condition, nature, extent and significance of the relics? Is there any evidence of a former cess-pit at the rear of the former house? Do the remains provide any insight into the lives of former teachers who occupied the residence during the late 19th and early 20th centuries?**

Some limited evidence of the timber teacher's residence was found in Test Trench 3, where demolition fill within a long linear cut into the natural ground was observed. The cut seems to follow the same orientation as the former building shown in the c1947 aerial photo (**Figure 2.3**). No *in situ* archaeological deposits or structural remains, however, were identified within Trench 3 and it is likely that construction of the active gas main may have significantly disturbed the location where the timber building once stood. Further archaeological investigation of the surrounding area, particular towards Elizabeth Drive and the active gas main, would be required to confirm this observation.

If *in situ* archaeological remains are present in the surrounding areas, they may provide some limited insight into the lives of former teachers that occupied the residence during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

**Has any archaeological evidence of the former post office building survived? If so, what is the nature and extent of the relics?**

Given the location of the former post office in relation to the active gas main that traverses the subject site, it is unlikely that substantially intact archaeological remains of that former building have survived. Disturbed brick was observed within the gas main corridor in the rough location of the former post office and it is likely that installation of the service has significantly disturbed the former building and associated archaeological relics.

**Is the rubbish pit identified at the eastern end of the subject site related to the former church? If so, what does the archaeological evidence tell us about the former church?**

Excavation of Test Trench 5 revealed the presence of an artefact- and charcoal-rich deposit in close proximity to the rubbish pit identified near the former c1906 St Paul's timber church. The deposit may be the remains of a disturbed fireplace and has considerable research potential. Further archaeological excavation of the deposit and the associated rubbish pits is required to recover further information about occupation of the church. Based on the evidence recovered from Test Trench 5, it is highly likely that the rubbish pit relates to former demolition of the church and artefact-rich deposits may be present in the surrounding area.

### 3.2 Updated archaeological potential

A review of the results of the archaeological assessment, test excavation results and response to the research questions in the *Historical Archaeological Assessment, Research Design and Test Excavation* (Roads and Maritime Services 2019) has resulted in the assessment of archaeological potential generally remaining the same as outlined above.

Particular areas of archaeological potential, such as artefact- and charcoal-rich deposits, and building footings, within the school site and the church site, have been defined and will form the basis of further investigation. Further consideration will be given to investigating the location of the original timber school building and the possibility of cess pits located behind the buildings. No evidence of the original timber school building was found during the test excavation and it was suggested that the remains of the original timber building may be situated closer to Elizabeth Drive, if they have survived. Further archaeological investigation in other areas of the complex may also reveal the original school building location, for example further towards Elizabeth Drive (south). Cess-pits were often placed to the rear of buildings (often within 20 metres) rather than the front of buildings. As no evidence of cess-pits was identified in the test excavation, open area excavation to the rear of the building footprints will also be undertaken in order to confirm the presence of cess-pits. As the historical aerial imagery indicates two small buildings to the east of the church building, this area will also be investigated.



## 4. Archaeological salvage research design

The following HARD identifies relevant historical themes to formulate appropriate research questions, which guides the strategy and archaeological methods to be employed during the salvage excavation.

### 4.1 Historical themes

**Table 4.1** below outlines historical themes, as identified by the NSW Heritage Council (2001), relevant to the subject site.

Table 4.1: Historical themes relevant to the subject site

National Theme	NSW Theme	Local Theme	Examples
Developing local, regional and national economies	Communication	Activities relating to the creation and conveyance of information	Post Office, telephone exchange, printery, radio studio, newspaper office, telegraph equipment, network of telegraph poles, mail boat shipwreck, track, airstrip, lighthouse, stamp collection
Building settlements, towns and cities	Accommodation	Activities associated with the provision of accommodation, and particular types of accommodation – does not include architectural styles – use the theme of Creative Endeavour for such activities.	Terrace, apartment, semi-detached house, holiday house, hostel, bungalow, mansion, shack, house boat, caravan, cave, humpy, migrant hostel, homestead, cottage, house site (archaeological).
Educating	Education	Activities associated with teaching and learning by children and adults, formally and informally.	School, kindergarten, university campus, mechanics institute, playground, hall of residence, text book, teachers' college, sail training boat wreck, sports field, seminary, field studies centre, library, physical evidence of academic achievement (eg a medal or certificate).
Developing Australia's cultural life	Religion	Activities associated with particular systems of faith and worship	Church, monastery, convent, rectory, presbytery, manse, parsonage, hall, chapter house, graveyard, monument, church organ, synagogue, temple, mosque, madrasa, carved tree, burial ground
Building settlements, towns and cities	Towns, suburbs and villages	Activities associated with creating, planning and managing urban functions, landscapes and lifestyles in towns, suburbs and villages	Town plan, streetscape, village reserve, concentrations of urban functions, civic centre, subdivision pattern, abandoned town site, urban square, fire hydrant, market place, abandoned wharf, relocated civic centre, boundary feature, municipal Coat of Arms

## 4.2 Research framework

The main aim of the archaeological salvage would be to:

- Fully recover as much information as possible about the buildings and activities that took place at the site prior to the commencement of construction activities associated with the M12 Motorway project.

Based on the identified historical themes and the results of the test excavation the following research questions are relevant to the subject site and guide the strategy and archaeological methods proposed for the salvage excavation. Those research questions which remain unanswered from the test excavation are also included and have been expanded where relevant.

### 4.2.1 Area A - Cecil Park School

- Have archaeological relics relating to the original school building constructed c1896 survived at the subject site? If so, what is the condition, nature, extent and significance of the archaeological relics? Does the evidence indicate the size of the original building and how does that compare to the later school shown in the c.1947 aerial photograph? Does the evidence provide any information about former students and their use of the Cecil Park public school?
- What is the extent of the brick footings relating to the more recent brick school building (constructed c1898) found during the test excavation at the school site? Do the footings extend towards Elizabeth Drive? Are there further artefacts related to the continuation of the brick footings? If so, are they the same types of artefacts found during the test excavation ie suggesting domestic activities were occurring at the site?
- Is there any evidence of a former cess-pit to the rear of the original school building location? If so, what is the nature of the deposits within the cess pit? Are there any artefacts located within the cess-pit? Are the artefacts similar to those found at the school site already? If there is an intact cesspit with remnant biosolids, is there microbiological evidence relating to human activity? Does this tell us anything about late 19<sup>th</sup> to early 20<sup>th</sup> century populations?
- How do the artefacts from the site compare with artefacts found on other late 19<sup>th</sup> to early 20<sup>th</sup> century schools in NSW (ie the Googong school site as outlined in the comparative analysis in the *Former Cecil Park Historical Complex Historical Archaeological Assessment, Research Design and Test Excavation Report* (Roads and Maritime Services 2019: 20)? Is there a distinctive difference in the types of artefacts located at the church, school and teacher's residence? What do these artefacts tell us about the work practices of the teachers that were working at the school during the late 19<sup>th</sup> and early 20<sup>th</sup> century? What do these artefacts tell us about the lives of the children who were attending the school? How do the artefacts compare with artefacts obtained from other school sites in Australia during the late 19<sup>th</sup> and early 20<sup>th</sup> century? Are the artefacts reflective of local manufacturing industries or were they obtained from other parts of Australia? Were the artefacts manufactured overseas? Do the artefacts have any similarities with school sites in the United Kingdom? What do the artefacts say about material possessions of children, and their experiences of childhood in the late 19<sup>th</sup> and early 20<sup>th</sup> century? For example, what games were they playing? Are there cultural differences between children in rural or urban contexts? Is gender reflected in types of toys and belongings found at the site?

### 4.2.2 Area B - Teacher's Residence

- Is there any archaeological evidence of the timber teacher's residence in areas not already investigated (ie further to the east and south)? If so, what is the condition, nature, extent and significance of the relics? How far into this area does disturbance from the gas main extend, if any? Do the remains provide any insight into the lives of former teachers who occupied the residence during the late 19<sup>th</sup> and early 20<sup>th</sup> centuries?

#### 4.2.3 Area C – Cecil Park Post Office

- Have archaeological relics relating to the post office building survived at the subject site? If so, what is the condition, nature, extent and significance of the archaeological relics? Does the evidence provide any information about the postal employees who worked at the site? Does the evidence provide any information about communication systems operating at that time? Is there evidence of any other uses of the post office apart from postal services?
- Is there any evidence of a former cess-pit to the rear of the building? If so, what is the nature and extent of the deposits within the cess-pit? Are there any artefacts located within the cess-pit? Do the remains provide any insight into the work practices of postal workers that were working at the post office during the late 19<sup>th</sup> to early 20<sup>th</sup> century? If there is an intact cesspit with remnant biosolids, is there microbiological evidence relating to human activity? What does this tell us about the diets of the postal workers at the site?
- How do the artefacts recovered compare with artefacts from other post offices in NSW or other Australian states? Were the artefacts manufactured locally, or in other parts of Australia, or were they manufactured overseas? What does this tell us about the interconnectedness of post offices across Australia, and is there any change discernible between the artefact pre-Federation and post-Federation when all post offices come under Commonwealth jurisdiction? Does this reflect changes in practice or operation? In analysing the types of artefacts, functions of artefacts and associated activities, is the pattern of artefacts reflective of the patterns expected from a late 19<sup>th</sup> to early 20<sup>th</sup> century site?

#### 4.2.4 Area D – School Church of St Paul

- What further material is present within the rubbish pit area identified during the test excavation? Does this material confirm that the rubbish pit is related to the demolition of the former church? If so, what does the archaeological evidence tell us about the former church?
- Is the charcoal deposit found during the test excavation a fireplace? Does this deposit relate to the church, such as a refectory, or is it possibly the site of the original timber school? What is the relationship between the deposit and the layout of the church footings? What is the nature and extent of the artefact- and charcoal-rich deposit?
- Is there any evidence of a former cess-pit to the rear or to the east of the building? If so, what is the nature of the deposits within the cess pit? Are there any artefacts located within the cess-pit? Are the artefacts similar to other artefacts found within the former church building site? If there is an intact cesspit with remnant biosolids, is there microbiological evidence relating to human activity? Does this tell us anything about late 19<sup>th</sup> to early 20<sup>th</sup> century populations?
- What types of artefacts are located at this site? Is there any information that can be obtained from the artefacts about the people attending the site for community purposes? How do the artefacts recovered compare with artefacts from other church sites in NSW? Are there regional similarities? Were the artefacts manufactured locally, or in other parts of Australia? Were the artefacts obtained from overseas? Is there any discernible differences in the types and nature of artefacts that can be related to the denomination of the churches?

### 4.3 Strategy and approach

Given that features are clearly identifiable at the subject site and the results of the test excavation confirm deposits relating to at least two of the four buildings on site, the recommended strategy is outlined below for each area/ building site to be investigated further.



Some of the proposed salvage excavation area extends outside the construction footprint (to the north) to allow an area of archaeological potential (possible cess pits) to be excavated at the same time as the area within the construction footprint. It is proposed to do this for the following reasons:

- The site complex as a whole should be understood and researched. Although information about the former building footprints is useful, in order to answer many of the research questions identified, a minimum reasonable quantity of artefacts for analysis is required. If cess pits are present in the excavation area outside the construction footprint, they have potential to contain artefacts which will add to the artefact collection and generate additional data to help answer research questions, in addition to the information already obtained during the test excavation.
- Access to the excavation area outside the construction footprint may be difficult in the future, as it will be adjacent to a major motorway interchange. The area is within the curve of the motorway offramp.
- The excavation area outside the construction footprint may be subject to accidental construction impacts due to its close proximity to the construction footprint (potential area for cess pits is within 20 metres of the construction footprint boundary) therefore potentially destroying any *in situ* archaeological deposits.

#### 4.3.1 Area A - Cecil Park School

The archaeological investigation of the Cecil Park School site will focus on the area marked as A on **Figure 4.1**. The former building footprint, as determined from historical aerial imagery, is around 17 metres by 13 metres in size. The area to the front of the school also has archaeological potential. There is potential for a former cess-pit to be located at the rear of the site. The open excavation area for the cess-pit investigation will extend 20 metres from the rear of the building.

The defined excavation area (marked in pink on **Figure 4.1**) will be gridded in 5-metre by 5-metre squares which will be further divided where necessary. The X and Y axes of the grid will be marked by pegs. A physical grid will only be established with string once features or deposits are identified to guide further excavation and recording.

All vegetation including trees and shrubs will be removed to facilitate the motorway construction. For excavation areas outside the construction footprint, any trees in the area will remain and excavation will occur around the trees. Shrubs and bushes will be removed. The defined excavation area (marked in pink on **Figure 4.1**), will be mechanically stripped, firstly removing the grass and topsoil to expose footings, rubbish deposits or other features. Excavation will be done using a smooth-bucket mechanical excavator systematically 'in strips' running in a northeast to southeast direction, following the former building alignment.

The excavator will stop at the top of any potential archaeological features or deposits or, if none are identified, continue until a culturally sterile layer is identified. The depth of the excavation will be determined based on the results of excavations. However, the previous test excavation in TT1 identified brick footings quite close to the ground surface.

If archaeological features or deposits are identified, then mechanical excavation will cease and manual hand excavation would be carried out in order to clarify, investigate and record the feature/deposit. Deposits will be manually excavated with trowels in 5-centimetre units, following cultural horizons where possible. The grid should be reduced to 1 metre x 1 metre for the excavation of artefact deposits. Excavation units (contexts) will be recorded in a single running sequence for Area A.

#### 4.3.2 Area B - Teacher's Residence

A service locator must be engaged to determine the location of the gas main prior to excavation works taking place at this site as it appears the eastern portion of the former building footprint overlaps with the gas main. A 6-metre buffer is required each side of the gas main for excavation and the excavation area must be marked accordingly.

The archaeological investigation of the Teacher's Residence site will focus on the area marked as B on **Figure 4.1**. The former building footprint, as identified in historical aerial imagery, is around 9 metres x 9 metres in size. The excavation area will also include the area at the front of the former building (ie south of the building footprint) to determine the presence of the footings. There is also potential for former cess-pits to be located at the rear of the site. The open excavation area for the cess-pit investigation will extend 20 metres to the rear of the building, but exclude the gas main and associated 6 metre buffer. The defined excavation area (marked in pink on **Figure 4.1**) will be gridded in 2-metre x 2-metre squares which will be further divided where necessary. The X and Y axes of the grid will be marked by pegs. A physical grid will only be established with string once features or deposits are identified to guide further excavation and recording.

All vegetation including trees and shrubs will be removed to facilitate the motorway construction. For excavation areas outside the construction footprint, any trees in the area will remain and excavation will occur around the trees. Shrubs and bushes will be removed. The defined excavation area (marked in pink on **Figure 4.1**) will be mechanically stripped, firstly removing the grass and topsoil to expose footings, rubbish deposits or other features. Excavation will be done using a smooth-bucket mechanical excavator systematically 'in strips' along a northeast to southwest axis aligned with the former building footprint.

The excavator will stop at the top of any potential archaeological features or deposits or, if none are identified, continue until a culturally sterile layer is identified. Works must cease if evidence of the gas main is encountered in a location not identified by the service locator. The depth of the excavation will be determined based on the results of excavations.

If archaeological features or deposits are identified, then mechanical excavation will cease and manual hand excavation would be carried out in order to clarify, investigate and record the feature/deposit. Deposits will be manually excavated with trowels in 5-centimetre units, following cultural horizons where possible. The grid should be reduced to 1 metre x 1 metre for the excavation of artefact deposits. Excavation units (contexts) will be recorded in a single running sequence for Area B.

#### 4.3.3 Area C – Cecil Park Post Office

A service locator must be engaged to determine the location of the gas main prior to excavation works taking place at this site as it appears the western portion of the former building footprint overlaps with the gas main. A 6-metre buffer is required each side of the gas main for excavation and the excavation area must be marked accordingly.

The archaeological investigation of the Cecil Park Post Office site will focus on the area marked as C on **Figure 4.1**. Much of the former building footprint, as identified in the historical aerial imagery, has likely been disturbed from the gas main installation. The open excavation area for the cess-pit investigation will extend 20 metres to the rear of the building, but exclude the gas main and associated 6 metre buffer to the west. The defined excavation area (marked in pink on **Figure 4.1**) will be gridded in 5-metre x 5-metre squares which will be further divided where necessary. The X and Y axes of the grid will be marked by pegs. A physical grid will only be established with string once features or deposits are identified to guide further excavation and recording.

All vegetation including trees and shrubs will be removed to facilitate the motorway construction. For excavation areas outside the construction footprint, any trees in the area will remain and excavation will occur around the trees. Shrubs and bushes will be removed. The defined excavation area (marked in pink on **Figure 4.1**) will be mechanically stripped, firstly removing the grass and topsoil to expose footings, rubbish deposits or other features. Excavation will be done using a smooth-bucket mechanical excavator systematically along the strip.

The excavator will stop at the top of any potential archaeological features or deposits or, if none are identified, continue until a culturally sterile layer is identified. The depth of the excavation will be determined based on the results of excavations.

If archaeological features or deposits are identified, then mechanical excavation will cease and manual hand excavation would be carried out in order to clarify, investigate and record the feature/deposit. Deposits should be excavated within 1 metre x 1 metre grids. Deposits will be manually excavated with trowels in 5-centimetre units, following cultural horizons where possible. Excavation units (contexts) will be recorded in a single running sequence for Area C.

#### 4.3.4 Area D - School Church of St Paul

A service locator must be engaged to determine the location of the gas main prior to excavation works taking place at this site as it appears the southern portion of the former building footprint overlaps with the gas main located outside the property and within the Elizabeth Drive road reserve. A 6-metre buffer is required each side of the gas main for excavation and the excavation area must be marked accordingly.

The archaeological investigation of the School Church of St Paul site will focus on the area marked as D on **Figure 4.1**, which is the former building footprint, measuring around 17 metres x 5 metres in size. There is also potential for former cess-pits to be located at the rear of the former building or to the east of the former building and the open excavation area will therefore extend 20 metres to the northeast and southeast of the former building.

The defined excavation area (marked in pink on **Figure 4.1**) will be confined to the area within the current cadastral property boundary as the former church building footprint appears to extend into the Elizabeth Drive road reserve which also contains a gas main. The area within the property will be gridded in a 5-metre x 5-metre square which will be further divided where necessary. The X and Y axes of the grid will be marked by pegs. A physical grid will only be established with string once features or deposits are identified to guide further excavation and recording.

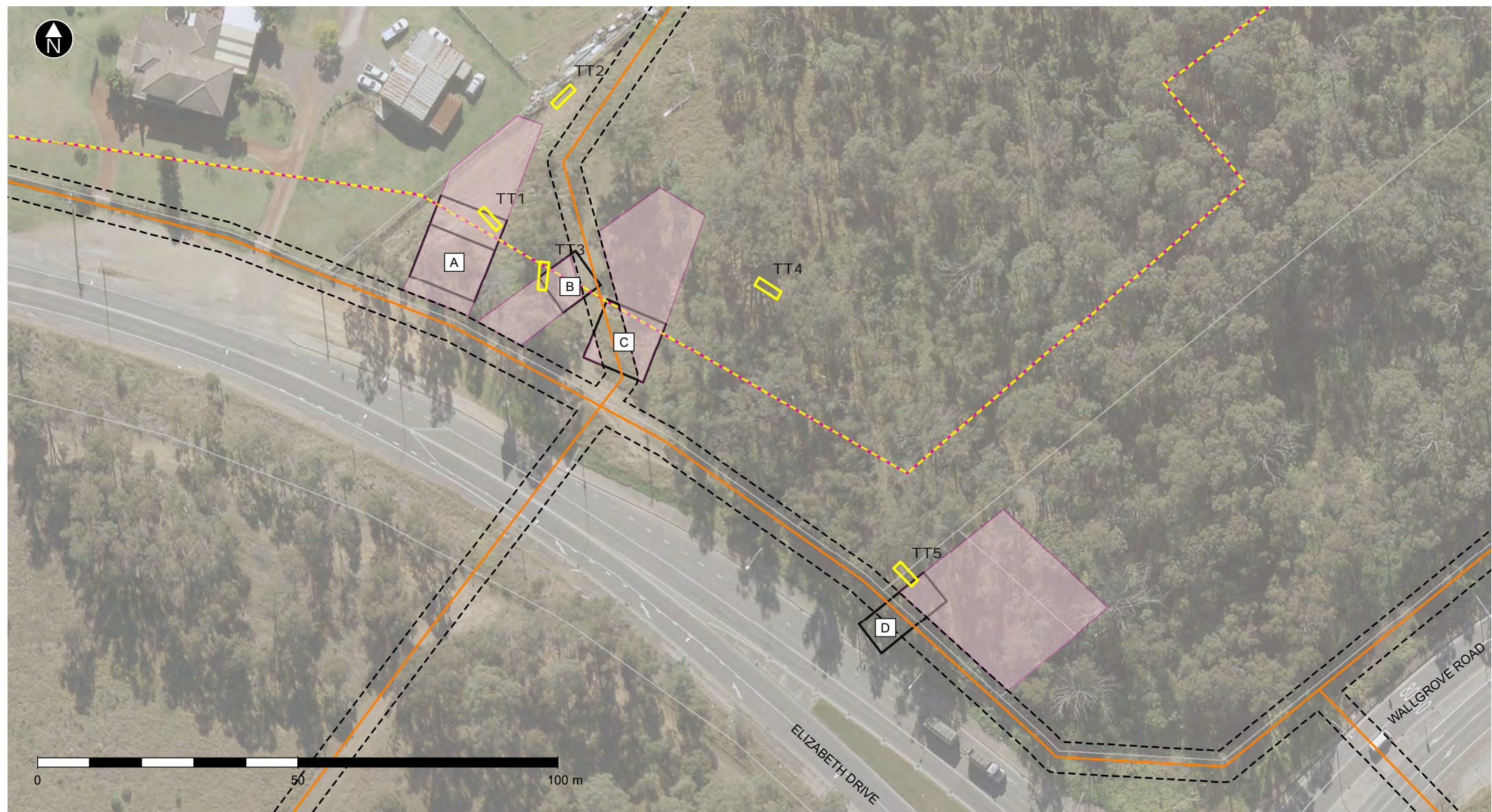
The previous test excavation trench TT5 will be reopened and manual hand excavation would be carried out in order to clarify, investigate and record the feature/deposit noted previously. Deposits will be manually excavated with trowels in 5-centimetre units, following cultural horizons where possible. The grid should be reduced to 1 metre x 1 metre for the excavation of artefact deposits. Excavation units (contexts) will be recorded in a single running sequence for Area D.

The defined excavation area (marked in pink on **Figure 4.1**) will be mechanically stripped, firstly removing the grass, all vegetation and topsoil to expose footings, rubbish deposits or other features. This will be done using a smooth-bucket mechanical excavator systematically 'in strips' along a northeast to southwest axis, as per the former building footprint.

The excavator will stop at the top of any potential archaeological features or deposits or, if none are identified, continue until a culturally sterile layer is identified. The depth of the excavation will be determined based on the results of excavations. However, the previous test excavation in TT5 identified charcoal and artefacts quite close to the ground surface.

If archaeological features or deposits are identified, then mechanical excavation will cease and manual hand excavation would be carried out in order to clarify, investigate and record the feature/deposit. Deposits will be manually excavated with trowels in 5-centimetre units, following cultural horizons where possible. The grid should be reduced to 1 metre x 1 metre for the excavation of artefact deposits. Excavation units (contexts) will be recorded in a single running sequence for Area D.

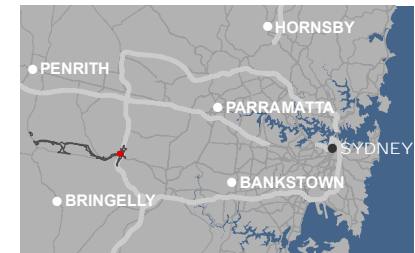
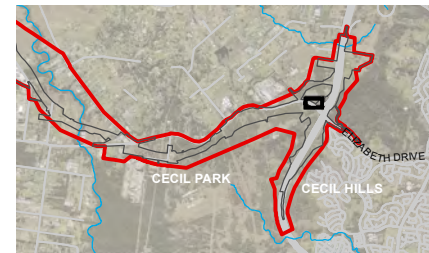




- The amended project
- The amended project construction footprint
- The amended project operational footprint
- Cadastre
- Existing gas line
- Existing gas line 6m corridor footprint
- Location of proposed open area excavation
- Test trenches 1 to 5 in test excavation (2019)

Cecil Park building locations

- A = Cecil Park School
- B = Teacher's Residence
- C = Cecil Park Post Office
- D = School Church of St Paul



**Figure 4.1** Location of proposed open area excavation

#### **4.4 Management of Aboriginal archaeology**

If Aboriginal sites are identified during this program then works will stop in the immediate area of the find, and the unexpected finds procedure for the discovery of Aboriginal ancestral remains, Aboriginal objects or new Aboriginal sites consistent with the *Standard Management Procedure Unexpected Heritage Items* (Roads and Maritime Services 2015) will be implemented.

#### **4.5 Excavation methods**

Standard archaeological excavation and recording methods are to be adopted during the investigation. These include undertaking the following tasks:

- A survey datum would be established by the site planner to record the levels of extant deposits and features
- Vegetation and grass would be carefully removed. This will include slashing and either removal of trees including roots, or removal of tree leaving the roots (method should incur least disturbance to site) by a small (7 tonne) excavator fitted with a batter bucket. This initial stage of the excavation would be supervised and directed by the Excavation Director. Spoil from excavation would be placed adjacent to the excavated area to be re-used as backfill
- After the removal of grass and topsoil, if archaeological features or deposits are noted, manual excavation and recording of deposits would be undertaken by the archaeology team in reverse order of deposition to expose the surface of significant archaeological features or deposits or culturally sterile clay. Manual excavation would be supervised and directed by the Excavation Director at all times
- All deposits will be sieved through a set of nested 10-millimetre, six-millimetre and three-millimetre sieves (or similar arrangement). Artefacts will not be point-provenienced but will be bulk bagged according to type within each feature, context or grid system
- Scaled site plans and profile or cross-section drawings showing the location of all archaeological deposits and features revealed during salvage excavation would be prepared, as required. These would be keyed to the site datum
- Photographic recording of all phases of the work on site would be undertaken. This would involve recording of archaeological features using an appropriate photographic scale
- A standard context recording system would be employed, namely the location, dimensions and characteristics of all archaeological features and deposits would be recorded on sequentially numbered proforma context recording sheets. This form of written documentation would be supplemented by preparation of a Harris Matrix showing the stratigraphic relationships between features and deposits
- Historical artefacts retained for analysis would be cleaned off site, sorted according to their fabric classes, bagged and boxed with reference to the context from which they were recovered, and
- Excavation would be conducted until site clearance was achieved to the satisfaction of the Excavation Director.



#### **4.6 Post-excavation analysis**

Historical artefacts recovered during salvage excavation would be catalogued and analysed for presentation and inclusion in an excavation report.

Artefact processing would be undertaken off-site, as follows:

- Artefacts would be cleaned and dried
- Items would then be divided into categories according to their type and fabric and, in the case of glass and ceramics, by colour. These would be further divided into diagnostic and non-diagnostic artefacts (with further consideration given to the diagnostic artefacts)
- Bulk-find items such as non-diagnostic glass, shells, small wooden fragments, non-diagnostic metal etc. would be weighed and recorded and retained for further research purposes
- The remaining items would be retained for further analysis and research
- Post-excavation analysis of materials recovered during excavation would be undertaken in a suitable location by JAJV under the supervision of the Excavation Director
- Following completion of analysis, artefacts would be assessed for being discarded, displayed or kept for research. Non-diagnostic artefacts would be discarded. Diagnostic artefacts would be retained for display and/or research. This would be assessed against the research questions and research significance of the collection
- Consultation with TfNSW would be undertaken to identify any artefacts for community engagement or heritage interpretation purposes for the project. Possible repositories for the artefact collection would also be decided in consultation with TfNSW and may include local museums or historical societies, or local councils.

#### **4.7 Excavation personnel**

The salvage excavation would be undertaken by a suitably qualified historical archaeologist who meets the requirements for open area excavation in the Heritage Council's Criteria for Assessing Excavation Directors. The Excavation Director would be assisted by a small team of archaeologists, including a site planner and three assistant archaeologists. It is estimated that it would take a minimum of three weeks to undertake the excavation; however, more time may be required if artefact-rich deposits and features are extensive.

#### **4.8 Reporting**

On completion of the salvage excavation a detailed excavation report would be prepared by the Excavation Director documenting the results of the investigation, artefact analysis, response to research questions, and include a revised significance assessment of the Former Cecil Park Historical Complex. It is estimated that it would take at least 6-12 months to complete the excavation report, including artefact processing.

A plain English summary of the results suitable for posting on the TfNSW website would be prepared by the Excavation Director.

Consideration would be given to a suitable community outreach program which could include but not be limited to the following:

- A public open day held during the salvage excavation
- A public lecture about the site held at a venue or historical society
- Educational opportunities such as engagement with schools



## 5. Conclusions and recommendations

### 5.1 Conclusions

The subject site housed a complex of former buildings associated with the village of Cecil Park including the school and teacher's residence, the post office and the School Church of St Paul. The predominantly timber buildings were progressively added to the site from 1895 through to 1903 and occupied until the 1950s prior to their demolition.

Archaeological test excavation (Roads and Maritime Services 2019) of the subject site in 2019 has confirmed the presence of intact historical archaeological relics of the Former Cecil Park Historical Complex. Relics include:

- Intact brick footings of the former c1898 Cecil Park school including a former annex attached to the main school building and a brick and mortar base, possibly for a stove. The footings were found below and in association with demolition fill containing occasional ceramic, glass and metal pieces, buttons, animal bone pieces with cut marks and a marble. Given the integrity of the footings, it is likely that some in situ deposits associated with occupation of the school will survive within the broader building footprint
- An artefact and charcoal rich deposit in the footprint of the former c1906 St Paul's timber church. The deposit was found in association with bricks and may be the remains of a disturbed fireplace. Further investigation, including manual excavation of the deposit and surrounding rubbish piles, is needed to confirm this initial interpretation.

The subject site maintains its significant at a local level for its historical heritage value, research potential and for its potential social heritage values. Further archaeological salvage excavation and associated artefact analysis would provide some insights into the changing layout of the building complex and the lives of the children, teachers and worshippers that lived at Cecil Park during the late 19th and early 20th centuries. The salvage excavation proposes investigation in the four areas as follows:

- Area A – Cecil Park School: area of former building footprint and small area at front of former building to be investigated, investigation at rear of building to identify if cess-pit present
- Area B – Teacher's Residence: area of former building footprint and area at front to be investigated
- Area C – Cecil Park Post Office: investigation of part of former building footprint and at rear of building to identify if cess-pit present
- Area D – School Church of St Paul: area of former building footprint to be investigated, investigation to rear and east of building to identify if cess-pit present

The proposed construction of an interchange and ramp at the junction of the M7 Motorway and Elizabeth Drive for the project would disturb or destroy archaeological relics associated with the former historical complex.

## **5.2 Recommendations**

The following actions are recommended:

- A copy of this report should be provided to the Department of Premier and Cabinet (DPC) (Heritage), as part of the non-Aboriginal heritage assessment for the broader M12 project
- A permit under Section 140 of the Heritage Act 1977 is not required for critical State significant infrastructure projects, however notification to DPC (Heritage) of the archaeological salvage program (by letter) is recommended
- Following project approval TfNSW must engage a suitably qualified historical archaeologist who fulfils Heritage Council's Criteria for the Assessment of Excavation Directors (Heritage Council of NSW 2011) to conduct archaeological salvage excavation of the Former Cecil Park Historical Complex in accordance with this HARD included as Section 4 of this report.

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