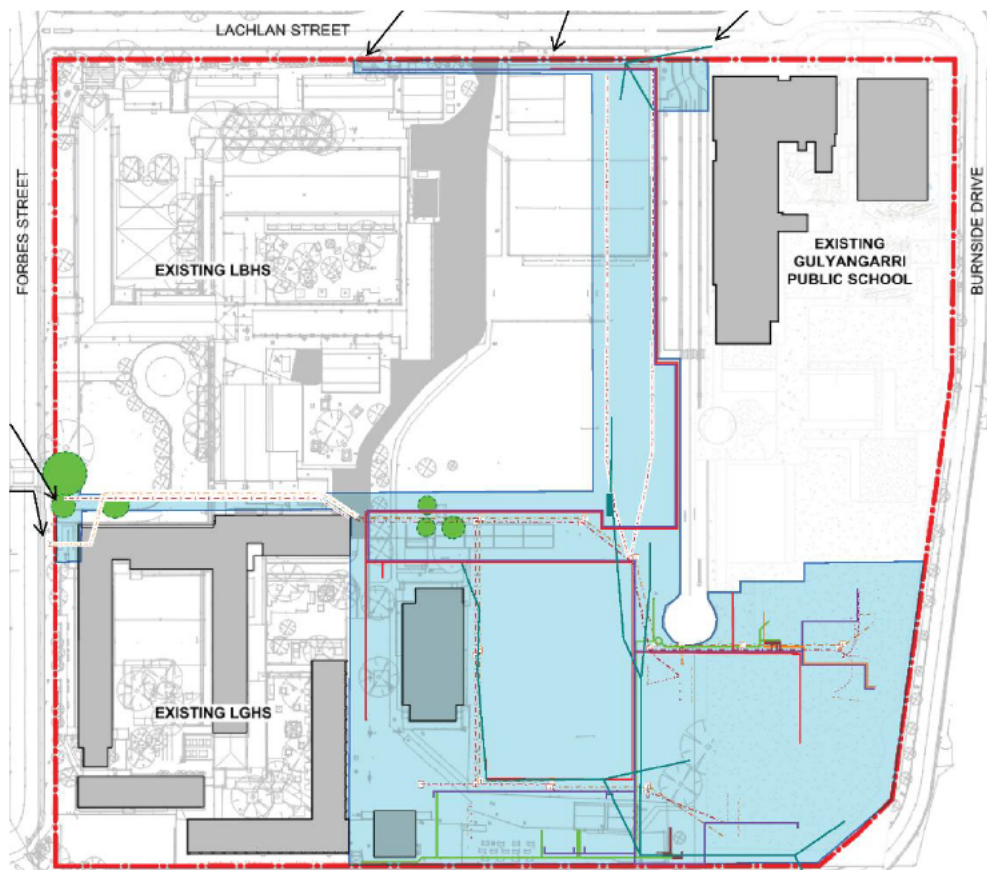


# MINOR WORKS REVIEW OF ENVIRONMENTAL FACTORS

## PRELIMINARY INFRASTRUCTURE WORKS TO FACILITATE REDEVELOPMENT OF LIVERPOOL BOYS AND LIVERPOOL GIRLS HIGH SCHOOLS

18 FORBES STREET, LIVERPOOL NSW 2170 (PART LOT 1 DP 1137425)



CLIENT: NSW Department of Education

DATE: 26 May 2025

PREPARED BY:



ABN 23 104 067 405

7 Canberra Street Charlestown NSW 2290 | PO Box 850 Charlestown NSW 2290

87 Herbert Street Gulgong NSW 2852 | PO Box 232 Gulgong NSW 2852

02 4942 5441 | 02 6374 2911

admin@dewittconsulting.com.au

www.dewittconsulting.com.au

# ENVIRONMENTAL ASSESSMENT DECLARATION

Review of Environmental Factors (REF)

Prepared under Part 5 of the Environmental Planning and Assessment Act 1979

REF Prepared by:

**Name** Trevor Allen  
**Qualifications** B.A Hons (Geography & Environmental Studies)  
 Grad. Dip Natural Resources Law and Policy  
 B.C.A

**Address** de Witt Consulting  
 7 Canberra Street  
 CHARLESTOWN NSW 2290

**Proponent name** NSW Department of Education

**Project address** 18 Forbes Street,  
 LIVERPOOL NSW 2170

**Proposed project** Preliminary Infrastructure Works

**Declaration** This Review of Environmental Factors (REF) has been prepared DeWitt Consulting on behalf of the NSW Department of Education (department) and assesses the potential environmental impacts which could arise from the proposed activity. This REF has been prepared in accordance with the *Guidelines for Division 5.1 Assessments* and any relevant addendum (the Division 5.1 Guidelines), and the relevant provisions of the *Environmental Planning and Assessment Act 1979* (EP&A Act), the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP).

This REF provides a true and fair review of the activity in relation to its likely impact on the environment and the information it contains is neither false nor misleading. It addresses to the fullest extent possible all the factors listed in Section 3 of the Division 5.1 Guidelines, the EP&A Regulation and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

In preparing the REF I have declared any possible conflict of interests (real, potential or perceived) and I do not consider I have any personal interests that would affect my professional judgement.

Signed



Reviewed by	Released by
<b>Name:</b> Orienne Glover <b>Position:</b> Town Planner	<b>Name:</b> Trevor Allen <b>Position:</b> Project Lead

---

**Copyright:** The concepts and information contained in this document are the property of de Witt Consulting. Use or copying of this document in whole or part without the written permission of de Witt Consulting constitutes an infringement of copyright.

**Liability:** Liability limited by a scheme approved under the Professional Standards Legislation.



This product has been manufactured under the controls established by a Bureau Veritas Certification approved management system that conforms with:

ISO 9001:2015, ISO 45001:2018 and ISO 14001:2015

N° AU004875-1 N° AU004876-1 N° AU005201-1

# CONTENTS

<b>1.</b>	<b>PROJECT INTRODUCTION .....</b>	<b>9</b>
<b>1.1.</b>	<b>ACKNOWLEDGEMENT OF COUNTRY .....</b>	<b>9</b>
<b>1.2.</b>	<b>PROPOSED ACTIVITY .....</b>	<b>9</b>
<b>1.3.</b>	<b>PROJECT BACKGROUND .....</b>	<b>9</b>
<b>1.4.</b>	<b>SITE AND SURROUNDS .....</b>	<b>9</b>
1.4.1.	LAND OWNERSHIP .....	12
1.4.2.	PROONENT AND DETERMINING AUTHORITY .....	12
<b>1.5.</b>	<b>PURPOSE OF REPORT .....</b>	<b>12</b>
<b>2.</b>	<b>OBJECTIVES, STRATEGIC NEED AND OPTIONS FOR THE PROPOSED ACTIVITY .....</b>	<b>14</b>
<b>2.1.</b>	<b>OBJECTIVE OF THE PROPOSED ACTIVITY .....</b>	<b>14</b>
<b>2.2.</b>	<b>STRATEGIC NEED FOR THE PROPOSED ACTIVITY .....</b>	<b>14</b>
<b>2.3.</b>	<b>PROJECT OPTIONS .....</b>	<b>14</b>
2.3.1.	ANALYSIS OF OPTIONS .....	14
2.3.2.	PREFERRED OPTION.....	14
<b>3.</b>	<b>PROPOSED ACTIVITY.....</b>	<b>15</b>
<b>3.1.</b>	<b>ACTIVITY DESCRIPTION.....</b>	<b>15</b>
<b>3.2.</b>	<b>PLANT AND EQUIPMENT.....</b>	<b>17</b>
<b>3.3.</b>	<b>TREE REMOVAL .....</b>	<b>17</b>
<b>3.4.</b>	<b>CONSTRUCTION TRAFFIC .....</b>	<b>17</b>
<b>3.5.</b>	<b>SITE SECURITY .....</b>	<b>17</b>
<b>3.6.</b>	<b>TIMING AND HOURS OF WORK .....</b>	<b>17</b>
<b>3.7.</b>	<b>RELATED ACTIVITIES .....</b>	<b>18</b>
<b>4.</b>	<b>STATUTORY PLANNING CONTROLS .....</b>	<b>19</b>
<b>4.1.</b>	<b>ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979.....</b>	<b>19</b>
4.1.1.	CONFIRMATION OF PART 5 ASSESSMENT .....	19
<b>4.2.</b>	<b>ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2021 .....</b>	<b>19</b>
<b>4.3.</b>	<b>STATE ENVIRONMENTAL PLANNING POLICIES .....</b>	<b>22</b>
4.3.1.	STATE ENVIRONMENTAL PLANNING POLICY (TRANSPORT AND INFRASTRUCTURE) 2021.....	22
4.3.2.	STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021 .....	22
4.3.3.	STATE ENVIRONMENTAL PLANNING POLICY (BIODIVERSITY AND CONSERVATION) 2021.....	23
<b>4.4.</b>	<b>LOCAL ENVIRONMENTAL PLAN .....</b>	<b>23</b>
4.4.1.	LAND USE ZONING .....	23
4.4.2.	HERITAGE CONSERVATION .....	24
4.4.3.	ACID SULFATE SOILS .....	25
<b>4.5.</b>	<b>STRATEGIC PLANS .....</b>	<b>26</b>
4.5.1.	LIVERPOOL LOCAL STRATEGIC PLANNING STATEMENT.....	26
4.5.2.	LIVERPOOL CENTRES AND CORRIDORS STRATEGY .....	26



<b>4.6.</b>	<b>NEW SOUTH WALES STATE LEGISLATION.....</b>	<b>26</b>
<b>4.7.</b>	<b>COMMONWEALTH LEGISLATION .....</b>	<b>29</b>
<b>5.</b>	<b>CONSULTATION .....</b>	<b>31</b>
<b>5.1.</b>	<b>SEPP TRANSPORT AND INFRASTRUCTURE CONSULTATION .....</b>	<b>31</b>
5.1.1.	SECTION 2.11 CONSULTATION WITH COUNCILS — DEVELOPMENT WITH IMPACTS ON LOCAL HERITAGE .....	32
5.1.2.	SECTION 2.15 CONSULTATION WITH AUTHORITIES OTHER THAN COUNCILS .....	32
<b>5.2.</b>	<b>COMMUNITY CONSULTATION .....</b>	<b>32</b>
<b>6.</b>	<b>ENVIRONMENTAL ASSESSMENT .....</b>	<b>33</b>
<b>6.1.</b>	<b>LAND USE.....</b>	<b>33</b>
6.1.1	EXISTING ENVIRONMENT .....	33
6.1.2	POTENTIAL IMPACTS .....	33
6.1.3	ENVIRONMENTAL MITIGATION MEASURES .....	33
<b>6.2.</b>	<b>TRAFFIC AND ACCESS.....</b>	<b>33</b>
6.2.1	EXISTING ENVIRONMENT .....	33
6.2.2	POTENTIAL IMPACTS .....	33
6.2.3	ENVIRONMENTAL MITIGATION MEASURES .....	34
<b>6.3.</b>	<b>NOISE AND VIBRATION.....</b>	<b>34</b>
6.3.1	EXISTING ENVIRONMENT .....	34
6.3.2	POTENTIAL IMPACTS .....	35
6.3.3	ENVIRONMENTAL MITIGATION MEASURES .....	35
<b>6.4.</b>	<b>SOILS, GEOLOGY &amp; CONTAMINATION .....</b>	<b>35</b>
6.4.1.	EXISTING ENVIRONMENT .....	35
6.4.2.	POTENTIAL IMPACTS .....	40
6.4.3.	ENVIRONMENTAL MITIGATION MEASURES .....	40
<b>6.5.</b>	<b>AIR QUALITY .....</b>	<b>42</b>
6.5.1	EXISTING ENVIRONMENT .....	42
6.5.2	POTENTIAL IMPACTS .....	42
6.5.3	ENVIRONMENTAL MITIGATION MEASURES .....	42
<b>6.6.</b>	<b>HYDROLOGY AND WATER QUALITY.....</b>	<b>42</b>
6.6.1	EXISTING ENVIRONMENT .....	42
6.6.2	POTENTIAL IMPACTS .....	43
6.6.3	ENVIRONMENTAL MITIGATION MEASURES .....	43
<b>6.7.</b>	<b>BIODIVERSITY.....</b>	<b>43</b>
6.7.1.	EXISTING ENVIRONMENT .....	43
6.7.2.	POTENTIAL IMPACTS .....	44
6.7.3.	ENVIRONMENTAL MITIGATION MEASURES .....	44
<b>6.8.</b>	<b>HERITAGE – ABORIGINAL OBJECTS OR PLACES OF SIGNIFICANCE.....</b>	<b>44</b>
6.8.1.	EXISTING ENVIRONMENT .....	44
6.8.2.	POTENTIAL IMPACTS .....	45

6.8.3.	ENVIRONMENTAL MITIGATION MEASURES .....	46
<b>6.9.</b>	<b>HERITAGE ITEMS, CONSERVATION AREAS AND ARCHAEOLOGICAL SITES .....</b>	<b>47</b>
6.9.1.	EXISTING ENVIRONMENT .....	47
6.9.2.	POTENTIAL IMPACTS .....	47
6.9.3.	ENVIRONMENTAL MITIGATION MEASURES .....	48
<b>6.10.</b>	<b>VISUAL IMPACTS .....</b>	<b>48</b>
6.10.1.	EXISTING ENVIRONMENT.....	48
6.10.2.	POTENTIAL IMPACTS .....	48
6.10.3.	ENVIRONMENTAL MITIGATION MEASURES.....	48
<b>6.11.</b>	<b>SOCIAL AND ECONOMIC .....</b>	<b>48</b>
6.11.1.	EXISTING ENVIRONMENT.....	48
6.11.2.	POTENTIAL IMPACTS .....	48
6.11.3.	ENVIRONMENTAL MITIGATION MEASURES.....	49
<b>6.12.</b>	<b>WASTE .....</b>	<b>49</b>
6.12.1	EXISTING ENVIRONMENT.....	49
6.12.2	POTENTIAL IMPACTS .....	49
6.12.3	ENVIRONMENTAL MITIGATION MEASURES.....	49
<b>6.13.</b>	<b>CUMULATIVE IMPACTS.....</b>	<b>49</b>
<b>7.</b>	<b>COMPILATION OF MITIGATION MEASURES.....</b>	<b>50</b>
<b>7.1.</b>	<b>CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN .....</b>	<b>50</b>
<b>8.</b>	<b>CONCLUSION AND JUSTIFICATION FOR THE ACTIVITY .....</b>	<b>51</b>
<b>9.</b>	<b>REFERENCES .....</b>	<b>52</b>

## TABLE OF FIGURES

Figure 1: Extract of Lot 1 DP 1137425 that forms the site from Liverpool Council .....	10
Figure 2: Extract of Plan of easement within the site.....	10
Figure 3: Aerial of site (outlined in red) with the main zone of REF works in black outline .....	11
Figure 4: Location plan. Site outlined in red.....	12
Figure 5 Proposed preliminary infrastructure for the site in the Main Zone of REF Works. ....	16
Figure 6: Indicative site plan showing proposed construction access, parking and site security.....	18
Figure 7: Land use zone of the site under Section 2.3 of the LEP. Site outlined in red .....	24
Figure 8: Heritage Item 8 mapping under Section 5.10 of the LEP. Site outlined in red. ....	25
Figure 9: Acid sulfate soils mapping under the LEP. Site outlined in red dashed line. ....	26
Figure 10 Adjoining occupiers notified of the proposed activity by the department. ....	31
Figure 11 Construction vehicle routes.....	34
Figure 12: Soils on the site.....	36
Figure 13: Location and details of three asbestos containment cells on site.....	37
Figure 14: Location of asbestos containment cells within the site of the proposed activity. ....	38

Figure 15 RAP works relative to proposed preliminary infrastructure .....	39
Figure 16 Sample locations as per Figure 4 in the RAP .....	41
Figure 17: PMF mapping of site (outlined in black). ....	43
Figure 18: Locations of PADs .....	45
Figure 19: Location of artefacts and subsequent AHIP area. ....	46

## LIST OF TABLES

Table 1 Factors to be considered concerning impact of an activity on the environment. ....	19
Table 2 Relevant NSW State Legislative Requirements and Approvals .....	27
Table 3: Matters of National Environmental Significance .....	29
Table 4: Other Matters .....	29
Table 5: Matters of NES Assessment .....	29
Table 6: Is consultation with authorities required?.....	32
Table 7: Details of Containment Cell 1 .....	37
Table 8: Details of Containment Cell 2 .....	37
Table 9: Details of Containment Cell 3 .....	38
Table 10: Summary of the climate at Liverpool (Bureau of Meteorology).....	42
Table 11 Trees to be removed.....	44
Table 12: ACHAR management recommendations .....	47

## APPENDICES

<b>Appendix 1</b>	Mitigation Measures
<b>Appendix 2</b>	Main Zone of the REF works by Northrop – 08/05/25
<b>Appendix 3</b>	Liverpool BGHS Upgrade Remediation Action Plan by JBS&G – 14/03/25
<b>Appendix 4</b>	EPBC Act Protected Matters Search - 23/09/24
<b>Appendix 5</b>	NLPS Asbestos Management Plan RevA prepared by Alliance 18/01/24
<b>Appendix 6</b>	Stormwater Management Plan by Meinhardt 28/02/25
<b>Appendix 7</b>	Liverpool BGHS Upgrade Arborist Report by Birds Tree Consultancy 02/04/25
<b>Appendix 8</b>	Liverpool BGHS Aboriginal Cultural Heritage Assessment Report by Everick Heritage – 13/02/25

## EXECUTIVE SUMMARY

This Minor Works Review of Environmental Factors has been prepared by de Witt Consulting on behalf of the Proponent – the NSW Department of Education (the department) to assess likely environmental impacts from the construction of preliminary infrastructure associated with the redevelopment of the Liverpool Boys High School and Liverpool Girls High School, at 18 Forbes Street, Liverpool NSW, 2170 (part Lot 1 DP1137425).

The activity relates to the construction and operation of preliminary infrastructure required to support the construction and operation of a temporary school and associated car parking and then the construction and operation of a single co-educational secondary school as detailed in separate Reviews of Environmental Factors pursuant to Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

The preliminary infrastructure that is subject to this REF comprises the following works:

- electricity transmission or distribution networks including electrical cables and substations;
- *stormwater management systems*;
- *telecommunication facilities*;
- *water reticulation system*;
- *sewerage systems*; and
- *construction works* including tree removal, minor earthworks, trenching and backfilling, restore the works area suitable to facilitate future uses.

The activity will provide the necessary infrastructure to support the construction and operation of the temporary high school and permanent high school redevelopment.

### Planning Pathway

The activity involves works by the department (a public authority) within the boundaries of the existing Liverpool Boys and Girls High School. Accordingly, pursuant to Chapter 2 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP), the proposed works are classified as development which may be carried out without consent.

Therefore, the activity is considered an ‘activity’ for the purposes of Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and is subject to an environmental assessment. For the purposes of this activity, the department is the proponent and the determining authority and the required environmental assessment is in the form of a Review of Environmental Factors (REF). The REF has been prepared in the accordance with the *Guidelines for Division 5.1 Assessments* (DPE, June 2022).

### Consultation

The department has consulted with Liverpool City Council, State Emergency Services and occupiers of land adjoining the site including NSW Health/South Western Sydney Local Health District. Only State Emergency Services provided general comment on flooding issues and this has been addressed in this REF.

### Justification and Conclusion

Based on the environmental assessment undertaken as part of this REF, it has been determined the proposal will not result in significant or long-term adverse impacts. The potential impacts identified can be reasonably mitigated and where necessary managed through the adoption of suitable site practices and adherence to accepted industry standards.

As the environmental impacts of the proposal are not likely to be significant, it is not necessary for an Environmental Impact Statement (EIS) to be prepared and approval to be sought for the proposal from the Minister for Planning and Public Spaces under Part 5.1 of the EP&A Act. The proposed activity will not have any effect on Matters of National Environmental Significance and approval of the Activity under the Commonwealth EPBC Act is not required.

On this basis, it is recommended that the department determine the proposed activity by way of approval in accordance with Part 5 of the EP&A Act and subject to the adoption and implementation of the department's standard mitigation measures in **Appendix 1** supplemented by additional mitigation measures identified by environmental investigations and included in this report.

### **Post determination approvals**

If the department approves the activity, then prior to construction commencing, the department will be required to obtain:

- a Section 138 approval from Liverpool City Council under the Roads Act for works in the road reserves of Lachlan and Forbes Streets.
- An Aboriginal Heritage Impact Permit from Heritage NSW under Section 90 of the National Parks and Wildlife Act to formalise the removal and management of artefacts removed from the site.

The need to obtain an Aboriginal Heritage Impact Permit under Section 90 of the National Parks and Wildlife Act 1974 triggers Section 171(5)(b) of the EP&A Regulation. Accordingly, this REF must be published on the department's website as soon as practicable and no later than 1 month after the activity commences.

## 1. PROJECT INTRODUCTION

### 1.1. ACKNOWLEDGEMENT OF COUNTRY

The NSW Department of Education (department) acknowledges the Cabrogal Peoples on whose traditional land the proposed activity is located. We pay respect to Elders past, present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of Australia.

### 1.2. PROPOSED ACTIVITY

This Review of Environmental Factors (**REF**) has been prepared by DeWitt Consulting (**DWC**) on behalf of the department to assess the likely environmental impacts of proposed preliminary infrastructure works within the Liverpool Boys and Girls High Schools site. The schools are located at 18 Forbes Street, Liverpool (the site).

The proposed activity comprises the following preliminary infrastructure works:

- Electrical infrastructure including two substations and underground power lines;
- stormwater management infrastructure;
- telecommunications infrastructure;
- water services;
- sewerage services; and
- construction works including tree removal, minor earthworks, trenching and backfilling, restore the works area suitable to facilitate future uses.

### 1.3. Project Background

The proposed works are to support the ongoing operation and continual use of the site as an *educational establishment*. Specifically, the preliminary infrastructure works subject to this REF are to facilitate the delivery of a new temporary school to accommodate students (under a separate planning pathway) and the demolition and redevelopment of the Liverpool Boys High School (also under a separate planning pathway).

### 1.4. SITE AND SURROUNDS

The site is identified as 18 Forbes Street, Liverpool NSW 2170 and is legally described as Lot 1 DP1137425 (Figure 1). The site is located within the Liverpool Local Government Area.



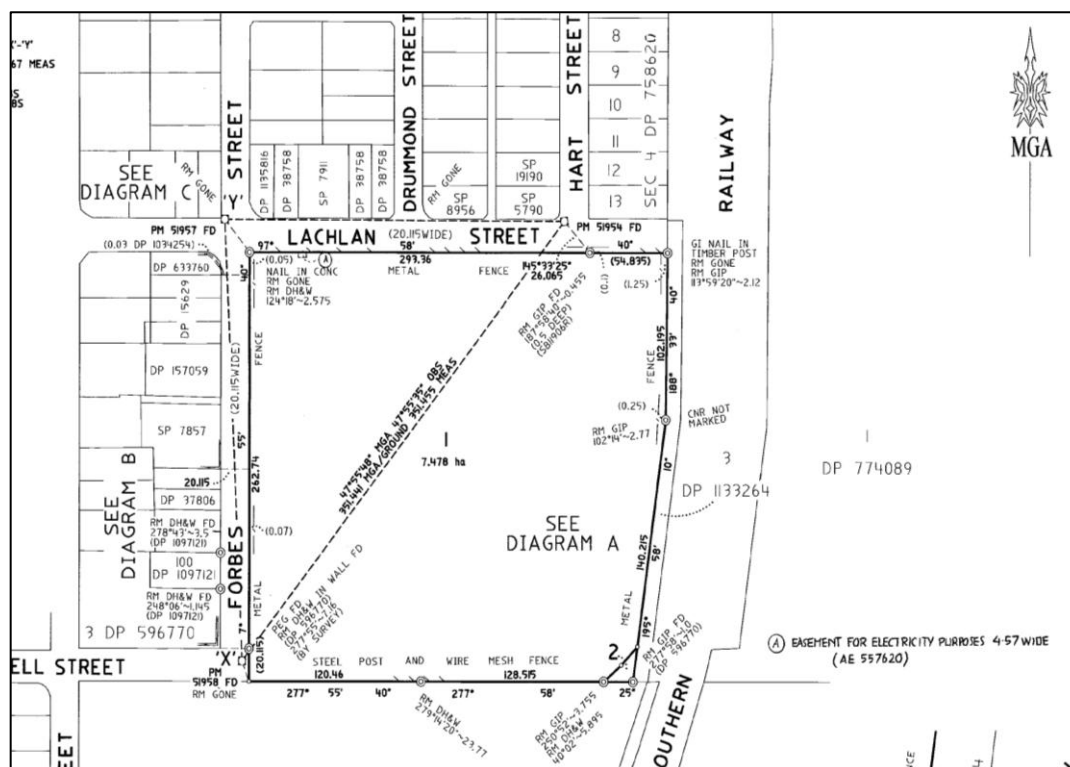


Figure 1: Extract of Lot 1 DP 1137425 that forms the site from Liverpool Council

Source: Survey for DP1137425 by Paul Michael Daly 19-02-2009.

An easement on the site - adjacent to Lachlan Street – is for an existing “padmount” substation 5.5m wide with a restriction on the site around the substation on the use of land (Figure 2).

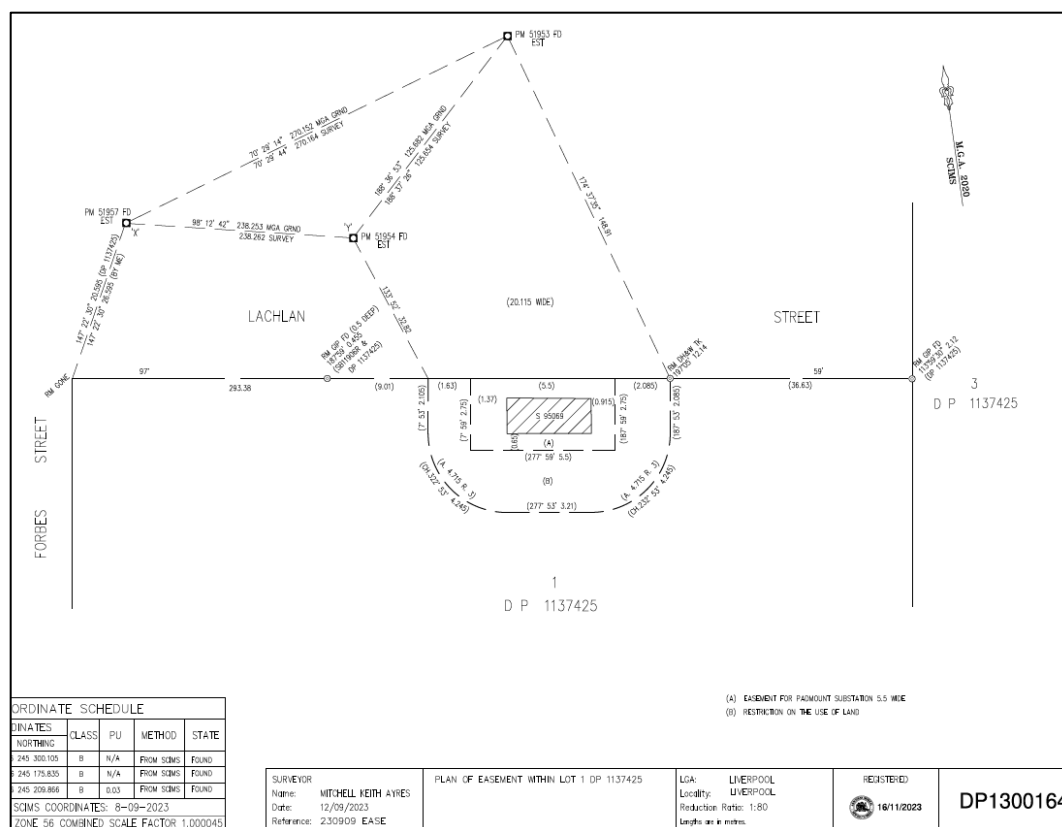


Figure 2: Extract of Plan of easement within the site

Source: Survey for DP1300164 by Mitchell Keith Ayres 12-09-2023

Figure 1 and Figure 2 indicate there are no easements or covenants that restrict or would have an adverse bearing on the design and approval of the activity.

The existing Liverpool Boys and Girls High Schools are located on the western portion of the site whilst the recently approved and constructed Gulyangarri Public School (SSD - 10391) is located on the eastern portion of the site. The area of the site subject to the preliminary infrastructure works under this REF is the area outlined in black in Figure 3).



Figure 3: Aerial of site (outlined in red) with the main zone of REF works in black outline

Source: Aerometrix, 2025.

The school site is regular in shape with a total area of approximately 8ha with frontages to Forbes Street (~160m, west), Lachlan Street (~290m, north), and Burnside Drive (~250m, east). The site slopes downwards from the west to the east with planted trees towards the eastern boundary.

South of the site is Liverpool Hospital, to the east is the Main Southern Rail line whilst to the north and west of the site are low-medium density residential flat buildings. Further away to the south west is the Liverpool town centre and railway station (Figure 4).

With reference to Figure 5, the proposed preliminary infrastructure is located within the Main Zone of REF Works. The activity also includes connection works within NSW Health land to the south, and the Forbes Street and Lachlan Street road reserves.





Figure 4: Location plan. Site outlined in red

Source: aerial © Aerometrex 2024.

#### 1.4.1. Land Ownership

The site is owned by the Minister for Education and Early Learning and managed through the Department of Education.

#### 1.4.2. Proponent and Determining Authority

The NSW Department of Education is the proponent and determining authority for the proposed activity.

### 1.5. PURPOSE OF REPORT

The purpose of this REF is to document the likely impacts of the construction and operation of the proposed activity on the environment and identify necessary environmental measures to mitigate these impacts.

The description of the activity and assessment of environmental impacts have been documented in this REF having regard to Section 170, 171 and 171A of the *Environmental Planning and Assessment Regulation 2021*, the *Biodiversity Conservation Act 2016*, the *Fisheries Management Act 1994*, and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*. It has been prepared having regard to the *Guidelines for Division 5.1 assessments* (Department of Planning and Environment, 2022).

The REF facilitates the department, as the proponent and determining authority, to satisfy the requirements of Section 5.5 of the *Environmental Planning and Assessment Act 1979* to examine and take into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the proposed activity.

The findings of the REF have been considered to assess:

- Whether the activity is likely to have a significant impact on the environment and if an environmental impact statement is required to be approved by the Minister for Planning and Public Spaces;
- The significance of any impact on threatened species as defined by the *Biodiversity Conservation Act 2016* and whether a Biodiversity Development Assessment Report or a Species Impact Statement are required; and
- The potential for the activity to significantly impact a matter of national environmental significance or Commonwealth land and the need to make a referral to the Commonwealth Government Department of Climate Change, Energy, the Environment and Water for a decision by the Australian Minister for the Environment and Water on whether assessment and approval is required under the *Environment Protection and Biodiversity Conservation Act*.

## **2. OBJECTIVES, STRATEGIC NEED AND OPTIONS FOR THE PROPOSED ACTIVITY**

### **2.1. OBJECTIVE OF THE PROPOSED ACTIVITY**

The objective of the proposed activity is to install necessary preliminary infrastructure works prior to construction of the temporary school (proposed under a separate planning pathway).

### **2.2. STRATEGIC NEED FOR THE PROPOSED ACTIVITY**

The Minister for Education and Early Learning is proposing to redevelop Liverpool Boys and Girls High School in anticipation of strong population growth in Liverpool LGA over the next 20 years.

A new permanent co-educational high school (subject to a separate REF) is to be located on the site of the current boys high school (north-west corner of site) and involve a new 6-storey building with general learning spaces, administration and staff facilities, a state-of-the-art library, school hall, gym, a new sports field and three sports courts.

The proposed preliminary infrastructure works under this REF will support the construction of a temporary high school that in turn facilitates the redevelopment of the existing high school. The works contained within this REF were not included in the main school REF due to timing constraints.

A description of the works are provided in Section 3 of this REF.

### **2.3. PROJECT OPTIONS**

There are three options available for the proponent with the proposed activity:

1. Undertake the preliminary infrastructure works; or
2. Do not proceed; or
3. Combine works in the main school REF.

#### **2.3.1. Analysis of Options**

Option 1 – Undertake works on site as described in Section 3 of this REF.

Option 2 – Do not proceed with the works. This option would not achieve the objective of the proposed activity. Doing nothing is not the preferred option.

Option 3 - Combine works in main school REF. This option is not preferred due to timing constraints (these works need to be completed ahead of the main works to facilitate the construction of the temporary school).

#### **2.3.2. Preferred Option**

Option 1 is the preferred option based on the following reasons:

- Ability to continue school operations while the broader site is redeveloped;
- Ability to meet the project objective;
- Ability to mitigate environmental impacts as much as is reasonably possible.

The REF considers the likely impact of the Option 1 on the environment.

### 3. PROPOSED ACTIVITY

#### 3.1. ACTIVITY DESCRIPTION

The proposed activity involves providing preliminary infrastructure at the site to facilitate the construction and operation of a temporary high school, as outlined in Section 1 Project Background of this REF.

The preliminary infrastructure works are described under Chapter 2 of the State Environmental Planning Policy *Infrastructure and Transport* (TI SEPP) as follows:

- electricity transmission or distribution networks including electrical cables and substations under Section 2.44;
- *stormwater management systems* under Section 2.137;
- *telecommunication facilities* under Section 2.141;
- *water reticulation system* under Section 2.159;
- *sewerage systems* under Section 2.126; and
- *construction works* under Section 2.3(3).

The preliminary infrastructure works is proposed within the area highlighted blue and described and illustrated as the “Main Zone of REF Works” in Figure 5 and **Appendix 2** and includes the following:

#### i. electrical infrastructure

- two new electrical substations on the site adjacent to Forbes Street;
- below ground electrical conduit extending from the substations into and across the site;

#### ii. stormwater Infrastructure

- below ground stormwater pits and pipes that connect north to Liverpool City Council’s existing stormwater assets in Lachlan Street and south to Council’s existing stormwater assets at Liverpool Hospital;

Note: an alternative stormwater connection has been indicated on drawing SKR01 Rev F. This is an alternative, (not preferred) connection to an existing internal stormwater pipe in the unlikely event that approval for the connection to the council asset to the South is not secured.

#### iii. telecommunications infrastructure

- below ground telecommunications conduit from Forbes Street road reserve across the western boundary and into and across the site;
- communication conduits will be underground;

#### iv. water services

- cold water works and hydrant works near the northern boundary adjacent to Lachlan Street;
- hydraulic pipes and fire hydrants connecting to existing girls school and proposed temporary school;

#### v. sewerage services

- two sewerage lines will run west-east in the southern section of the site of the proposed activity;



**Construction works** including tree removal and minor earthworks, trenching and backfilling, restore the works area suitable to facilitate future uses.

### 3.2. PLANT AND EQUIPMENT

Equipment used during construction of the works would include, but is not limited to, the following:

- Trucks (Light Rigid (LR) to Multi Combination (MC) Class);
- Concrete delivery trucks and pumping equipment;
- Excavators (various sizes);
- Generators;
- Tipper trucks; and
- Hand and power tools.

### 3.3. TREE REMOVAL

Six trees will be removed as part of this activity (Figure 5). The trees are required to be removed as trenching activity will occur within the tree protection zones and therefore the trees are not viable for retention.

### 3.4. CONSTRUCTION TRAFFIC

Construction traffic will comprise LR vehicles and medium rigid vehicles (the latter for deliveries of materials and equipment) and MC vehicles. Access for contractor parking and site office and amenities will be from Lachlan Street whilst a second adjacent access is proposed for construction vehicles and for equipment and materials (Figure 6). No vehicle access is proposed Burnside Drive as that is an emergency ambulance access for the hospital to the south of the site.

Heavy vehicle movements will be limited to the installation of the substations (2 trucks) and delivery of an excavator. Deliveries of pipework/materials (less than 10 movement per day) will be carried out with medium rigid vehicles.

Note: there will be no access through Burnside Drive.

The number of workers are estimated to be approximately 15 (max 25) and they will utilise on-site parking within the worksite.

Note: Mitigation Measure CMM17 is included in Appendix 1 to ensure these impacts are continued to be addressed through construction.

### 3.5. SITE SECURITY

The construction site will be fenced using existing fencing along the eastern and southern boundaries of the site and construction fencing will be located between the public school and the girls and boys high schools for safety and security (Figure 6).

### 3.6. TIMING AND HOURS OF WORK

Construction will occur during standard construction hours in accordance with the Interim Construction Noise Guideline (Department of Environment and Climate Change NSW, 2009):

- Mondays to Fridays: 7:00am to 6:00pm
- Saturdays: 8:00am to 1:00pm
- Sundays and public holidays: No work

A construction program will be determined upon appointment of the contractor(s) and will consider and prioritise the operational needs of the Gulyangarri Public School and Liverpool Girls and Boys High Schools. It is estimated that construction of the activity will take approximately 12 weeks.





## 4. STATUTORY PLANNING CONTROLS

### 4.1. ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

The EP&A Act is the principal legislation guiding land use development in NSW. The activity can proceed as development without consent and the proponent and determining authority are required to consider Part 5 Infrastructure and environmental impact assessment of the EP&A Act prior to determination. The activity meets the definition of an *activity* as per Section 5.1 of the Act. Other key Sections of the Act include:

- Section 5.5 requires a determining authority to consider to the fullest extent possible all matters affecting or likely to affect the environment by reason of an activity; and
- Section 5.7 states an Environmental Impact Statement is required when an activity is prescribed or may have a significant impact on the environment.

#### 4.1.1. Confirmation of Part 5 assessment

Part 5 of the *Environmental Planning and Assessment Act* permits activities to be assessed by a determining authority and pursuant to section 5.1 of the Act, the activity is an “activity”.

The Department is the proponent and determining authority for the activity. The Department is a statutory body representing the Crown and is a “public authority” as defined in section 1.4 of the EP&A Act. The Department is therefore a determining authority for the purposes of Part 5 of the EP&A Act for development that is permitted without consent, including under the TI SEPP .

Under section 5.5(1) of the EP&A Act, the determining authority, (the Department) is required to “examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity”.

The activity is identified as development permitted without consent under Chapter 2 of the TI SEPP.

### 4.2. ENVIRONMENTAL PLANNING AND ASSESSMENT REGULATION 2021

Section 171 of the *Environmental Planning and Assessment Regulation 2021* and the Division 5.1 Guidelines identifies factors listed in Table 1 to be taken into account concerning impact of an activity on the environment.

Table 1: Factors to be considered concerning impact of an activity on the environment.

Clause 171 Review of Environmental Factors	Consideration
(1) <i>When considering the likely impact of an activity on the environment, the determining authority must take into account the environmental factors specified in the environmental factors guidelines that apply to the activity.</i>	REF prepared with consideration of the <i>Division 5.1 Guidelines</i> , June 2022, DPE.
(2) <i>If there are no environmental factors guidelines in force, the determining authority must take into account the following environmental factors—</i>	Table 1 of the Guidelines document refers to the following factors (a) to (r):
(a) <i>any environmental impact on a community,</i>	Refer Section 7.
(b) <i>any transformation of the locality,</i>	The works primarily relate to trenching for services and substations and will therefore not transform the locality.
(c) <i>any environmental impact on the ecosystems of the locality,</i>	Refer Section 7.4 and 7.7
(d) <i>any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality,</i>	The site and locality do not have notable aesthetic, recreational, scientific environmental qualities or values that

	would be reduced by the proposed activity.
<i>(e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations</i>	A SoHI was prepared to review potential impacts of the temporary school and subsequent main school works on identified elements of historic heritage significance. The assessment identified Liverpool Boys and Girls School as an unlisted built heritage item. Impacts to the adjacent LEP item and identified historic archaeological relics were also assessed. The temporary school works to be completed under the current REF were assessed as resulting in Little - no impact to the significance of Liverpool Boys and Liverpool Girls School. The works were also assessed to result in Little to no impact to the LEP item "Plan of town of Liverpool (early town centre layout - Hoddle 1827)". Assessment confirmed no impact to identified archaeological relics.  Aboriginal heritage items are identified on site. An aboriginal Heritage Impact Permit will be required prior to construction.
<i>(f) Any impact on the habitat of protected animals (within the meaning of the Biodiversity Conservation Act 2016)</i>	Refer Section 7.7.
<i>(g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air</i>	
<i>(h) any long-term effects on the environment,</i>	
<i>(i) any degradation of the quality of the environment,</i>	Section 7.
<i>(j) any risk to the safety of the environment</i>	Section 7.
<i>(k) any reduction in the range of beneficial uses of the environment,</i>	Activity within existing school unlikely to reduce the range of beneficial uses of the environment.
<i>(l) any pollution of the environment,</i>	Refer Sections 7.3 - 7.6.
<i>(m) any environmental problems associated with the disposal of waste,</i>	Section 7.12.
<i>(n) any increased demands on natural or other resources that are, or are likely to become, in short supply,</i>	Proposed activity uses materials that are unlikely to become in short supply.
<i>(o) any cumulative environmental effect with other existing or likely future activities,</i>	Refer Section 7.13.
<i>(p) any impact on coastal processes and coastal hazards, including those under projected climate change conditions,</i>	N/A. Site is not subject to coastal processes and coastal hazards.
<i>(q) any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1.</i>	Refer Section 4.5.
<i>(r) other relevant environmental factors.</i>	There are no other relevant environmental factors.

Section 171A of the EP&A Regulation requires the consideration of the impact of an activity on the environment in a regulated catchment. The site is located within the Georges River catchment - a regulated catchment as defined under Schedule 6 of *SEPP Biodiversity and Conservation* (refer Section 4.3.3).

Section 171(4) identifies circumstances where an REF must be published on the department's website or the NSW Planning Portal. The estimated development cost is less

than \$5 million and does not require approval under *Fisheries Management Act 1994*, *Heritage Act 1977* and *Protection of the Environment Operations Act 1997*. However, the proponent has identified a need to obtain an Aboriginal Heritage Impact Permit (AHIP) under Section 90 of the National Parks and Wildlife Act 1974. Accordingly, under Section 171(5)(b) of the EP&A Regulation, this REF must be published as soon as practicable and no later than 1 month after the activity commences.



### 4.3. STATE ENVIRONMENTAL PLANNING POLICIES

#### 4.3.1. State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 Infrastructure of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TI SEPP) is where each component of the activity is permitted without consent as follows:

- A public authority may carry out *electricity transmission or distribution networks* including new substations and construction works including electricity cables as permissible without consent on any land under Section 2.44;
- A public authority may carry out sewerage reticulation systems including construction works without consent under Section 2.126;
- A public authority may carry out construction of *stormwater management systems* including construction works without consent under Section 2.137;
- A public authority may carry out construction of *telecommunication facilities* without consent on any land under Section 2.141; and
- A public authority may carry out the construction of a *water reticulation system* including construction works without consent on any land under Section 2.159.

*Construction works* are defined in the TI SEPP under Section 2.3(3) as follows:

*If this Chapter provides that development for a particular purpose that may be carried out without consent includes construction works, the following works or activities are (subject to and without limiting that provision) taken to be construction works if they are carried out for that purpose—*

- (a) *accessways,*
- (b) *temporary construction yards,*
- (c) *temporary lay-down areas for materials or equipment,*
- (d) *temporary structures,*
- (e) *investigations (including geotechnical and other testing, surveying and the placement of survey marks, and sampling),*
- (f) *clearing of vegetation (including any necessary cutting, pruning, ringbarking or removal of trees) and associated rectification and landscaping,*
- (g) *demolition,*
- (h) *relocation or removal of infrastructure,*
- (i) *extraction of extractive materials at the construction site solely for the purpose of the construction.*

The Department is a statutory body representing the Crown under the *Education Act 1990* and is a “public authority” as defined in section 1.4 of the EP&A Act. The Department is therefore a determining authority for development (an activity) that is permitted without consent under the SEPP.

The SEPP identifies the activity as development permitted without consent thereby permitting assessment of the activity under Part 5.5 of the EP&A Act with the Department as the determining authority.

Consultation requirements under the TI SEPP are addressed at Section 5.

#### 4.3.2. State Environmental Planning Policy (Resilience and Hazards) 2021

Site investigations for the high school upgrade project identified contaminants in the northwest portion of the site where the demolition of the Boys High School and its replacement buildings are proposed. A data gap investigation for the upgrade project

confirmed the site is suitable for the proposed school subject to remediation of identified asbestos and copper contamination (JBS&G, 2025A). Under this SEPP, a Category 2 Remediation Action Plan (RAP) was prepared (**Appendix 3**). Within the statutory planning framework described above, consideration of site contamination in the RAP and the proposed preliminary infrastructure is provided under Section 7.4.

#### 4.3.3. State Environmental Planning Policy (Biodiversity and Conservation) 2021

The site is approximately 300m from the Georges River with urban development, including a rail corridor, intervening. The site does not contain nor abut a natural water body.

Under Section 171A of the Regulation, a determining authority is required to consider the likely impact of the activity on the environment within a regulated catchment under *Part 6.2 Development in regulated catchments Division 2 Controls on development generally* of the SEPP Biodiversity and Conservation. The SEPP controls relate to water quality and quantity (Section 6.6), aquatic ecology (Section 6.7), flooding (Section 6.8), and recreation and public access (Section 6.9).

The proposed activity will include sufficient erosion and sediment controls during construction to ensure there will be no substantial impact to Georges River. The activity does not propose clearing of riparian vegetation. It is unlikely construction of the activity will occur during a probable maximum floods. Regardless potential erosion flooding during construction can be mitigated through erosion and sediment control measures.

The site does not provide public access to Georges River and therefore the proposed activity is unlikely to impact on recreational land users in the regulated catchment.

#### 4.4. LOCAL ENVIRONMENTAL PLAN

Local Environmental Plans are typically not relevant for Part 5 activities. However, they can and do identify matters that have implications for the assessment and determination of Part 5 activities e.g. zoning and heritage.

##### 4.4.1. Land Use Zoning

Under Section 2.3 of the Liverpool Local Environmental Plan 2008 (LEP), the site is zoned *SP2 Infrastructure (Health Services Facility & Educational Establishment)* (Figure 7).

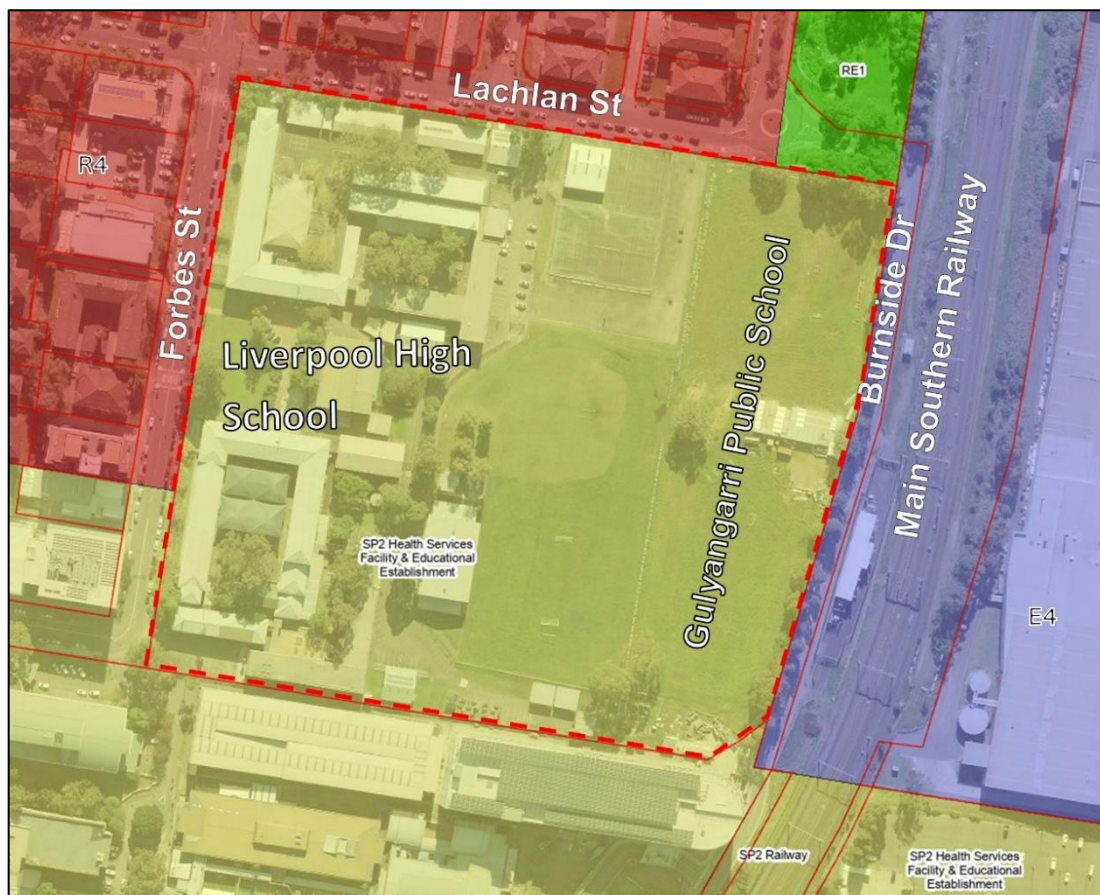


Figure 7: Land use zone of the site under Section 2.3 of the LEP. Site outlined in red

Source: NSW Planning Portal Spatial Viewer

The objectives of the zone are:

#### **Zone SP2 Infrastructure**

##### **1 Objectives of zone**

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.
- To reserve land for the provision of infrastructure.

The following uses are permitted with consent in the SP2 zone:

*Aquaculture; The purpose shown on the [Land Zoning Map](#), including any development that is ordinarily incidental or ancillary to development for that purpose; Environmental protection works; Roads.*

The LEP defines Educational establishments as:

*....a building or place used for education (including teaching), being—*

*(a) a school, or*

*(b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.*

#### **4.4.2. Heritage Conservation**

The site is adjacent to a local heritage item. Section 5.10 of LEP refers to Schedule 5 that lists Item 89 as a heritage item of local significance as follows:

*Plan of Town of Liverpool (early town centre street layout—Hoddle 1827)*



*Streets in the area bounded by the Hume Highway, Copeland Street, Memorial Avenue, Scott Street, Georges River and Main Southern Railway Line (excluding Tindall Avenue and service ways)*

Mapping of Item 89 relative to the site is provided in Figure 8. It identifies that Lachlan St and Forbes Street on the northern and western sides of the site are heritage items. Refer Section 7.9.



Figure 8: Heritage Item 8 mapping under Section 5.10 of the LEP. Site outlined in red.

Source: NSW Planning Portal Spatial Viewer.

#### 4.4.3. Acid sulfate soils

Mapping of acid sulfate soils under Section 7.7 is provided in *Figure 9* indicating just over half of the southern portion of the site is identified as Class 5 land.

The LEP describes works on Class 5 land as follows:

*Works within 500 metres of adjacent Class 1, 2, 3 or 4 land that is below 5 metres Australian Height Datum by which the watertable is likely to be lowered below 1 metre Australian Height Datum on adjacent Class 1, 2, 3 or 4 land.*

Refer to Section 7.4.



Figure 9: Acid sulfate soils mapping under the LEP. Site outlined in red dashed line.

Source: NSW Planning Portal Spatial Viewer.

#### 4.5. STRATEGIC PLANS

Section 171(2) of the EP&A Regulation and the Division 5.1 Guidelines require applicable local strategic planning statements, regional strategic plans, or district plans made under Division 3.1 of the EP&A Act to be taken into account in determining an activity under Part 5.

##### 4.5.1. Liverpool Local Strategic Planning Statement

The Local Strategic Planning Statement (LSPS) (Liverpool City Council, 2020) provides the strategy for the Liverpool community's economic, social, and environmental land use needs over the next 20 years.

Whilst the school is not mentioned, Local Planning Priority 10 states Liverpool has the potential to build upon existing school infrastructure. The proposed activity is consistent with the LSPS.

##### 4.5.2. Liverpool Centres and Corridors Strategy

The Centres and Corridors Strategy (undated) identifies the site within the Metropolitan Cluster of the Liverpool City Centre. Whilst schools are not referenced, the proposed activity will not conflict with the existing centres hierarchy relating to an existing school.

#### 4.6. NEW SOUTH WALES STATE LEGISLATION

NSW legislation relevant for consideration of the proposed activity is considered in Table 2.



Table 2: Relevant NSW State Legislative Requirements and Approvals

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE TO ACTIVITY
<i>Biodiversity Conservation Act 2016</i>	Under Section 7.6(2) of the <i>Biodiversity Conservation Act 2016</i> (BC Act), an activity under Part 5 of the EP&A Act is to be regarded as an activity likely to significantly affect the environment if it is likely to significantly affect threatened species.	Site not identified having biodiversity value. A Flora and Fauna Assessment for entire site (Water Technology, 14 <sup>th</sup> February 2025) concluded: <i>"The proposed activity will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations, ecological communities, their habitats, or impact biodiversity values. Additionally, the proposed activity is not likely to have a significant impact on matters of national environmental significance or on the environment of Commonwealth land. Therefore, referral to the Minister under the EPBC Act is not required, and a Species Impact Statement (SIS) and/or a Biodiversity Development Assessment Report is not required, in accordance with Section 7.8 of the Biodiversity Conservation Act 2016."</i>
<i>Biosecurity Act 2015</i>	Act provides a framework for prevention, elimination and minimisation of biosecurity risks posed by biosecurity matter including management of weeds.	Site used for a high school since 1955 and is located within an existing urban area. The activity is unlikely to pose a biosecurity risk including the spread of weeds.
Contaminated Land Management Act 1997	Act establishes process for investigating and (where appropriate) remediating land the EPA considers contaminated to require regulation.	Refer Section 7.4.
Dangerous Goods (Road and Rail Transport) Act 2008	Act regulates on-road transport of dangerous goods.	Dangerous goods are unlikely to be required for the construction and operation of the activity.
Environmentally Hazardous Chemicals Act 1985	Act regulates use and storage of environmentally hazardous chemicals or declared chemical waste. Act provides NSW EPA with assessment and control mechanisms for chemicals and chemical wastes.	Hazardous chemicals are unlikely to be used during the construction and operation of the activity.
Fisheries Management Act 1994	Act applies to all waters within the limits of NSW. Section 220ZZ requires a determining authority to consider whether an activity will result in a significant impact on threatened species, population or ecological communities, or their habitats.	Site is not in or in proximity to waterbodies. The closest waterbody is Georges River ~315m to the south. A search of the Fisheries NSW Spatial Data Portal (23/09/2024) indicated the river doesn't contain key fish habitat, estuarine macrophytes or NSW marine protected areas. The activity is unlikely to significantly affect threatened species, populations



LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE TO ACTIVITY
		or ecological communities or critical habitat.
Heritage Act 1977	Act concerns the protection and restoration of State heritage items.	<p>No listed state items or places are located within the site.</p> <p>Archaeological investigations for redevelopment of the Liverpool Boys and Girls High Schools identified a cistern which was assessed to be an archaeological relic and subsequently protected under the requirements of the Heritage Act. Assessment of potential archaeological impact within the SoHI (Everick Heritage Pty Ltd 2025a) confirms that the temporary school works would be spatially separated from the relic and no impact was proposed.</p> <p>The SOHI also concluded there is low potential for the proposed preliminary infrastructure works to impact on the cistern (refer Section 7.9).</p> <p>A Section 140 permit is not required.</p>
National Parks and Wildlife Act 1974	<p>Act aims to conserve nature and objects, places or features of cultural value.</p> <p>An Aboriginal Heritage Impact Permit (AHIP) is required under Section 90 to harm or desecrate Aboriginal objects or places.</p>	<p>An <i>Aboriginal Cultural Heritage Assessment Report</i> (Everick Heritage Pty Ltd (2025B) was undertaken to support the activity (<b>Appendix 7</b>).</p> <p>Assessment identified 3 Aboriginal sites within the school footprint which would be impacted by the wider temporary school works. It was recommended that an AHIP be obtained to recover and manage found artefacts and authorise harm to the known objects.</p>
Protection of the Environment Operations Act 1997	Act regulates pollution control and waste disposal and identifies scheduled activities requiring an environmental protection licence.	The proposed activity is not listed as a scheduled activity in Schedule 1 of the POEO Act. An environmental protection licence is not required
Roads Act 1993	Section 138 of the Act requires approval for works in road reserves.	Approval from Liverpool City Council is required for works, namely stormwater management and communications connections, in Lachlan Street and Forbes Street road reserves prior to construction. This has been identified as a mitigation measure.
<i>Rural Fires Act 1997</i>	A bushfire safety authority is required for development of bushfire fire prone land for a Special Fire Protection Purpose (SFPP) including schools.	The site is not identified as bushfire prone land. A bushfire safety authority is not required.
Water Management Act 2000	<p>Works within 40m of a waterway generally require a Controlled Activity Approval.</p> <p>Taking groundwater not managed by a water sharing plan requires a licence under Section 113 of <i>Water Act 1912</i>.</p>	<p>Public authorities are exempt from requiring a controlled activity approval.</p> <p>Access to groundwater is not required.</p>

LEGISLATION	PURPOSE OF LEGISLATION	RELEVANCE TO ACTIVITY
Waste Avoidance and Resource Recovery Act 2001	Act encourages efficient use of resources, reducing environmental harm and establishes the waste hierarchy of avoidance, resource recovery and disposal.	Proposed activity unlikely to generate significant waste. Construction waste would be disposed at a licensed waste management facility.

#### 4.7. COMMONWEALTH LEGISLATION

The *Environmental Protection Biodiversity Conservation Act 1999* (EPBC) provides a national framework for environmental protection and management of nationally and internationally important flora, fauna, ecological communities and heritage places. Part 3 of the Act lists nine matters of National Environmental Significance (NES) that if impacted by development or activities in NSW may require approval from the Commonwealth Minister for the Environment.

An EPBC Act Protected Matters Report (**Appendix 4**) identified matters of NES that are summarised in Table 3.

Table 3: Matters of National Environmental Significance

Matters of NES	Occurrence in or near the site
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Significance	None
Great Barrier Reef Marine Park	None
Commonwealth Marine Areas	None
Threatened Ecological Communities	12
Threatened Species	104
Migratory Species	42

Other matters protected by the Act, including Commonwealth land are provided in Table 4.

Table 4: Other Matters

Other Matters Protected by the EPBC Act	Occurrence in or near site (10km buffer)
Commonwealth Land	1021
Commonwealth Heritage Places	5
Listed Marine Species	51
Whales and Other Cetaceans	None
Critical Habitats	None
Commonwealth Reserves Terrestrial	None
Australian Marine Parks	None
Habitat Critical to the Survival of Marine Turtles	None

Commonwealth land would not be affected by the activity. A *Flora and Fauna Assessment for the Liverpool Boys and Girls High School Upgrade* (Water Technology, Feb. 2025) concluded there would be no significant impacts on matters of national environmental significance.

As the site for the proposed activity is the same as the High School Upgrade, Table 5 provides an assessment of the proposed activity against each matter of NES.

Table 5: Matters of NES Assessment

Matters of NES	Comment	Likely Impact
World Heritage	No world heritage properties will be affected by the activity.	Nil
National Heritage	No national heritage will be affected by the activity.	Nil

Wetlands of International Importance	Site is not located on any creek, river or tributary that will affect a wetland of international significance.	Nil
Threatened Species and Ecological Communities	It is unlikely threatened species, populations or ecological communities listed within Commonwealth (or State) legislation would be significantly affected by the activity.	Nil
Migratory Species	It is unlikely migratory species would be affected by the activity	Nil
Nuclear Actions	No nuclear actions are proposed.	Nil
Marine Environment	No Commonwealth Marine Areas will be impacted by the activity.	Nil
Great Barrier Reef Marine Park	Great Barrier Reef Marine Park will not be impacted by the activity.	Nil
Protecting Water Sources from Coal Seam Gas and Large Coal Mining Developments	No coal seam gas or coal mines are proposed.	Nil

Referral of the proposed activity to the Commonwealth Department of Climate Change, Energy, the Environment and Water under the EPBC Act is not required.

## 5. CONSULTATION

### 5.1. SEPP TRANSPORT AND INFRASTRUCTURE CONSULTATION

As the activity is proposed under Chapter 2 of the Transport and Infrastructure SEPP and not under Chapter 3, the consultation requirements of Part 2.2 General Division 1 Consultation apply.

Consultation has been undertaken with the following stakeholders in accordance with statutory requirements under the TI SEPP:

- **Liverpool City Council:** Pursuant to section 2.10, 2.12 and 2.45 of the TI SEPP, the Department notified Council of the proposed works, allowing for 21 calendar days to receive comments. No comments were received.
- **State Emergency Service (SES):** Pursuant to section 2.13 of the TI SEPP, the department notified SES of the proposed works, allowing for 21 calendar days to receive comments. SES wrote to the department on 24<sup>th</sup> March 2025 advising among other to ensure workers are aware of flood risk through site inductions and consider closing the worksite and securing all materials and equipment prior to the start of the working day when Bureau of Meteorology advise if there is a risk of riverine flooding. These issues will be addressed in a required *Construction Environmental Management Plan* under CMM2 in **Appendix 1**;
- **Adjoining occupiers:** Pursuant to section 2.45 of the TI SEPP, the department notified adjoining occupiers including the sites identified in blue in Figure 10 below as well as NSW Health/Southwestern Sydney Local Health District allowing for 21 calendar days to receive comments. No comments were received.



Figure 10 Adjoining occupiers notified of the proposed activity by the department.



### 5.1.1. Section 2.11 Consultation with councils — development with impacts on local heritage

Section 2.11 requires the proponent to consult with Liverpool City Council if the works are likely to have an impact that is not minor or inconsequential on a local heritage item. Figure 8 in Section 4.1.2 identifies Lachlan and Forbes Streets as heritage items as they form the historic street network of Liverpool. Works in Lachlan Street and Forbes Street for a stormwater management system and telecommunications infrastructure are likely to have minor and inconsequential impacts on Lachlan Street. Accordingly, consultation with Council was not required under Section 2.11. Nonetheless, Council was notified of the activity on 3 March 2025 and no comments have been received.

### 5.1.2. Section 2.15 Consultation with authorities other than councils

Table 6 identifies the requirements of Section 2.15. Consultation with authorities other than councils and whether consultation is required or not.

Table 6: Is consultation with authorities required?

Subclause (2)	YES	NO
a) Are the works adjacent to a national park, nature reserve or other area reserved under the National Parks and Wildlife Act 1974?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Are the works on land in Zone E1 National Parks and Nature Reserves or in a land use zone that is equivalent to that zone, other than land reserved under the National Parks and Wildlife Act 1974?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Do the works comprise a fixed or floating structure in or over navigable waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Will the works increase the amount of artificial light in the night sky and that is on land within dark sky region as identified on the dark sky region map?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Are the works on defence communications facility buffer land within the meaning of clause 5.15 of the Standard Instrument?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Are the works on land in a mine subsidence district within the meaning of the Mine Subsidence Compensation Act 1961?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Are the works for the purposes of a health services facility, correctional centre or group home, or for residential purposes, in an area that is bush fire prone land?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 5.2. COMMUNITY CONSULTATION

The REF is for minor works and does not require public exhibition on the NSW Planning Portal. However, under Section 171(5)(b) of the EP&A Regulation, this REF must be published as soon as practicable and no later than 1 month after the activity commences.

The location and nature of the proposed activity relative to adjacent land uses suggests there are unlikely to be significant impacts beyond the site boundary. The department or its contractor will again notify neighbours (as per Section 5.1 and Figure 10) prior to construction commencing (refer Appendix 1 Mitigation Measures).



## 6. ENVIRONMENTAL ASSESSMENT

### 6.1. LAND USE

#### 6.1.1 Existing Environment

The site is used for the Liverpool Boys and Girls High Schools and Gulyangarri Public School and includes existing buildings, car parks, internal roads, playing fields and associated landscaping. Typical of schools, the entire site is fenced. This includes along the southern boundary to the Liverpool Hospital.

#### 6.1.2 Potential Impacts

The proposed activity is for preliminary infrastructure works, which will facilitate the construction of a temporary high school (under separate planning pathway) that in turn enables the existing high school to be redeveloped (also under separate planning pathway). Accordingly, the impacts are expected, temporary and reasonable.

Part of the activity is located on the grounds of the primary school – particularly the playing fields at the southern end of the school. Construction of the activity will temporarily prevent the primary school (not operating at full capacity) using this part of the site for outdoor activities. As this part of the primary school has been identified for the proposed temporary high school, these impacts are expected, temporary and reasonable. The primary school will have its full grounds available for recreation once construction of the new school is complete and the temporary high school is dismantled.

#### 6.1.3 Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures. There are no specific additional mitigation measures required for land use impacts.

### 6.2. TRAFFIC AND ACCESS

#### 6.2.1 Existing Environment

The three streets bordering the site are sealed local roads with kerb and guttering and footpaths on both sites (with only one footpath on Burnside Drive) and are designated within the school speed zone. These streets connect to the local road network with the closest classified state road being the Hume Highway to the north.

Forbes Street includes a mix of no stopping, loading zones, bus zones, and time limited parking. Lachlan Street is unrestricted. Burnside Drive has no on street parking and is the ambulance access to the hospital to the south.

Vehicle access to the school site is from Lachlan Street. Figure 11 illustrates the proposed vehicle routes to the site.

#### 6.2.2 Potential Impacts

A *Preliminary Construction Management Plan* was prepared (Taylor, Thomson, Whitting, 2025A) for the redevelopment of the high school project.

The scale and nature of the proposed activity indicates traffic impacts during construction as workers arrive and leave the site and the delivery of machinery, equipment and goods is unlikely to be significant.

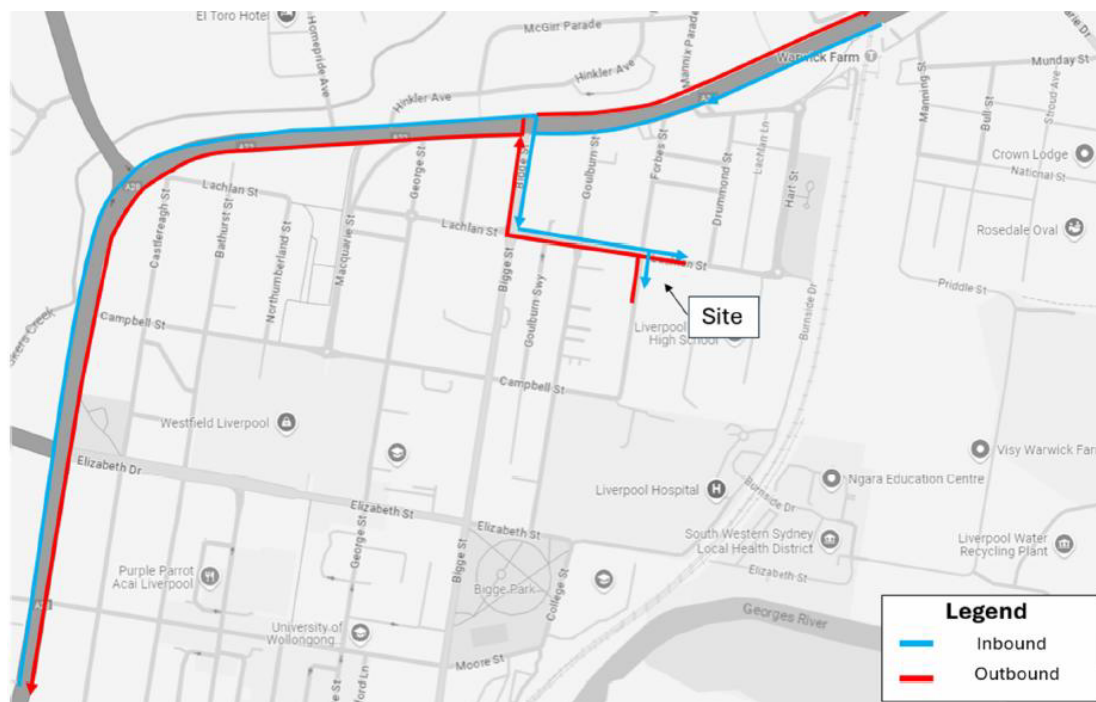


Figure 11 Construction vehicle routes

Source: Taylor, Thomson, Whitting, 2025A.

Construction vehicles are expected to be light weight with potential for some rigid trucks for deliveries.

There may be impacts on Lachlan St footpath during construction particularly of the connection of stormwater infrastructure from the site into Council's stormwater infrastructure in the road reserve and connection of electrical and telecommunications infrastructure from the site to existing services in Forbes Street.

### 6.2.3 Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures. The following specific additional mitigation measure is required for transport and access impacts.

The following measures to be included in the CEMP:

- number of heavy vehicle movements;
- ensure no access through Burnside Drive;
- worker parking/public transport usage;
- number of workers on site;
- street parking survey if workers are parking on street to ensure enough spaces;
- whether existing parking is removed (both on and off site); and
- Large truck movements are to be undertaken preferably outside of peak school times and when unable to be undertaken outside of these hours, measures are to be put in place to ensure the safety of pedestrians.

## 6.3. NOISE AND VIBRATION

### 6.3.1 Existing Environment

The main sources of ambient noise in the locality include trains, motor vehicles, school operations including students, air conditioners and bells, and air conditioning units for hospital and other large buildings typical of an urban area. Sensitive land uses are the hospital to the south and residential dwellings to the north.

A Noise and Vibration Impact Assessment for Review of Environmental Factors was undertaken for the REF for the redevelopment of the Liverpool Boys and Girls High Schools (Acoustic Studio, February 2025). Unattended background noise monitoring identified Forbes and Lachlan Streets having a Rating Background Level of noise at 47dB(A) to 48dB(A) and a noise management level of 57 to 58dB(A) respectively. For school classrooms and hospital wards, the noise management level was identified as 45dB(A).

The assessment report identified the following project noise trigger levels:

- Forbes St 51dB(A)
- Lachlan St – 53dB(A)
- School classrooms – 43dB(A)
- Hospital wards – 33 dB(A)

### 6.3.2 Potential Impacts

Construction would involve the equipment and works identified in Section 3. The assessment report assessed a worst case scenario that construction noise (for the demolition and construction of the new of the High School) would exceed noise trigger levels at the façade of dwellings on Forbes and Lachlan Streets and school classrooms (external). The report concluded “*significant impacts are not expected for the majority of the construction period.*”

Impacts to educational receivers (existing high schools) are highest at the school boundary when works are carried out at the boundary. Windows can be closed during noise works to manage impacts and scheduling should occur.

Construction is unlikely to generate significant vibration given the type of plant and equipment proposed. As such, vibration noticeable at adjacent residences and schools is considered unlikely.

The nature of the proposed activity indicates that operational noise is not required to be considered.

### 6.3.3 Environmental Mitigation Measures

**Appendix 1** list the department’s standard mitigation measures. There are no specific additional mitigation measures required for noise and vibration impacts.

## 6.4. SOILS, GEOLOGY & CONTAMINATION

### 6.4.1. Existing Environment

**Soils** - Two soil groups are located on the site (Figure 12). The two soil groups include:

- Rwb - Shale, carbonaceous claystone, claystone, laminite, fine to medium-grained lithic sandstone, rare coal and tuff; and
- Ta - Clayey quartzose sand, and clay.

**Asbestos** - During construction of the Gulyangarri Public School, friable and non-friable (bonded) asbestos containing materials were found on site (Alliance Geotechnical, 2024). These materials were retained on site in three purpose built containment cells and capped with natural soils and turf and mulch (Figure 13 and **Appendix 5**).

The containment cells are within the Main Zone of REF Works. The details for each cell are provided in Table 7, Table 8 and Table 9. Notably, Cells 1 and 2 are entirely situated within the site of the proposed activity, while Cell 3 is only partially within the site of the proposed activity (Figure 13). Figure 13 also shows trees along the eastern boundary of the site and one tree towards the southern site boundary with associated tree protection zones. Around



the base of these trees is remnant asbestos impacted fill that could not be removed. Each tree has an overlying geofabric marker layer with a natural soil capping of 0.2m plus either mulch or turf. The marker layer would be approximately 0.25 below ground level.

Figure 14 illustrates the proposed infrastructure works are not within or near the tree protection zones along the eastern boundary. A stormwater pipe is proposed near the tree towards the southern boundary that has a geofabric marker layer 0.25 underground for the extent of the tree protection zone. It is unlikely that trenching will pierce the geofabric layer as there is sufficient space and flexibility to the position the stormwater pipe at the appropriate depth and alignment to avoid out of the tree protection zone.

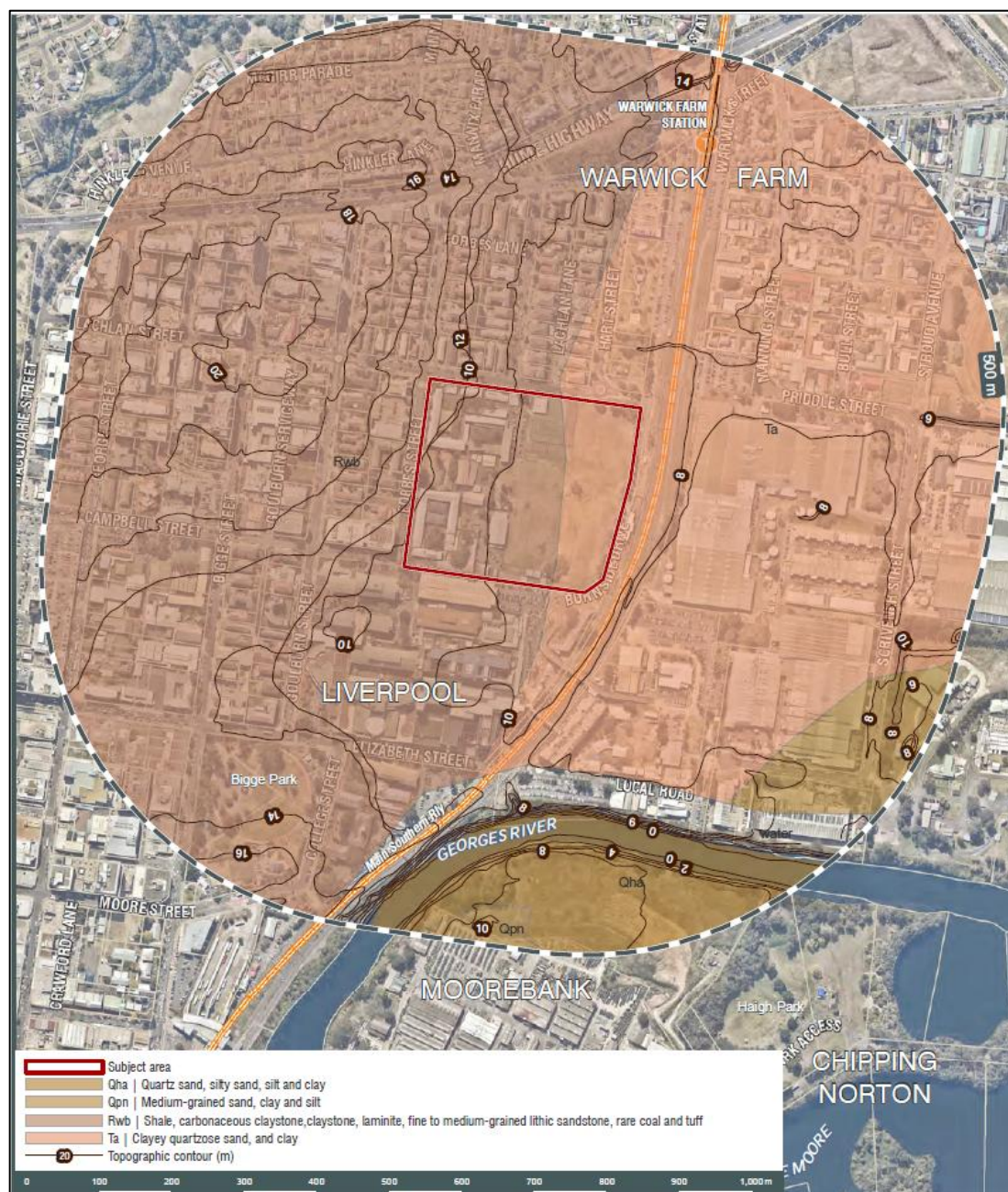


Figure 12: Soils on the site.

Source: Coffey, March 2020.



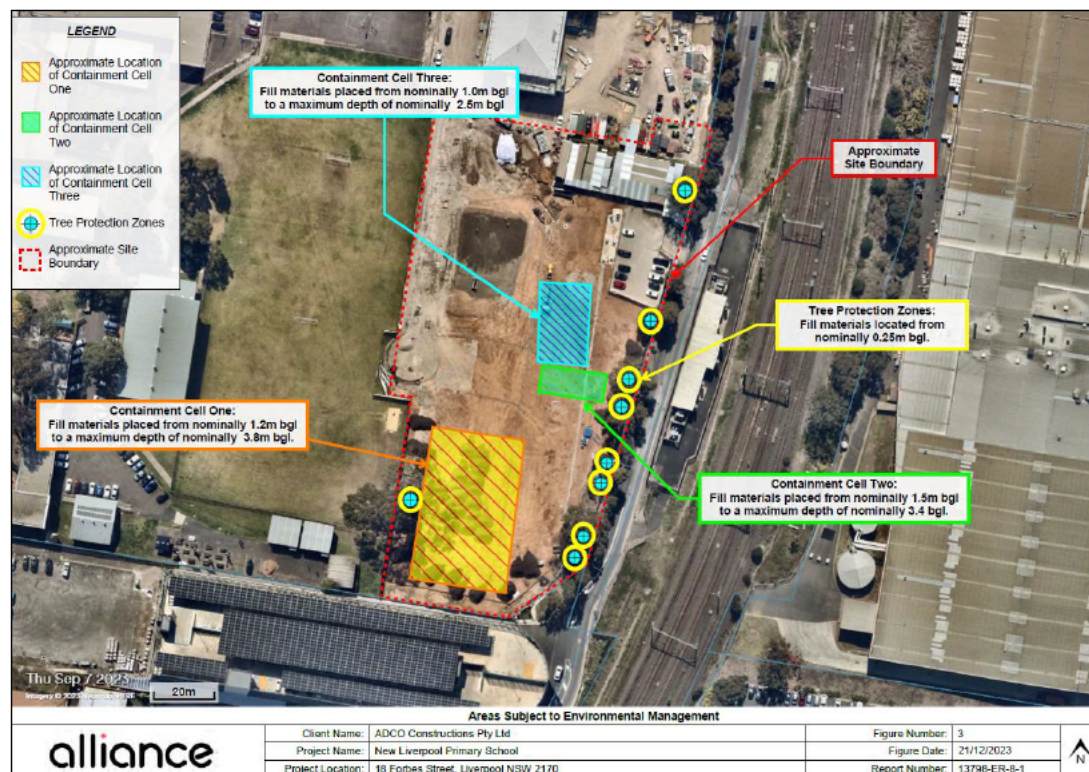


Figure 13: Location and details of three asbestos containment cells on site.

Source: Alliance, 2024.

Table 7: Details of Containment Cell 1

Unit	Description	Depth (m bgs*)
Surface	Turf / Grasses	0.0-0.05
Topsoil turf underlay	Clayey SAND, fine to coarse, moist, greyish brown, low plasticity, trace fine grained gravels and rootlets.	0.05-0.15
Capping Layer	CLAY, red/orange, firm/stiff, high plasticity	0.15-1.2
Marker Layer	Geofabric	1.2m
Contaminated Soils	Gravelly SAND, black/dark grey (ash), fine to coarse grained. Or Sandy CLAY, pale brown to grey, trace gravels, soft to firm, medium plasticity. Or Clayey SAND, brown/orange, fine to medium grained,	1.2-3.8
Natural	CLAY, high plasticity, stiff/very stiff, grey/orange.	3.8

\* below ground surface

Table 8: Details of Containment Cell 2

Unit	Description	Depth (m bgs)
Surface	Turf / Grasses	0.0-0.05
Topsoil turf underlay	Clayey SAND, fine to coarse, moist, greyish brown, low plasticity, trace fine grained gravels and rootlets.	0.05-0.15
Capping Layer	CLAY, red/orange, firm/stiff, high plasticity	0.15-1.5
Marker Layer	Geofabric	1.5m
Contaminated Soils	Gravelly SAND, black/dark grey (ash), fine to coarse grained Or Sandy CLAY, pale brown to grey, trace gravels, soft to firm, medium plasticity Or Clayey SAND, brown/orange, fine to medium grained,	1.5-3.4
Natural	CLAY, high plasticity, stiff/very stiff, grey/orange.	3.4



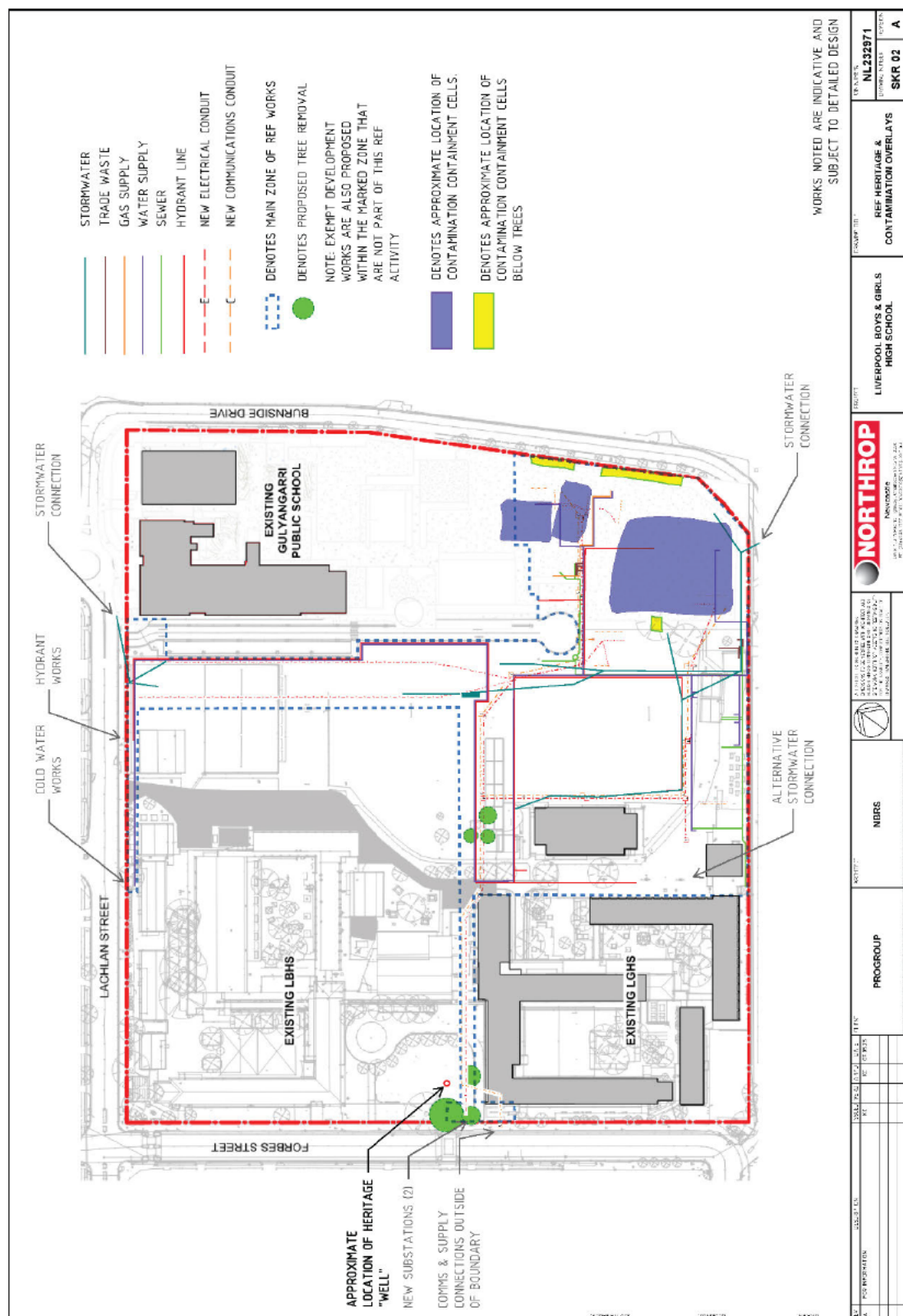


Figure 14: Location of asbestos containment cells within the site of the proposed activity.

Table 9: Details of Containment Cell 3

Unit	Description	Depth (m bgs)
Surface	Turf / Grasses	0.0- 0.05
Topsoil turf underlay	Clayey SAND, fine to coarse, moist, greyish brown, low plasticity, trace fine grained gravels and rootlets.	0.05 - 0.15
Capping Layer	CLAY, red/orange, firm/stiff, high plasticity	0.15 - 1.0

Marker Layer	Geofabric	1.0m
Contaminated Soils	Gravelly SAND, black/dark grey (ash), fine to coarse grained. Or Sandy CLAY, pale brown to grey, trace gravels, soft to firm, medium plasticity Or Clayey SAND, brown/orange, fine to medium grained,	1.0 - 2.5
Natural	CLAY, high plasticity, stiff/very stiff, grey/orange.	2.5

**Remediation Action Plan** - for the redevelopment of the Liverpool Boys and Girls High Schools, the proponent had a Remediation Action Plan (RAP) prepared (JBS&G, 2025B). The RAP concerns approximately half of the site pertaining to the high school redevelopment (northwest corner) but includes test pit results across the entire site.

Figure 6 of the RAP identifies the approximate extent of the site for the high school upgrade project requiring remediation. The site for the preliminary infrastructure works the subject of this REF has been overlayed with Figure 6 of the RAP (Figure 15). It can be seen the copper and asbestos (friable and non-friable) associated with Block A and Northern western retaining wall are relatively remote from the proposed preliminary infrastructure works.

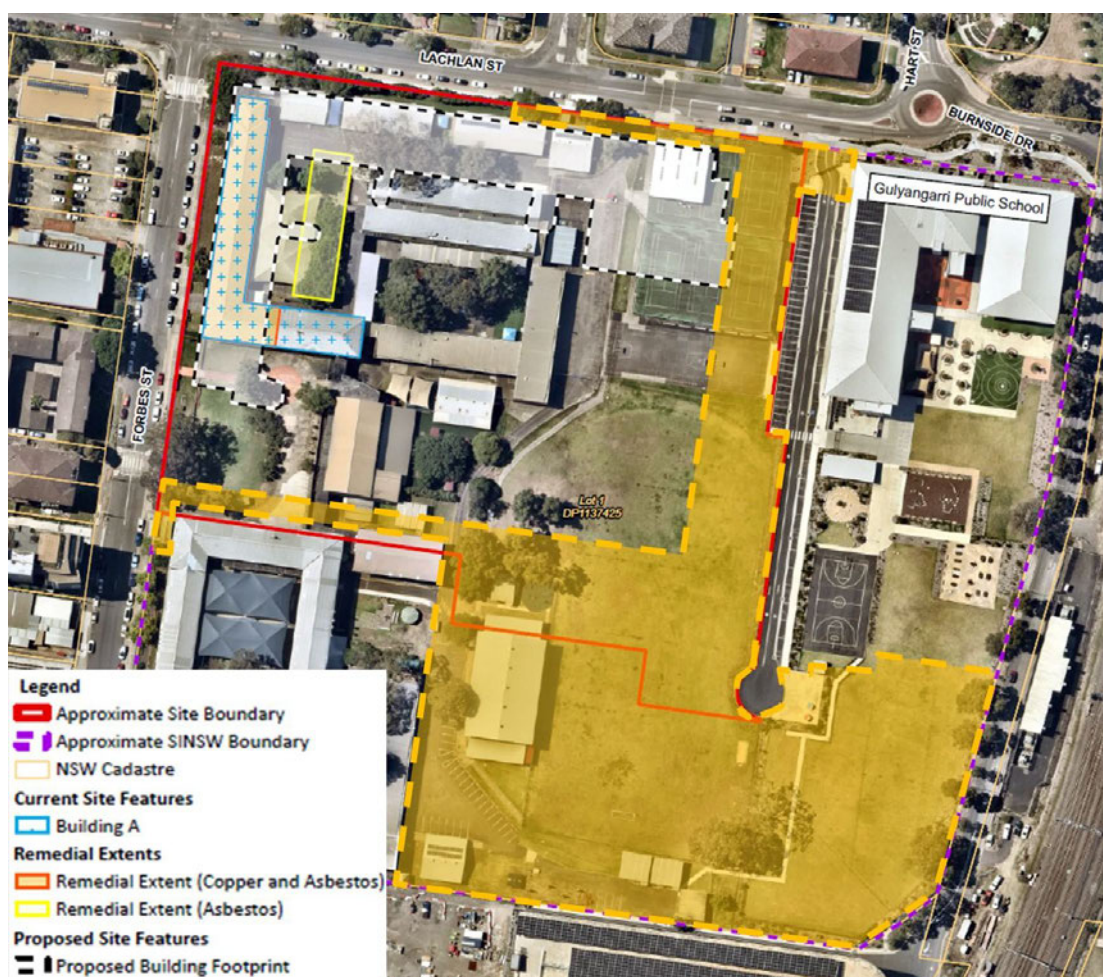


Figure 15 RAP works relative to proposed preliminary infrastructure (orange shaded area).

Source: annotated from JBS&G, 2025B.

Based upon historic and current site investigations, the area of environmental concern relevant for the proposed activity subject of this REF is uncontrolled fill with heavy metals and asbestos being contaminants of potential concern (COPC).

Site investigation borehole and test pit logs from 43 sample locations identified fill across the site with an average depth of 0.4-0.5m below ground surface (Figure 16). Sample sites

TP105 (located in the *remedial extent asbestos* polygon in Figure 15) and TP107 (located under the proposed building footprint in Figure 15) contained asbestos fragments and bonded asbestos containing materials likely to be from uncontrolled filling. Sample site A08570 (located under the floor of Block A in the Girls High School south of the site) contained asbestos and copper exceedances. All these sample sites are outside of the site of the preliminary works.

No elevated concentrations of COPC were found within natural underlying soils.

#### 6.4.2. Potential Impacts

Minor excavation will be required for trenching of the infrastructure and backfilling accordingly. Northrop advise trenching and the laying of pipes/conduit can be undertaken above the geofabric marker layer for each containment cell and the tree protection zone toward the southern boundary of the site in Figure 14.

The soils types on the site are unlikely to require particular management.

Acid sulfate soils are not typically found in class 5 land. Trenching on the site is not likely to lower the water table below 1m AHD on adjacent class 1, 2, 3 or 4 land.

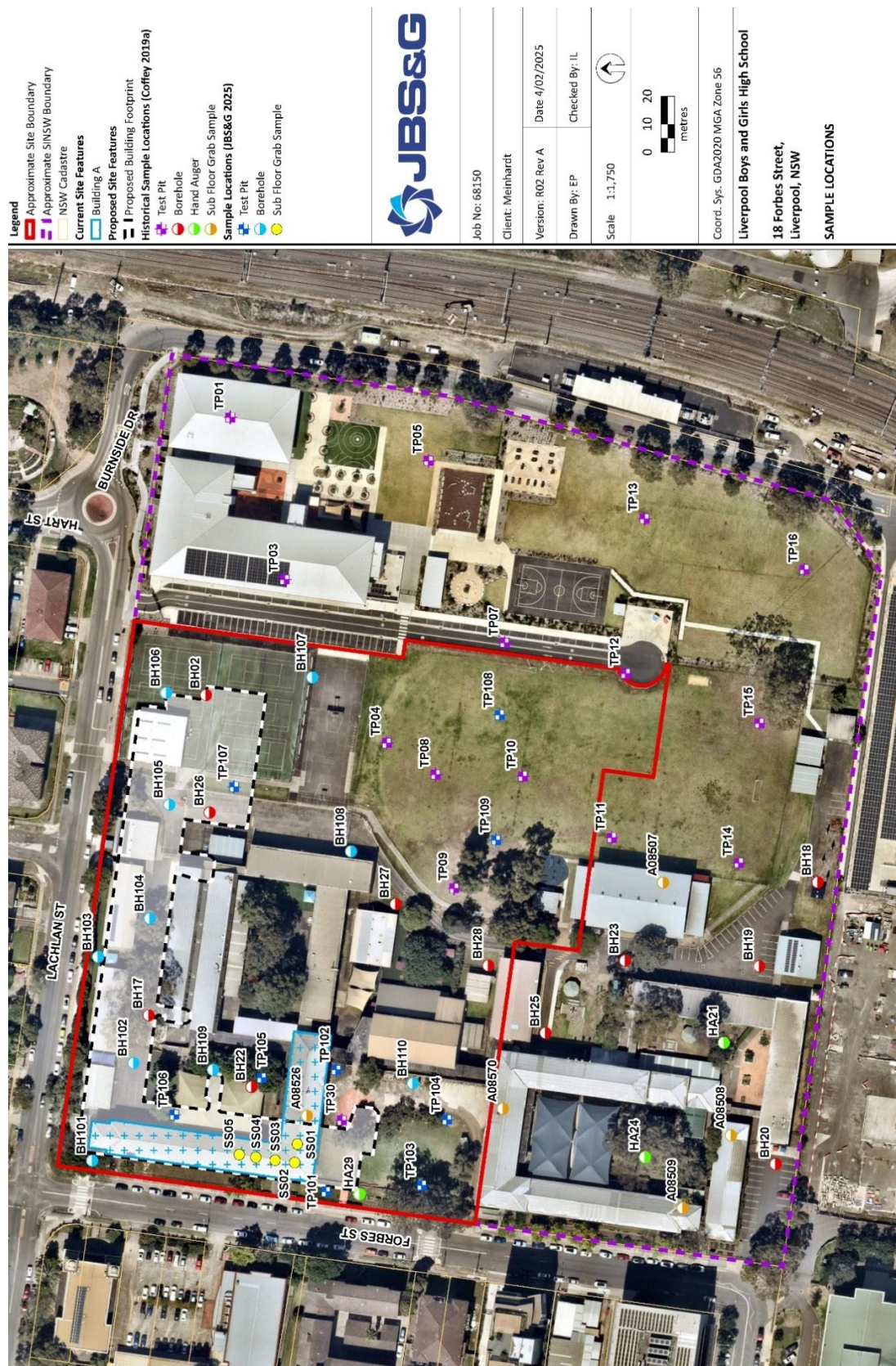
Fuel storage and refuelling of plant during construction may potentially contaminate soil.

#### 6.4.3. Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures. The following specific additional mitigation measure is required for contamination impacts:

- Design and construction of the activity must be undertaken in accordance with the *NLPS Asbestos Management Plan* RevA prepared by Alliance 18-01-2024 including:
  - Trenching over:
    - Containment Cell 1 should not exceed a depth of 1.2m;
    - Containment Cell 2 should not exceed a depth of 1.5m; and
    - Containment Cell 3 should not exceed a depth of 1.0m.
- Construction of trenching should not penetrate geofabric marker for each containment cell.





(Source JGS&G, 2025B)

## 6.5. AIR QUALITY

### 6.5.1 Existing Environment

Table 10 summarises the climate of the site derived from data collected by the Bureau of Meteorology at Bankstown Airport AWS. In summer the mean maximum daily temperatures average ~28°C. In winter mean maximum daily temperatures average ~18.6°C. Rainfall is generally higher in late summer and early autumn.

Table 10: Summary of the climate at Liverpool (Bureau of Meteorology)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall (mm)												
Mean	93.8	109.6	112.0	84.2	63.4	78.2	48.4	48.9	44.5	61.4	76.4	67.1
Temperature (°C)												
Mean	28.5	27.9	26.4	23.9	20.6	17.8	17.4	19.1	21.8	24.0	25.4	27.5

As the site is in an urban area within the western area of Sydney, site air quality is affected by surrounding urban land uses.

### 6.5.2 Potential Impacts

As there will be relatively limited ground disturbance, there is unlikely to be any significant dust generation as a result of this activity. Exhaust from heavy machinery and other vehicles may impact on local air quality. The proposed works are not considered to adversely impact site air quality.

It is unlikely trenching will pierce the under lying geofabric layer over the asbestos containment cells or the protection zone of the tree towards the southern boundary and disturb remnant asbestos impacted fill.

### 6.5.3 Environmental Mitigation Measures

Appendix 1 list the department's standard mitigation measures. The following specific additional mitigation measure is required for air quality impacts:

- Design and construction of the activity must be undertaken in accordance with the *NLPS Asbestos Management Plan RevA* prepared by Alliance 18-01-2024.

## 6.6. HYDROLOGY AND WATER QUALITY

### 6.6.1 Existing Environment

There are no natural watercourses within or in close proximity to the site.

According to the stormwater management plan for the high school upgrade project (Meinhardt, 2025 – Appendix 6):

- Stormwater run-off currently appears to discharge to the eastern (and re-routed to the nearest discharge point in Lachlan Street on the primary school northern boundary) and southern boundary; and
- The site does not have a stormwater detention system.

The new public school has been approved with on-site stormwater detention tanks system.

The site is partially identified as flood prone land during probable maximum flood storm events. This poses a low flood hazard level over the site where the risk of flood damage is low for most land uses and most activities are permitted (Figure 17).



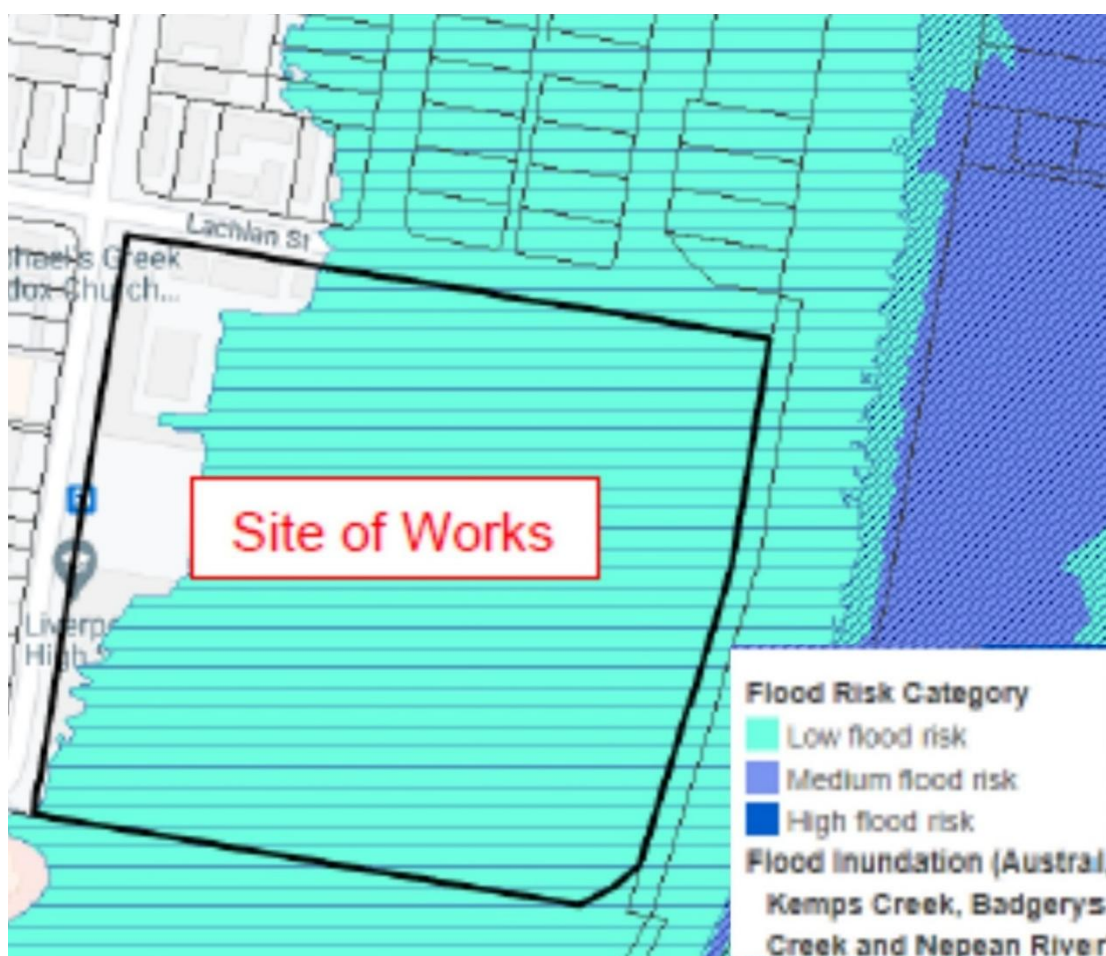


Figure 17: PMF mapping of site (outlined in black).

Source: NSW Department of Education, 2025.

### 6.6.2 Potential Impacts

The proposed works will not change ground levels and hence are unlikely to significantly or adversely alter the flood behaviour of the site.

There is potential for soil erosion from trenching and backfilling during storm events.

According to Meinhardt (2025) it generally takes 11 hours for floodwaters to reach their highest levels after the start of a probable maximum flood event at the site and last approximately 31 hours. These time frames are sufficient for workers to be alerted, secure the site, materials and equipment and undertake evacuation.

### 6.6.3 Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures. The following specific additional mitigation measure is required for water quality impacts:

- Design and construction of the activity will be undertaken in accordance with the Stormwater Management Plan prepared by Meinhardt (2025).

## 6.7. BIODIVERSITY

### 6.7.1. Existing Environment

The site consists of playing fields and landscaped areas. A *Flora and Fauna Assessment - Liverpool Boys and Girls High School Upgrade – Biodiversity* (Water Technology, 2025) identified:

- site not mapped having Biodiversity Values under the *Biodiversity Conservation Act 2016* that is a trigger for determining whether the Biodiversity Offset Scheme applies;
- Trees on site are mostly mature Eucalyptus trees.
- No Plant Community Types were found;
- No threatened flora or fauna were found.
- Site has no key fish habitat.

### 6.7.2. Potential Impacts

For the preliminary infrastructure works, six trees are required to be removed to accommodate the preliminary infrastructure (Figure 5) under this REF. The rest of the Main Zone of REF Works has no biodiversity values.

The Flora and Fauna Assessment concluded there will be no significant impacts on matters of national environmental significance. Consequently, no referral to the Australian Minister for the Environment under the *Environment Protection and Biodiversity Conservation Act 1999* is required.

The six trees identified for removal in Figure 5 are identified and described in an arborist report (Appendix 7) for the site and summarised in Table 11.

Table 11: Trees to be removed

Tree No.	Species	Common Name	Arborist recommendation
58	<i>Eucalyptus crebra</i>	Narrow Leaved Iron Bark.	Tree not viable to be retained due to proposed development
59	<i>Eucalyptus scoparia</i>	Wallangarra White Gum	Tree not viable to be retained due to proposed development
60	<i>Melaleuca quinquenervia</i>	Broad leaved Paperback	Tree not viable to be retained due to proposed development
89	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Tree not viable to be retained due to proposed development
90	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Tree not viable to be retained due to proposed development
91	<i>Eucalyptus saligna</i>	Sydney Blue Gum	Tree not viable to be retained due to proposed development

Replacement trees are subject to permanent school landscaping.

### 6.7.3. Environmental Mitigation Measures

Trees not approved to be pruned or removed are to be protected and maintained in accordance with AS 4970-2009 Protection of Trees on Development Sites and are to remain in place until the completion of all construction work in the vicinity of the protected trees.

## 6.8. HERITAGE – ABORIGINAL OBJECTS OR PLACES OF SIGNIFICANCE

### 6.8.1. Existing Environment

An Aboriginal Cultural Heritage Assessment Report (ACHAR) was prepared for the site (Appendix 8). The ACHAR was prepared in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010).

The draft ACHAR was sent for Registered Aboriginal Party review in November 2024 and no responses were received.

Previous archaeological survey and assessments for the Gulyangarri Public School identified three Potential Archaeological Deposits (PAD)(Figure 18). PADs 1 and 2 were subject to test and salvage excavation as part investigation and approval for Gulyangarri Public School. The

area of PAD 1 and PAD2 were subsequently subject to gross earthworks during the construction of the Public School.

PAD 3 was subject to test excavation as part of investigation undertaken to support the Liverpool Boys and Girls High School upgrade project. Investigation included the excavation of 24 test pits. Six subsurface artefacts were identified in two locations: Liverpool BHS GHS\_AS01 (45-5-5789) and Liverpool BHS GHS\_IA01 (45-5-5791). Another artefact was identified at the base of a tree in the SE corner of the oval - Liverpool BHS GHS\_IA02 (45-5-5790)(Figure 19). The sites were assessed to be of low scientific, historical and aesthetic significance. The assessment noted that the potential for further Aboriginal objects to be present across the school site was low.



Figure 18: Locations of PADs

Source: Everick Heritage, 2025.

### 6.8.2. Potential Impacts

Artefacts recovered from test excavation including Liverpool BHS GHS\_AS01 (45-5-5789) and Liverpool BHS GHS\_IA01 (45-5-5791) were collected as part of the test excavation works. These sites will be formally managed under the AHIP process. One site, Liverpool BHS GHS\_IA02 (45-5-5790) currently remains in-situ at its registered site location. The AHIP will authorise surface collection of this object.

An AHIP for harm is proposed to be lodged across the works footprint to formally authorise harm to the three Aboriginal sites as well as any other sites which may be present across the works footprint.

Construction works will not commence until the AHIP permit has been granted.



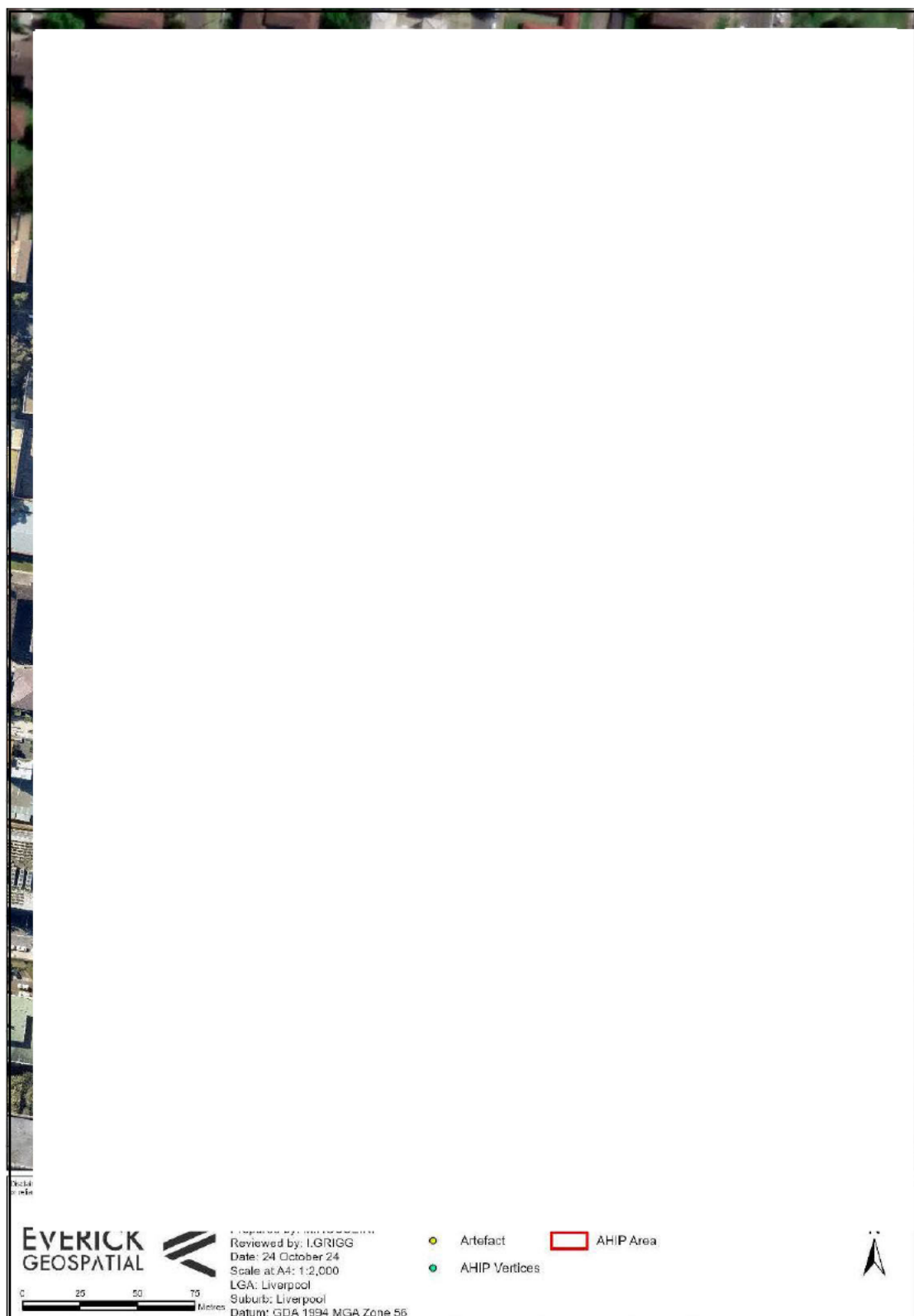


Figure 19: Location of artefacts and subsequent AHIP area.

(Source: Everick, 2024)

### 6.8.3. Environmental Mitigation Measures

Appendix 1 list the department's standard mitigation measures. The following specific additional mitigation measure is required for impacts on aboriginal objects:

- Implement the management recommendations of the ACHAR summarised in Table 12.



Table 12: ACHAR management recommendations

Site name (AHIMS ID)	Proposed Management
Liverpool BHS GHS_AS01 (45-5-5789)	Formal management through AHIP Recovered during test excavation
Liverpool BHS GHS_IA01 (45-5-5791)	Formal management through AHIP Recovered during test excavation
Liverpool BHS GHS_IA02 (45-5-5790)	AHIP to harm Surface artefact recovery through community collection
All other areas	AHIP to harm

- As per the Aboriginal Cultural Heritage Assessment Report (see Appendix 7), an Aboriginal Heritage Impact Permit is required for the proposed activity (including trenching works) prior to the commencement of works where harm to Aboriginal objects may occur. Works must adhere to the conditions of the AHIP permit.

## 6.9. HERITAGE ITEMS, CONSERVATION AREAS AND ARCHAEOLOGICAL SITES

### 6.9.1. Existing Environment

A Statement of Heritage Impact was prepared to assess the proposed activity as well as potential impacts associated with works to be subject to separate and subsequent approvals. As part of this assessment the Liverpool Boys and Girls School site was assessed to be an item of unlisted heritage significance. Elements which contribute to the significance of the unlisted heritage item were identified to be limited to existing buildings within the school sites and the layout of existing school buildings. Landscape values were not identified to contribute to the heritage significance.

The SoHI also identified that the school sites are located adjacent to one local heritage item, "Plan of town of Liverpool (Early town centre Layout - Hoddle 1827)" which includes portions of Lachlan and Forbes Street. The SoHI interpreted that the significance of the listing was tied to the historic street layout as opposed to specific landscape or streetscape features. Further, while archaeological values are referenced as part of this inventory listing for the item, it was assessed that these potential archaeological values were associated with adjacent town allotments as built around the road layout as opposed to the fabric of the road itself.

The site is not within a heritage conservation area.

Historic archaeological test excavations were undertaken on site and identified a cistern just south of Block A of the Liverpool Boys High School (Figure 14). The cistern was assessed as a relic and notification to Heritage NSW was undertaken under s146 of the Heritage Act 1977. The cistern is approximately 1m below the current ground surface and 30-40m north of the two proposed substations and associated trenching on the western extremity of the site. The remainder of the school sites were assessed to have low potential to contain archaeological relics.

### 6.9.2. Potential Impacts

The SoHI has assessed potential heritage impacts associated with a number of matters for consideration. In reference to service upgrade works it was noted that there would be little to no impact to the Liverpool Girls High School Buildings. Further under landscape works, the assessment notes that the school site is not considered to have heritage values associated with its landscape or trees. No impacts were identified within the SoHI in relation to these elements.

The components of the proposed activity within Lachlan Street is the stormwater mitigation works and within Forbes Street to bring power and communications via underground conduits into the site. As the proposed activity does not alter the alignment of the road, it was assessed that there would be little to no impact to the adjacent heritage item.

Construction of the substations and switching substation and trenching for associated piping/conduit has been assessed to avoid impacting the relic that is 30-40m north of these works.

### 6.9.3. Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures. The following specific additional mitigation measure is required for impacts on archaeological relics:

- Detailed design and construction must avoid impact to the identified relic. Works should not extend within 400mm of the item.

## 6.10. VISUAL IMPACTS

### 6.10.1. Existing Environment

The site contains existing *educational establishments* featuring one and two storey structures and playing fields. Buildings, fencing and trees screen views into the site from Forbes and Lachlan Streets and to a lesser degree from Burnside Drive.

### 6.10.2. Potential Impacts

The works will primarily be visible from the Burnside Drive during construction as a result of construction equipment and vehicles. The proposed works are such that, following construction they will not be visible.

The only visible structures will be the two substations on Forbes St and located adjacent to the Liverpool Girls School buildings that are to be retained. This and the construction of the multi storey school buildings over the current Boys High School indicate the substations will be a minor or subordinate component of the Forbes streetscape.

### 6.10.3. Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures.

## 6.11. SOCIAL AND ECONOMIC

### 6.11.1. Existing Environment

The Australian Bureau of Statistics website (accessed 23/09/24) indicates during the last Census, Liverpool - East had a population of 19,531, being 47.6% male and 47.8% female. The median age of residents was 32.8 and the median weekly household income was \$891. There are 4,347 families in the census area, and on average there are 1.7 children per family.

### 6.11.2. Potential Impacts

The construction of the proposed activity may generate local employment and demand for local goods and services.

The proposed works may have short term impacts on adjoining land and streets by potentially disrupting traffic flows and noise generation during construction. However, these impacts will be temporary and are not likely to significantly impact the local community, as traffic flow will be maintained, and construction noise and vibration will be managed appropriately.

### 6.11.3. Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures.

## 6.12. WASTE

### 6.12.1 Existing Environment

The schools on site generate and manage their waste through their respective operations. Bins are provided within the schools and are collected by Council's waste management services.

### 6.12.2 Potential Impacts

Demolition is not part of the proposed activity. Construction waste is likely to mostly consist of packaging materials and off cuts of piping and conduit.

No operational waste will result given the nature of the works proposed under this REF.

### 6.12.3 Environmental Mitigation Measures

**Appendix 1** list the department's standard mitigation measures. The following specific additional mitigation measure is required for impacts on waste:

- Spoil requiring removal from the site for disposal will be classified in accordance with the *Waste Classification Guidelines Part 1: Classifying Wastes* (NSW EPA, 2014) and disposed accordingly.

## 6.13. CUMULATIVE IMPACTS

The redevelopment of the school site to create a new permanent combined Boys and Girls High School and the creation of the temporary Boys High school is currently at the planning stage (under separate planning pathways). The proposed preliminary infrastructure activity under this REF is required to be completed prior to these two proposed developments. Whilst impacts of the construction of the proposed preliminary infrastructure is likely to have minor and acceptable impacts beyond the site of the high school, it is likely to contribute to a longer overall construction program.

The NSW government created the Liverpool Health and Academic Precinct, located adjacent and south and south west of the site fronting Campbell, Goulburn and Elizabeth Streets, and is investing \$830 million in redeveloping the precinct. The multistorey car park south of the site was constructed in 2022 whilst Stage 1 (new birthing unit, expanded neonatal intensive care unit, new pathology department, medical imaging department, emergency Department expansion, new hospital main entrance, outpatient clinic and new pharmacy) was completed late 2024 with Stage 2 (new inpatient units, integrated cancer centre, increased women's and children's ambulatory care and enhanced corporate support services) commenced late 2024 and is scheduled for completion in 2027.

The scale and nature of the precinct development are much larger than that of the proposed activity particularly in terms of construction noise impacts. Furthermore, construction access to the precinct is separate to that proposed for the preliminary civil works. On balance, it is unlikely the proposed activity will significantly contribute to cumulative impacts upon the surrounding locality.

## 7. COMPILATION OF MITIGATION MEASURES

### 7.1. CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

A basic Construction Environmental Management Plan will be prepared for the proposed activity that will include environmental mitigation measures identified in Section 7 and collated with the department's standard mitigation measures for education projects contained in **Appendix 1**.

Where construction requires a change of scope to that considered in this REF, then an addendum to the REF might be required to consider additional environmental impacts and mitigation measures.



## 8. CONCLUSION AND JUSTIFICATION FOR THE ACTIVITY

The department is proposing to undertake preliminary infrastructure works at 18 Forbes Street, Liverpool. This will facilitate the construction and operation of the temporary high school (for the Liverpool Boys High School) that is subject to separate approval that in turn facilitates the redevelopment of the Liverpool Boys and Girls High School upgrade to create a combined high school that is also subject to a separate planning approval pathway.

The activity is characterised under Chapter 2 of the State Environmental Planning Policy (Infrastructure and Transport) 2021 as follows:

- electricity transmission or distribution networks including electrical cables and substations under Section 2.44;
- *stormwater management systems* under Section 2.137;
- *telecommunication facilities* under Section 2.141;
- *water reticulation system* under Section 2.159.;
- *sewerage systems* under Section 2.126; and
- *construction works* under Section 2.3(3) including tree removal and minor earthworks, trenching and backfilling, restore the works area suitable to facilitate future uses.

This REF is prepared on behalf of the department as the proponent and determining authority under Part 5 of the *Environmental Planning and Assessment Act 1979*. The REF fulfils the Department's obligation to examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposed activities described in Section 3 of this REF.

The activity is unlikely to significantly affect the environment (including critical habitat) or threatened species, populations or ecological communities, or their habitats. The activity does not require an Environmental Impact Statement and does not require a referral under the EPBC Act.

The proposed activity is justified and has minor and acceptable impacts upon the environment that can be managed. Accordingly, the REF warrants favourable determination.

## 9. REFERENCES

- Acoustic Studio, February 2025 *A Noise and Vibration Impact Assessment for Review of Environmental Factors Liverpool Boys and Girls High Schools Upgrade Project*.
- Alliance Geotechnical, January 2024. *Asbestos Management Plan for New Liverpool Primary School*.
- Aerometrex (MetroMap) <https://metromap.com.au/>
- AHIMS Web Services Search (accessed 23 September 2024)
- Australian Bureau of Meteorology <http://www.bom.gov.au/> (accessed 22 January 2025)
- Australian Bureau of Statistics [www.abs.stat.gov.au](http://www.abs.stat.gov.au), (accessed 22 January 2025)
- Birds Tree Consultancy (April 2025) *Liverpool BGHS Upgrade Arborist report*
- Biodiversity Conservation Act 2016 No 63*
- Department of Planning and Environment, 2022. *Guidelines for Division 5.1 assessments*,
- Department of Environment, Climate Change & Water, 2010, *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*
- Environment Protection and Biodiversity Conservation Act 1999*
- Environmental Protection and Biodiversity Conservation Act Protected Matters Search
- Environmental Planning and Assessment Act 1979 No 203*
- Environmental Planning and Assessment Regulation 2021*
- Environment Protection Authority, 2014. *Waste Classification Guidelines Part 1: Classifying Waste*
- Everick Heritage, February 2025A. *Liverpool Boys and Girls High School Upgrade Project – Statement of Heritage Impact*
- Everick Heritage, February 2025B. *Liverpool Boys and Girls High School Upgrade Project Aboriginal Cultural Heritage Assessment Report*.
- JBS&G February 2025A - *Liverpool Boys and Girls High School Upgrade Project – Data Gap Investigation*. 165,353 | 68105 (Rev 0)
- JBS&G February 2025B - *Liverpool Boys and Girls High School Upgrade Project - Remediation Action Plan*
- Liverpool Local Environmental Plan 2008*
- Liverpool City Council, 2020, *Liverpool's Local Strategic Planning Statement – a Land Use Vision to 2040*
- Landcom (2004). *Managing Urban Stormwater: Soils and construction - Volume 1* 4th Edition
- Meinhardt, 2025 *Liverpool Boys and Girls High School Upgrade Project Site Based Stormwater Management Plan*. February 2025 – Revision D
- NSW Department of Education, 2025. *Review of Environmental Factors Liverpool Boys and Girls High School Upgrade Project*. Document version: Final Date: 18/03/2025
- NSW EPA, Register of Contaminated Sites Notified to the EPA
- NSW EPA (2014). *Waste Classification Guidelines Part 1: Classifying Waste*
- NSW Planning Portal ePlanning Spatial Viewer

Office of Environment & Heritage State Heritage Register

*Roads Act 1994*

*Rural Fires Act 1997*

SIX Maps <https://maps.six.nsw.gov.au/>

*State Environmental Planning Policy (Biodiversity and Conservation) 2021*

*State Environmental Planning Policy (Resilience and Hazards) 2021*

*State Environmental Planning Policy (Transport and Infrastructure) 2021*

Taylor, Thomson Whitting, 2025. *Transport and Accessibility Impact Assessment Liverpool Boys and Girls High School Upgrade Project*

Taylor, Thomson Whitting, 2025A. *Preliminary Construction Traffic Management Plan Liverpool Boys and Girls High School Upgrade Project*

Water Technology February 2025. *Flora and Fauna Assessment - Liverpool Boys and Girls High School Upgrade – Biodiversity*

## APPENDICES



## APPENDIX 1

### Mitigation measures for the construction of the preliminary infrastructure works

## APPENDIX 2

### Main Zone of the REF works by Northrop

## APPENDIX 3

### Liverpool BGHS Upgrade Remediation Action Plan by JBS&G

## APPENDIX 4

### EPBC Act Protected Matters Search



## APPENDIX 5

NLPS Asbestos Management Plan RevA prepared by Alliance

## APPENDIX 6

### Stormwater Management Plan by Meinhardt

## APPENDIX 7

### Liverpool BGHS Upgrade Arborist Report by Birds Tree Consultancy

## APPENDIX 8

### Liverpool BGHS Aboriginal Cultural Heritage Assessment Report by Everick Heritage