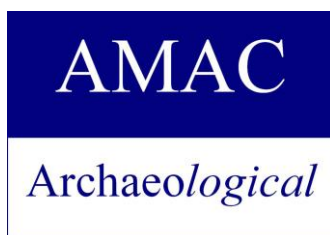


ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

**Green Square Integrated Community
Facility and School
Lot 2/DP 1174641
3 Joynton Avenue
Zetland, NSW
(Sydney LGA)**



**Benjamin Streat, Yolanda Pavincich &
Steven J. Vasilakis**

Archaeological Management & Consulting Group
and Streat Archaeological Services

for

**Department of Education
Schools Infrastructure NSW**

July 2021

Disclaimer

The veracity of this report is not guaranteed unless it is a complete and original copy.

This report may be inaccurate, incomplete, not original, or modified, if it appears in monochrome form and the signature below is a copy.



*Benjamin Street
Director of Aboriginal Archaeology
(mobile 0405 455 869)*



Archaeological Management & Consulting Group

AMAC-AEGIS Pty Ltd ABN 14 627 076 751

Ph (02) 9568 6093
 Fax (02) 9568 6093
 Mob 0411 727 395
 E-mail amac@archaeological.com.au



Streat Archaeological Services Pty Ltd

ACN 126 731 637 ABN 17 126 731 637

Ph (02) 9564 2206
 Mob 0405 455 869
 E-mail Streatarchaeological@netspace.net.au
Benjaminstreat@archaeological.com.au

Cover Image

Aerial of study area.

AMAC (2020) and Six Maps, LPI online (accessed 5/5/20).

ACKNOWLEDGEMENT OF COUNTRY

Schools Infrastructure NSW would like to acknowledge the Traditional Custodians of the Eora Nation– the Gadigal Peoples– and pay respect to their cultural heritage, beliefs and continuing relationship with the land.

Schools Infrastructure NSW would also like to acknowledge the post contact experiences of Aboriginal peoples who have attachment to the Sydney area.

“We pay our respect to the Elders – past, present and future – for they hold the memories, traditions, culture and hopes of Aboriginal Peoples in the area”.

Schools Infrastructure NSW recognises the role of the registered Aboriginal parties in the management of the Aboriginal cultural heritage sites, landscape features and values of this project.

Schools Infrastructure NSW would like to thank the Registered Aboriginal Parties for their participation in this project and for their valuable contribution to this Aboriginal Cultural Heritage Assessment which has been enriched by their willingness to share valuable aspects of their cultural knowledge especially in respect of Caring for Country

INTERNAL REVIEW

Version	Written/Edited By	Date	Document Status	Reviewed By	Issue Date
1	Yolanda Pavincich (AMAC) & Steven J. Vasilakis (AMAC)	17/08/20	Draft V.1	RAPs	25/08/20
2	Steven J. Vasilakis (AMAC)	28/09/20	RAP Comments & Amendments	Yolanda Pavincich (AMAC)	5/10/20
3	Steven J. Vasilakis (AMAC)	03/11/20	Final	Ben Streat (AMAC)	03/11/20
4	Steven J. Vasilakis (AMAC)	07/07/21	Amended Final	Ben Streat (AMAC)	07/07/21

CONTENTS	PAGE
ACKNOWLEDGEMENT OF COUNTRY	II
INTERNAL REVIEW	III
CONTENTS	1
TABLE OF FIGURES	3
EXECUTIVE SUMMARY	5
CONTACT DETAILS	8
1.0 INTRODUCTION	9
1.1 BACKGROUND	9
1.2 STUDY AREA	9
1.3 SCOPE	9
1.4 AUTHOR IDENTIFICATION	10
1.5 LEGISLATIVE CONTEXT AND STATUTORY CONTROLS	10
1.5.1 Commonwealth Heritage Legislation and Lists	10
1.5.2 New South Wales State Heritage Legislation and Lists	11
1.5.3 Local Planning Instruments	14
1.5.4 Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales	17
1.5.5 Guidelines	17
1.6 ACKNOWLEDGEMENTS	17
2.0 DESCRIPTION OF STUDY AREA	18
2.1 REGISTERED ARCHAEOLOGICAL SITES WITHIN THE STUDY AREA	20
2.2 ENVIRONMENTAL CONTEXT	21
2.2.1 Topography	21
2.2.2 Geology and Soils	22
2.2.3 Watercourse	23
2.2.4 Vegetation	23
2.3 LAND USE AND DISTURBANCE FACTORS	27
2.3.1 The Cadigal and Wangal Nation	27
2.3.2 European Land Use	28
2.3.3 Disturbance and Archaeological Potential	28
2.3.4 Exclusion Areas	28
2.3.5 JBS&G AUSTRALIA PTY LTD 2020 - GREEN SQUARE PUBLIC SCHOOL REMEDIAL ACTION PLAN	32
3.0 ABORIGINAL CONSULTATION	37
3.1 CONSULTATION REQUIREMENTS	37
3.2 CONSULTATION SUMMARY	41
4.0 BACKGROUND INFORMATION	50
4.1 AHIMS SEARCH RESULTS	50
4.2 OTHER SEARCH RESULTS	53
4.3 SUMMARY OF ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE REGION	53
4.4 ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE STUDY AREA	59
4.5 ARCHAEOLOGICAL CONTEXT	59
4.6 PREVIOUS ARCHAEOLOGICAL STUDIES WITHIN THE STUDY AREA	60
5.0 PHYSICAL EVIDENCE	63
5.1 SURVEY METHODS	63
5.2 RESULTS SUMMARY	63

6.0	CULTURAL HERITAGE RESPONSES	72
6.1	REGISTERED STAKEHOLDER QUESTIONS	72
6.2	REGISTERED STAKEHOLDER SUBMISSIONS TO QUESTIONS AND RESEARCH METHODOLOGY	73
6.2.1	A1 Indigenous Services	73
6.2.2	Responses from RAPs contacted by phone on 12 th August 2020	73
6.2.3	Responses from RAPs contacted by phone on 13 th August 2020	73
6.2.4	Butucarbin Aboriginal Corporation	73
6.3	REGISTERED STAKEHOLDER SUBMISSIONS TO ACHAR AND AATR	73
6.3.1	Responses from RAPs contacted by phone on 2 nd September 2020	73
6.3.2	Didge Ngunawal Clan	74
6.3.3	A1 Indigenous Services	74
6.3.4	Responses from RAPs contacted by phone on 7 th September 2020	74
6.3.5	Responses from RAPs contacted by phone on 8 th September 2020	74
6.3.6	Responses from RAPs contacted by phone on 15 th September 2020	74
6.3.7	Butucarbin Aboriginal Corporation	74
6.4	CONSULTATION/DOCUMENT UPDATES	75
6.4.1	Teleconference Meeting 17 th June 2021	75
7.0	SIGNIFICANCE ASSESSMENT	76
7.1	ARCHAEOLOGICAL SIGNIFICANCE	76
7.1.1	Educational Significance	76
7.1.2	Scientific Significance	76
7.1.3	Representative Significance	76
7.2	SOCIAL AND CULTURAL SIGNIFICANCE	76
7.2.1	Historic Significance	77
7.2.2	Scientific Significance	77
7.2.3	Aesthetic Significance	77
8.0	PROPOSED ACTIVITY	78
8.1	DESCRIPTION OF PROPOSED ACTIVITY	78
8.2	PROPOSED DEVELOPMENT JUSTIFICATION	79
8.3	POTENTIAL HARM TO ABORIGINAL OBJECTS AND CULTURAL HERITAGE	79
8.4	ASSESSING HARM	79
8.5	AVOIDING AND MINIMISING HARM TO ABORIGINAL OBJECTS	79
8.6	JUSTIFICATION OF HARM TO ABORIGINAL OBJECTS	79
8.7	ECOLOGICALLY SUSTAINABLE DEVELOPMENT AND INTERGENERATIONAL EQUITY	80
9.0	MANAGEMENT AND MITIGATION	92
9.1	CARE AND CONTROL	92
9.2	RECOMMENDATIONS	92
10.0	PROPOSED AHIP BOUNDARY	95
	GLOSSARY	96
	REFERENCES	99
	APPENDICES	103
	APPENDIX ONE AHIMS EXTENSIVE SEARCH RESULT	103
	APPENDIX TWO - AHIMS SITE CARD 45-6-3944	106
	APPENDIX THREE SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SSD-10381)	119

TABLE OF FIGURES

Figure 2-1	Study area location, indicated in red.	18
Figure 2-2	Aerial photograph showing the study site.	19
Figure 2-3	New Green Square School PAD.	20
Figure 2-4	Approximate location of study area on soil map.	21
Figure 2-5	Geological map of region with study area indicated in red outline.	24
Figure 2-6	Cross section of soil landscape illustrating relationships between landscape features and dominant soil materials.	25
Figure 2-7	Historical Alexandria Parish Map (15th May 1900) with approximate location of study area indicated in red, illustrating surrounding watercourses.	26
Figure 2-8	A parish map, showing Waterloo Dam, covering a large part of the area of the study site.	29
Figure 2-9	The area of the site in 1885.	30
Figure 2-10	Detail of the study site, as shown in an 1890 Parish Map.	30
Figure 2-11	An aerial photograph taken in 1930, showing the site.	31
Figure 2-12	An aerial photograph taken in 1943.	31
Figure 2-13	Soil Criteria Exceedances (Human Health).	34
Figure 2-14	Soil Criteria Exceedances (Ecological).	35
Figure 2-15	Inferred Fill Depth – Cross Section A-A1.	36
Figure 4-1	AHIMS Search Results.	52
Figure 4-2	Examples of forager settlement patterns.	54
Figure 4-3	Strahler's hierarchy of tributaries.	55
Figure 5-1	South western quarant of the study site, fronting Portman Street, facing west.	64
Figure 5-2	South western quarant of the study site, fronting Portman Street, facing west.	64
Figure 5-3	Southern quarant of the study site, fronting Portman Street, facing south. ...	65
Figure 5-4	North western quadrant of the study site, fronting Portman Street, facing west.	65
Figure 5-5	North western quadrant of the study site, fronting Portman Street, facing west.	66
Figure 5-6	North western quadrant of the study site, fronting Portman Street, facing north west. Note the refuse.	66
Figure 5-7	Detail of the north western quadrant of the study site, note the demolition debris on the surface of the study site, facing west.	67
Figure 5-8	Rehabilitation Centre (Namoi Wing) and the south western quadrant of the study site, facing south.	67
Figure 5-9	Western extent of the study site, note the demolition fill, facing south.	68
Figure 5-10	Western extent of the study site, note the gravel bedding/levelling fills, facing south.	68
Figure 5-11	Detail of sandstone blocks found in the study site, facing east.	69
Figure 5-12	Grassed area immediately to the south of the Rehabilitation (Namoi) Wing, facing east.	69
Figure 5-13	Grassed area immediately to the south of the Rehabilitation (Namoi) Wing, facing south east.	70
Figure 5-14	Asphalt carpark on the study site, facing north east.	70
Figure 5-15	Asphalt carpark and community centre located on the eastern extent of the study site fronting Joynton Avenue, facing east.	71
Figure 5-16	Asphalt carpark and driving fronting Joynton Avenue, facing west.	71
Figure 8-1	Proposed Site Plan.	81
Figure 8-2	GA Plan – Ground Level.	82
Figure 8-3	GA Plan – Level 01.	83

Figure 8-4	GA Plan – Level 02.....	84
Figure 8-5	GA Plan - Level 03.....	85
Figure 8-6	GA Plan – Roof Plan.....	86
Figure 8-7	GA Plan - Basement.....	87
Figure 8-8	External Elevations Overall.....	88
Figure 8-9	Sections 01.....	89
Figure 8-10	Footing Plan – Sheet 1.....	90
Figure 8-11	Footing Plan – Sheet 1.....	91
Figure 10-1	AHIP Boundary indicated in red with Reference Points and Coordinates.	95

EXECUTIVE SUMMARY

Study Area

Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services Pty Ltd was commissioned by Schools Infrastructure NSW (SINSW) in May 2020, to undertake an Aboriginal Cultural Heritage Assessment Report and accompanying Aboriginal Archaeological Technical Report for the proposed new school at 3 Joynton Avenue, Zetland, New South Wales.

This report conforms to the reporting process, conditions, and requirements of both the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)* and of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*.

Aboriginal Consultation

Consultation for this report has been undertaken in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*. A full extract of all consultation material and correspondence can be viewed in *Appendix B: Aboriginal Consultation Log; New Green Square Public School; Lot 2/DP 1174641; 3 Joynton Avenue, Zetland NSW 2017 (AMAC 2020)*.

Physical Evidence

A site inspection was carried out on the 22nd of January 2018 by Ms. Melissa Kennedy of AMAC Group.

The site inspection revealed that the bulk of the study site, to the west, has been significantly disturbed by recent demolition activities. This includes significant piles of demolition rubble, household refuse, mulch and levelling fills of gravel. The original ground level of the study site cannot be determined in the western and southern extents of the study site, due to these deposits and associated levelling fills. The aforementioned fill not only consist of gravel, but also sand, brick fragments, concrete remains, some sandstone fragments and general refuse. No intact soils were observed due to the lack of visibility.

Significance

No specific significance can as yet be assigned to the study area. However intact soils are likely below fill material, with the potential for Aboriginal objects and features of archaeological and cultural heritage value to be present.

Recommendations

There were no confirmed Aboriginal archaeological sites located within/near the study area on the Aboriginal Heritage Information Management System (AHIMS) or from other sources of information of which the author of this report is aware.

The past landscape features present indicate the area was subject to inundation with the northern end of the study area being within the location of Waterloo Dam and swamplands. The land has been relatively undeveloped - mainly consisting of industrial buildings and associated activities and later the location of the South Sydney Hospital.

There is a low-moderate probability that sub-surface Aboriginal objects and/or deposits with conservation value may be present within disturbed areas. If objects are present, they may have been subject to disturbance such as post depositional movement. Although the

area may have low archaeological significance it may, however, hold high cultural significance with intrinsic value to the Aboriginal community. A Potential Archaeological Deposit (PAD) AHIMS Site 45-6-3944 was registered within the bounds of the study area. A programme of test excavation has been proposed under an Aboriginal Heritage Impact Permit (AHIP) to be conducted to ascertain the nature of this deposit and extent of subsurface Aboriginal objects within the study area.

Environmental investigations resulted in the identification of up to 3 meters of fill and contaminants on the site which intersects with the water table of the area. This limits the extent of any Aboriginal archaeological material being identified within any potential intact soils that may be present.

The plans however indicate that the development will require several subsurface impacts including piers as foundations, a basement pump room, an on-site detention tank, a lift pit as well as new electrical and hydraulic services, all of which will impact on potential intact soils that are likely to be present below fill material. Therefore, any potential Aboriginal objects present will be impacted upon as part of the proposed development.

In light of this, and in the context of the information provided, there is nothing to impede the project from proceeding, the following has been recommended to manage the archaeological values of the study area:

- Consultation with the Registered Aboriginal Parties should continue, as per the requirements detailed in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)*
- Subsequent to this report and in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010)*, a program of systematic, sub surface archaeological test excavation under an Aboriginal Heritage Impact Permit (AHIP) should be undertaken to establish the nature and extent of any archaeological objects and/or deposits that may be present. Due to the Potential Archaeological Deposit (PAD) AHIMS Site 45-6-3944, test excavation under the *Code of Practice for the Investigation of Aboriginal Objects in NSW (DECCW 2010)* cannot be adhered to and as such an AHIP will need to be applied for. This is to take place prior to the development activity proceeding (Figures 8.1-8.11)
- In the event, archaeological test excavations reveal Aboriginal archaeological objects or deposits, the following is recommended. Once the nature and extent of the archaeological site has been established through test excavation, the data will be analysed and synthesised into a test excavation report and the site card for AHIMS Site 45-6-3944 - updated. Dependent on the status of the project, an Aboriginal Cultural Heritage Management Plan (ACHMP), is recommended to be produced in order to allow the development to proceed. An ACHMP will need to be subject to review by the Department of Planning, Industry and Environment (DPIE), with input from Heritage NSW, but no formal second AHIP will need to be in place as the proposed development is a State Significant Development
- It is recommended that an Aboriginal Cultural Heritage Management Plan (ACHMP) should be in place as part of the status of the development as SSD, in order to manage and mitigate any potential Aboriginal objects of archaeological and cultural significance that may be present within the study area. As intact soils are likely below fill material, there is a potential for intact Aboriginal objects and/or features to be present

-
- If test excavation does not reveal Aboriginal archaeological objects or deposits, the following is recommended. Dependant on the status of the project as an SSD - either an ACHMP will need to be in place for the post remediation and development works or no further works under the ACHAR, with the development activity (Figures 8.1–8.11) allowed to ‘proceed with caution’
 - After this, and before any ground disturbance takes place as part of the construction, all development staff, contractors and workers should be briefed prior to works commencing on site, as to the status of the area and their responsibilities regarding any Aboriginal archaeological deposits and/or objects that may be located during the following development through a Cultural Heritage Induction.

Should any Aboriginal archaeological deposits or objects be located during the development:

- All excavation in the vicinity of any objects and/or deposits shall cease immediately and the area secured
- Heritage NSW and a suitably qualified archaeologist should be notified so the significance of the said deposits or objects can be evaluated and presented in a report and the study area recorded as an archaeological site
- The archaeological deposits or objects shall be subject to fulfilment of the relevant legislative requirements particularly section 90 of the NPW Act 1974 (as amended).

Should any human remains be located during the following development:

- All excavation in the immediate vicinity of any objects of deposits shall cease immediately
- The NSW police and Heritage NSW Enviroline be informed as soon as possible
- Once it has been established that the human remains are Aboriginal ancestral remains, Heritage NSW and the relevant Registered Aboriginal Parties will identify the appropriate course of action.

CONTACT DETAILS

The contact details for the following archaeologist, NSW Police, Heritage NSW, and the Local Aboriginal Land Council are as follows:

Organisation	Contact	Contact Details
NSW Environment Line		131 555
NSW South Sydney Police Area Command (PAC)		PAC Office: 965 Botany Road Mascot NSW 2020 Ph: (02) 8338 7399 Fax: (02) 8338 7411
Archaeological Management & Consulting Group	Mr. Benjamin Streat or Mr. Martin Carney	122c-d Percival Road Stanmore NSW 2048 Ph:(02) 9568 6093 Fax:(02) 9568 6093 Mob: 0405 455 869 Mob: 0411 727 395 benjaminstreat@archaeological.com.au
Heritage NSW Department of Planning, Industry and Environment	Archaeologist – Head Office	PO Box A290 Sydney South NSW 1232 Ph: (02) 9995 5000 info@environment.nsw.gov.au
Metropolitan Local Aboriginal Land Council (MLALC)	Cultural Heritage Officer	Po Box 1103 Strawberry Hills NSW 2012 (02) 8394 9666 culturalheritage@metrolalc.org.au
A1 Indigenous Services	Carolyn Hickey	cazadirect@live.com
Didge Ngunawal Clan	Lilly Carroll & Paul Boyd	didgengunawalclan@yahoo.com.au
Butucarbin Aboriginal Corporation	Jennifer Beale & Lowanna Gibson	butuheritage@gmail.com

1.0 INTRODUCTION

1.1 BACKGROUND

Archaeological Management and Consulting Group (AMAC) in conjunction with Streat Archaeological Services Pty Ltd (SAS) was commissioned by Schools Infrastructure NSW (SINSW) in May 2020, to undertake an Aboriginal Cultural Heritage Assessment Report and accompanying Aboriginal Archaeological Technical Report for the proposed new school at 3 Joynton Avenue, Zetland, New South Wales.

The Aboriginal Cultural Heritage Assessment Report is being prepared as part of the works that will be carried out at the study site that includes AHIMS Site 45-6-3944 for which it is recommended that further investigation including a programme of test excavation takes place prior to any works commencing. As such, an Aboriginal Heritage Impact Permit (AHIP) is recommended for which this report in conjunction with the Aboriginal Archaeological Technical Report will form the AHIP application.

This report conforms to the reporting process, conditions, and requirements of both the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)* and of the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*

1.2 STUDY AREA

The study site is that piece of land described as Lot 2 of the Land and Property Information Deposited Plan 1174641, forming the following street address 3 Joynton Avenue, Zetland, in the Parish of Alexandria, County of Cumberland.

The area subject to investigation is located at the northern and western end of the address only (Figures 2.1-2.2).

1.3 SCOPE

The aims of this cultural heritage assessment are to assess the Aboriginal cultural heritage values of the study area, to provide registered Aboriginal persons or organisations who hold cultural knowledge relevant to determining the cultural significance of Aboriginal object(s) and/or place(s) within, or in the vicinity of the area of the proposed development, to present this knowledge for synthesis, analysis and compilation into a Cultural Heritage Assessment about the study area.

This report will assess the impact of the proposed development on any identified items or places of Aboriginal cultural heritage value and to develop mitigative strategies under the appropriate legislation for the management of Aboriginal archaeological and cultural heritage values of the study area. The process has also allowed the proponent and/or the proponent's representative to outline the project details and the participating Aboriginal parties to have input into formulating mitigative strategies at identified points in the impact assessment process.

A methodology and a timeline for the completion of the assessment process and report delivery was developed and distributed to all parties. With these clearly identified roles the methodology and project background had been submitted to the participating Aboriginal parties for review and input for a period of no less than 28 days.

1.4 AUTHOR IDENTIFICATION

The analysis of the archaeological background and the reporting were undertaken by Mr. Benjamin Streat (BA, Grad Dip Arch Her, Grad Dip App Sc), archaeologist and Director of Streat Archaeological Services Pty Ltd in association with Ms. Yolanda Pavincich (B. Arch, Grad Dip Cul Her) and Mr. Steven J. Vasilakis (B.A. Hons.), under the guidance of Mr. Martin Carney archaeologist and Managing Director of AMAC Group.

1.5 LEGISLATIVE CONTEXT AND STATUTORY CONTROLS

This section of the report provides a brief outline of the relevant legislation and statutory instruments that protect Aboriginal archaeological and cultural heritage sites within the state of New South Wales. Some of the legislation and statutory instruments operate at a federal or local level and as such are applicable to Aboriginal archaeological and cultural heritage sites in New South Wales. This material is not legal advice and is based purely on the author's understanding of the legislation and statutory instruments. This document seeks to meet the requirements of the legislation and statutory instruments set out within this section of the report.

1.5.1 Commonwealth Heritage Legislation and Lists

One piece of legislation and two statutory lists and one non-statutory list are maintained and were consulted as part of this report: the Environmental Protection and Biodiversity Conservation Act, the National Heritage List; the Commonwealth Heritage List and the Register of the National Estate.

1.5.1.1 Environmental Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) offers provisions to protect matters of national environmental significance. This act establishes the National Heritage List and the Commonwealth Heritage List which can include natural, Indigenous and historic places of value to the nation. This Act helps ensure that the natural, Aboriginal and historic heritage values of places under Commonwealth ownership or control are identified, protected and managed (Australian Government 1999).

1.5.1.2 National Heritage List

The National Heritage List is a list which contains places, items and areas of outstanding heritage value to Australia; this can include places, items and areas overseas as well as items of Aboriginal significance and origin. These places are protected under the Australian Government's EPBC Act.

1.5.1.3 Commonwealth Heritage List

The Commonwealth Heritage List can include natural, Indigenous and historic places of value to the nation. Items on this list are under Commonwealth ownership or control and as such are identified, protected and managed by the Federal Government.

1.5.1.4 Register of the National Estate

The Register of the National Estate is a list of natural, Indigenous and heritage places throughout Australia. It was originally established under the *Australian Heritage*

Commission Act 1975(AHC Act). This has now been replaced by the Environment Protection and Biodiversity Conservation Act 1999. The register will continue to operate until February 2012 when it will be completely replaced by The Commonwealth Heritage List.

1.5.2 New South Wales State Heritage Legislation and Lists

The state (NSW) based legislation that is of relevance to this assessment comes in the form of the acts which are outlined below.

1.5.2.1 National Parks and Wildlife Act 1974

The NSW National Parks and Wildlife Act 1974 (as amended) defines Aboriginal objects and provides protection to any and all material remains which may be evidence of the Aboriginal occupation of lands continued within the state of New South Wales. The relevant sections of the Act are sections 84, 86, 87 and 90.

An Aboriginal object, formerly known as a relic is defined as:

any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains” (NSW Government, 1974).

It is an offence to harm or desecrate an Aboriginal object or places under Part 6, Section 86 of the NPW Act:

Part 6, Division 1, Section 86: Harming or desecrating Aboriginal objects and Aboriginal places:

- (1) *A person must not harm or desecrate an object that the person knows is an Aboriginal object.*

Maximum penalty:

- (a) *in the case of an individual—2,500 penalty units or imprisonment for 1 year, or both, or (in circumstances of aggravation) 5,000 penalty units or imprisonment for 2 years, or both, or*
- (b) *in the case of a corporation—10,000 penalty units.*

- (2) *A person must not harm an Aboriginal object.*

Maximum penalty:

- (a) *in the case of an individual—500 penalty units or (in circumstances of aggravation) 1,000 penalty units, or*
- (b) *in the case of a corporation—2,000 penalty units.*

- (3) *For the purposes of this section, **circumstances of aggravation** are:*

- (a) *that the offence was committed in the course of carrying out a commercial activity, or*
- (b) *that the offence was the second or subsequent occasion on which the offender was convicted of an offence under this section.*

This subsection does not apply unless the circumstances of aggravation were identified in the court attendance notice or summons for the offence.

- (4) *A person must not harm or desecrate an Aboriginal place.*

Maximum penalty:

- (a) *in the case of an individual—5,000 penalty units or imprisonment for 2 years, or both, or*

- (b) *in the case of a corporation—10,000 penalty units.*
- (5) *The offences under subsections (2) and (4) are offences of strict liability and the defence of honest and reasonable mistake of fact applies.*
- (6) *Subsections (1) and (2) do not apply with respect to an Aboriginal object that is dealt with in accordance with section 85A.*
- (7) *A single prosecution for an offence under subsection (1) or (2) may relate to a single Aboriginal object or a group of Aboriginal objects.*
- (8) *If, in proceedings for an offence under subsection (1), the court is satisfied that, at the time the accused harmed the Aboriginal object concerned, the accused did not know that the object was an Aboriginal object, the court may find an offence proved under subsection (2).*

1.5.2.2 Environmental Planning & Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act) states that environmental impacts of proposed developments must be considered in land use planning procedures. Four parts of this act relate to Aboriginal cultural heritage.

- Part 3, divisions 3 and 4 refer to Regional strategic plans and both Local Environmental Plans (LEP) and Development Control Plans (DCP), which are environmental planning instruments and call for the assessment of Aboriginal heritage among other requirements.
- Part 4 determines what developments require consent and what developments do not require consent. Section 4.15 calls for the evaluation of

The likely impacts of that development, including environmental impacts on both the natural and built environments and the social and economic impacts in the locality (NSW Government 1979).

This part of the legislation also addresses State Significant Developments as mentioned in division 4.7 with section 4.38 outlining the consent for State Significant Development in relation to the environmental planning instruments.

- Part 5 of this Act requires that impacts on a locality which may have an impact on the aesthetic, anthropological, architectural, cultural, historic, scientific, recreational or scenic value are considered as part of the development application process (NSW Government, 1979).

1.5.2.3 State Environmental Planning Policy – Educational Establishments and Child Facilities 2017

The Educational Establishments and Child Facilities 2017 policy outlines the consent for development with regards to State Significant Developments. This is outlined part 4 clause 42 as seen below:

42 State significant development for the purpose of schools—application of development standards in environmental planning instruments

Development consent may be granted for development for the purpose of a school that is State significant development even though the development would contravene a development standard imposed by this or any other environmental planning instrument under which the consent is granted.

1.5.2.4 The Aboriginal Land Rights Act 1983

The NSW *Aboriginal Land Rights Act 1983* (ALR Act), administered by the NSW Department of Aboriginal Affairs, established the NSW Aboriginal Land Council (NSWALC) and Local Aboriginal Land Councils (LALCs). The ALR Act requires these bodies to:

- take action to protect the culture and heritage of Aboriginal persons in the council's area, subject to any other law
- promote awareness in the community of the culture and heritage of Aboriginal persons in the council's area.

These requirements recognise and acknowledge the statutory role and responsibilities of New South Wales Aboriginal Land Council and Local Aboriginal Land Councils. The ALR Act also establishes the Office of the Registrar whose functions include but are not limited to, maintaining the Register of Aboriginal Land Claims and the Register of Aboriginal Owners.

Under the ALR Act the Office of the Registrar is to give priority to the entry in the Register of the names of Aboriginal persons who have a cultural association with:

- lands listed in Schedule 14 to the NPW Act
- lands to which section 36A of the ALR Act applies (NSW Government, 1974 & DECCW 2010).

1.5.2.5 The Native Title Act 1993

The *Native Title Act 1993* (NTA) provides the legislative framework to:

- recognise and protect native title
- establish ways in which future dealings affecting native title may proceed, and to set standards for those dealings, including providing certain procedural rights for registered native title claimants and native title holders in relation to acts which affect native title
- establish a mechanism for determining claims to native title
- provide for, or permit, the validation of past acts invalidated because of the existence of native title.

The National Native Title Tribunal has a number of functions under the NTA including maintaining the Register of Native Title Claims, the National Native Title Register and the Register of Indigenous Land Use Agreements and mediating native title claims (NSW Government, 1974 & DECCW 2010).

1.5.2.6 New South Wales Heritage Register and Inventory 1999

The State Heritage Register is a list of places and objects of particular importance to the people of NSW. The register lists a diverse range of over 1,500 items, in both private and public ownership. Places can be nominated by any person to be considered to be listed on the Heritage register. To be placed an item must be significant for the whole of NSW. The State Heritage Inventory lists items that are listed in local council's local environmental plan (LEP) or in a regional environmental plan (REP) and are of local significance.

1.5.2.7 Register of Declared Aboriginal Places 1999

The NPW Act protects areas of land that have recognised values of significance to Aboriginal people. These areas may or may not contain Aboriginal objects (i.e. any physical evidence of Aboriginal occupation or use). Places can be nominated by any person to be considered for Aboriginal Place gazettal. Once nominated, a recommendation can be made to EPA/OEH for consideration by the Minister. The Minister declares an area to be an 'Aboriginal place' if the Minister believes that the place is or was of special significance to Aboriginal culture. An area can have spiritual, natural resource usage, historical, social, educational, or other type of significance.

Under section 86 of the NPW Act it is an offence to harm or desecrate a declared Aboriginal place. Harm includes destroying, defacing, or damaging an Aboriginal place. The potential impacts of the development on an Aboriginal place must be assessed if the development will be in the vicinity of an Aboriginal place (DECCW 2010).

1.5.3 Local Planning Instruments

1.5.3.1 Sydney Local Environmental Plan 2012

The Sydney Local Environmental Plan was prepared by City of Sydney in 2012. Section 5.10 deals with Heritage Conservation. The plan states in Clause 1:

The objectives of this clause are as follows:

(1) Objectives

The objectives of this clause are as follows:

- (a) *to conserve the environmental heritage of the City of Sydney,*
- (b) *to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,*
- (c) *to conserve archaeological sites,*
- (d) *to conserve Aboriginal objects and Aboriginal places of heritage significance.*

(2) Requirement for consent

Development consent is required for any of the following:

- (a) *demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):*
 - (i) *a heritage item,*
 - (ii) *an Aboriginal object,*
 - (iii) *a building, work, relic or tree within a heritage conservation area,*
- (b) *altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,*
- (c) *disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,*
- (d) *disturbing or excavating an Aboriginal place of heritage significance,*
- (e) *erecting a building on land:*

- (i) *on which a heritage item is located or that is within a heritage conservation area, or*
- (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,*
- (f) *subdividing land:*
 - (i) *on which a heritage item is located or that is within a heritage conservation area, or*
 - (ii) *on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.*

(3) When consent not required

However, development consent under this clause is not required if:

- (a) *the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:*
 - (i) *is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and*
 - (ii) *would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or*
- (b) *the development is in a cemetery or burial ground and the proposed development:*
 - (i) *is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and*
 - (ii) *would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or*
- (c) *the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or*
- (d) *the development is exempt development.*

(8) Aboriginal places of heritage significance

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

- (a) *consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and*
- (b) *notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent*

(10) Conservation incentives

The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:

- (a) *the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and*
- (b) *the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and*

- (c) *the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and*
- (d) *the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and*
- (e) *the proposed development would not have any significant adverse effect on the amenity of the surrounding area*

1.5.3.2 Sydney Development Control Plan 2012

The Sydney Development Control Plan was prepared by the City of Sydney in 2012. Section 3 – General Provisions, Subsection 3.9 deals with heritage. The plans objects are as follows:

Objectives

- (a) *Ensure that heritage significance is considered for heritage items, development within heritage conservation areas and development affecting archaeological sites and places of Aboriginal heritage significance.*
- (b) *Enhance the character and heritage significance of heritage items and heritage conservation areas and ensure that infill development is designed to respond positively to the heritage character of adjoining and nearby buildings and features of the public domain.*

3.9.3 Archaeological Assessments

1. *An archaeological assessment is to be prepared by a suitable qualified archaeologist in accordance with the guidelines prepared by the NSW Office and Environment and Heritage.*
2. *For development proposals in Central Sydney, refer to the Central Sydney Archaeological Zoning Plan to determine whether the development site has archaeological potential*
3. *An archaeological assessment is to be submitted as part of the statement of environmental effects for development applications affecting an archaeological site or a place of Aboriginal heritage significance, or potential archaeological site that is likely to have heritage significance.*
4. *An archaeological assessment is to include:*
 - (a) *an assessment of the archaeological potential of the archaeological site or place of Aboriginal heritage significance;*
 - (b) *the heritage significance of the archaeological site or place of Aboriginal heritage significance;*
 - (c) *The probably impact of the proposed development on the heritage significance of the archaeological site or place of Aboriginal heritage significance;*
 - (d) *The compatibility of the development with conservation policies contained within an applicable conservation management plan or conservation management strategy; and*
 - (e) *A management strategy to conserve the heritage significance of the archaeological site or place of Aboriginal heritage significance*
5. *If there is any likelihood that the development will have an impact on significant archaeological relics, development is to ensure that the impact is managed according to the assessed level of significance of those relics.*

1.5.4 Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales

This assessment conforms to the parameters set out in the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010).

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales states that if:

- a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely, then further archaeological investigation and impact assessment is necessary.

1.5.5 Guidelines

This report has been carried out in consultation with the following documents which advocate best practice in New South Wales:

- Aboriginal Archaeological Survey, Guidelines for Archaeological Survey Reporting (NSW NPWS 1998)
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010)
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010)
- Aboriginal Cultural Heritage Standards and Guidelines Kit (NPWS 1998)
- Australia ICOMOS 'Burra' Charter for the conservation of culturally significant places (Australia ICOMOS 1999)
- Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)
- Protecting Local Heritage Places: A Guide for Communities (Australian Heritage Commission 1999).
- Guide to investigating, assessing, and reporting on Aboriginal Cultural Heritage in NSW (OEH 2011)

1.6 ACKNOWLEDGEMENTS

The author would like to thank the following for advice and/or input into this assessment:

- Mr. Matthew Hannibal, Colliers International
- Mr. Andrew Watts, Department of Education Schools Infrastructure NSW
- Mr. Callum Flitcroft of Colliers International
- Ms. Selina Timothy, Metropolitan Local Aboriginal Land Council
- Ms. Lilly Carroll & Mr Paul Boyd, Didge Ngunawal Clan
- Ms. Carolyn Hickey, A1 Indigenous Services Pty Ltd
- Ms. Jennifer Beale & Ms Lowanna Gibson, Butucarbin Aboriginal Corporation

2.0 DESCRIPTION OF STUDY AREA

The study site is that piece of land described as Lot 2 of the Land and Property Information Deposited Plan 1174641, forming the following street address 3 Joynton Avenue, Zetland, in the Parish of Alexandria, County of Cumberland

The area subject to investigation is located at the northern and western end of the address only. Its extent is bound by the northern carpark and southern pedestrian walkway.

Address	Lot	Deposited Plan
3 Joynton Avenue, Zetland	2	1174641



Figure 2-1 Study area location, indicated in red.
AMAC (2020), Six Maps, LPI Online (accessed 6/5/20).

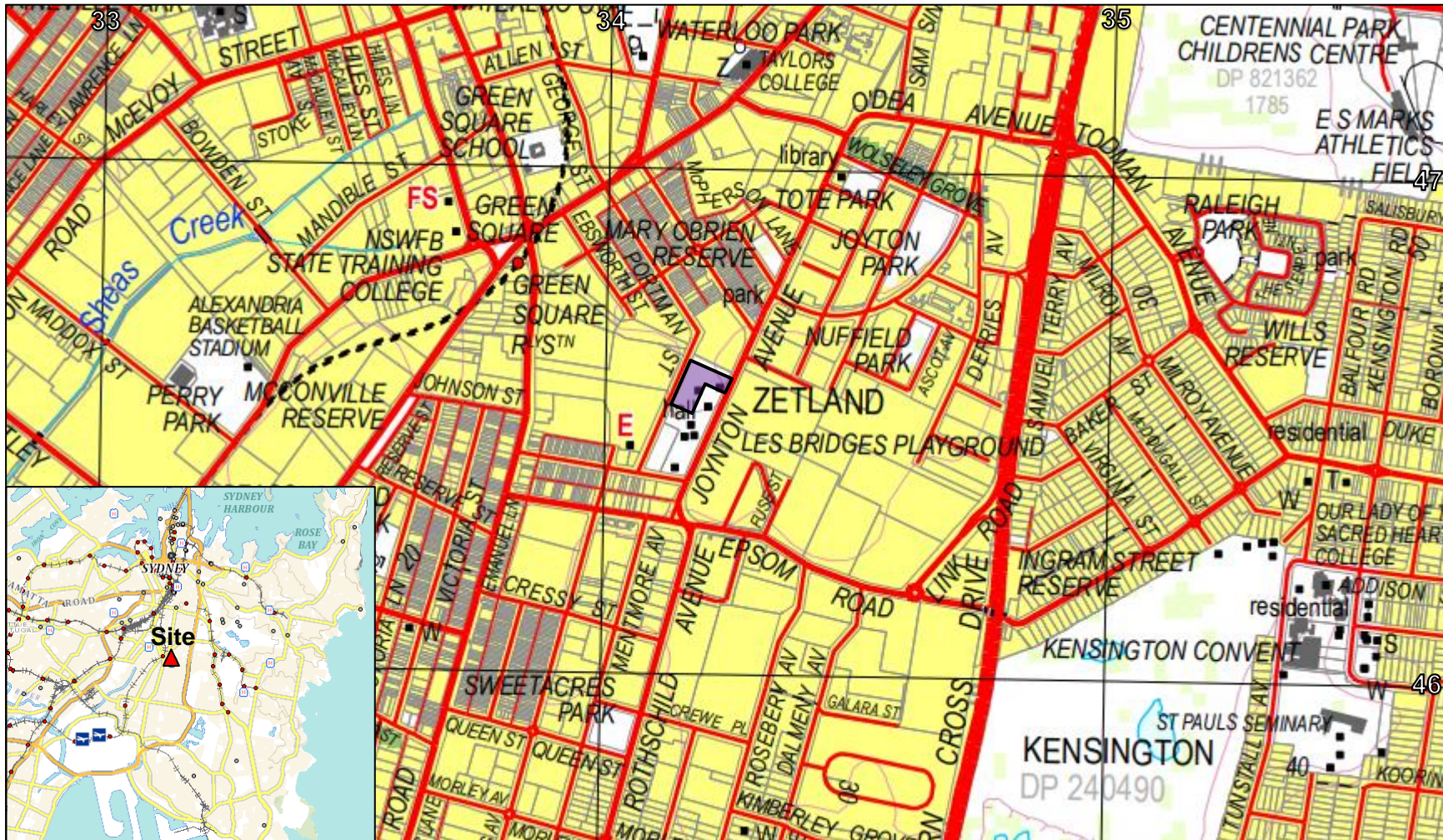


Figure 2-2 Aerial photograph showing the study site.
Study site indicated in purple. Six Maps, LPI Online (accessed 13/05/2020).

2.1 REGISTERED ARCHAEOLOGICAL SITES WITHIN THE STUDY AREA

A Potential Archaeological Deposit (PAD), AHIMS Site 45-6-3944 (Figure 2.3) was registered within the bounds of the study area. Located south of the northern carpark, the PAD is situated in an open area to the north of the northern building complex.

A programme of test excavation has been proposed under an Aboriginal Heritage Impact Permit (AHIP) to be conducted to ascertain the nature of this deposit and extent of subsurface Aboriginal objects within the study area.

A copy of the site card can be found in Appendix Two.



Figure 2-3 New Green Square School PAD.
Yellow triangle indicates AHIMS Site 45-6-3944 (AMAC 2021).

2.2 ENVIRONMENTAL CONTEXT

To adequately understand and assess the potential Aboriginal archaeological resource that may be present within the study area it is vital to understand the environment in which the Aboriginal inhabitants of the study area carried out their activities. The environment that Aboriginal inhabitants lived in is a dominant factor in shaping their activity and therefore the archaeological evidence created by this activity. Not only will the resources available to the Aboriginal population have an influence on the evidence created but the survival of said evidence will also be influenced by the environment.

2.2.1 Topography

The study area extends over one topographic zone, that belonging to the Tuggerah (tg) fluvial landscape (Figure 2.3), which consists of an extensive dune system of gently undulating plains and rolling undulating rises of broad and level swales and dunes with a local relief of <20m. There are known to be isolated steep rises. Depressions and lagoons/swamps occur within the natural topography.

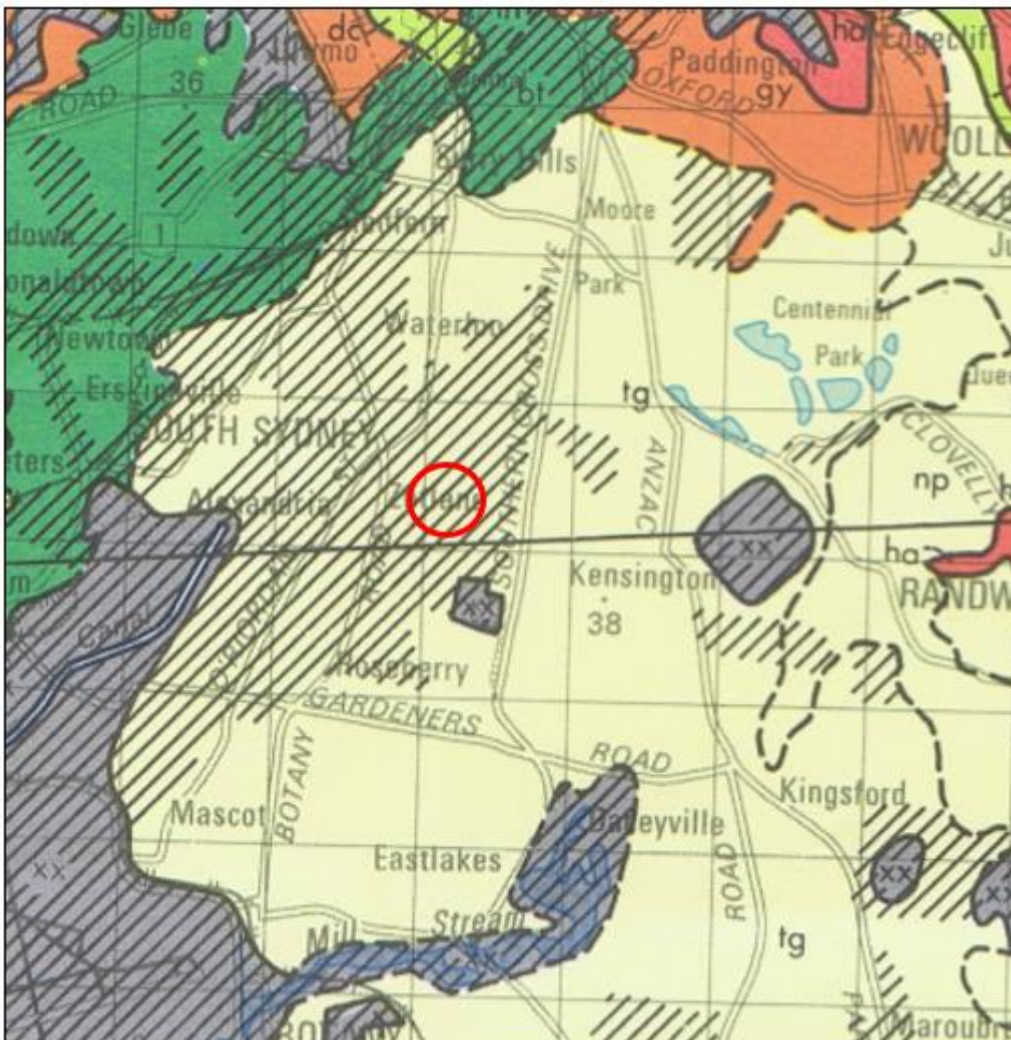


Figure 2-4 Approximate location of study area on soil map.
Study area indicated in red. Chapman *et al* (1989) & AMAC (2017).

2.2.2 Geology and Soils

The geology of the study area consists of Quaternary (Holocene and Pleistocene) windblown, fine to medium grained, marine quartz sand (Figure 2.4). The sands are found to be finer than those found on beaches. Shell fragments are also found to be absent from the sand.

The study area has been significantly altered into an urban residential area with areas of Zetland developed for heavy industry.

The following dominant natural soils are expected in area:

Dominant Soil	Horizon	Colour	Description
tg1	A1 horizon	Brownish - grey to brownish - black.	Loose speckled loamy sand with single-grained structure and porous sandy fabric. Can contain organic fragments and charcoal.
tg2	A2 horizon	Bleached when dry, when moist can range from light grey, greyish - yellow and dull yellow – orange.	Loose sand with single grained structure and porous sandy fabric. Charcoal and stones are absent.
tg3	A horizon (variation)	Brownish -grey to greyish-brown. Grey mottles at depth.	Mottled sand or loamy sand with single grained structure and loose sandy fabric. It occurs where subsoils have poor drainage and subject to waterlogging. Charcoal and stones are absent.
tg4	B horizon (variation)	Black or brownish-black.	Soft sandy organic pan – stained organic single grained sand with earthy and/or sandy fabric. Sand weakly cemented with organic compounds. Hardsetting on exposure and does not contain charcoal or stones.
tg5	B horizon (variation)	Bright yellowish brown to brown. Dark brown and orange mottles are common.	Sandy iron pan known as coffee rock. Consists of iron stained to loamy sand. Sands are coated with yellow and red sesquioxides. Stones and charcoal are absent.
tg6	B horizon (variation)	Varies from light yellow to dull yellow - orange.	Massive sand to clayey sand with a single grained or massive structure with sandy fabric. Clay compacted sands are expected. Does not contain charcoal and roots.

Table 2-1 Table of expected Tuggerah (tg) soil profiles based on landform

Dunes
<ul style="list-style-type: none">➤ up to 30cm of grey-brown loamy sand (tg1)➤ >100cm of bleached loose sand (tg2)➤ >50cm Intermixed with black soft sand (tg4) and brown soft sandy iron can be present (tg5)➤ >200cm of yellow massive sand as a deep subsoil (tg6) <p><i>N.B The total soil profile exceeds 300cm. The boundaries between the soil horizons are generally sharp to clear.</i></p>
Swales
<ul style="list-style-type: none">➤ up to 25cm of grey-brown loamy sand (tg1)➤ > 30cm of bleached loose sand (tg2)➤ Brownish- grey mottled sand located near the water table (tg3)➤ Underlined by black soft sandy iron pan – at water table (tg4)➤ Intermixed black sand and brown sandy iron (tg5) can occur between tg4 and tg6➤ Yellow massive sand located and can be several meters thick. <p><i>N.B The total soil profile exceeds 200cm. The boundaries between the soil horizons are generally sharp except for boundary between tg2 and tg3 which is gradual.</i></p>

2.2.3 Watercourse

The study area lies east 628m of 2nd order stream, Alexandria Canal. It is also situated north west, 2.290km of Mill Stream and Lachlan Swamps. There are a number of drainage channels and manmade dams near the study area at Centennial park and the Australian Golf Course as a result of European occupation and past land use. Towards the northern end of the study area was the location of Waterloo Dam. The study area is found to be surrounded within swamplands.

2.2.4 Vegetation

The vegetation found in the study area is no longer in a native state and is comprised of a variety of introduced and noxious types of vegetation. This movement away from the natural vegetation is a result of previous land clearing for farming and development.

These lands were cleared soon after European settlement. The native vegetation of this area would have comprised of dry sclerophyll eucalypt and apple woodland and tall open-woodland or forest. Dominant tree species include smooth barked apple *Angophora costata*, Sydney peppermint eucalyptus *piperita*, and old man banksia *Banksia aemula*. The shrubby sclerophyllous understorey consists of communities such as bracken *Pteridium esculentum*, Christmas bush *Ceratopetalum gummiferum*, woody pear *Xylomelum pyriforme* and prickly moses *Acacia ulicifolia*.

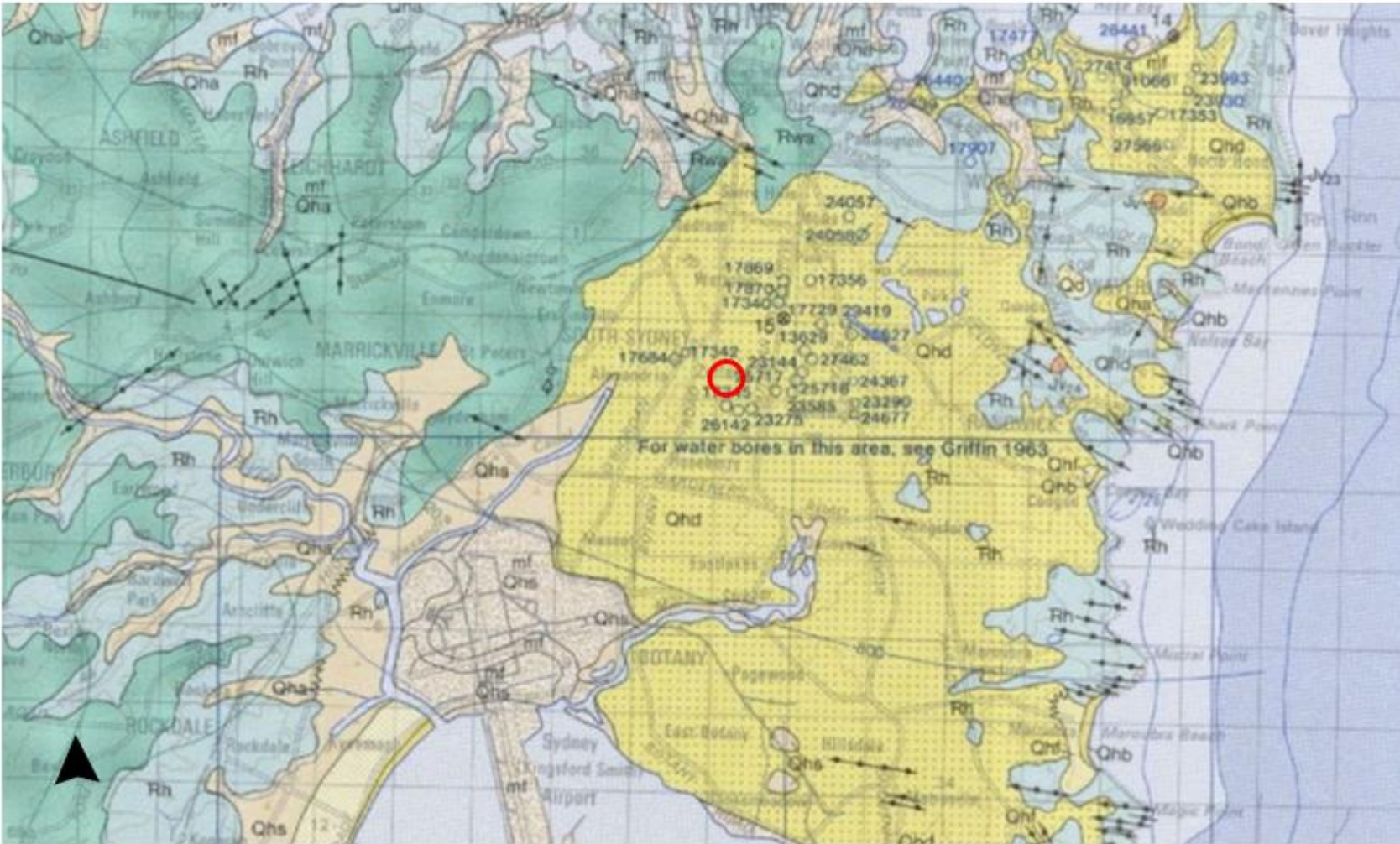


Figure 2-5 Geological map of region with study area indicated in red outline.
Sydney 9030 (Department of Mineral Resources, Sydney 1983).

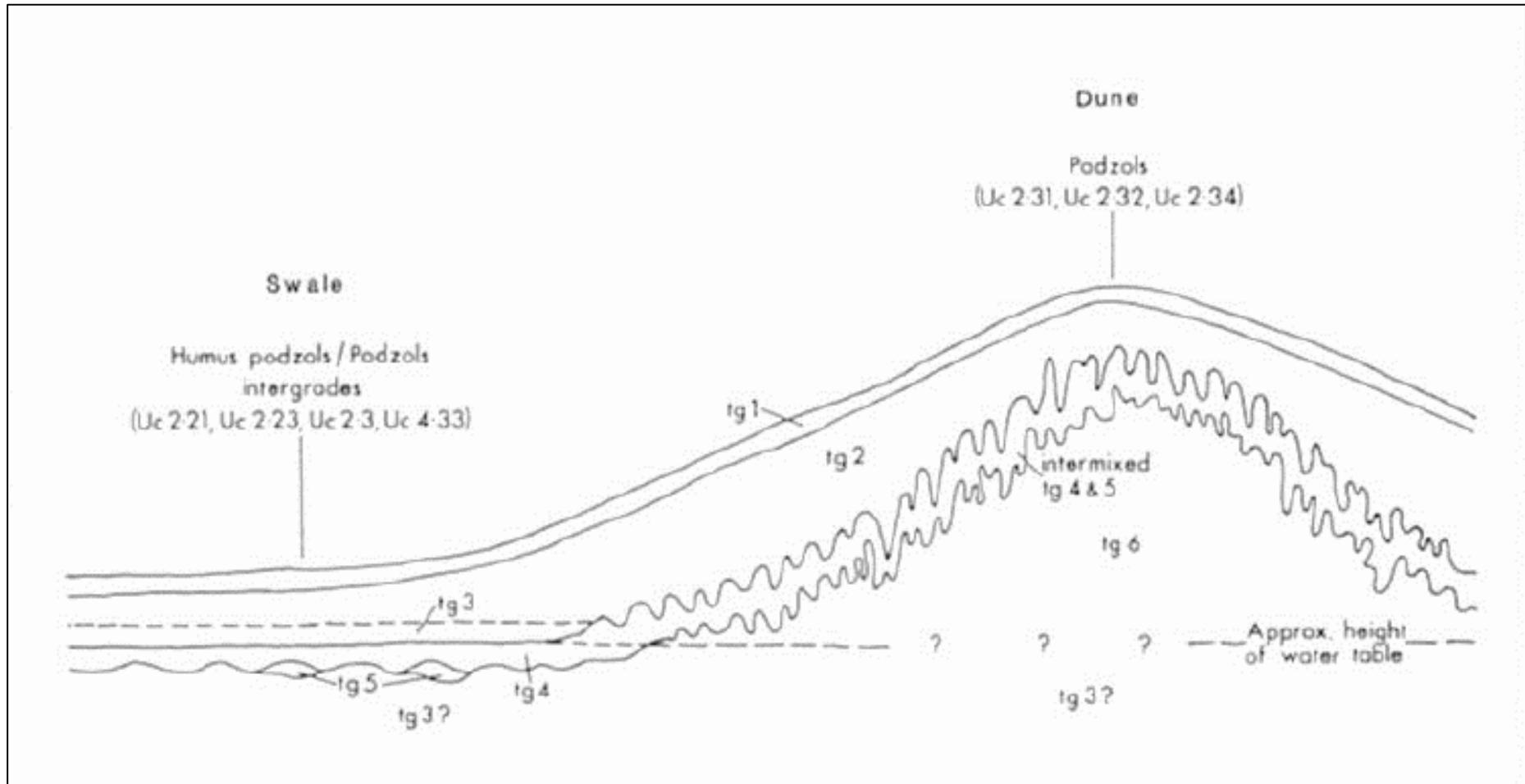


Figure 2-6 Cross section of soil landscape illustrating relationships between landscape features and dominant soil materials.
Soil Landscapes of the Sydney 1:100 000 sheet (Chapman & Murphy, 1989).



Figure 2-7 Historical Alexandria Parish Map (15th May 1900) with approximate location of study area indicated in red, illustrating surrounding watercourses.
NSW LRS HLRV, A.O Map number 24497(accessed 19/05/20).

2.3 LAND USE AND DISTURBANCE FACTORS

This section of the report provides an assessment of land use, the level of disturbance and the likely archaeological potential of the study area. The archaeological potential is based on the level of previous disturbance as well as the previously discussed predictive model for the region.

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010); defines disturbed lands as given below.

“Land is disturbed if it has been the subject of a human activity that has changed the land’s surface, these being changes that remain clear and observable. Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure and construction of earthworks)”

This definition is based on the types of disturbance as classified in The Australian Soil and Land Survey Field Handbook (CSIRO 2010). The following is a scale formulated by CSIRO (2010) of the levels of disturbances and their classification.

Minor Disturbance		Moderate Disturbance		Major Disturbance	
0	No effective disturbance; natural	3	Extensive clearing (e.g.: poisoning and ringbarking)	6	Cultivation: grain fed
1	No effective disturbance other than grazing by hoofed animals	4	Complete clearing: pasture native or improved, but never cultivated	7	Cultivation: irrigated, past or present
2	Limited clearing (e.g.: selected logging)	5	Complete clearing: pasture native or improved, cultivated at some stage	8	Highly disturbed (quarrying, road works, mining, landfill, urban)

The above scale is used in determining the level of disturbance of the study area and its impact on the potential archaeology which may be present.

2.3.1 The Cadigal and Wangal Nation

It is estimated that around 250 distinct languages were in use throughout the Australian continent at the time of contact. The exact number cannot be known for certain, however 250 is a conservative estimate. These languages fell within two language groups, the *Pama-Nyungan* and *Non Pama-Nyungan* languages. Knowledge of the different language groups in a given area is variable. Early European recordings noted the names of particular Aboriginal individuals and groups, but were not always clear about which named groups represented a language rather than some other social grouping (Hardy and Streat 2008).

The Cadigal and Wangal extended from Darling Harbour to South Head, including some of the lower parts of Port Jackson (Casey & Lowe, 2014). Within these large language groups resource access and ownership was centred on extended family groups or ‘clans’

which appear to have had ownership of land (Attenbrow 2002). As it was unlikely to be acceptable to find sexual partners within the family grouping and for other reasons such as resource sharing, a number of clans would often travel together in a larger group.

These groups are referred to as *bands*. Whether the clan or the band was the most important group politically to an individual is likely to have varied from place to place. Group borders were generally physical characteristics of the landscape inhabited, such as waterways or the limits of a particular resource. Groups also shared spiritual affiliations, often a common dreaming ancestor, history, knowledge, and dialect (Hardy 2008).

A wide variety of activities comprised the lifestyle of the Aboriginal groups across the Cumberland Lowlands. Some behaviours leave traces which can be retrieved by archaeological study of material remains. Many of these can only be reconstructed by oral history, observations of European explorers and ethnologists, and other forms of past recording such as photography or art. Some of the details of the complexity and sophistication of the past lifestyles of Aboriginal people in the area have been lost, but many can be reconstructed using the sources available.

2.3.2 European Land Use

Background research indicates that the entirety of the study area has been impacted on during the 19th Century – 21st Century for industrial purposes due to the proximity to swamplands and water sources, of which a number of mills were located within the area as well as associated activities such as wheat grinding and wool washing. Past European land use has led to the clearing of the land and construction of a man-made dam (Figure 2.7- 2.11).

2.3.3 Disturbance and Archaeological Potential

It is important to note that the following assessments describe the archaeological potential of the study area. It is acknowledged that if the study area has little or no archaeological potential, the study area may still have cultural significance to the Aboriginal community.

Past aeriels indicate that no deep excavation, construction of basements or bulk soil removal has taken place. The study area is likely to have been subject to inundation as a result of the surrounding swampland and dam.

The study area was the site of a hospital completed in 1913 and remained in use until 1993. Therefore, the land is considered to be relatively undeveloped.

In light of this, and in the context of the information provided about the land use of the site and its proximity to two major water sources, the following has been predicted.

Low-Moderate disturbance to sections of the landscape: Sub-surface Aboriginal objects with potential conservation value have a low probability of being present within the study area.

2.3.4 Exclusion Areas

No areas of exclusion have been identified.

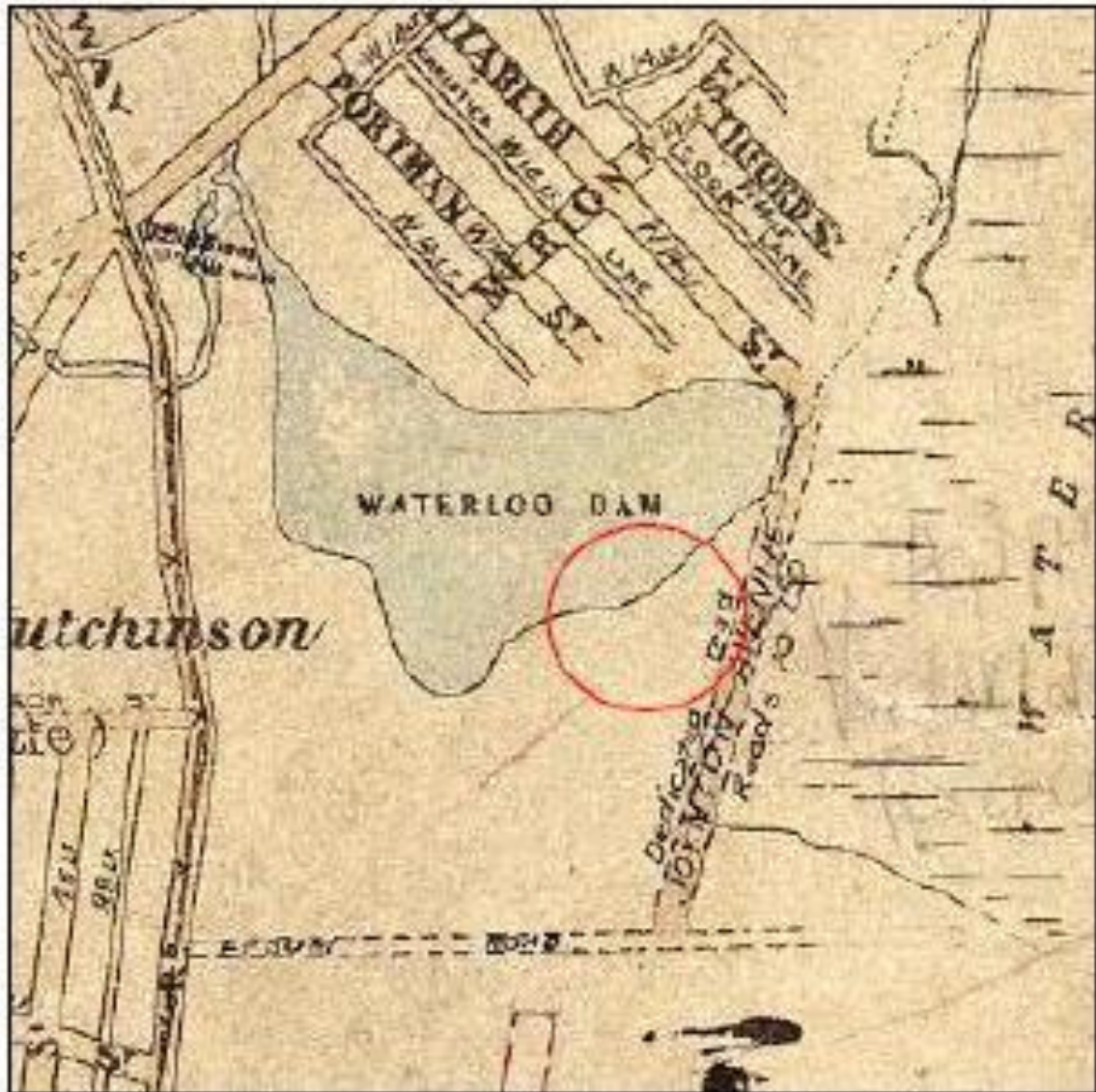


Figure 2-8 A parish map, showing Waterloo Dam, covering a large part of the area of the study site.
Approximate location of study site outlined in red. Parish of Alexandria, County of Cumberland. Department of Lands, Parish Map Preservation Project. PMapMN02-14040602.



Figure 2-9 The area of the site in 1885.
Approximate location of study site outlined in red. Gibbs Shallard and Co. (1885) Map of the City of Sydney and Suburbs 1885. Reproduced in Ashton and Waterson (2000), p. 36.

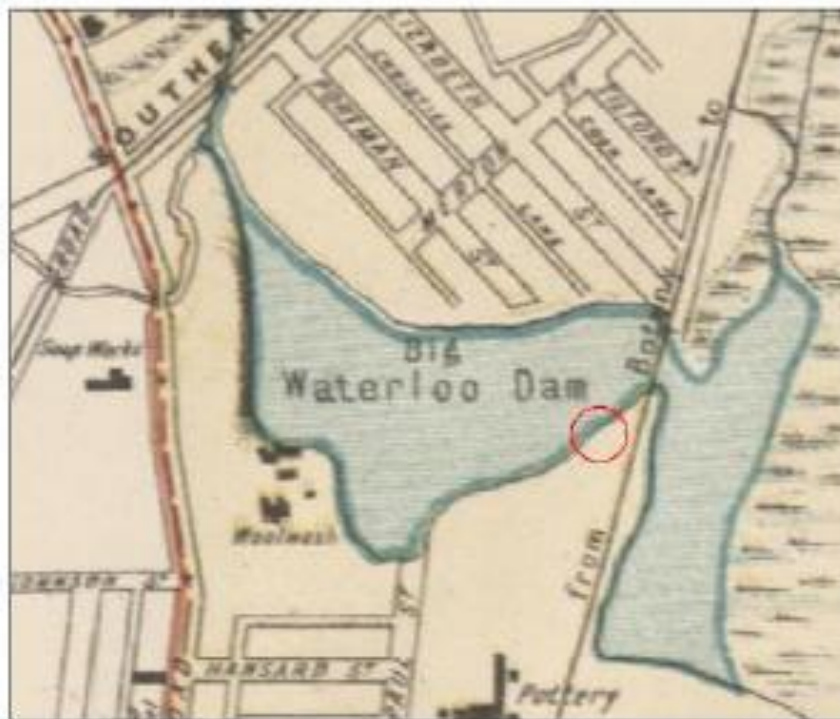


Figure 2-10 Detail of the study site, as shown in an 1890 Parish Map.
Approximate location of the study site outlined in red. Higginbotham and Robinson (1890) Waterloo, Parish of Alexandria. National Library of Australia, Map F 136, online version.



Figure 2-11 An aerial photograph taken in 1930, showing the site. Study site outlined in red. NSW Department of Lands (1930) Map 3428, Sydney, Run 16.



Figure 2-12 An aerial photograph taken in 1943. Approximate location of the study site outlined in red. RTA (n.d.) *From the Skies: Aerial Photographs of Sydney in 1943.*

2.3.5 JBS&G AUSTRALIA PTY LTD 2020 - GREEN SQUARE PUBLIC SCHOOL REMEDIAL ACTION PLAN

JBS&G Australia Pty Ltd produced a remedial action plan for the proposed Green Square Public School development at 3 Joynton Avenue, Zetland. The remediation plan was in response to existing contamination reports undertaken within the study area.

It was concluded that a conservative approach to the remediation of the site be undertaken, including the compromised nature of the fill having been impacted by both asbestos and Polycyclic Aromatic Hydrocarbons (PAH).

The objective of the remediation plan are as follows:

- Removal of potential contamination sources, including potential fuel infrastructure
- Management and/or removal of unacceptable risks to human health and the environment from the identified impacted (fill material and natural) soils such that the site is suitable for the propose use
- Close out any data gaps; and
- Validation of the remedial/management works in accordance with the relevant NSW EPA Guidelines and with reference to the adopted site criteria to demonstrate the successful remediation of the site.

The following areas have been identified as requiring remediation/management:

- Decommissioning/removal of potential USTs, any associated infrastructure, tank backfill material and any further, petroleum impacted soils
- Carcinogenic PAH compounds (*asB(a)P TEQ*), lead and asbestos impacted fill at the site that is proposed to be retained as part of the site redevelopment. The final extent of material capped in situ will be dependent on conditions encountered during remediation and development works. It is noted that based on the current development plans (Appendix A), for planning purposes, the anticipated maximum extent of retained fill material is considered to be the entire site development area

The preferred remedial strategy is as follows:

- Excavation and off-site disposal of potential petroleum infrastructure including the USTs, associated pipework and former browser plinths
- Excavation of tank pit backfill and associated impacted soil (where present) to the extent practicable and (subsequent to stockpiling and characterisation in accordance with the requirements for off-site disposal), removal of the excavated material from the site to a lawful waste facility
- Excavation and off-site disposal of impacted fill material as required to achieve proposed development subgrade levels; and
- On-site retention of all remaining in-situ fill material via implementation of a cap/cover remedial strategy based on physical separation, with implementation of on-going management plan

In addition, JBS&G outlined a Contingency Plan in the event of unexpected finds to ensure minimisation/mitigation of the associated remedial works health and environmental risks/hazards and that the objectives of this RAP are met.

The report (JBS&G 2020) acknowledged that previous investigations of the site have been undertaken to assess the identified contaminants of potential concern in selected

parts of the site. However, ground conditions between sampling points may vary, and further hazards may arise from unexpected sources and/or in unexpected locations during remediation. The nature of any residual hazards which may be present and which may be discovered at the site are generally detectable through visual or olfactory means, for example:

- The presence of significant aggregates of friable asbestos materials (visible) as opposed to minor occurrences of fragments or fibre bundles in soil; and/or
- Excessive quantities of Construction/Demolition Waste (visible); and/or
- Hydrocarbon impacted materials (visible/odorous); and/or
- Drums, waste pits, former pipework or USTs (visible); and/or
- Tarry like impacted soil/fill material (visible/odorous); and/or
- Potential chlorinated hydrocarbon impact (sweet odour soils).

JBS&G (2020) recommended, as a precautionary measure to ensure the protection of the workforce and surrounding community, should any of the abovementioned substances (or any other unexpected potentially hazardous substance) be identified, the procedure summarised in Figure 2.12 be followed.

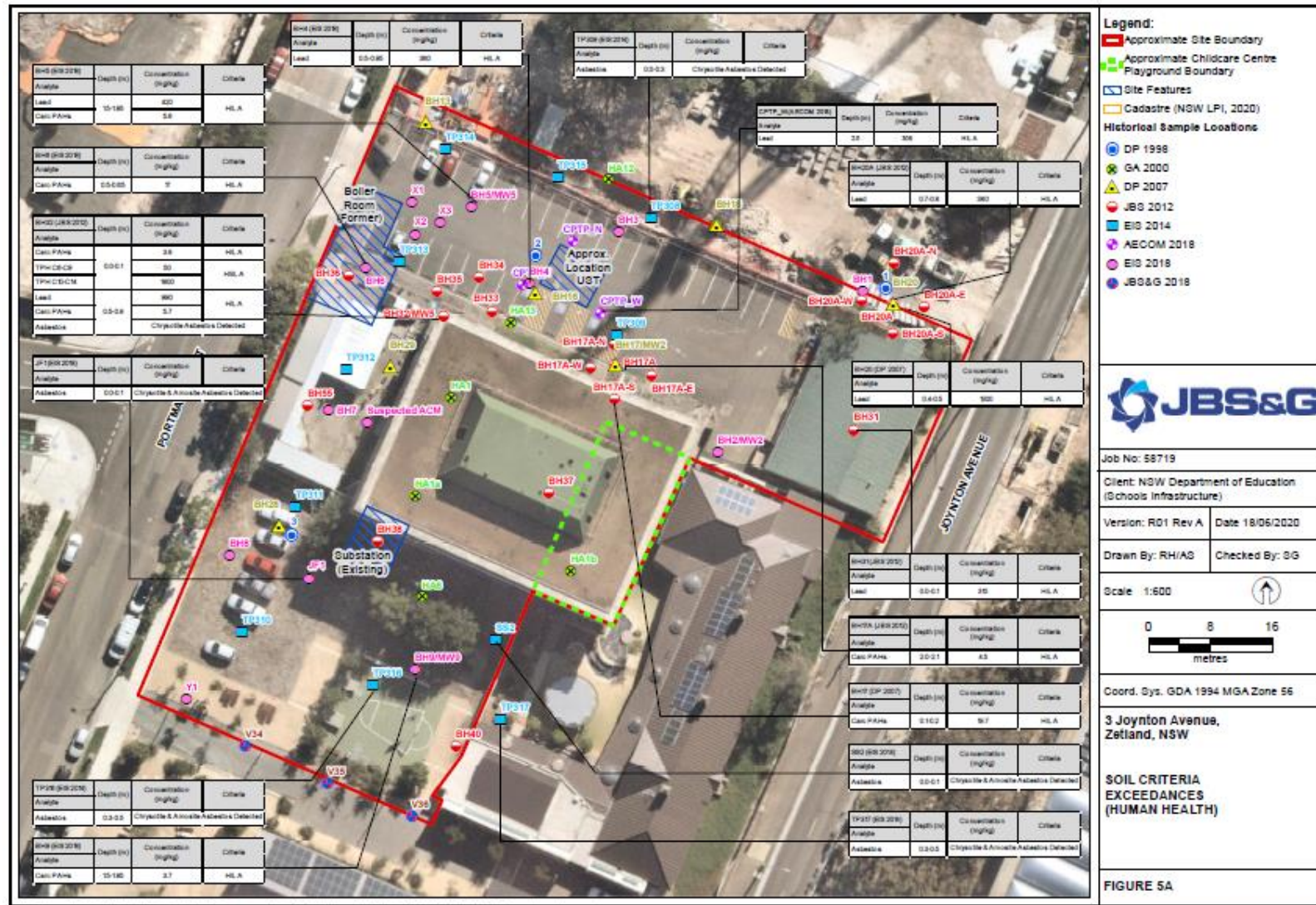


Figure 2-13
 Soil
 Criteria
 Exceedances
 (Human
 Health).
 JBS&G
 Australia Pty
 Ltd (2020:
 Figure 5A).

Pty

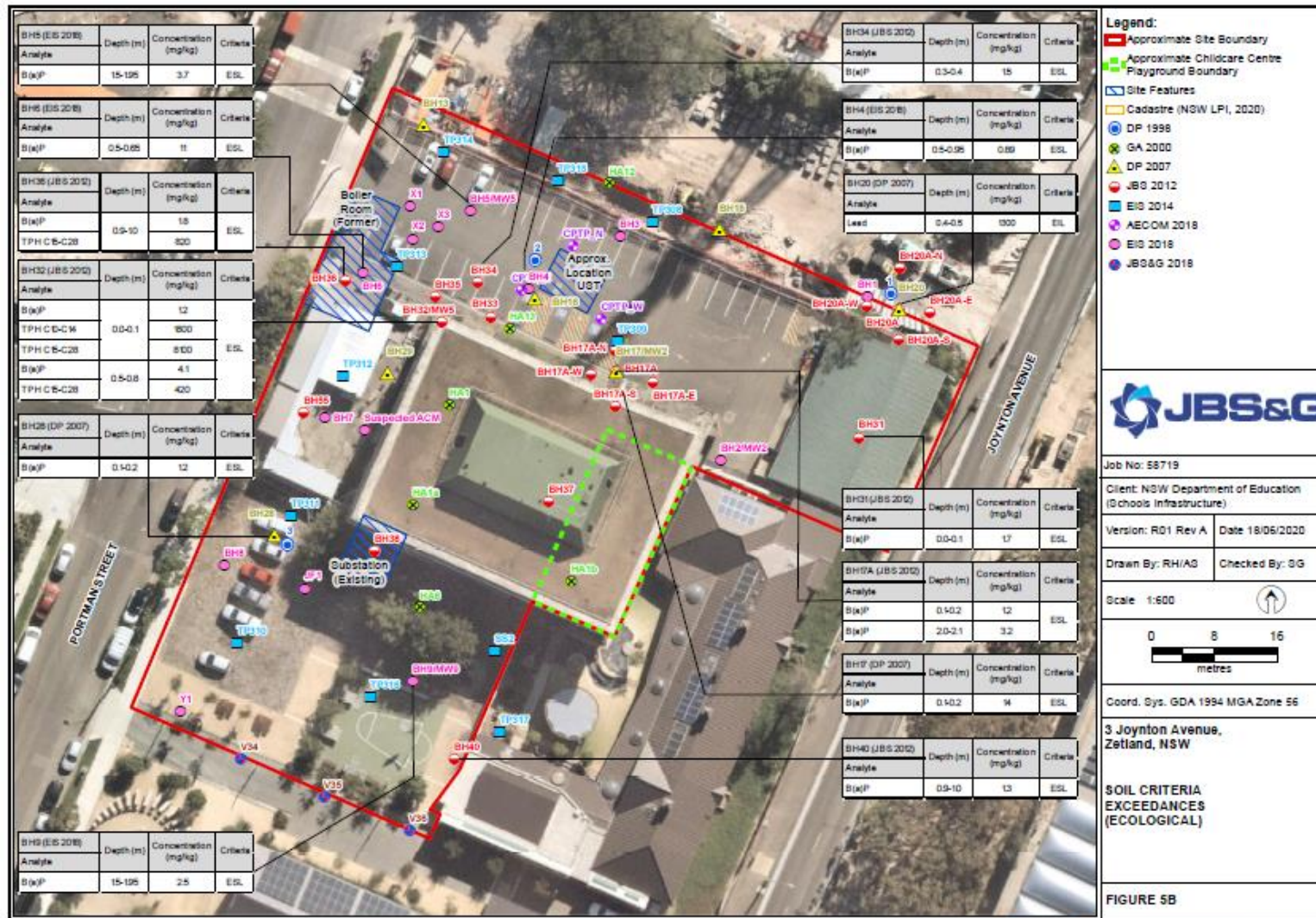


Figure 2-14
 Soil
 Criteria
 Exceedances
 (Ecological).
 JBS&G Australia
 Ltd (2020:
 Figure 5B).

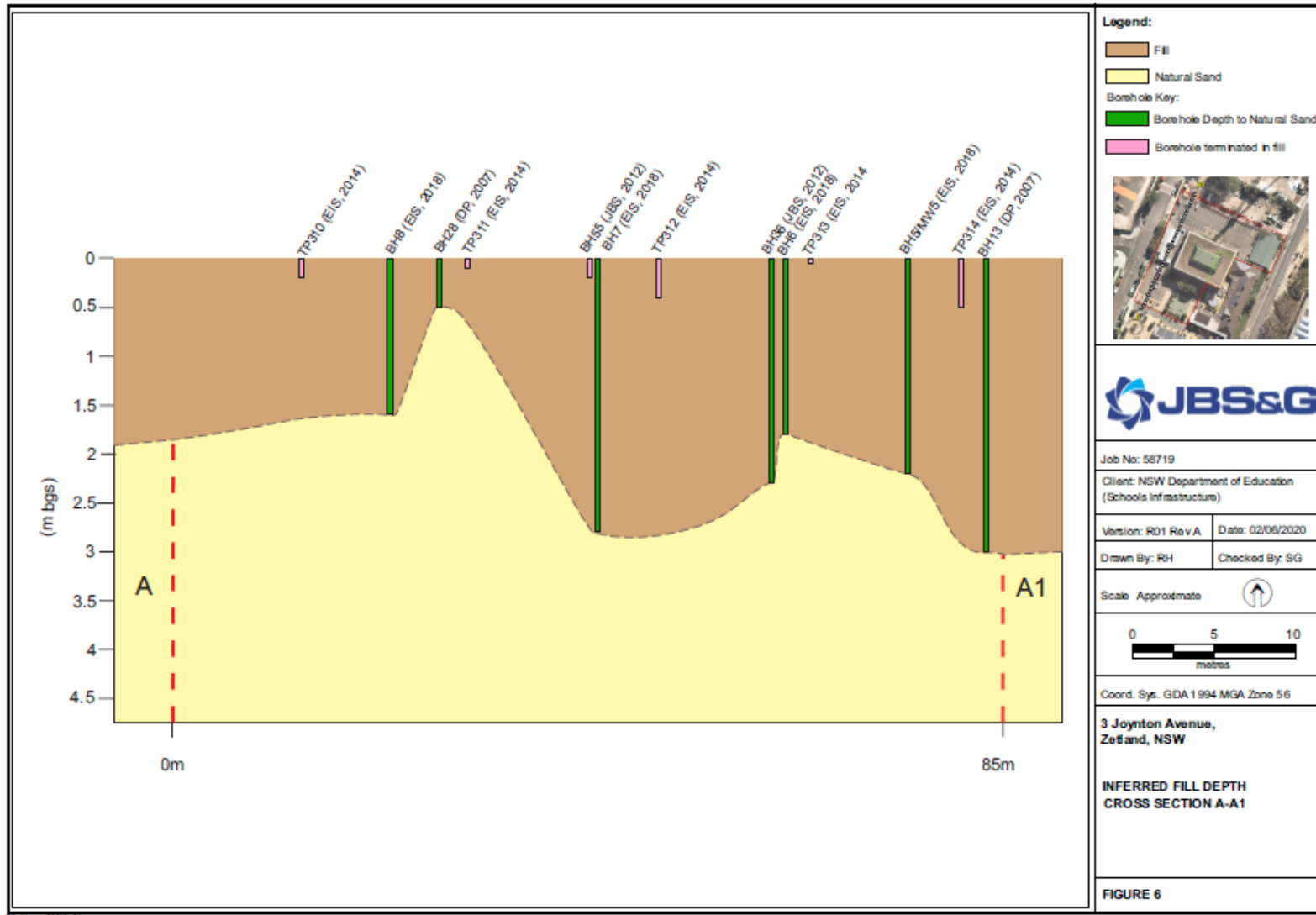


Figure 2-15
Inferred
Fill Depth – Cross
Section A-A1.
 JBS&G Australia
 Pty Ltd (2020:
 Figure 6).

3.0 ABORIGINAL CONSULTATION

This section documents the requirements of the Aboriginal consultation process that should be undertaken as part of any Aboriginal archaeological and cultural heritage assessment where an Aboriginal Heritage Impact Permit (AHIP) or test excavation is required. Section 4.1 outlines the guidelines for Aboriginal consultation issued by the DECCW. Section 4.2 documents the steps taken for this Aboriginal cultural assessment and the outcomes of the consultation. Further information, including copies of correspondence to and from registered parties is included in Appendix B.

3.1 CONSULTATION REQUIREMENTS

Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010), referring to Part 6 Approvals under the NPW Act were released in April 2010. The responsibilities of the proponent when test excavation is to take place and/or permit under section 90 of the NPW Act are listed below.

<http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf>

Stage 1 – Notification of project proposal and registration of interest

Stage 1 states that:

“4.1.2- Proponents are responsible for ascertaining, from reasonable sources of information, the names of Aboriginal people who may hold cultural knowledge relevant to determining the significance of Aboriginal *objects* and/or *places*. Reasonable sources of information could include (a) to (g) below. Proponents must compile a list of Aboriginal people who may have an interest for the proposed project area and hold knowledge relevant to determining the cultural significance of Aboriginal *objects* and/or *places* by writing to:

- (a) the relevant DECCW (sic) EPRG regional office
- (b) the relevant Local Aboriginal Land Council(s)
- (c) the Registrar, *Aboriginal Land Rights Act 1983* for a list of Aboriginal owners
- (d) the National Native Title Tribunal for a list of registered native title claimants, native title holders and registered Indigenous Land Use Agreements
- (e) Native Title Services Corporation Limited (NTSCORP Limited)
- (f) the relevant local council(s)
- (g) the relevant catchment management authorities for contact details of any established Aboriginal reference group.

4.1.3- Proponents must write to the Aboriginal people whose names were obtained in step 4.1.2 and the relevant Local Aboriginal Land Council(s) to notify them of the proposed project. The proponent must also place a notice in the local newspaper circulating in the general location of the proposed project explaining the project and its exact location. The notification by letter and in the newspaper must include:

- (a) the name and contact details of the proponent

- (b) a brief overview of the proposed project that may be the subject of an application for an AHIP, including the location of the proposed project
- (c) a statement that the purpose of community consultation with Aboriginal people is to assist the proposed applicant in the preparation of an application for an AHIP and to assist the Director General of DECCW in his or her consideration and determination of the application
- (d) an invitation for Aboriginal people who hold cultural knowledge relevant to determining the significance of Aboriginal object(s) and/or place(s) in the area of the proposed project to register an interest in a process of community consultation with the proposed applicant regarding the proposed activity
- (e) a closing date for the registration of interests.

4.1.4- There must be a minimum of 14 days from the date the letter was sent or notice published in the newspaper to register an interest. The time allowed to register an interest should reflect the project's size and complexity.

4.1.5- The proponent must advise Aboriginal people who are registering an interest that their details will be forwarded to DECCW and the Local Aboriginal Land Council (LALC) unless they specify that they do not want their details released.

4.1.6- The proponent must make a record of the names of each Aboriginal person who registered an interest and provide a copy of that record, along with a copy of the notification from 4.1.3 to the relevant DECCW EPRG regional office and LALC within 28 days from the closing date for registering an interest.

4.1.7- LALCs holding cultural knowledge relevant to determining the significance of Aboriginal objects and places in the proposed project area who wish to register an interest to be involved in consultation must register their interest as an Aboriginal organisation rather than as individuals.

4.1.8- Where an Aboriginal organisation representing Aboriginal people who hold cultural knowledge has registered an interest, a contact person for that organisation must be nominated. Aboriginal cultural knowledge holders who have registered an interest may indicate to the proponent they have appointed a representative to act on their behalf. Where this occurs, the registered Aboriginal party must provide written confirmation and contact details of those individuals to act on their behalf.

Stage 2 – Presentation of information about the proposed project

Stage 2 states that:

“4.2.1- The proponent must initiate arrangements for presenting the proposed project information to the registered Aboriginal parties (from Stage 1).

4.2.2- The presentation of proposed project information should provide the opportunity for:

- (a) the proponent to present the proposal, outline project details relevant to the nature, scope, methodology and environmental and other impacts
- (b) the proponent to outline the impact assessment process including the input points into the investigation and assessment activities

- (c) the proponent to specify critical timelines and milestones for the completion of assessment activities and delivery of reports
- (d) the proponent and registered Aboriginal parties to clearly define agreed roles, functions and responsibilities
- (f) the registered Aboriginal parties to identify raise and discuss their cultural concerns, perspectives and assessment requirements (if any).

4.2.3- The proponent should record or document that the proposed project information has been presented. This record or documentation should include any agreed outcomes, and any contentious issues that may require further discussion to establish mutual resolution (where applicable). The proponent should provide a copy of this record or documentation to registered Aboriginal parties.

4.2.4- Depending on the nature, scale and complexity of the proponent's project, it may be reasonable and necessary for the proponent to:

- (a) conduct additional project information sessions to ensure that all necessary information about the project is provided and enable registered Aboriginal parties to provide information about the cultural significance of Aboriginal object(s) and/or place(s) that may be present on the proposed project area
- (b) create the opportunity for registered Aboriginal parties to visit the project site" (DECCW 2010).

Stage 3 – Drafting, review and finalisation of the Cultural Heritage Assessment Report

Stage 3 states that:

"4.3.1- The proponent must present and/or provide the proposed methodology(s) for the cultural heritage assessment to the registered Aboriginal parties.

4.3.2- The registered Aboriginal parties must be given the opportunity to review and provide feedback to the proponent within a minimum of 28 days of the proponent providing the methodology. The review should identify any protocols that the registered Aboriginal parties wish to be adopted into the information gathering process and assessment methodology and any matters such as issues/areas of cultural significance that might affect, inform or refine the assessment methodology. Comments should be provided in writing, or may be sought verbally by the proponent and accurately recorded.

4.3.3- As part of this consultation, the proponent must also seek cultural information from registered Aboriginal parties to identify:

- (a) whether there are any Aboriginal objects of cultural value to Aboriginal people in the area of the proposed project
- (b) whether there are any places of cultural value to Aboriginal people in the area of the proposed project (whether they are Aboriginal places declared under s.84 of the NPW Act or not). This will include places of social, spiritual and cultural value, historic places with cultural significance, and potential places/areas of historic, social, spiritual and/or cultural significance.

4.3.4- Some information obtained from registered Aboriginal parties may be sensitive or have restricted public access. The proponent must, in consultation with registered Aboriginal parties, develop and implement appropriate protocols for sourcing and holding cultural information. In some cases the sensitive information may be provided to the proponent by an individual and the proponent should not share that information with all registered Aboriginal parties or others without the express permission of the individual.

4.3.5- Information obtained in 4.3.4 is used to understand the context and values of Aboriginal object(s) and/or place(s) located on the proposed project site. This information must be integrated with the scientific (archaeological) assessment of significance. Together the context, values, and scientific assessment provide the basis for assessing Aboriginal heritage values and recommending management options.

The information collected by the proponent during the consultation process must be used only to inform decision making for any application for an AHIP, unless the registered Aboriginal parties agree otherwise.

4.3.6- The proponent must seek the views of registered Aboriginal parties on potential management options. Management options will include ways to avoid or mitigate harm and/or conserve known Aboriginal object(s) and/or place(s). Management options should consider how Aboriginal people can continue their association with identified Aboriginal heritage values.

4.3.7- The proponent must document all feedback received in Stage 3 from registered Aboriginal parties in the final cultural heritage assessment report. This must include copies of any submissions received and the proponents response to the issues raised. In some cases this may require an acknowledgment of sensitive information and a list of Aboriginal people who should be contacted for permission to receive further details” (DECCW 2010).

Stage 4 – Review of draft cultural heritage assessment report.

Stage 4 states that:

“4.4.1- The proponent must prepare a draft cultural heritage assessment report.

4.4.2- The proponent must provide a copy of the draft cultural heritage assessment report to registered Aboriginal parties for their review and comment.

4.4.3- The proponent must give registered Aboriginal parties a minimum of 28 days from sending the draft report to make submissions. The time allowed for comment on the draft report should reflect the project’s size and complexity. Comments should be provided in writing or, where provided verbally, accurately recorded.

4.4.4- After considering the comments received on the draft report the proponent must finalise the report. The final report must include copies of any submissions received, including submissions on the proposed methodology and on the draft report. The final report must also include the proponent’s response to each submission. The report must then be submitted to DECCW for consideration with the proponent’s application for an AHIP.

4.4.5- The proponent must provide or make available copies of the final cultural heritage assessment report and the AHIP application to registered Aboriginal parties and the relevant LALC(s) (whether or not the LALC is registered in Stage 1). The report and application must be provided or made available within 14 days of the AHIP application being made” (DECCW 2010).

3.2 CONSULTATION SUMMARY

Consultation for this report was undertaken in accordance with the Office of Environment and Heritage and National Parks and Wildlife Act 1974: Part 6; *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)*.

All registered stakeholders have had 28 days to review and comment on the document. All comments have been included in the finalisation of this document. A full log containing documented evidence and submissions can be seen in *Appendix B: Aboriginal Consultation Log - New Green Square Public School, Lot 2/DP 1174641 3 Joynton Avenue, Zetland NSW 2017 (AMAC 2020)*.

Table 3-1 Consultation Log

STAGE 1						
Authority Letters & Advertisement						
Authority Body/ Organisation	Contact Person	Contact Details	Date Sent	Method	Response Received	Date
Sydney City Council	Heritage Officer	GPO Box 1591, Sydney NSW 2001	4/05/2020	Mail	No	
Greater Sydney LLS	Heritage Officer	PO BOX 4515, Westfield Penrith NSW 2750	4/05/2020	Mail	No	
Metropolitan Local Aboriginal Land Council	Heritage Officer	PO BOX 1103, Strawberry Hills NSW 2016	4/05/2020	Mail	No	
NSW Native Title Services	Heritage Officer	PO BOX 2105, Strawberry Hills NSW 2012	4/05/2020	Mail	No	
NNTT	Heritage Officer	GPO BOX 9973, Sydney NSW 2001	4/05/2020	Mail	Yes	23/07/2020
NTSCORP	Heritage Officer	PO BOX 2105, Strawberry Hills NSW 2012	4/05/2020	Mail	No	
DPIE (formerly OEH)	Archaeologist	PO BOX 644, Parramatta NSW 2124	4/05/2020	Mail	Yes	20/05/2020
Office of Registrar	Heritage Officer	PO Box 5068, Parramatta NSW 2124	4/05/2020	Mail	No	
Newspaper Advertisement: Publications Temporarily Suspended due to COVID-19	Wentworth Courier	Due to Newspaper Publication Suspension - Advertisement submitted on Online Classifieds		Submitted: 15/06/20	Date printed: 15/06/20	End Period: 29/06/20
Stakeholders Contacted	Minimum 14 days to register	(26/05/2020) - (09/06/2020)				
Name/Organisation	Contact Person	Contact Details	Date Sent	Method	Notes	
La Perouse LALC	Chris Ingrey	PO Box 365 Matraville NSW 2036	26/05/2020	Mail		
Darug Aboriginal Cultural Heritage Assessments	Celestine Everingham	9/6 Chapman Ave. Chatswood NSW 2067	26/05/2020	Mail		

Darug Land Observations	Jamie & Anna Workman	PO Box 173, Ulladulla NSW 2539	26/05/2020	Mail	
A1 Indigenous Services	Carolyn Hickey	10 Marie Pitt Place, Glenmore Park NSW 2745	26/05/2020	Mail	
Eric Keidge		11 Olsson Close, Hornsby Heights NSW 2077	26/05/2020	Mail	
Corroboree Aboriginal Corporation	Marilyn Carroll-Johnson	PO Box 3340, Rouse Hill NSW 2155	26/05/2020	Mail	
Muragadi Heritage Indigenous Corporation	Jesse Johnson	5 Hession Rd. Nelson NSW 2765	26/05/2020	Mail	
Kamilaroi-Yankuntjatjara Working Group	Phil Khan	78 Forbes St. Emu Plains NSW 2750	26/05/2020	Mail	
Tocomwall	Scott Franks	PO Box 76, Caringbah NSW 1495	26/05/2020	Mail	
Gunyuu	Kylie Ann Bell	gunyuuchts@gmail.com	26/05/2020	Email	
Walbunja	Hika te Kowhai	walbunja@gmail.com	26/05/2020	Email	
Badu	Karia Lea Bond	11 Jeffery Place, Moruya NSW 2537	26/05/2020	Mail	
Goobah Developments	Basil Smith	66 Grantham Rd, Batehaven NSW 2536	26/05/2020	Mail	
Wullung	Lee-Roy James Boota	54 Blackwood St, Gerringong NSW 2534	26/05/2020	Mail	
Yerramurra	Robert Parson	Yerramurra@gmail.com	26/05/2020	Email	
Nundagurri	Newton Carriage	Nundagurri@gmail.com	26/05/2020	Email	
Murrumbul	Mark Henry	murrumbul@gmail.com	26/05/2020	Email	

Jerringong	Joanne Anne Stewart	Jerringong@gmail.com	26/05/2020	Email	
Pemulwuy CHTS	Pemulwuy Johnson	pemulwuyd@gmail.com	26/05/2020	Email	DPIE Postal Address Invalid
Bilinga	Simalene Carriage	bilingachts@gmail.com	26/05/2020	Email	
Munyunga	Kaya Dawn Bell	munyangchts@gmail.com	26/05/2020	Email	
Wingikara	Hayley Bell	wingikarachts@gmail.com	26/05/2020	Email	
Minnamunnung	Aaron Broad	1 Waratah Ave. Albion Park Rail NSW 2527	26/05/2020	Mail	
Walgalu	Ronald Stewart	walgaluchts@gmail.com	26/05/2020	Email	
Thauaira	Shane Carriage	thauairachts@gmail.com	26/05/2020	Email	
Dharug	Andrew Bond	dharugchts@gmail.com	26/05/2020	Email	
Gulaga	Wendy Smith	gulagachts@gmail.com	26/05/2020	Email	
Biamanga	Seli Storer	biamangachts@gmail.com	26/05/2020	Email	DPIE Contact Invalid - Correct Contact Janaya Smith
Cullendulla	Corey Smith	cullendullachts@gmail.com	26/05/2020	Email	
Murramarang	Roxanne Smith	murramarangchts@gmail.com	26/05/2020	Email	
DJMD Consultancy	Darren Duncan	darrenjohnduncan@gmail.com	26/05/2020	Email	

Butucarbin Aboriginal Corporation	Jennifer Beale	Butuheritage@gmail.com	26/05/2020	Email	
Didge Ngunawal Clan	Lillie Carroll & Paul Boyd	33 Carlyle Crescent, Cambridge Gardens NSW 2747	26/05/2020	Mail	
Ginninderra Aboriginal Corp	Steven Johnson & Krystle Carroll	PO Box 3143, Grose Vale NSW 2754	26/05/2020	Mail	
Wailwan Aboriginal Digging Group	Philip Boney	Waarlan12@outlook.com	26/05/2020	Email	
Barking Owl Aboriginal Corporation	Jody Kulakowski	2/65-69 Wehlow St. Mt. Druitt NSW 2770	26/05/2020	Mail	
Thoorga Nura	John Carriage	50B Hilltop Crescent, Surf Beach NSW 2536	26/05/2020	Mail	
Darug Boorooberongal Elders Aboriginal Corporation	Gordon Workman	PO Box 14, Doonside NSW 2767	26/05/2020	Mail	
B.H. Heritage Consultants	Ralph Hampton	184 Captain Cook Dr. Willmot NSW 2770	26/05/2020	Mail	
B.H. Heritage Consultants	Nola Hampton	95 Mt. Ettalong Rd. Umina Beach NSW 2257	26/05/2020	Mail	
Ngambaa Cultural Connections	Kaarina Slater	6 Natchez Crescent, Greenfield Park NSW 2167	26/05/2020	Mail	
Goodradigbee Cultural & Heritage Aboriginal Corporation	Caine Carroll	1 Morilla Rd. East Kurrajong NSW 2758	26/05/2020	Mail	
Mura Indigenous Corporation	Phillip Carroll	11 Nargal St. Flinders NSW 2529	26/05/2020	Mail	
Aragung Aboriginal Cultural Heritage Site Assessments	Jamie Eastwood	33 Bulolo Dr. Whalan NSW 2770	26/05/2020	Mail	
Waawaar Awa	Rodney Gunther	15 Bungonia St. Prestons NSW 2170	26/05/2020	Mail	

Clive Freeman		6 Dhugan Close, Wreck Bay Aboriginal Community JBT NSW 2540	26/05/2020	Mail	
Registered Organisations/Individuals	Contact Person	Email Address	Date	Method	Notes
Metropolitan LALC	Nathan Moran	nmoran@metrolalc.org.au	14/05/2020	Email	Selina Timothy MLALC contact for Project
Didge Ngunawal Clan	Lillie Carroll & Paul Boyd	didgengunawalclan@yahoo.com.au	28/05/2020	Email	
A1 Indigenous Services	Carolyn Hickey	cazadirect@live.com	3/06/2020	Email	
Butucarbin Aboriginal Corporation	Lowanna Gibson	butuheritage@gmail.com	10/06/2020	Email	
		-			
STAGE 2 & 3					
ACHAR Methodology (/Test Excavation Methodology)	Minimum 28 days to respond	(27/07/2020) - (24/08/2020)			
Contacted Organisation/Individuals	Contacted by Organisation/Individual	Subject	Date	Method	Notes
All RAPs	AMAC/Steven J. Vasilakis	Dispatch ACHAR Research Design & Testing Methodology	27/07/2020	Email	
AMAC/Steven J. Vasilakis	A1 Indigenous Services/Carolyn Hickey	ACHAR Methodology Review	5/08/2020	Email	Supports ACHAR Methodology
Metropolitan LALC/Selina Timothy; DNC/Lilly Carroll & Paul Boyd; Butucarbin/ Jennifer Beale	AMAC/Steven J. Vasilakis	ACHAR Methodology Review	12/08/2020	Phone	DNC/Paul Boyd ACHAR Supports Meth; Butucarbin/Jennifer Beale Supports Meth & Lowanna Gibson to Review; Metropolitan MLAC/Selina Timothy No Response Left Message

Metropolitan LALC/Selina Timothy; Butucarbin/Lowanna Gibson	AMAC/Steven J. Vasilakis	ACHAR Methodology Review	13/08/2020	Phone	Lowanna Gibson Supports Meth; Metropolitan MLALC/Selina Timothy No Response Left message
AMAC/Steven J. Vasilakis	Butucarbin/Lowanna Gibson	ACHAR Methodology Review	13/08/2020	Email	Supports ACHAR Methodology
Test Excavation		(00/00/2020) - (00/00/2020)			
STAGE 4					
ACHAR Report Review		Minimum 28 days to respond		(25/08/2020) - (22/09/2020)	
Contacted Organisation/ Individuals	Contacted by Organisation/ Individual	Subject	Date	Method	Notes
All RAPs	AMAC/Steven J. Vasilakis	Dispatch ACHAR Report	25/08/2020	Email	
All RAPs	AMAC/Steven J. Vasilakis	ACHAR Report Review	2/09/2020	Phone	DNC & A1 Indigenous Services Support ACHAR Recommendations; MLALC & Butucarbin are to review and respond
AMAC/Steven J. Vasilakis	DNC/Lilly Carroll & Paul Boyd	ACHAR Report Review	2/09/2020	Email	Written Support of Recommendations
AMAC/Steven J. Vasilakis	A1 Indigenous Services/Carolyn Hickey	ACHAR Report Review	6/09/2020	Email	Written Support of Recommendations
Metropolitan LALC/Selina Timothy; Butucarbin/ Jennifer Beale	AMAC/Steven J. Vasilakis	ACHAR Report Review	7/09/2020	Phone	MLALC No Response Left Message; Butucarbin to review & respond
Metropolitan LALC/Selina Timothy; Butucarbin/Jennifer Beale	AMAC/Steven J. Vasilakis	ACHAR Report Review	8/09/2020	Phone	MLALC No Response Left Message; Butucarbin to review & respond

Metropolitan LALC/Selina Timothy	AMAC/Steven J. Vasilakis	ACHAR Report Review	15/09/2020	Phone	MLALC to review & respond
Butucarbin/Jennifer Beale	AMAC/Steven J. Vasilakis	ACHAR Report Review	15/09/2020	Phone	No Response Left Message
AMAC/Steven J. Vasilakis	Butucarbin/Lowanna Gibson	ACHAR Report Review	23/09/2020	Email	Written Support of Recommendations
Consultation/Document Updates (23/02/2021) - (17/06/2021)					
Contacted Organisation/Individuals	Contacted by Organisation/ Individual	Subject	Date	Method	Notes
All RAPs	AMAC/Steven J. Vasilakis	Consultation Update	23/02/2021	Email	
All RAPs	AMAC/Steven J. Vasilakis	Site Meeting	22/04/2021	Email	Scheduled for 29/04/2021 to discuss Aboriginal Cultural Heritage Interpretation Strategy
AMAC/Steven J. Vasilakis	DNC/Paul Boyd	Site Meeting	22/04/2021	Email	Available to attend meeting
AMAC/Steven J. Vasilakis	Butucarbin/Lowanna Gibson	Site Meeting	26/04/2021	Email	Available to attend meeting
AMAC/Steven J. Vasilakis	A1 Indigenous/Carolyn Hickey	Site Meeting	26/04/2021	Email	Unable to attend meeting
All RAPs	AMAC/Steven J. Vasilakis	Site Meeting Rescheduled	27/04/2021	Email	Rescheduled to 06/05/2021 to discuss Aboriginal Cultural Heritage Interpretation Strategy
All RAPs	AMAC/Steven J. Vasilakis	Teleconference Meeting	4/05/2021	Email	Due to the low meeting response, it had been decided to conduct a Teleconference meeting

AMAC/Steven J. Vasilakis	DNC/Paul Boyd	Teleconference Meeting	4/05/2021	Email	Available to attend meeting
All RAPs	AMAC/Steven J. Vasilakis	Teleconference Meeting	6/05/2021	Email	Teleconference Meeting postponed until further notice
All RAPs	AMAC/Steven J. Vasilakis	Site meeting	27/05/2021	Email	Scheduled for 02/06/2021 to discuss Aboriginal Cultural Heritage Interpretation Strategy
AMAC/Steven J. Vasilakis	DNC/Paul Boyd	Site Meeting	27/05/2021	Email	Available to attend meeting
All RAPs	AMAC/Steven J. Vasilakis	Site Meeting Postponed	1/06/2021	Email	Meeting postponed until further notice
All RAPs	AMAC/Steven J. Vasilakis	Site Meeting Rescheduled	9/06/2021	Email	Rescheduled to 17/06/2021 to discuss Aboriginal Cultural Heritage Interpretation Strategy
AMAC/Steven J. Vasilakis	DNC/Paul Boyd	Site Meeting	9/06/2021	Email	Available to attend meeting
All RAPs	AMAC/Steven J. Vasilakis	Teleconference Meeting	15/06/2021	Email	Due to the low meeting response, it had been decided to conduct a Teleconference meeting on the 17/06/2021
All RAPs	AMAC/Ben Streat	Teleconference Meeting	17/06/2021	Phone	All RAPs support Aboriginal Cultural Heritage Interpretation Strategy & recommendations

4.0 BACKGROUND INFORMATION

Pre-field work research consisted of an analysis and synthesis of the background data to determine the nature of the potential archaeological and cultural heritage resource in the region.

The research of this cultural heritage assessment consisted of stages which are listed below:

- Background research
- Aboriginal consultation and oral history interviews
- Site inspection and cultural heritage mapping

Background research entailed a detailed review of sources of information on the history, oral history, ethno-history and archaeological background of the study area and surrounds and will include but not be limited to material from:

- Heritage NSW archaeological assessment and excavation reports and cultural heritage assessments
- Heritage NSW Library
- State Library of NSW including the Mitchell Library
- Local libraries and historical associations
- National Library of Australia.

A search of the Heritage NSW AHIMS was undertaken and the results examined. The site card for each site within 1000m in all directions from the centre of the study area was inspected (where available) and an assessment made of the likelihood of any of the sites being impacted by the proposed development. The Heritage NSW library of archaeological reports (Hurstville) was searched and all relevant reports were examined. Searches were undertaken on the relevant databases outlined in *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010)*.

Further to this the following sources were examined:

- The National Heritage List
- The Commonwealth Heritage List
- The NSW State Heritage Inventory
- The Register of the National Estate
- The National Native Title Register
- The Register of Declared Aboriginal Places
- Prevailing local and regional environmental plans
- Environmental background material for the study area.

4.1 AHIMS SEARCH RESULTS

The Archaeological Heritage and Information Management System Database (AHIMS) is located at the Heritage NSW Offices at Hurstville in New South Wales. This database comprises information about all the previously recorded Aboriginal archaeological sites registered with Heritage NSW. Further to the site card information that is present about

each recorded site, the assessments and excavation reports that are associated with the location of many of these sites are present in the library of reports.

The location of these sites must be viewed as purely indicative as errors in the recording of the locations of sites often occurs due to the disparate nature of the recording process, the varying level of experience of those locating the sites and the errors that can occur when transferring data. If possible, sites that appear to be located near a study area should be relocated.

An AHIMS extensive 1km search was conducted on the 8th January 2018 (ID 320828). This search resulted in no registered sites within 1000 m of the study area. A second search was conducted on the 5th May 2020 (ID 502117). The search resulted in no registered sites within 1000 m of the study area. The most recent search was conducted on the 20th July 2021 (ID 607744). The search resulted in one registered site - AHIMS Site 45-6-3944 located within the study area (see Appendix One).

Table 4-1 AHIMS Search Results

Site ID	Site name	Site status	Site features
45-6-3944	New Green Square School	Valid	Potential Archaeological Deposit (PAD)

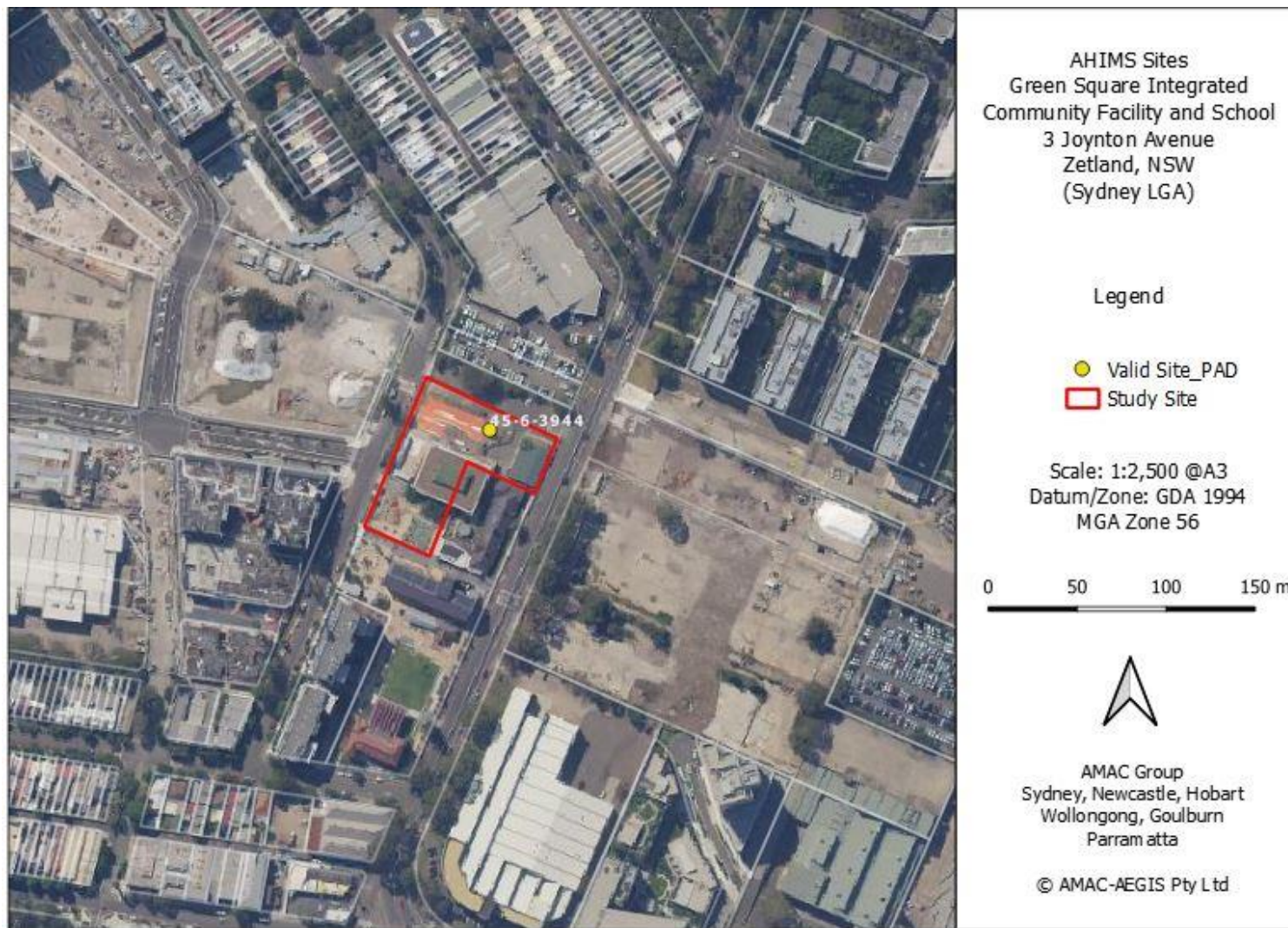


Figure 4-1 AHIMS Search Results.
AMAC 2021. Six Maps, LPI Online (accessed 07/07/2021).

4.2 OTHER SEARCH RESULTS

Results for other statutory databases searched are given below:

Heritage Listings/ Register/ Other	Result
National Heritage List	Not Listed
Commonwealth Heritage List	Not Listed
NSW State Heritage Register	Not Listed
Register of Declared Aboriginal Places	Not Listed
National Native Title Register	Not Listed

4.3 SUMMARY OF ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE REGION

Predictive modelling is an adaptive process which relies on a framework formulated by a number of factors, including but not limited to the use of local land systems, the environmental context, archaeological work and any distinctive sets of constraints that would influence land use patterns. This is based on the concept that different landscape zones may offer different constraints, which is then reflected in the spatial distributions and forms of archaeological evidence within the region (Hall and Lomax 1996).

Early settlement models focused on seasonal mobility, with the exploitation of inland resources being sought once local ones become less abundant. These principles were adopted by Foley (1981) who developed a site distribution model for forager settlement patterns. This model identifies two distinctive types of hunter-gather settlements, 'residential base camps' and 'activities areas.' Residential base camps are predominately found located in close proximity to a reliable source of permanent water and shelter. From this point the surrounding landscape is explored and local resources gathered. This is reflected in the archaeological record, with high density artefact scatters being associated with camp bases, while low density and isolated artefacts are related to the travelling routes and activity areas (Foley 1981).

However, more recently, investigation into understanding the impacts of various episodes of occupation on the archaeological record has been explored, of which single or repeated events are being identified. This is often a complex process to establish, specifically within predictive models as land use and disturbance can often result in post depositional processes and the superimposition of archaeological materials by repeated episodes of occupation.

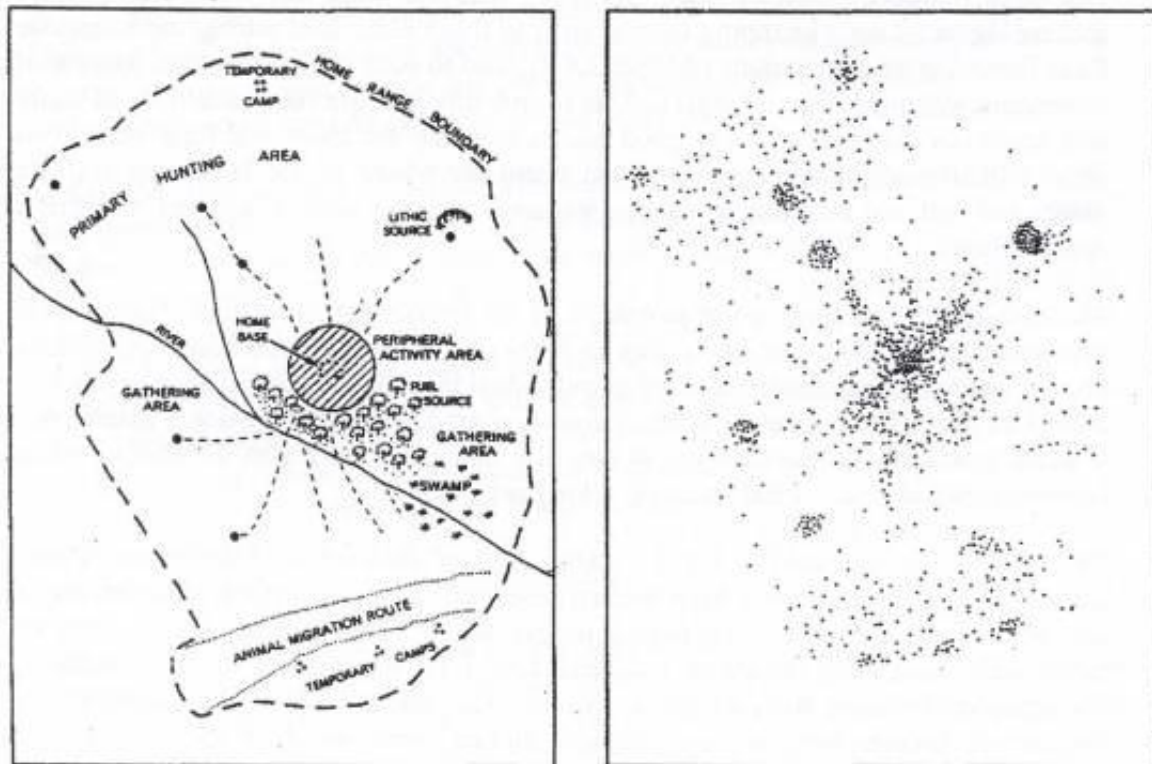


Figure 4-2 Examples of forager settlement patterns.
Foley (1981).

The principals behind this model have been incorporated into other predictive models such as that of McBryde (1976). McBryde's model is centred on the utilisation of food resources as a contributor to settlement patterns, specifically with reference to the predictability and reliability of food resources for Aboriginal people within the immediate coastal fringe and/or hinterland zone, with migratory behaviour being a possibility. Resources such as certain species of animals, particularly; small marsupials and reptiles, plant resources and nesting seabirds may have been exploited or only available on a seasonal or intermittent basis. As such, archaeological sites which represent these activities whilst not being representative of permanent occupation may be representative of brief, possibly repeated occupation.

Jo McDonald and Peter Mitchell have since contributed to this debate, with reference to Aboriginal archaeological sites and proximity to water using their Stream order model (1993). This model utilises Strahler's hierarchy of tributaries.

This model correlates with the concept of proximity to permanent water and site locations and their relationship with topographical units. They identify that artefact densities are greatest on terraces and lower slopes within 100m of water.

Intermittent streams, however, also have an impact on the archaeological record. It was discovered that artefacts were most likely within 50 – 100m of higher (4th) order streams, within 50m (2nd) order streams and that artefact distributions around (1st) order streams were not significantly affected by distance from the watercourse. Landscapes associated with higher order streams (2nd) order streams were found to have higher artefact densities and more continuous distribution than lower order streams.

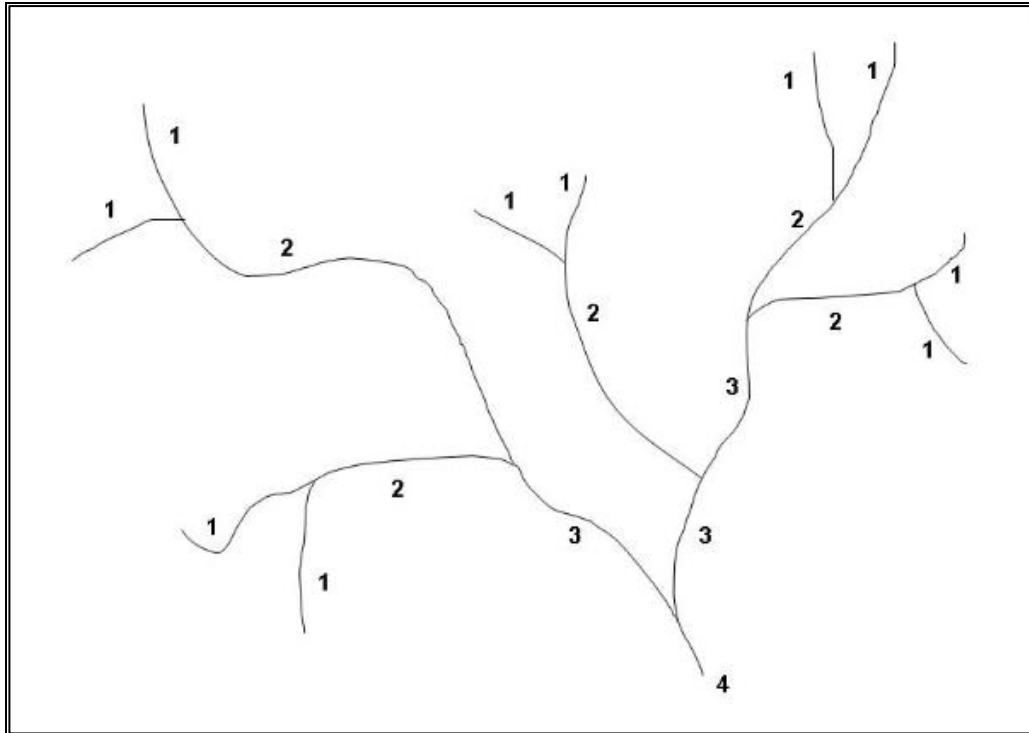


Figure 4-3 Strahler's hierarchy of tributaries.
Strahler (1957).

Table 4-2 Relationship between landscape unit and site distribution for region.

Landscape Unit /Site types	Site Distribution and activity
1 st order stream	Archaeological evidence will be sparse and reflect little more than a background scatter
Middle reaches of 2 nd Order Stream	Archaeological evidence will be sparse but focus activity (one-off camp locations, single episodes and knapping floor)
Upper reaches of 2 nd order stream	Archaeological evidence will have a relatively sparse distribution and density. These sites contain evidence of localised one-off behaviour
Lower reaches of 3 rd order stream	Archaeological evidence for frequent occupation. This will include repeated occupation by small groups, knapping floors (used and unused material) and evidence of concentrated activities
Major creeklines 4 th order streams	Archaeological evidence for more permanent or repeated occupation. Sites will be complex and may be stratified with a high distribution and density
Creek junctions	This landscape may provide foci for site activity, the size of the confluence in terms of stream rankings could be expected to influence the size of the site, with the expectation of there being higher artefact distribution and density
Ridge top locations between drainage lines	Ridge Tops will usually contain limited archaeological evidence, although isolated knapping floors or other forms of one-off occupation may be in evidence in such a location
Raw Materials near water-sources	The most common raw materials are silcrete and chert in sites closer to coastal headlands, though some indurated mudstone/silicified tuff and quartz artefacts may also be found
Grinding Grooves	Grinding Grooves may be found in the sandstone or shale/sandstone transition areas
Scarred trees	May occur in stands of remnant vegetation
Ceremonial Sites	Consultation with relevant Aboriginal Stakeholder groups, individuals and review of ethnographic sources often reveal the presence of ceremonial or social sites

This predictive model has been refined with focus on the dominant environment and landscape zones of the Cumberland Lowlands, such as the Wianamatta Group Shales, Hawksbury Sandstone, Quaternary alluvium, Quaternary Aeolian and Tertiary alluvium. Attenbrow (2002) discovered that the Quaternary alluvial deposits had a greater concentration of archaeological sites, which is likely the result of these deposits being located towards major creeklines and rivers, such as Eastern Creek, Second Ponds Creek etc. Areas of alluvial deposits were found by Kohen (1986) to contain artefact scatters of a large and complex nature the closer they were to permanent creeks.

Umwelt (2004), has identified similar environmental – archaeological relationships which contribute to the mapping and modelling of archaeological sites, such as:

-
- The pattern of watercourses and other landscape features such as ridge lines affected the ease with which people could move through the landscape
 - Certain landscape features such as crests or gently sloping, well-drained landforms influenced the location of camping places or vantage points that provided outlooks across the countryside
 - The morphology of different watercourses affected the persistence of water in dry periods and the diversity of aquatic resources and so influenced where, and for how long, people could camp or procure food
 - The distribution of rock outcrops affected the availability of raw materials for flakes and ground stone tools
 - The association of alluvial, colluvial and stable landforms affect the potential that sites will survive
 - European land-use practices affect the potential for site survival and/or the capacity for sites to retain enough information for us to interpret the types of activities that took place at a specific location.

The Aboriginal Cultural Heritage Data Audit (DOP, 2005) produced the following table as part of the NSW Comprehensive Coastal Assessment Toolkit (DOP, 2005) which made the following statements outlined in table 4.3 about the predictive location of Aboriginal sites in Coastal NSW. These statements support the conclusions drawn in the following predictive model established for the study area. The study makes one very important claim which is that Aboriginal Ceremonial or Dreaming Sites can only be identified by Aboriginal community knowledge.

All models state that the primary requirement of all repeated, concentrated or permanent occupation is reliable access to fresh water. Brief and possibly repeated occupation may be represented in areas that have unreliable access to ephemeral water sources, however these areas will not possess a high archaeological potential (Goodwin 1999).

Table 4-3 Aboriginal Cultural Heritage Data Audit, Predictive Modelling for Coastal Aboriginal Sites, NSW.

Site Type	Archaeological/ Predictive Modelling
Aboriginal Ceremony and Dreaming Sites	Can only be identified on the basis of Aboriginal community knowledge.
Aboriginal Resource and Gathering Sites	Can occur at any location where plant and animal target species are found at present or were available in the past.
Art Sites	All rock paintings or drawings and some rock engravings will occur within rock shelters/overhangs, most commonly within sandstone cliff lines and in granite boulder fields. Rock engravings may occur wherever there are suitable rock-surface exposures.
Artefacts	Will occur in all landscapes with varying densities. Artefacts of greatest scientific significance will occur in stratified open contexts (such as alluvial terraces, sand bodies) and rock shelter floors.
Burials	Most likely (but not always) to be buried in, or eroding from, sandy soils. Can occur within rock shelters/overhangs, most commonly within sandstone cliff lines and in granite boulder fields.
Ceremonial Ring Sites	Environmental factors may be of particular importance in site location including association with sources of water, ridges, unstructured soils and geological boundaries. Distance to adjacent ceremonial ring sites may influence site location.
Conflict Sites	Can only be identified on the basis of historical records and community knowledge.
Grinding Grooves	Most likely to occur on surface exposures of sandstone. Occasionally occur within sandstone rock shelters.
Modified Trees	Will only occur where target tree species survive and if these are of an age generally greater than 100 years old.
Non-Human Bone and Organic Material Sites	Will occur in any surface or buried context where preservation conditions allow. Most commonly survive in open shell midden sites and in rock shelter floor deposits.
Ochre Quarry Sites	Can occur at any location where suitable ochre sources are found, either as isolated nodules or as suitable sediments (clays).
Potential Archaeological Deposits	Can occur in all landscape types. PADs of greatest scientific significance will occur in stratified open contexts (such as alluvial terraces, sand bodies) and rock shelter floors.
Shell Middens	Will occur as extensive packed shell deposits to small shell scatters in all coastal zones along beaches, headlands and estuaries, both in open situations and in rock shelters. May occur along rivers and creeks where edible shellfish populations exist or existed in the past.
Stone Arrangements	Tend to be on high ground, often on the tops of ridges and peaks commanding views of the surrounding country. Often situated in relatively inaccessible places.
Stone Quarry Sites	Can occur at any location where suitable raw materials outcrop, including pebble beds/beaches.
Waterholes	May occur within any river or creek. Rare examples may occur in open exposures of rock.

4.4 ARCHAEOLOGICAL PREDICTIVE MODEL FOR THE STUDY AREA

The following section gives an indication of the likelihood of certain site types being located within the study area. These indications are based on the research and results of assessments and excavations in the vicinity of the study area.

Site Type	Research	Likelihood
Open Artefact Scatters	A higher order stream is located near the vicinity of the study area. However, it has been modified, with the surrounding land also being developed. The dearth of known reliable raw material source within nearby landscape units, would suggest that the artefacts may be smaller in size, on account to greater levels of stone tool reduction.	Likely within undisturbed parts of the study area.
Isolated Artefacts	A higher order stream is located near the vicinity of the study area. However, it has been modified, with the surrounding land also being developed. The dearth of known reliable raw material source within nearby landscape units, would suggest that the artefacts may be smaller in size, on account to greater levels of stone tool reduction.	Likely within undisturbed parts of the study area.
Grinding Grooves	Boulders of sandstone or outcrops do not occur in the landscape units represented in the study area.	Unlikely
Stone Resource Sites	Rock outcrops of suitable flaking material are almost absent from the soil landscapes represented within the study area.	Unlikely
Scarred Trees	Trees of sufficient age are not located within the study area due to land clearing.	Unlikely
Sandstone Shelters	The soil landscapes of the study area do not contain sandstone overhangs	Unlikely
Burials	While it is possible that undisturbed sand bodies may lie within the study area. These sites tend to occur within deep, sandy and/or soft soil contexts within sand dune formations, often in association with midden materials.	Unlikely
Ceremonial Sites	Consultation with relevant Aboriginal parties and individuals has not taken place, and as such, has not revealed the presence of ceremonial or social sites. It is possible that such information may become available in the future.	Possible that Ceremonial/Social sites will be present within the study area

4.5 ARCHAEOLOGICAL CONTEXT

It is generally accepted that Aboriginal occupation of Australia dates back at least 40,000 years (Attenbrow 2002 p.20 - 21 & Kohen et al 1983). The result of this extensive and continued occupation which includes the Sydney region has left a vast amount of accumulated depositional evidence and the Cumberland Lowlands is no exception. The oldest date generally considered to be reliable for the earliest occupation around the region comes from excavations at Parramatta which contain objects or features which have been dated to 30,735 ± 407 BP (McDonald et al 2005).

The majority of reliably dated archaeological sites within the region are less than 5,000 years old which places them in the mid to late Holocene period. A combination of reasons has been suggested for this collection of relatively recent dates. There is an argument that an increase in population and ‘intensification’ of much of the continent took place around this time, leading to a great deal more evidence being deposited than was previously deposited as a result of the sparser prior occupation period. It is also the case that many archaeological sites along the past coastline may have been submerged as the seas rose approximately to their current level around 6,000 years ago. This would have had the effect of covering evidence of previous coastal occupation. In addition, it is also true that the acidic soils which are predominate around the Sydney region do not allow for longer-term survival of sites (Hiscock 2008 p. 106).

Different landscape units not only influence the preservation of sites but can determine where certain site types will be located. Across the whole of the Sydney Basin, the most common Aboriginal archaeological site type is occupation evidence within Rock Shelters. However, the most common Aboriginal archaeological site type in the Cumberland Lowlands is Open Artefact Scatters or Open Campsites, which are locations where two or more pieces of stone show evidence of human modification. These sites can sometimes be very large, with up to thousands of artefacts and include other habitation remains such as animal bone, shell or fireplaces [known as *hearths*] (Attenbrow 2002 p. 75 – 76). Many hundreds of artefact sites have been recorded within the Cumberland Lowlands. This is despite the fact that at least 50% of the Cumberland Lowlands has already been developed to such an extent that any archaeological evidence which may have once been present has been destroyed.

4.6 PREVIOUS ARCHAEOLOGICAL STUDIES WITHIN THE STUDY AREA

As part of the research process of this report the library of archaeological assessments, test excavation and open area salvage excavation reports which is located at the offices of DECCW at Hurstville was consulted. Presented below are summaries of indigenous archaeological survey assessments, test excavations and salvage excavations in the vicinity of the study area, which have all been carried out within the last ten years. This list is by no means exhaustive and is merely a representative sample of the most recent archaeological activity within the vicinity of the study area.

Archaeological & Heritage Management Solutions 2015 – Aboriginal and Historical Heritage Review – Central to Eveleigh Corridor, Sydney.

Archaeological & Heritage Management Solutions (AHMS) conducted an Aboriginal and Historical heritage review in 2015. This was in response to investigations concerning redevelopment options within the stretch of land known as the Central to Eveleigh Corridor. Community consultation took place as part of this review as a result it was proposed that an archaeological assessment and associated archaeological zoning plan will need to be devised in order to inform future management as well as an interpretation strategy including an oral history programme focusing on urban communities and heritage places.

Artefact Heritage (2014) – Aboriginal Heritage Management Assessment – CBD and South East Light Rail Project: Construction Heritage Management Plan for the Moore Park Works

In 2014, as part of the CBD and South East Light Rail Project (CSELR), Artefact Heritage carried out an Aboriginal Heritage Impact Assessment at Moore Park. The study investigated the Tramway Oval and Tennis Centre, to the north of the study site, as part of the investigation of the Moore Park Works. Based on geotechnical

investigations at the Tramway Oval, the following archaeological implication was concluded. Due to the removal of the upper sand layers that may have contained Aboriginal objects, it is likely that the site is culturally sterile and Aboriginal archaeological test excavation not warranted.

Godden Mackay Logan (2013) – Aboriginal Heritage Management Assessment – CBD and South East Light Rail Project – Environmental Impact Statement: Heritage Impact Assessment

In 2013, as part of the Heritage Impact Statement for the CBD and South East Light Rail Project (CSELR) Environmental Impact Statement, Godden Mackay Logan (GML) carried out an Aboriginal Archaeological Management Assessment along the CSELR route. The study site was not investigated as part of the Moore Park precinct. GML used Aboriginal Archaeological Management Zones (GML 2013:108-111) to identify archaeological sensitivity along the entire CSELR route with Zones 1, 2, and 3 being recommended to conduct Aboriginal archaeological investigation that may include testing/salvage excavations. Zone 4, however, recommends that no further assessment or physical investigation of Aboriginal archaeology is required due to the large-scale land modifications.

Archaeological Management & Consulting 2012 – Due Diligence Aboriginal Archaeological Assessment – Wellington Street, Waterloo.

Archaeological Management & Consulting conducted a Due Diligence assessment at 36 Wellington Street, Waterloo. The study indicated the area to be significantly disturbed of which it was unlikely for Aboriginal objects and/or features to be present and as such no further investigation was recommended. Archaeological monitoring was recommended during trenching in case subsurface deposits and artefacts were located as a result of these impacts.

Dominic Steele Consulting Archaeology (2006) – Aboriginal Heritage Assessment – Randwick Racecourse, Randwick NSW

In 2006, Dominic Steele Consulting Archaeology was commissioned to prepare an Aboriginal heritage assessment as part of a conservation management plan for Randwick Racecourse. It is reported that the site has had widespread environmental and landscape modification and subsequently concluded that due to the high disturbance levels, it was unlikely that any surface and/or subsurface Aboriginal archaeological evidence would be located across most of the site. However, it was advised that a large sand dune to the southeast of the racecourse with a height of over 20m may have archaeological evidence in deeper sand dune contexts, possibly as much as several thousand years old, and was identified as high Aboriginal archaeological sensitivity.

Australian Museum Business Services (2002) – Aboriginal Archaeological Assessment – Centennial Parklands Conservation Management Plan

In 2002, Australian Museum Business Services (AMBS) prepared an Aboriginal archaeological assessment as part of an investigation for Aboriginal land and resource use in Centennial, Moore and Queens Parks for the Centennial Parklands Conservation Management Plan. The assessment discussed previously identified Aboriginal sites, including a rock-shelter with 27 white human hand stencils at Queens Park, rock engravings (now destroyed) at Darvall Street and one artefact found at the Sydney Cricket Ground, which is now stored at the Australian Museum collection.

AMBS indicated that it is likely that Aboriginal archaeological evidence may survive in areas beneath buildings, ponds, and landfill that are now present across the Centennial Parklands. The assessment also suggested that it is possible that additional rock engravings may have been exposed in areas of currently covered sandstone outcrops during periods in the past when these outcrops were exposed.

The practical ramifications of the results of the aforementioned archaeological assessments and excavation are that there is a moderate potential for Aboriginal archaeological objects to be present within the study area, particularly if intact original soil profiles are present.

5.0 PHYSICAL EVIDENCE

A site inspection was conducted by Melissa Kennedy of AMAC Group who inspected the study site on the 22nd of January 2018.

5.1 SURVEY METHODS

The study site was inspected on foot. Where practical the whole of the study area was inspected, however, there were a number of limiting factors such recent demolition activities. This includes substantial piles of demolition rubble, household refuse, mulch and levelling fills of gravel. Any areas of exposed soil or areas of erosion were inspected in detail.

All visible landscape units were inspected as well as photographed where informative details as to land use and disturbance could be ascertained. Information was also collected regarding land surface and vegetation conditions as encountered during the survey.

The following broadly outlines the methods adopted:

- field inspections were carried out on foot,
- attempts were made to relocate the registered sites within the study area and assess their condition,
- highly disturbed areas indicated on plans were inspected to verify the level of disturbance and depending on level of disturbance were included or excluded from the additional survey,
- undisturbed areas were inspected in as much detail as the remaining surface coverage and environment would allow and the results were recorded,
- areas of exposed ground such as tracks or eroded surfaces which allow good surface visibility formed the focus of the field inspections.

5.2 RESULTS SUMMARY

The bulk of the study site, to the west, was modified by recent demolition activities. This includes substantial piles of demolition rubble, household refuse, mulch and levelling fills of gravel (Figures 5.1-5.4). The original ground level of the study site cannot be determined in the western and southern extents of the study site, due to these deposits and associated levelling fills. The aforementioned fill and levelling deposits not only consist of gravel, but also sand, brick fragments, concrete remains, some sandstone fragments and general refuse (Figures 5.5-5.10). No footings or other archaeological remains could be discerned on the extant surface. Some sandstone rubble was present but did not appear to originate from dressed stone blocks or other construction material (Figure 5.11).

To the north and east, the study site is marked by an asphalt car park with road access to both Joynton Avenue to the east and Portman Street to the west. There is also a grassed area immediately to the north of the Rehabilitation (Namoi) Wing and a small mid-to-late 20th century brick structure fronting Joynton Avenue, which is currently being used as a Community Centre (Figures 5.12-5.16). To the east of this structure is a large asphalt driveway and a car park (Figure 5.16). The state of preservation of the soil profile beneath these surfaces is unknown.



Figure 5-1 South western quadrant of the study site, fronting Portman Street, facing west.
AMAC Group, IMG_2133, (22/01/2018).



Figure 5-2 South western quadrant of the study site, fronting Portman Street, facing west.
AMAC Group, IMG_2135, (22/01/2018).



Figure 5-3 Southern quadrant of the study site, fronting Portman Street, facing south.
AMAC IMG_2136, (22/01/2018).



Figure 5-4 North western quadrant of the study site, fronting Portman Street, facing west.
AMAC Group IMG_2142, (22/01/2018).



Figure 5-5 North western quadrant of the study site, fronting Portman Street, facing west.
AMAC Group IMG_2143, (22/01/2018).



Figure 5-6 North western quadrant of the study site, fronting Portman Street, facing north west. Note the refuse.
AMAC Group IMG_2146, (22/01/2018).



Figure 5-7 Detail of the north western quadrant of the study site, note the demolition debris on the surface of the study site, facing west.
AMAC Group IMG_2144, (22/01/2018).



Figure 5-8 Rehabilitation Centre (Namoi Wing) and the south western quadrant of the study site, facing south.
AMAC Group IMG_2145, (22/01/2018).



Figure 5-9 Western extent of the study site, note the demolition fill, facing south.
AMAC Group IMG_2150, (22/01/2018).



Figure 5-10 Western extent of the study site, note the gravel bedding/levelling fills, facing south.
AMAC Group IMG_2153, (22/01/2018).



Figure 5-11 Detail of sandstone blocks found in the study site, facing east.
AMAC Group IMG_2158, (22/01/2018).

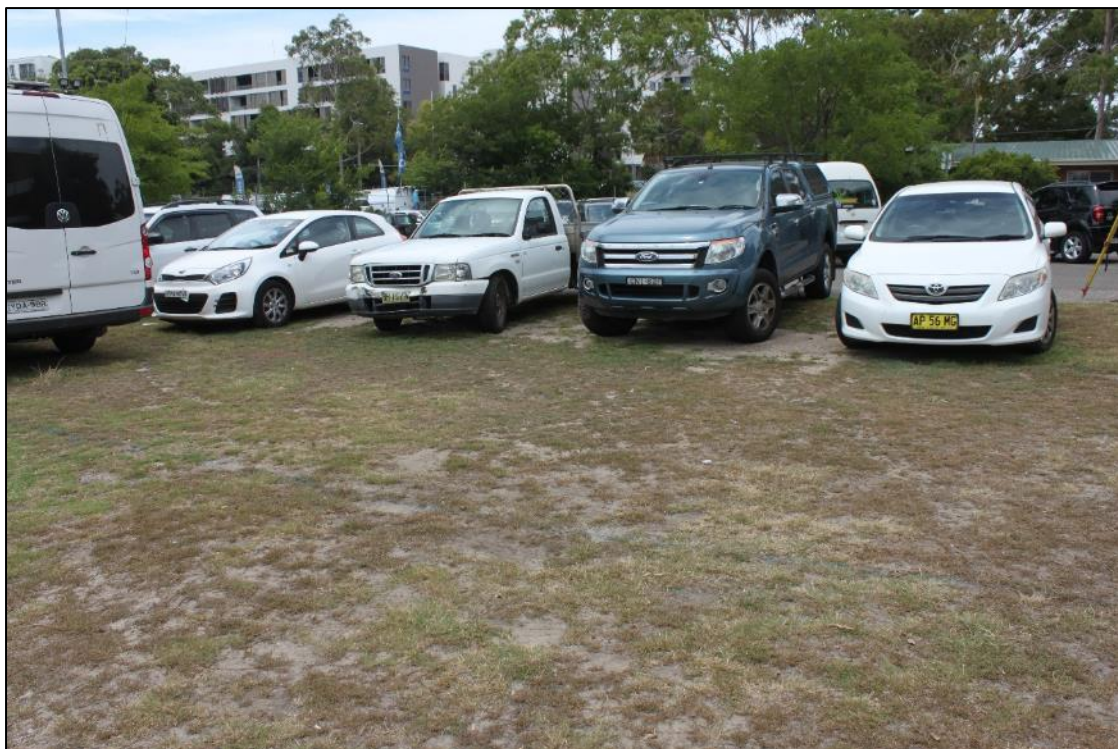


Figure 5-12 Grassed area immediately to the south of the Rehabilitation (Namoï) Wing, facing east.
AMAC Group IMG_2169, (22/01/2018).



Figure 5-13 Grassed area immediately to the south of the Rehabilitation (Namoi) Wing, facing south east.
AMAC Group IMG_2170, (22/01/2018).



Figure 5-14 Asphalt carpark on the study site, facing north east.
AMAC Group IMG_2173, (22/01/2018).



Figure 5-15 Asphalt carpark and community centre located on the eastern extent of the study site fronting Joynton Avenue, facing east.
AMAC Group IMG_2176, (22/01/2018).



Figure 5-16 Asphalt carpark and driving fronting Joynton Avenue, facing west.
AMAC Group IMG_2182, (22/01/2018).

6.0 CULTURAL HERITAGE RESPONSES

All registered stakeholders were given a copy of this report and were given a minimum of 28 days to comment on this report. All comments will be incorporated into these reports. This section outlines the research questions and responses concerning the cultural heritage of the study area.

6.1 REGISTERED STAKEHOLDER QUESTIONS

All registered stakeholders were given a copy of a proposed Aboriginal Cultural Heritage Assessment (ACHA) research methodology and given 28 days to respond to this methodology.

The following is a questionnaire that was included with the ACHA methodology.

- Does the study area hold any social, spiritual or cultural values to the participating Aboriginal stakeholders?
- If so, what are these values and are they confined to particular parts of the study area?
- Why are these parts or the whole of the study area culturally significant to the participating Aboriginal stakeholders?
- Are particular parts of the study area more important than others?
- Are any previously unidentified known culturally significant places present within the study area? If so, where are they located?
- Are any previously unidentified Aboriginal objects or Aboriginal places present within the study area? If so, where are they located?
- Are any previously unidentified natural or archaeological resources present within the study area? If so, where are they located?
- Are there any traditional stories or legends associated with the study area?
- Are there any recollections of Aboriginal people living within the study area?
- Is there any information to suggest the presence of burials within the study area?
- Are any traditional flora or fauna resources associated with the study area?
- Does the study area have any sensory scenic or creatively significant cultural values?
- If so, what are these values and are they confined to particular parts of the study area and where are they located?
- In what way if any will the proposed development harm the identified cultural heritage and archaeological values of the study area?
- Do the participants have suggestions on the mitigative strategies for the management of the cultural and archaeological values of the study area?
- Are there any gender specific cultural values associated with the study area which cannot be raised in a male presence?
- Are there any gender specific cultural values associated with the study area which cannot be raised in a female presence? If so how would the Aboriginal stakeholders like these dealt with?
- Do the participants have any concerns not yet raised in this interview?

6.2 REGISTERED STAKEHOLDER SUBMISSIONS TO QUESTIONS AND RESEARCH METHODOLOGY

6.2.1 A1 Indigenous Services

From: Carolyn .H <cazadirect@live.com>
Sent: Thursday, 30 July 2020 4:57 PM
To: Steven John Vasilakis
Subject: Re: Green Square Public School - Meth



Contact: Carolyn Hickey
M: 0411650057
E: Cazadirect@live.com
A: 10 Marie Pitt Place, Glenmore Park, NSW 2745
ACN: 639 868 876

Hi,
I have reviewed the document and support the ACHAR Research Design and Testing Methodology for the proposed development of the New Green Square Public School.

Thank you
Carolyn Hickey

6.2.2 Responses from RAPs contacted by phone on 12th August 2020

- Metropolitan LALC – No response and left message
- Butucarbin Aboriginal Corp. – Jennifer Beale supports Methodology
- Butucarbin Aboriginal Corp. - Lowanna Gibson to review & comment
- Didge Ngunawal Clan – Support Methodology

6.2.3 Responses from RAPs contacted by phone on 13th August 2020

- Metropolitan LALC – No response and left message
- Butucarbin Aboriginal Corp. – Lowanna Gibson supports Methodology

6.2.4 Butucarbin Aboriginal Corporation

From: Butucarbin Heritage <butuheritage@gmail.com>
Sent: Thursday, 13 August 2020 12:14 PM
To: Steven John Vasilakis
Subject: Re: Green Square Public School - Meth

Hi Steve,
I just want to confirm that Butucarbin supports the methodology.

Warm regards,

6.3 REGISTERED STAKEHOLDER SUBMISSIONS TO ACHAR AND AATR

6.3.1 Responses from RAPs contacted by phone on 2nd September 2020

- Metropolitan LALC – To review and respond
- Butucarbin Aboriginal Corp. – To review and response
- Didge Ngunawal Clan - Support ACHAR recommendations
- A1 Indigenous Services - Support ACHAR recommendations

6.3.2 Didge Ngunawal Clan

From: lilly carroll <didgengunawalclan@yahoo.com.au>
Sent: Wednesday, 2 September 2020 10:32 AM
To: Steven John Vasilakis; benjaminstreet@archaeological.com.au
Subject: Re: Green Square Public School - ACHAR

Hi Steve,

DNC is happy with the ACHAR for The Green Square Public School

6.3.3 A1 Indigenous Services

From: Carolyn .H <cazadirect@live.com>
Sent: Sunday, 6 September 2020 8:57 PM
To: Steven John Vasilakis
Subject: Re: Green Square Public School - ACHAR



Contact: Carolyn Hickey
M: 0411 650057
E: Cazadirect@live.com
A: 10 Marie Pitt Place, Glenmore Park, NSW 2745
ACN: 639 868 876
ABN: 31 639 868 876

Hi,
I have reviewed the document and support the ACHAR.
Kind regards
Carolyn Hickey

6.3.4 Responses from RAPs contacted by phone on 7th September 2020

- Metropolitan LALC – No response and left message
- Butucarbin Aboriginal Corp. – To review and respond

6.3.5 Responses from RAPs contacted by phone on 8th September 2020

- Metropolitan LALC – No response and left message
- Butucarbin Aboriginal Corp. – To review and respond

6.3.6 Responses from RAPs contacted by phone on 15th September 2020

- Metropolitan LALC – To review and respond
- Butucarbin Aboriginal Corp. – No response and left message

6.3.7 Butucarbin Aboriginal Corporation

From: Butucarbin Heritage <butuheritage@gmail.com>
Sent: Wednesday, 23 September 2020 3:14 AM
To: Steven John Vasilakis
Subject: Re: Green Square Public School - ACHAR

Hi Steve,

I have reviewed the document and have concluded that Butucarbin is in support of this ACHAR.

Kind regards

6.4 CONSULTATION/DOCUMENT UPDATES

In order to ensure all Aboriginal Stakeholders remain updated, they were kept informed with the various stages of development and management program. Meetings had been arranged to address interpretation strategies and/or additional investigation.

On the 23rd February 2021, all the RAPs were sent an update email to inform them that consultation for the proposed New Green Square School development will continue throughout the duration of the project (see Appendix B Consultation Log).

6.4.1 Teleconference Meeting 17th June 2021

On the 17th June 2021, Ben Streat (AMAC) conducted a Teleconference Meeting with all the RAPs to discuss the Aboriginal Cultural Heritage Interpretation Strategy for New Green Square School development.

The following response were received:

- Metropolitan LALC – Support Interpretation Strategy & recommendations
- Butucarbin Aboriginal Corp. – Support Interpretation Strategy & recommendations
- Didge Ngunawal Clan - Support Interpretation Strategy & recommendations
- A1 Indigenous Services - Support Interpretation Strategy & recommendations

7.0 SIGNIFICANCE ASSESSMENT

The processes of assessing significance for items of cultural heritage value are set out in *The Australian ICOMOS Charter for the Conservation of Places of Cultural Significance: the Burra Charter* (amended 1999) formulated in 1979 and based largely on the Venice Charter of International Heritage established in 1966. Archaeological sites may be significant according to four criteria, including scientific or archaeological significance, cultural significance to Aboriginal people, representative significance which is the degree to which a site is representative of archaeological and/or cultural type, and value as an educational resource. In New South Wales the nature of significance relates to the scientific, cultural, representative or educational criteria and sites are also assessed on whether they exhibit historic or cultural connections.

7.1 ARCHAEOLOGICAL SIGNIFICANCE

7.1.1 Educational Significance

The educational value of any given location will depend on the importance of any archaeological material located, on its rarity, quality and the contribution this material can have on any educational process (Australia ICOMOS, 1999 p. 11).

No specific educational significance can as yet be assigned to the study area. However, intact soils are likely below fill material with the potential for Aboriginal objects and features of archaeological and cultural heritage value to be present.

7.1.2 Scientific Significance

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No specific scientific significance can as yet be assigned to the study area. However, intact soils are likely below fill material with the potential for Aboriginal objects and features of archaeological and cultural heritage value to be present.

7.1.3 Representative Significance

The representative value of any given location will depend on rarity and quality of any archaeological material located and on the degree to which this representativeness may contribute further substantial information to an educational or scientific research process. (Australia ICOMOS, 1999 p.11).

No specific representative significance can as yet be assigned to the study area. However, intact soils are likely below fill material with the potential for Aboriginal objects and features of archaeological and cultural heritage value to be present.

7.2 SOCIAL AND CULTURAL SIGNIFICANCE

As defined in the 'Burra Charter' (ICOMOS, 1999) cultural significance is broken into three parts: aesthetic, historic and scientific value for past, present or future generations. Cultural significance is a concept which assists in estimating the value of any given place. Places that are likely to be of significance are those which can contain information which may assist with the understanding of the past or enrich the present, and which will be of value to future generations. The meaning of these terms in the context of cultural significance is outlined below. It should be noted that they are not mutually exclusive, (Australia ICOMOS, 1999 p.12).

7.2.1 Historic Significance

A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment. (Australia ICOMOS, 1999 p.11).

No historical significance has been assigned to the study area by any participating Aboriginal Stakeholders.

7.2.2 Scientific Significance

The scientific value of any given location will depend on the importance of the data that can be obtained from any archaeological material located, on its rarity, quality and on the degree to which this may contribute further substantial information to a scientific research process. (Australia ICOMOS, 1999 p.11).

No scientific significance has been assigned to the study area by any participating Aboriginal Stakeholders.

7.2.3 Aesthetic Significance

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; the smells and sounds associated with the place and its use. (Australia ICOMOS, 1999 p.11).

No aesthetic significance has been assigned to the study area by any participating Aboriginal Stakeholders.

8.0 PROPOSED ACTIVITY

This section outlined the proposed activity including the staging and timeframes, along with the potential harm of the proposed activity on Aboriginal objects and or declared Aboriginal places, assessing both the direct and indirect result of the activity on any cultural heritage values associated with the study area.

It also aims to outline the justification for harm with the intention of avoiding and minimising harm where possible.

8.1 DESCRIPTION OF PROPOSED ACTIVITY

The proposed development activity looks to redevelop the north-western extent of the Royal South Sydney Hospital site, at 3 Joynton Avenue, Zetland (Figures 8.1–8.11). The new public school consists of four levels, with the lower three levels designed for administration and staff rooms, community learning hubs, multi-purpose rooms, canteen and storage facilities; and the fourth floor designed with a library leading out to an open-air recreation area, which includes a roof top terraces and cola structures. In addition, the landscape design is to link Green Square's natural and indigenous heritage through the landscape character and species selection, e.g., Cabbage Palms. The bulk of construction for the school will be located in the northern and western boundaries of the study site.

The structural design of the New Green Square Public School will be constructed using an innovative, concrete & glulam hybrid structure that allows for the provision of high quality, acoustically sound environment, and improving on the on-site assembly times. The ground level will be constructed with a concrete structure consisting of 16 metre clear spans that will be used to accommodate public and shared programme spaces. Concrete will be used for much of the construction as it provides both sound protection in the event of flooding on ground level and efficient structural strength for the transfer of loads on Level 02 from the glulam structure above. The court enclosures on Level 0 and 02 will also consist of a concrete column and beam structure. It is anticipated that foundations will be likely piled to a depth of 18m below FFL.

The plans indicate that the development will require several subsurface impacts including piers as foundations, a basement pump room, an on-site detention tank, a lift pit, new electrical and hydraulic services.

The proposed development will consist of 4 levels (including ground floor) and basement with the construction of the design of the new school including the following:

- Demolition of all existing structures on the proposed development footprint
- North Building Construction
 - Ground Level - Administration, Multi-Purpose 1A & 1B Room
 - Level 01 – Administration
 - Level 02 – Staff Room
 - Level 03 – Library & Roof Top Cola
 - Basement – Pump Room (ca. 3m depth)
- West Building Construction
 - Ground Level – Communal Hall, Multi-Purpose 2 Room, Canteen
 - Level 01 – Community Learning Hubs
 - Level 02 – Community Learning Hubs
 - Level 03 – Roof Top Cola & Terrace

The contamination results from the preliminary report compiled by Environmental Investigation Services (EIS 2018), indicated a programme of remediation was needed to take place. The study revealed that the site exhibits substantial soil contamination due to the presence of heavy metals, asbestos, hydrocarbons and the suspected presence of underground storage tanks (USTs). Thus, remediation is likely to involve a combination of cutting and filling. This was followed up by a Remedial Action Plan report compiled by JBS&G which indicated the removal of fill across the site (see Section 2.4).

No formal areas of exclusion have been identified in the current plans.

8.2 PROPOSED DEVELOPMENT JUSTIFICATION

Green Square Integrated Community Facility & School is a new public primary school (kindergarten – Year 6) and a series of Multi Service Spaces for shared and community use.

The site sits in the centre of the developing Green Square urban renewal precinct.

8.3 POTENTIAL HARM TO ABORIGINAL OBJECTS AND CULTURAL HERITAGE

The proposed development activity will disturb the ground surface and therefore may disturb Aboriginal objects and areas of cultural significance. The study area has been shown through research to have low-moderate archaeological potential. As such the proposed development has low-moderate potential to disturb/harm Aboriginal archaeological deposits, objects and items or areas of cultural significance. A program of test excavation has been proposed in order to assess the nature and extend of any potential Aboriginal objects and areas of cultural significance within the study area, in order to effectively assess the potential harm.

8.4 ASSESSING HARM

The proposed development activity will disturb the ground surface and therefore may disturb Aboriginal objects and areas of cultural significance. The study area has been shown through research to have low-moderate archaeological potential. As such the proposed development has low-moderate potential to disturb/harm Aboriginal archaeological deposits, objects and items or areas of cultural significance. A program of test excavation has been proposed in order to assess the nature and extend of any potential Aboriginal objects and areas of cultural significance within the study area, in order to effectively assess the potential harm.

8.5 AVOIDING AND MINIMISING HARM TO ABORIGINAL OBJECTS

A program of test excavation has been proposed in order, to assess the nature and extent of any potential Aboriginal objects and areas of cultural significance within the study area, in order, to effectively assess the potential harm.

8.6 JUSTIFICATION OF HARM TO ABORIGINAL OBJECTS

A program of test excavation has been proposed in order, to assess the nature and extent of any potential Aboriginal objects and areas of cultural significance within the study area, in order, to effectively assess the potential harm.

8.7 ECOLOGICALLY SUSTAINABLE DEVELOPMENT AND INTERGENERATIONAL EQUITY

The ability of any development to be completely ecologically sustainable will be limited by definition. However, the proponents of this development appear to have made significant efforts to meet the needs of the current generation without compromising the ability of future generations to meet their own needs. This has been accomplished by proposing a plan on a manageable and affordable scale while still protecting and conserving the archaeological resources. This is being accomplished by a program of subsurface test excavation with the possibility of further salvage excavation if needed as well as extensive consultation with the relevant Aboriginal community.

Inter-generational equity refers to the equitable sharing of resources between current and future generations. The planet's current generation should ensure that future generations have the same opportunities and resources available. This idea is being accomplished by designing a building with as little disturbance to the ground surface as possible and as such any archaeological or cultural material that may be present in these areas either identified, or unidentified will be left intact and persevered for future generations.

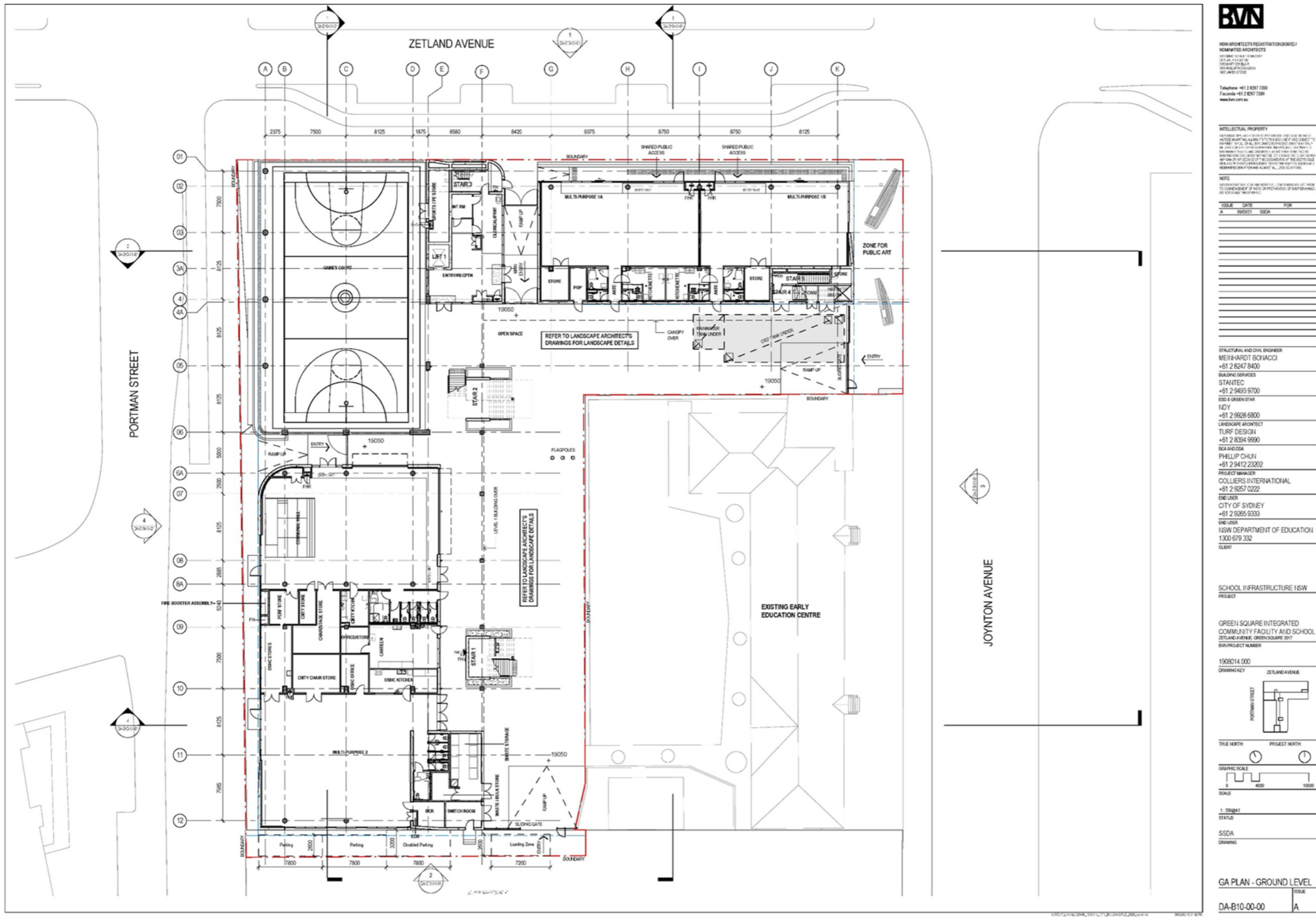
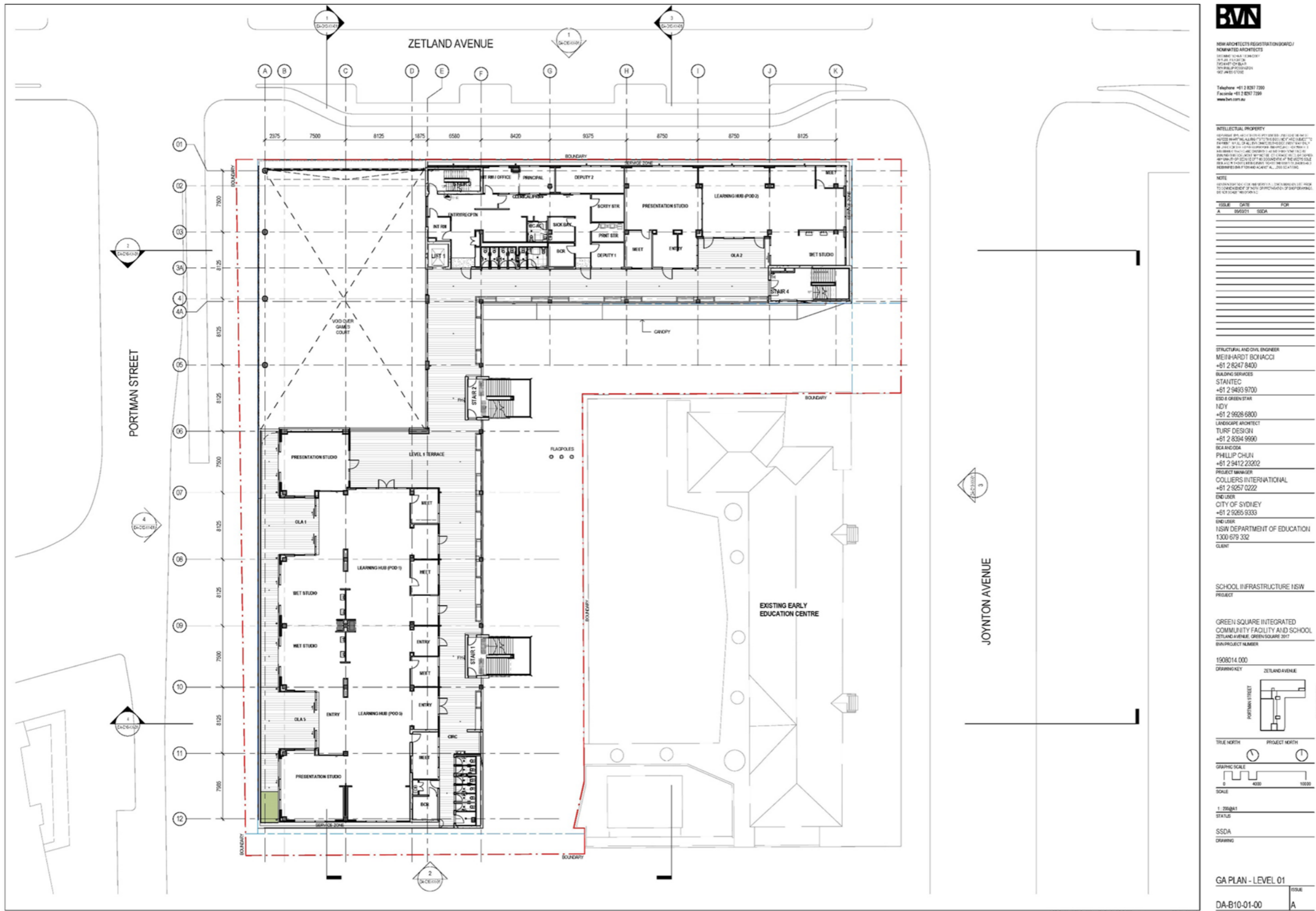


Figure 82 GA Plan – Ground Level. BVN Architecture Pty Ltd (2021). DA-B10-00-00, issue A.



BVN
 NSW ARCHITECTS REGISTRATION BOARD /
 NOMINATED ARCHITECTS
 B.V.N. ARCHITECTS
 10/111 FLEET STREET
 SYDNEY NSW 2000
 TEL: (02) 9231 7200
 FAX: (02) 9231 7299
 www.bvn.com.au

INTELLECTUAL PROPERTY
 THIS DRAWING IS THE PROPERTY OF B.V.N. ARCHITECTS AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF B.V.N. ARCHITECTS.

NOTE
 THIS DRAWING IS FOR INFORMATION ONLY. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE RELEVANT AUTHORITIES.

TABLE	DATE	FOR
1	01/07/2021	ISSUE A

STRUCTURAL AND CIVIL ENGINEER
 MEIB-HARDT BONACCI
 +61 2 8247 8400

BUILDING SERVICES
 STANTEC
 +61 2 9493 9700

ESD & GREEN STAR
 1:201
 +61 2 9228 6800

LANDSCAPE ARCHITECT
 TURF DESIGN
 +61 2 8394 9900

SCA AND O&A
 PHILLIP CHUJH
 +61 2 9412 2302

PROJECT MANAGER
 COLLIER INTERNATIONAL
 +61 2 9257 0222

END USER
 CITY OF SYDNEY
 +61 2 9285 9333

END USER
 NSW DEPARTMENT OF EDUCATION
 1300 679 332

CLIENT

SCHOOL INFRASTRUCTURE NSW
 PROJECT

GREEN SQUARE INTEGRATED COMMUNITY FACILITY AND SCHOOL
 ZETLAND HUB AND GREEN SQUARE 2017
 B.V.N. PROJECT NUMBER

1508014.000
 DRAWING KEY: ZETLAND AVENUE

TRUE NORTH PROJECT NORTH

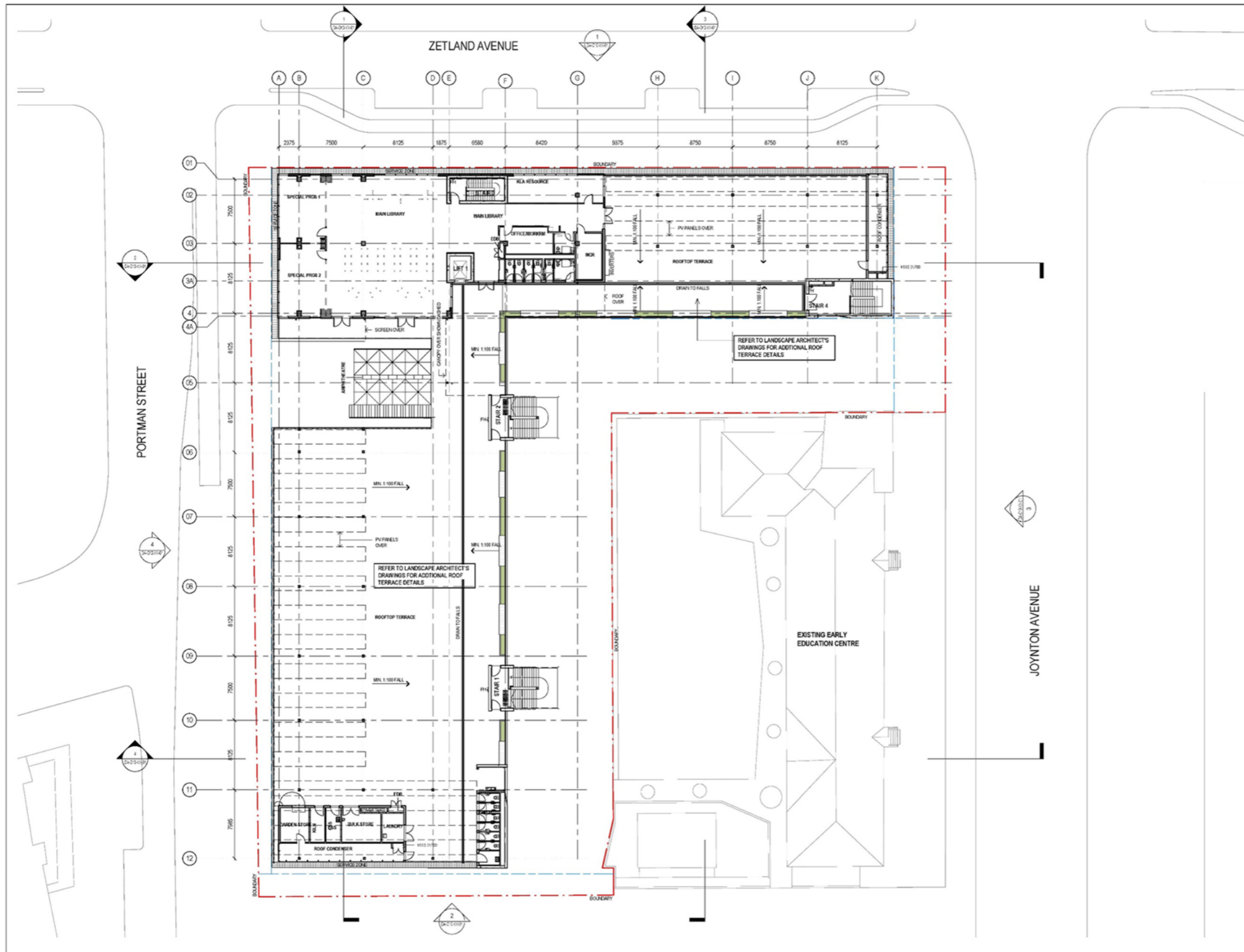
GRAPHIC SCALE
 0 4000 10000
 SCALE

1:25000
 STATUS

SSDA
 DRAWING

GA PLAN - LEVEL 01
 DA-B10-01-00 A

Figure 8-3 GA Plan - Level 01.
B.V.N. Architecture Pty Ltd (2021). DA-B10-01-00, issue A.



BVN
 NSW ARCHITECTS REGISTRATION BOARD /
 NOMINATED ARCHITECTS
 201 PAVILLION
 100 WILSON STREET
 SYDNEY NSW 2000
 Telephone +61 2 8297 7200
 Facsimile +61 2 8297 7299
 www.bvn.com.au

INTELLECTUAL PROPERTY
 COPYRIGHT AND ALL RIGHTS RESERVED. THIS DOCUMENT IS THE
 PROPERTY OF BVN ARCHITECTS PTY LTD. ANY REPRODUCTION OR
 DISTRIBUTION OF THIS DOCUMENT WITHOUT THE WRITTEN
 PERMISSION OF BVN ARCHITECTS PTY LTD IS STRICTLY
 PROHIBITED. THE CITY OF SYDNEY AND THE NSW DEPARTMENT
 OF EDUCATION ARE NOT TO BE HELD RESPONSIBLE FOR ANY
 ERRORS OR OMISSIONS IN THIS DOCUMENT. THE CITY OF
 SYDNEY AND THE NSW DEPARTMENT OF EDUCATION
 HEREBY GRANT TO BVN ARCHITECTS PTY LTD A LIMITED
 LICENSE TO REPRODUCE THIS DOCUMENT FOR THE PURPOSES
 OF THIS PROJECT ONLY.

NOTE
 THE DRAWING IS THE PROPERTY OF BVN ARCHITECTS PTY LTD. IT IS
 TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY
 IDENTIFIED IN THE TITLE BLOCK.

DATE	ISSUE	FOR
15/05/21	SSDA	SSDA

STRUCTURAL AND CIVIL ENGINEER
 MEINHARDT BONACCI
 +61 2 8247 8400

BUILDING SERVICES
 STANTEC
 +61 2 9493 9700

ESD & GREENSTAR
 NDY
 +61 2 9828 6800

LANDSCAPE ARCHITECT
 TURF DESIGN
 +61 2 8394 9990

SCA AND SGA
 PHILLIP CHUN
 +61 2 9412 2300

PROJECT MANAGER
 COLLIER INTERNATIONAL
 +61 2 9267 0222

END USER
 CITY OF SYDNEY
 +61 2 9265 9333

END USER
 NSW DEPARTMENT OF EDUCATION
 1300 679 332

CLIENT

SCHOOL INFRASTRUCTURE NSW
 PROJECT

GREEN SQUARE INTEGRATED
 COMMUNITY FACILITY AND SCHOOL
 ZETLAND AVENUE, GREEN SQUARE 2017
 DRAWING NUMBER

1508014.000
 DRAWING KEY ZETLAND AVENUE

TRUE NORTH PROJECT NORTH

GRAPHIC SCALE
 0 500 1000
 SCALE
 1:2500A1
 STATUS
 SSDA
 DRAWING

GA PLAN - LEVEL 03
 DA-B10-03-00 A

Figure 85 GA Plan - Level 03.
 BVN Architecture Pty Ltd (2021). DA-B10-03-00, issue A.

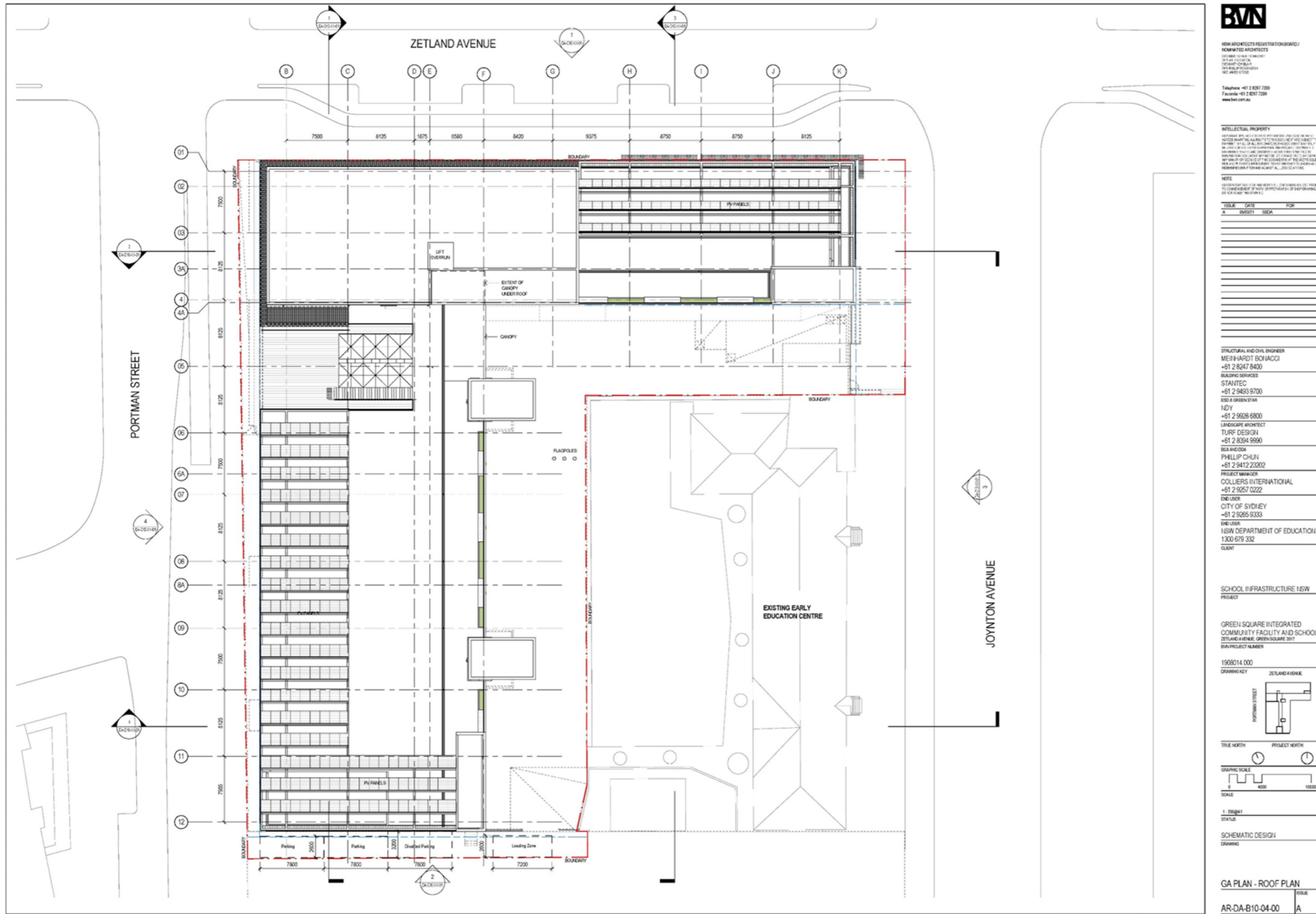


Figure 86 GA Plan – Roof Plan.
B.V.N. Architecture Pty Ltd (2021). Drawing DA-B10-04-00, issue A.

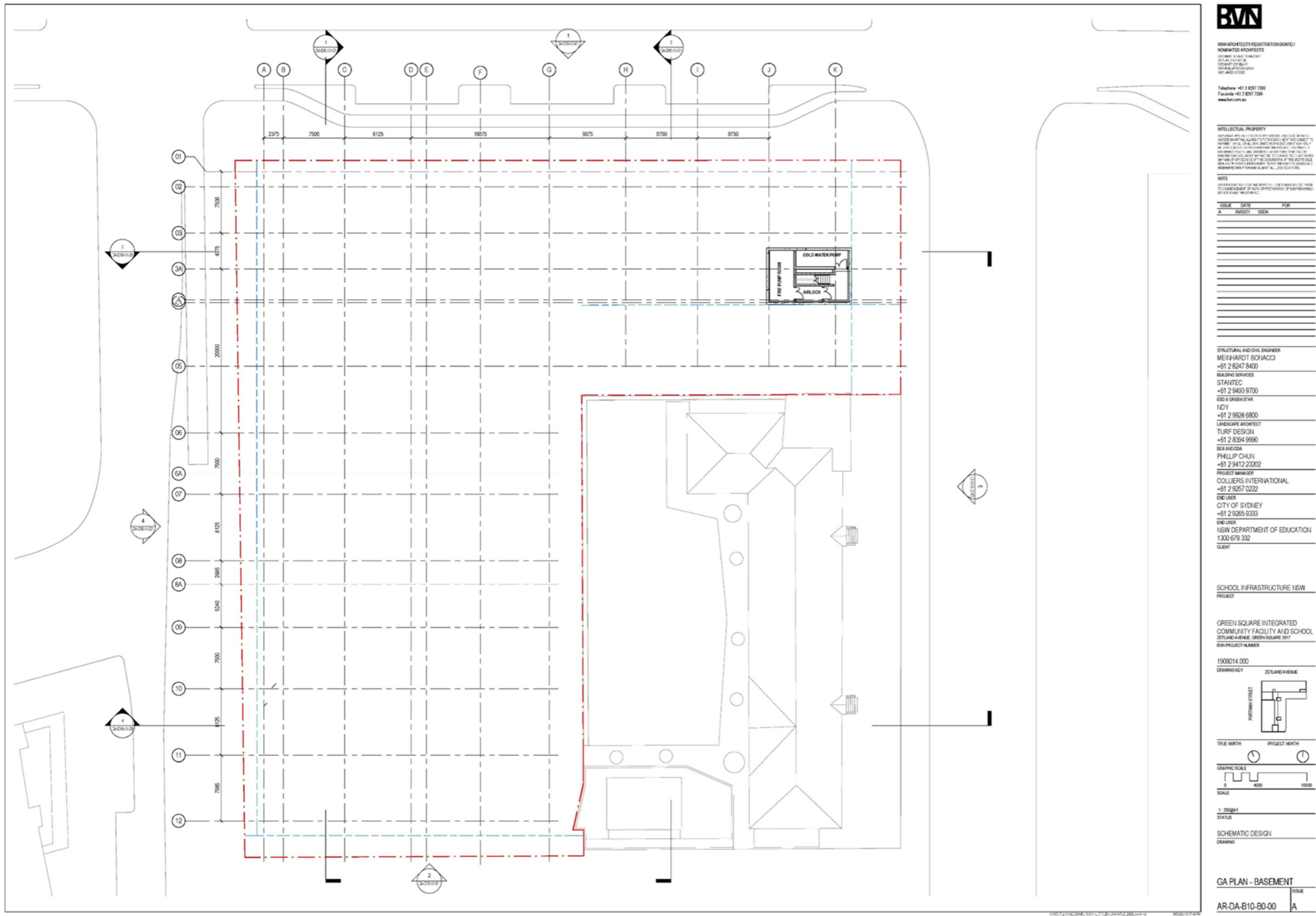


Figure 8-7 GA Plan - Basement. BUN Architecture Pty Ltd (2021). DA-B10-B0-00, issue A.

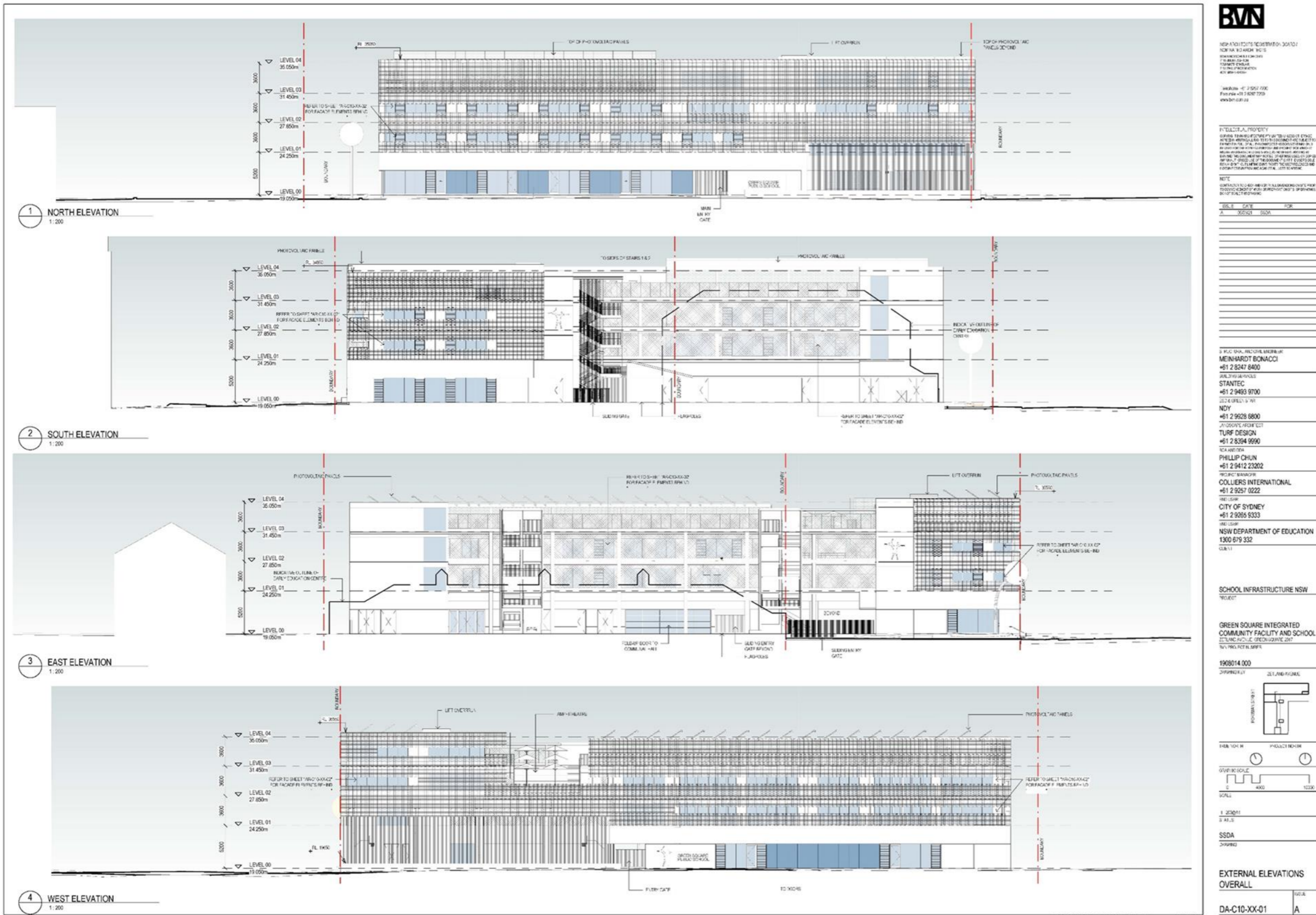


Figure 8-8 External Elevations Overall.
BUN Architecture Pty Ltd (2021). DA-C10-XX-01, issue A.

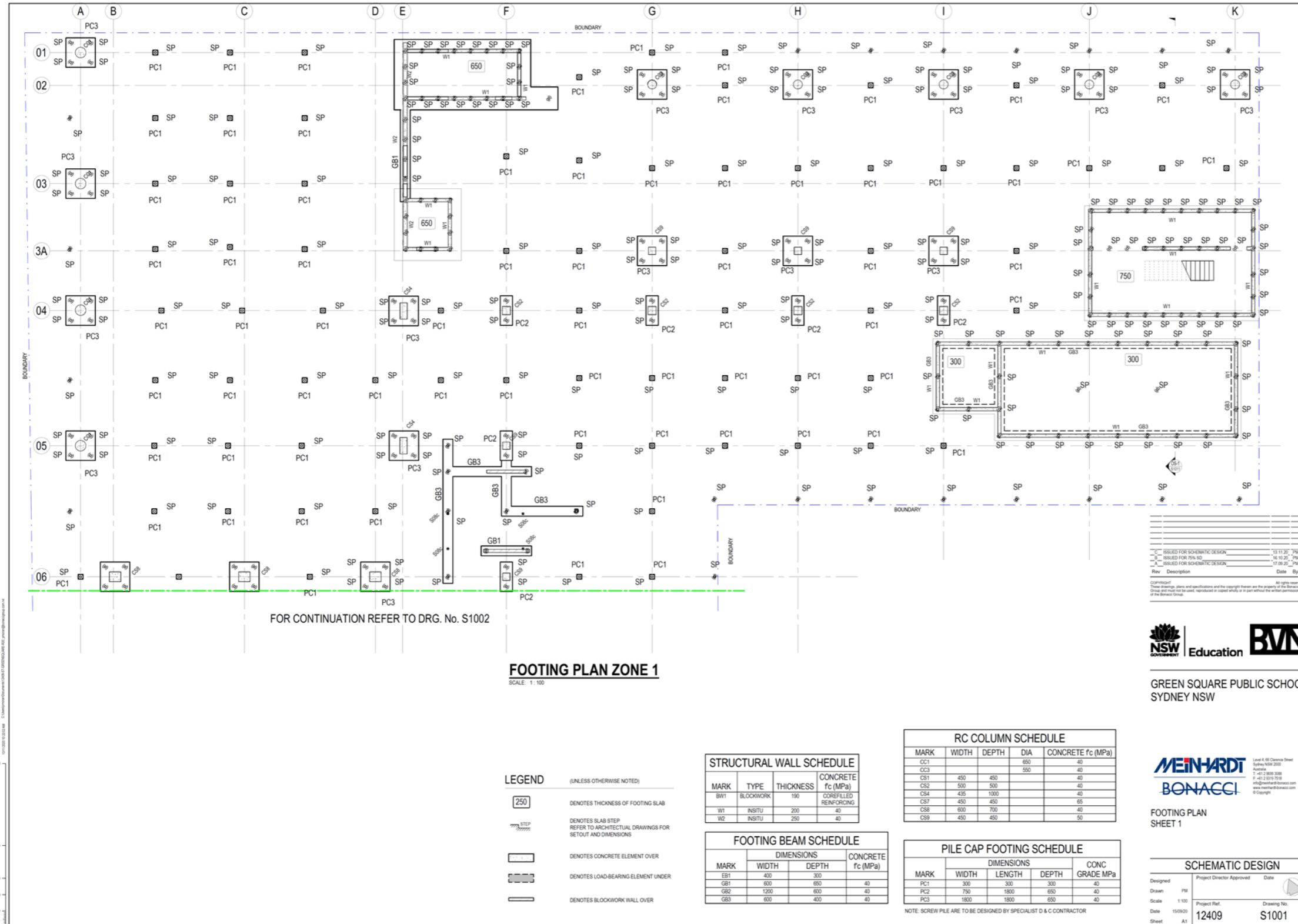


Figure 8-10 Footing Plan – Sheet 1.
Meinhardt-Bonacci Group Pty Ltd (2020). S1001, Rev. C.

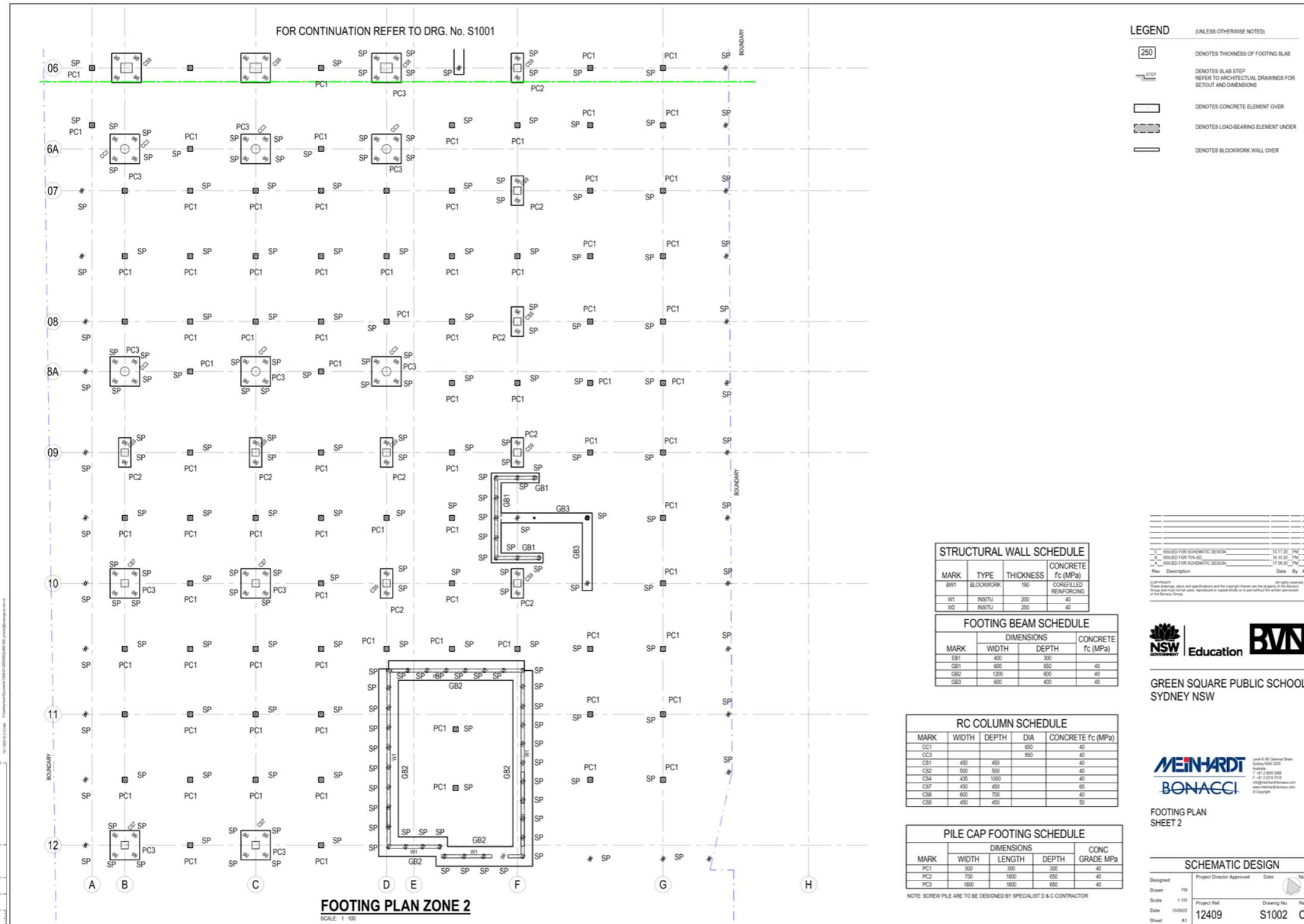


Figure 8-11 Footing Plan—Sheet 1.
Meinhardt-Bonacci Group Pty Ltd (2020). S1002, Rev. C.

9.0 MANAGEMENT AND MITIGATION

The management recommendations presented in the following section of the report take into account the following:

- Legislation outlined in this report which protects Aboriginal cultural and archaeological objects and places in New South Wales
- Research and assessment carried out by the author/s of this report
- Results of previous archaeological assessment and excavation in the vicinity of the study area
- The concerns and views of the Aboriginal stakeholders listed in this report
- The impact of the proposed development on any Aboriginal archaeological material that may be present
- The requirements of the consent authority (City of Sydney Council).

9.1 CARE AND CONTROL

Any artefacts recovered shall be reburied as soon as practicable in a secure, temporary storage location in accordance with requirement 26 of the *Code of Conduct for the Investigation of Archaeological Objects in NSW*, pending any agreement reached as to the long-term management of the salvaged Aboriginal objects. The excavation director is responsible for ensuring that procedures are put in place so that Aboriginal objects that are reburied are not harmed. The location of the secure temporary storage location must be submitted to AHIMS with a site update record card for the site(s) in question.

If any archaeological material is recovered it shall be subject to a care and control agreement established after the nature and significance of the archaeological or cultural material is understood as per requirement 26 of the *Code of Conduct for the investigation of Archaeological objects in NSW*.

9.2 RECOMMENDATIONS

There were no confirmed Aboriginal archaeological sites located within/near the study area on the Aboriginal Heritage Information Management System (AHIMS) or from other sources of information of which the author of this report is aware.

The past landscape features present indicate the area was subject to inundation with the northern end of the study area being within the location of Waterloo Dam and swamplands. The land has been relatively undeveloped - mainly consisting of industrial buildings and associated activities and later the location of the South Sydney Hospital.

There is a low - moderate probability that sub-surface Aboriginal objects and/or deposits with conservation value may be present within disturbed areas. If objects are present, they may have been subject to have been subject to disturbance such as post depositional movement. Although the area may have low archaeological significance it may, however, hold high cultural significance with intrinsic value to the Aboriginal community. A Potential Archaeological Deposit (PAD) AHIMS Site 45-6-3944 was registered within the bounds of the study area. A programme of test excavation has been proposed under an Aboriginal Heritage Impact Permit (AHIP) to be conducted to ascertain the nature of this deposit and extent of subsurface Aboriginal objects within the study area.

Environmental investigations resulted in the identification of up to 3 meters of fill and contaminants on the site which intersects with the water table of the area. This limits the extent of any Aboriginal archaeological material being identified within any potential intact soils that may be present.

The plans however indicate that the development will require several subsurface impacts including piers as foundations, a basement pump room, an on-site detention tank, a lift pit as well as new electrical and hydraulic services, all of which will impact on potential intact soils that are likely to be present below fill material. Therefore, any potential Aboriginal objects present will be impacted upon as part of the proposed development.

In light of this, and in the context of the information provided, there is nothing to impede the project from proceeding, the following has been recommended to manage the archaeological values of the study area:

- Consultation with the Registered Aboriginal Parties should continue, as per the requirements detailed in the *Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)*
- Subsequent to this report and in accordance with the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974, (DECCW 2010)*, a program of systematic, sub surface archaeological test excavation under an Aboriginal Heritage Impact Permit (AHIP) should be undertaken to establish the nature and extent of any archaeological objects and/or deposits that may be present. Due to the Potential Archaeological Deposit (PAD) AHIMS Site 45-6-3944, test excavation under the *Code of Practice for the Investigation of Aboriginal Objects in NSW (DECCW 2010)* cannot be adhered to and as such an AHIP will need to be applied for. This is to take place prior to the development activity proceeding (Figures 8.1-8.11)
- In the event, archaeological test excavations reveal Aboriginal archaeological objects or deposits, the following is recommended. Once the nature and extent of the archaeological site has been established through test excavation, the data will be analysed and synthesised into a test excavation report and the site card for AHIMS Site 45-6-3944 - updated. Dependent on the status of the project, an Aboriginal Cultural Heritage Management Plan (ACHMP), is recommended to be produced in order to allow the development to proceed. An ACHMP will need to be subject to review by the Department of Planning, Industry and Environment (DPIE), with input from Heritage NSW, but no formal second AHIP will need to be in place as the proposed development is a State Significant Development
- It is recommended that an Aboriginal Cultural Heritage Management Plan (ACHMP) should be in place as part of the status of the development as SSD, in order to manage and mitigate any potential Aboriginal objects of archaeological and cultural significance that may be present within the study area. As intact soils are likely below fill material, there is a potential for intact Aboriginal objects and/or features to be present.
- If test excavation does not reveal Aboriginal archaeological objects or deposits, the following is recommended. Dependant on the status of the project as an SSD - either an ACHMP will need to be in place for the post remediation and development works or no further works under the ACHAR, with the development activity (Figures 8.1–8.11) allowed to ‘proceed with caution’
- After this, and before any ground disturbance takes place as part of the construction, all development staff, contractors and workers should be briefed

prior to works commencing on site, as to the status of the area and their responsibilities regarding any Aboriginal archaeological deposits and/or objects that may be located during the following development through a Cultural Heritage Induction.

Should any Aboriginal archaeological deposits or objects be located during the development:

- All excavation in the vicinity of any objects and/or deposits shall cease immediately and the area secured
- Heritage NSW and a suitably qualified archaeologist should be notified so the significance of the said deposits or objects can be evaluated and presented in a report and the study area recorded as an archaeological site
- The archaeological deposits or objects shall be subject to fulfilment of the relevant legislative requirements particularly section 90 of the NPW Act 1974 (as amended).

Should any human remains be located during the following development:

- All excavation in the immediate vicinity of any objects of deposits shall cease immediately
- The NSW police and Heritage NSW Enviroline be informed as soon as possible
- Once it has been established that the human remains are Aboriginal ancestral remains, Heritage NSW and the relevant Registered Aboriginal Parties will identify the appropriate course of action.

10.0 PROPOSED AHIP BOUNDARY

As it is not possible to carry out test excavation on this site under the *Code of Practice for Archaeological investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974*, due to the Potential Archaeological Deposit (PAD) AHIMS Site 45-6-3944, an Aboriginal Heritage Impact Permit (AHIP) is to be sought in order for test excavations to take place within the study area.

Therefore, an AHIP is required in order for test excavation to take place prior to the any development activity proceeding. This will be in compliance with the legislative requirements concerning the impact on known and unknown Aboriginal objects in NSW. The authors of this report have made no AHIP application for this site in the past and are not aware of any previous AHIP application made by any other party.

The area to which the AHIP is to apply, is shown in Figure 10.1, as indicated in red.

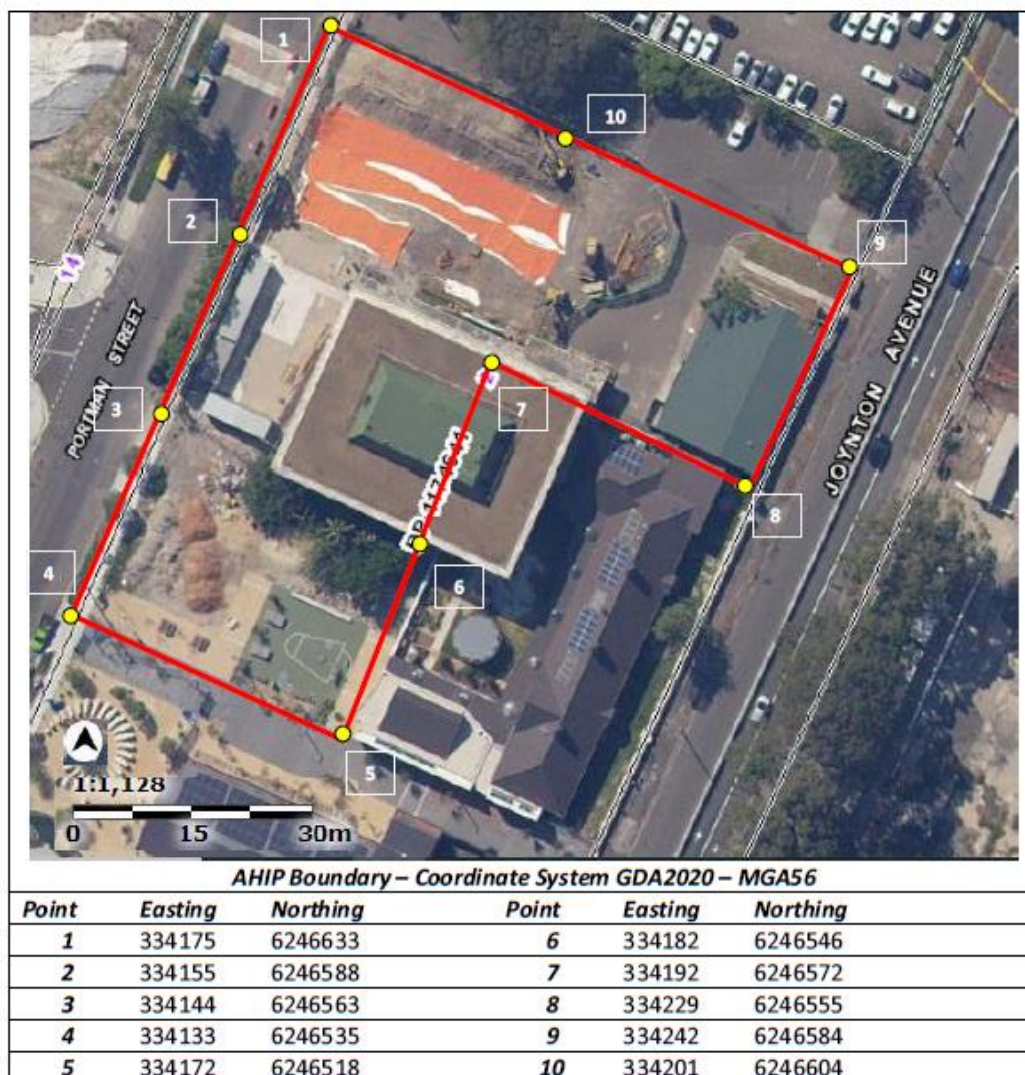


Figure 10-1 AHIP Boundary indicated in red with Reference Points and Coordinates.
AMAC Group (2020), Six Maps, LPI Online, (accessed 21/07/2020).

GLOSSARY

Term	Definition
Aboriginal/ Aborigine	These terms apply to indigenous Australians throughout time.
Aboriginal Object	A term now used (formerly 'relic') within the NSW <i>National Parks and Wildlife Act, 1974</i> to refer to "...any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains."
AHIP	Aboriginal Heritage Impact Permit, issued under Part 6 of the National Parks and Wildlife Act 1974, where harm to an Aboriginal object or Aboriginal place cannot be avoided.
Alluvial	Describes material deposited by, or in transit in flowing water.
AMAC	Archaeological Management and Consulting Group.
Artefact	Any object, usually portable, that has been made or shaped by human hand.
Assemblage	A collection of artefacts found in close proximity with one another often excavated together.
Axe grinding Grooves	Areas on a stone surface where other items such as stone tools, wood or bones have been sharpened.
Basalt	A dark coloured, basic volcanic rock.
Bioturbation	Reworking of sediments through the action of ground dwelling life forms. This can also include soil cracking and root activity.
Broken Flake	A flake fragment which displays only part of the diagnostic features of a complete flake.
BP	Before present (AD1950).
Burial	Sites containing the physical remains of deceased Aboriginal people.
Ceremonial Sites	Places or objects of ceremonial, religious or ritual significance to Aboriginal people.
Chert	A hard siliceous rock suitable for flaking into tools.
DCP	Development Control Plan.
DP	Deposited Plan.
Erosion	Process where particles are detached from rock or soil and transported away principally via water, wind and ice.
Flake	A piece of stone, detached by striking a core with another stone.
Flaking/Knapping	The process of making stone tools by detaching flakes from a piece of stone.
Hard setting	Soil which is compact and hard. It appears to have a pedal structure when dried out.
Heritage Division	Formerly known as the Heritage Branch
Holocene	The period of time since the last retreat of the polar icecaps, commencing approximately 10,000 – 110,000
Landscape Unit	An area of land where topography and soils have distinct characteristics, are recognisable, describable by concise statements and capable of being represented on a map.
Laminite	A thinly bedded, fine grained sedimentary rock.
LEP	Local Environment Plan.
LGA	Local Government Area.
Lithics	A term used to describe stone and stone artefacts.

Term	Definition
Loam	A medium textured soil of approximate composition of 10- 25% clay, 25-50% silt and 2% sand.
Loose	A soil which is not cohesive.
Matrix	Finer grained fraction, typically a cementing agent within soil or rock in which larger particles are embedded.
Midden	Aboriginal occupation site consisting chiefly of shells, which can also include bone, stone artefacts and other debris.
NPW Act	National Parks and Wildlife Act 1974
OEH	NSW Office of Environment and Heritage (formerly known as the DECCW)
Open Campsite	A surface accumulation of stone artefacts and/ or other artefacts exposed on the ground surface.
Potential Archaeological Deposit (PAD)	An area where no surface archaeological remains are visible but where it has been assessed that there is some potential for sub-surface archaeological remains to be present.
Ped	An individual, natural soil aggregate.
Pedal	Describes a soil in which some or all of the soil material occurs in the form of peds in a moist state.
Plastic	Describes soil material which is in a condition which allows it to undergo permanent deformation without appreciable volume change or elastic rebound and without rupture.
Pleistocene	The epoch of geological time starting 1.8 million years ago.
Quartz	Common mineral with naturally sharp edges and poor fracturing properties. Colour ranging from clear, to milky white and pink.
Quartzite	Homogenous medium to coarse grained metamorphosed sandstone.
Rock Painting	Encompassing drawing, paintings or stencils that have been placed on a rock surface usually within a rock shelter.
Rock Engraving	Pictures which have been carved, pecked or abraded into a rock surface, usually sandstone and predominantly open, flat surfaces.
Sandstone	A detrital sedimentary rock with predominantly sand sized particles.
Scarred/ Carved Tree	A tree from which bark has been deliberately removed.
Sclerophyll	Denoting the presence of hard stiff leaves, typically used to classify forest and indicative of drier conditions.
Sedimentation	Deposition of sediment typically by water.
Silcrete	A sedimentary rock comprising of quartz grains in a matrix of fine grained – amorphous silica.
Silt	Fine soil particles in size ranges of 0.02 – 0.002mm.
Slope	A landform element inclined from the horizontal at an angle measured in degrees or as a percentage.
SHI	State Heritage Inventory
SHR	State Heritage Register
Subsoil	Subsurface material comprising the B and C horizons of soils with distinct profiles.
Stone Resource Site	A geological feature in the landscape from which raw material for the manufacture of stone tools was obtained.
Texture	The coarseness or fineness of a soil as measured by the behaviour of a moist ball of soil when pressed between the thumb and forefinger.
Topsoil	A part of the soil profile, typically the A1 Horizon, containing material which is usually darker, more fertile and better structured than the underlying layers.

Term	Definition
Weathering	The physical and chemical disintegration, alteration and decomposition of rocks and minerals at or near the earth's surface by atmospheric and biological agents.

REFERENCES

ABORIGINAL HERITAGE AND INFORMATION MANAGEMENT SYSTEM.

2011 & 2012 www.environment.nsw.gov.au/awssapp

ARCHAEOLOGICAL & HERITAGE MANAGEMENT SOLUTIONS.

2015 *Central to Eveleigh Corridor: Aboriginal and Historical Heritage Review, Final Report*. Unpublished report to DECCW.

ARCHAEOLOGICAL MANAGEMENT & CONSULTING.

2012 *Proposed Residential Development at 34-36 Wellington Street, Waterloo, New South Wales, Due diligence Aboriginal Archaeological Assessment*. Unpublished report to DECCW.

ARTEFACT.

2016 *210-220 George Street, Sydney; Stage 1 DA Heritage Assessment*. Report to Wynyard 048 Service Pty Ltd.

ATTENBROW, V.

2002 *Sydney's Aboriginal Past: Investigating the archaeological and historical records*. UNSW Press, Sydney.

AUSTRALIA ICOMOS.

1999 *The Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter)*. Australia ICOMOS, Canberra.

AUSTRALIAN HERITAGE COMMISSION.

2002 *Ask First: A guide to respecting Indigenous heritage places and values*. Australian Heritage Commission, Canberra.

AUSTRALIAN INSTITUTE OF ABORIGINAL AND TORRES STRAIT ISLANDER STUDIES.

2000 *Aboriginal Australia*. Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra.

AUSTRALIAN MUSEUM BUSINESS SERVICES.

2002 *Pre-colonial Aboriginal Land and resource Use in Centennial, Moore and Queen Parks – Assessment of Historical and Archaeological Evidence for Centennial Parklands Conservation Management Plan*. Prepared for Conybear Morrison & Partners.

BANNERMAN, S.M. AND HAZELTON P.A.

1990 *Soil Landscapes of the Penrith 1;100 000 Soil Sheet*. Soil and Conservation Service of NSW.

BONHOMME, T., AND S. BUZER

1994 *Holocene Shell Middens of the Central Coast of NSW: An Investigation of the Management Problems Concerning Coastal Shell Midden*. Unpublished report to DECCW.

BRANAGAN, D.C. HERBERT AND T. LANGFORD-SMITH.

1979 *The Sydney Basin: An outline of the Geology and Geomorphology*. University of Sydney, Sydney.

BURKE, H. AND C. SMITH.

2004 *The Archaeologists Field Hand Book*. Allen & Unwin, St Leonards, NSW.

CHAPMAN, G. A. AND C. L. MURPHY.

1989 *Soil landscapes of the Sydney 1:100 000 sheet*. Soil Conservation Service of NSW, Sydney.

City of Sydney Council.

2012 *Sydney Local Environmental Plan*.

2012 *Sydney Development Control Plan*.

COMBER CONSULTANTS PTY LTD.

2008 *Final; Aboriginal Archaeological & Cultural Heritage Assessment; Darling Walk, Darling Harbour*. Unpublished report to DECCW.

2011 *Aboriginal Archaeological and Cultural Heritage Assessment; Johnstons Stormwater Canal: Shared Pathway Project*. Unpublished report to DECCW.

COMMONWEALTH HERITAGE LIST.

2011

www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=search_results;state=N SW;list_code=CHL;legal_status=35

DEC.

2004 *Aboriginal Womens Heritage: Port Stephens*. Department of Environment and Conservation. Sydney.

DECC.

2005 *Aboriginal Scarred Trees in New South Wales: A Field Manual*. Department of Environment and Climate Change, Sydney.

DECCW.

2010 *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974*. Department of Environment, Climate Change and Water, Sydney.

2010 *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales, Part 6 National Parks and Wildlife Act 1974*. Department of Environment, Climate Change and Water, Sydney.

2010 *Guide to Investigation, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales, Part 6 National Parks and Wildlife Act 1974*. Department of Environment, Climate Change and Water, Sydney.

2010 *Part 6; National Parks and Wildlife Act Aboriginal Cultural Heritage Consultation Requirements for Proponents*. Department of Environment, Climate Change and Water, Sydney.

DEPARTMENT OF PLANNING.

2005 *The NSW Comprehensive Coastal Assessment Tool Kit*. NSW Government.

DOMINIC STEELE CONSULTING ARCHAEOLOGY.

2006 *Aboriginal Archaeological heritage Impact Assessment – Randwick Racecourse*. Randwick NSW. Prepared for Godden Mackay Logan.

FOLEY, R.A.

1981 A model of Regional Archaeological Structure. *Proceedings of the Prehistoric Society* 47: 1-17.

GODDEN MACKAY HERITAGE CONSULTANTS.

2013 *Aboriginal Heritage Management Assessment – CBD and South East Light Rail Project – Environmental Impact Statement: Heritage Impact Assessment*. Technical Report 4 prepared for Parsons Brinckerhoff on behalf of Transport for NSW.

GOODWIN, L.

1999 Two steps forward, one back. Some thoughts on settlement models for the North Coast of New South Wales. In *Australian Coastal Archaeology* edited by Jay Hall and Ian J McNiven. ANH Publications, Canberra.

HALL, R AND K. LOMAX.

1996 A Regional Landscape Approach to the Management of Stone Artefact Sites in Forested Uplands in Eastern Australia. *Australian Archaeology* 42: 35-38.

HARDY, V. AND B. STREAT.

2008 *An Aboriginal Heritage Assessment of SADA Coal Washery, Glenlee New South Wales*, Unpublished Report for SADA Coal submitted to DECCW.

HISCOCK, P.

2008 *Archaeology of Ancient Australia*. Routledge, London & New York.

HOLDAWAY, S. AND N. STERN.

2004 *A Record in Stone: The Study of Australia's Flaked Stone Artefacts*. Aboriginal Studies Press, Melbourne.

KAYANDEL.

2010 *The Georges River Estuary, Cultural Heritage Desktop Assessment*. Report prepared for SMEC.

KOHEN, J.

1993 *The Darug and Their Neighbours: The traditional owners of the Sydney Region*. Darug Tribal Aboriginal Corporation, Sydney.

MCBRYDE, I.

1976 *Subsistence patterns in New England Prehistory*. University of Queensland Occasional Papers in Anthropology. 6:48 – 68.

MCDONALD, J.

1992 Chapter 2: Aboriginal Usage of the Hawkesbury-Nepean In Prehistory. In *Hawkesbury-Nepean Historic Environmental Changes Study*.

MULVANEY, J. AND J. KAMMINGA.

1999 *Prehistory of Australia*. Allen & Unwin, St Leonards, NSW.

NATIONAL HERITAGE LIST.

2011 www.environment.gov.au/heritage/places/national/index.html

NATIONAL NATIVE TITLE TRIBUNAL.

2011 www.nntt.gov.au

NEW SOUTH WALES HERITAGE BRANCH.

2011 *New South Wales Heritage Register*.
www.heritage.nsw.gov.au/07_subnav_04.cfm

NEW SOUTH WALES GOVERNMENT.

1974 *National Parks and Wildlife Act*. New South Wales Government, Sydney.

1979 *Environmental Planning and Assessment Act*. New South Wales Government, Sydney.

1983 *Land Rights Act*. New South Wales Government, Sydney.

1993 *Native Title Act*. New South Wales Government, Sydney.

1999 *Environmental Protection and Biodiversity Conservation Act*. New South Wales Government, Sydney.

NEW SOUTH WALES NATIONAL PARKS AND WILDLIFE SERVICE.

1997 *Aboriginal Cultural Heritage: Standards and Guidelines Kit*. NSW National Parks and Wildlife Service.

SMITH, L.

1988 *Aboriginal Site Planning Study in the Sydney Basin. Stage 1: The Cumberland Plain. Interim report: site survey and site analysis on the northern Cumberland Plain*. Part of the Cumberland Plain Management Study prepared for the NSW National Parks and Wildlife Service.

STRAHLER, A.N.

1957 Quantitative analysis of watershed geomorphology. *American Geophysical Union Transaction*, 33: 913-920.

UMWELT.

2004B. Assessment of Aboriginal Cultural Heritage Conservation Area Options for Glendell Open Cut Mine. Report to Glendell Joint Venture.

WALKER, P.H.

1975 *A Soil Survey of The Cumberland Plain*. NSW Department of Agriculture.

APPENDICES

APPENDIX ONE AHIMS EXTENSIVE SEARCH RESULT



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : Green Square School
Client Service ID : 607744

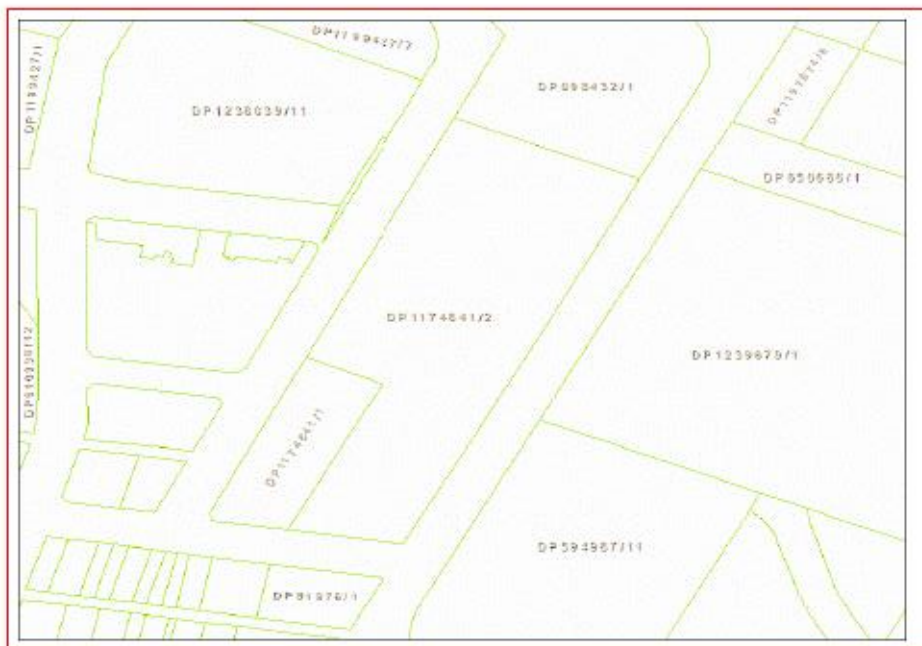
Benjamin Street
122c Percival Road
Stanmore New South Wales 2048
Attention: Benjamin Street
Email: benjaminstreet@archaeological.com.au

Date: 20 July 2021

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 2, DP:DP1174641 with a Buffer of 50 meters, conducted by Benjamin Street on 20 July 2021.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

1	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location.*



**AHIMS Web Services (AWS)
Search Result**

Purchase Order/Reference : Green Square

Client Service ID: 502117

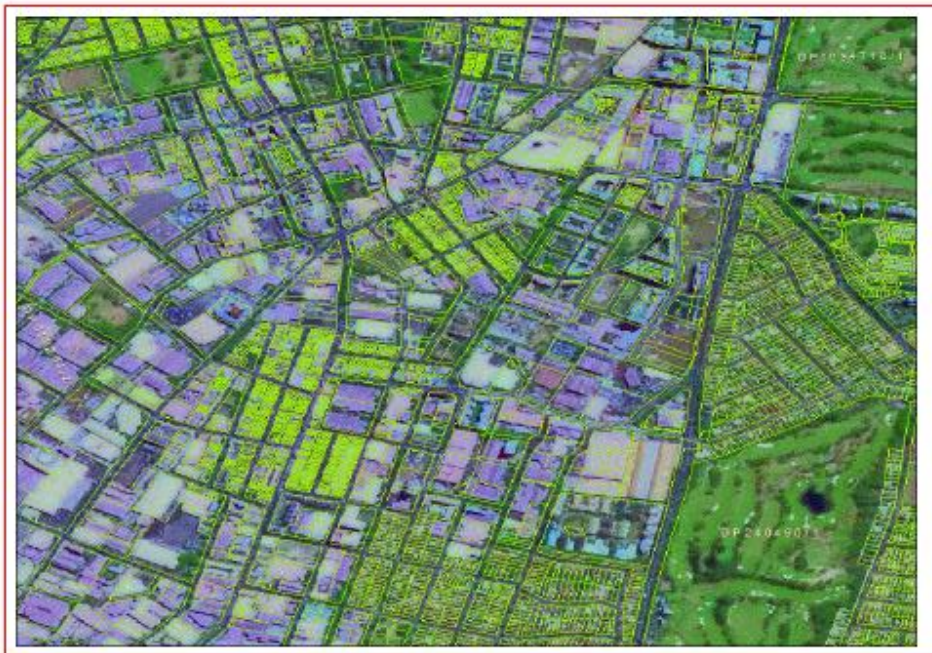
Benjamin Street
122 c-d Percival Road
Stanmore New South Wales 2048
Attention: Benjamin Street
Email: streatarchaeological@netspace.net.au

Date: 05 May 2020

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 2, DP:DP1174641 with a Buffer of 1000 meters.
Additional Info : As part of ACHA for submission for SSDA, conducted by Benjamin Street on 05 May 2020.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location.*



**AHIMS Web Services (AWS)
Search Result**

Purchase Order/Reference : GreenSq
Client Service ID: 320828

Benjamin Streat
122 c-d Percival Road
Stanmore New South Wales 2048
Attention: Benjamin Streat
Email: streatarchaeological@netspace.net.au

Date: 08 January 2018

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : 2, DP:DP1174641 with a Buffer of 1000 meters.
Additional Info : Due Diligence Report to DoE, conducted by Benjamin Streat on 08 January 2018.**


The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location.*

APPENDIX TWO - AHIMS SITE CARD 45-6-3944



Aboriginal Site Recording Form

Senior Heritage Information Officer, Heritage NSW, Locked Bag 5020, NSW 2124

Office Use Only

Site number 4 | 5 | - | 6 | - | 3 | 9 | 4 | 4

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information access

Gender/male
 Gender/female
 Location restriction
 General restriction
 No access

For further information contact:

Nominated Trustee

Title	Surname	First name	Initials
 	 	 	

Organisation

Address

Phone number Fax

Knowledge holder

Title	Surname	First name	Initials
M r	M o r a n	N a t h a n	N M

Organisation M e t r o p o l i t a n L A L C

Address P O B O X 1 1 0 3 S t r a w b e r r y H i l l s

Phone number 0 2 8 3 9 4 9 3 6 1 Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic location

Site Name N e w G r e e n S q u a r e S c h o o l

Easting 3 3 4 2 0 4 Northing 6 2 4 6 5 8 7 AGD/GDA GDA

Mapsheet B o t a n y B a y

Zone 56 Location method 1:25k Topographic Map

Other registration

Primary recorder

Title	Surname	First name	Initials
M r	S t r e a t	B e n j a m i n	B S

Organisation A M A C G R O U P

Address 1 2 2 c P e r c i v a l R o a d S t a n m o r e

Phone number 0 2 9 5 6 8 6 0 9 3 Fax

Date recorded 16/11/2020

Office Use Only

Client on system

Client on system

Client on system

Aboriginal site recording form - site information			page 3
General site information			Features
<p>Closed site</p> <p>Shelter/cave formation</p> <p><input type="checkbox"/> Boulder</p> <p><input type="checkbox"/> Wind erosion</p> <p><input type="checkbox"/> Water erosion</p> <p><input type="checkbox"/> Rock collapse</p> <p>Condition of Ceiling</p> <p><input type="checkbox"/> Boulder</p> <p><input type="checkbox"/> Sandstone platform</p> <p><input type="checkbox"/> Silica gloss</p> <p><input type="checkbox"/> Tessellated</p> <p><input type="checkbox"/> Weathered</p> <p><input type="checkbox"/> Other platform</p>	<p>Rock surface condition</p> <p><input type="checkbox"/> Boulder</p> <p><input type="checkbox"/> Sandstone platform</p> <p><input type="checkbox"/> Silica gloss</p> <p><input type="checkbox"/> Tessellated</p> <p><input type="checkbox"/> Weathered</p> <p><input type="checkbox"/> Other platform</p> <p>Shelter Aspect</p> <p><input type="checkbox"/> North</p> <p><input type="checkbox"/> North East</p> <p><input type="checkbox"/> East</p> <p><input type="checkbox"/> South East</p> <p><input type="checkbox"/> South</p> <p><input type="checkbox"/> South West</p> <p><input type="checkbox"/> West</p> <p><input type="checkbox"/> North West</p>	<p>Open site</p> <p>Site orientation</p> <p><input type="checkbox"/> N-S</p> <p><input checked="" type="checkbox"/> NE-SW</p> <p><input type="checkbox"/> E-W</p> <p><input type="checkbox"/> SE-NW</p> <p><input type="checkbox"/> N/A</p>	<p><input type="checkbox"/> 1. Aboriginal ceremony and dreaming</p> <p><input type="checkbox"/> 2. Aboriginal resource and gathering</p> <p><input type="checkbox"/> 3. Art</p> <p><input type="checkbox"/> 4. Artefact</p> <p><input type="checkbox"/> 5. Burial</p> <p><input type="checkbox"/> 6. Ceremonial ring</p> <p><input type="checkbox"/> 7. Conflict</p> <p><input type="checkbox"/> 8. Earth mound</p> <p><input type="checkbox"/> 9. Fish trap</p> <p><input type="checkbox"/> 10. Grinding groove</p> <p><input type="checkbox"/> 11. Habitation structure</p> <p><input type="checkbox"/> 12. Hearth</p> <p><input type="checkbox"/> 13. Non human bone & organic material</p> <p><input type="checkbox"/> 14. Ochre quarry</p> <p><input checked="" type="checkbox"/> 15. Potential archaeological deposit</p> <p><input type="checkbox"/> 16. Stone quarry</p> <p><input type="checkbox"/> 17. Shell</p> <p><input type="checkbox"/> 18. Stone arrangement</p> <p><input type="checkbox"/> 19. Modified tree</p> <p><input type="checkbox"/> 20. Water hole</p>
Site plan <small>Indicate scale, boundaries of site, features</small>			<p>Site dimensions</p> <p>Closed site dimensions (m)</p> <p><input type="text"/> Internal length</p> <p><input type="text"/> Internal width</p> <p><input type="text"/> Shelter height</p> <p><input type="text"/> Shelter floor area</p> <p>Open site dimensions (m)</p> <p><input type="text"/> Total length of visible site</p> <p><input type="text"/> Average width of visible site</p> <p><input type="text"/> Estimated area of visible site</p> <p><input type="text"/> Length of assessed site area</p>

Aboriginal site recording form - site interpretation and community statement		<i>page 4</i>
Aboriginal community interpretation and management recommendations		
No specific archaeological significance can as yet be assigned to the study area. <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		
Preliminary site assessment		
Site cultural and scientific analysis and preliminary management recommendations		
No cultural and scientific significance has as yet been assigned to the study area. <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>		
This section should only be filled in by the endorsees Endorsed by: <input type="checkbox"/> Knowledge holder <input type="checkbox"/> Nominated trustee <input type="checkbox"/> Native Title holder <input type="checkbox"/> Community consensus		
Title <input style="width: 30px; height: 15px;" type="text"/>	Surname <input style="width: 150px; height: 15px;" type="text"/>	First name <input style="width: 150px; height: 15px;" type="text"/>
Organisation <input style="width: 200px; height: 15px;" type="text"/>	Address <input style="width: 200px; height: 15px;" type="text"/>	
Phone number <input style="width: 100px; height: 15px;" type="text"/>	Fax <input style="width: 100px; height: 15px;" type="text"/>	
Attachments (No.) <input type="checkbox"/> A4 location map <input type="checkbox"/> B/W photographs <input type="checkbox"/> Colour photographs <input type="checkbox"/> Slides <input type="checkbox"/> Aerial photographs <input type="checkbox"/> Site plans, drawings <input type="checkbox"/> Recording tables <input type="checkbox"/> Other <input type="checkbox"/> Feature inserts-No. <input style="width: 20px;" type="text"/>	Comments <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	

Feature recording form - artefact		page 1
Site I.D. <input style="width: 100px;" type="text"/>	Site name <input style="width: 300px;" type="text"/>	
First recorded date <input style="width: 100px;" type="text"/>	Importance <input style="width: 150px;" type="text"/>	
No. of instances <input style="width: 100px;" type="text"/>		
Recorded by <input style="width: 100px;" type="text"/>		
Stone artefacts only <input style="width: 100px;" type="text"/>		
Artefacts collected <input style="width: 100px;" type="text"/>	Percentage of non-stone artefacts to percentage of stone artefacts	
<small>A permit is required to collect artefacts</small>	0-9% <input type="checkbox"/> 10-19% <input type="checkbox"/> 20-29% <input type="checkbox"/> 30-39% <input type="checkbox"/> 40-49% <input type="checkbox"/> 50-59% <input type="checkbox"/> 60-69% <input type="checkbox"/> 70-79% <input type="checkbox"/> 80-89% <input type="checkbox"/> 90-100% <input type="checkbox"/>	
Feature context and condition		
Scatter No. <input style="width: 50px;" type="text"/>	Easting <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>	Northing <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/> <input style="width: 50px;" type="text"/>
Density <small>(Artefact count per square metre)</small> <input style="width: 50px;" type="text"/>	Dimensions	
	Length (m) <input style="width: 50px;" type="text"/>	Width (m) <input style="width: 50px;" type="text"/>
	Depth (m) <input style="width: 50px;" type="text"/>	
	In situ <input style="width: 50px;" type="text"/>	Stratified <input style="width: 50px;" type="text"/>
Feature condition	General condition	Recommended action
<input type="checkbox"/> Very good	<input type="checkbox"/> Weathered	<input type="checkbox"/> Boardwalk
<input type="checkbox"/> Good	<input type="checkbox"/> Vehicle damage	<input type="checkbox"/> Fencing
<input type="checkbox"/> Poor	<input type="checkbox"/> Surface water wash	<input type="checkbox"/> Closure to public
	<input type="checkbox"/> Fire damage	<input type="checkbox"/> Continued inspection
	<input type="checkbox"/> Erosion	<input type="checkbox"/> Fire hazard reduction
	<input type="checkbox"/> Stock damage	<input type="checkbox"/> Expert assessment
	<input type="checkbox"/> Exposed archaeological material	<input type="checkbox"/> Meeting with land manager
		<input type="checkbox"/> Revegetation
		<input type="checkbox"/> Signage
		<input type="checkbox"/> Soil erosion control
		<input type="checkbox"/> Track closure/re-routing
		<input type="checkbox"/> Additional recording
Feature plan (Indicate scale, location of instances)		
	Feature environment <small>(Complete when feature environment differs to site environment, use attributes from cover card, p. 2)</small>	
	<input style="width: 100px;" type="text"/>	Land form
	<input style="width: 100px;" type="text"/>	Land form unit
	<input style="width: 100px;" type="text"/>	Slope
	<input style="width: 100px;" type="text"/>	Vegetation
	<input style="width: 100px;" type="text"/>	Land use
	Water	
	Distance to permanent water source <input style="width: 50px;" type="text"/>	metres
	Distance to temporary water source <input style="width: 50px;" type="text"/>	metres
	Name of nearest permanent water source	
	<input style="width: 250px;" type="text"/>	
	Name of nearest temporary water	
	<input style="width: 250px;" type="text"/>	

Feature recording form - groove		page 1
Site I.D. <input style="width: 50px;" type="text"/>	Site name <input style="width: 300px;" type="text"/>	
First recorded date <input style="width: 50px;" type="text"/>	Importance <input style="width: 50px;" type="text"/>	Aboriginal information recorded? <input style="width: 50px;" type="text"/>
No. of instances <input style="width: 50px;" type="text"/>		
Recorded by <input style="width: 100px;" type="text"/>		
Feature description		
Type of grinding feature	Seed species present	Recording date <input style="width: 50px;" type="text"/>
<input type="checkbox"/> Broad <input type="checkbox"/> Narrow/point <input type="checkbox"/> Hollow <input type="checkbox"/> Flat	<input style="width: 100%; height: 20px;" type="text"/>	
Profile shape	Groove function	
<input type="checkbox"/> 'U' shaped <input type="checkbox"/> 'V' shaped <input type="checkbox"/> Flat	<input style="width: 100%; height: 20px;" type="text"/>	
Dimensions		
Smallest	Largest	
Length (mm) <input style="width: 50px;" type="text"/>	Length (mm) <input style="width: 50px;" type="text"/>	Groove count <input style="width: 50px;" type="text"/>
Width (mm) <input style="width: 50px;" type="text"/>	Width (mm) <input style="width: 50px;" type="text"/>	Cluster count <input style="width: 50px;" type="text"/>
Depth (mm) <input style="width: 50px;" type="text"/>	Depth (mm) <input style="width: 50px;" type="text"/>	
Feature context and condition		
Easting <input style="width: 50px;" type="text"/> Northing <input style="width: 50px;" type="text"/>		
Dimensions of whole feature <input style="width: 50px;" type="text"/> Length (m) <input style="width: 50px;" type="text"/> Width (m) <input style="width: 50px;" type="text"/>		
Feature condition	General condition ctd.	Recommended action
<input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Poor	<input type="checkbox"/> Fire damage <input type="checkbox"/> Surface water wash <input type="checkbox"/> Graffiti <input type="checkbox"/> Vehicle damage <input type="checkbox"/> Erosion <input type="checkbox"/> Stock damage	<input type="checkbox"/> Boardwalk <input type="checkbox"/> Cage/barrier/fencing <input type="checkbox"/> Closure to public <input type="checkbox"/> Continued inspection <input type="checkbox"/> Expert assessment <input type="checkbox"/> Graffiti removal <input type="checkbox"/> Meeting with land manager
General condition	<input type="checkbox"/> Revegetation <input type="checkbox"/> Rubbish removal <input type="checkbox"/> Signage <input type="checkbox"/> Erosion control <input type="checkbox"/> Track closure/re-routing <input type="checkbox"/> Additional recording	
<input type="checkbox"/> Weathered <input type="checkbox"/> Vandalised		
Feature plan <small>(Indicate scale, location of instances)</small>		
Feature environment <small>(Complete when feature environment differs to site environment, use attributes from cover card, p. 2)</small>		
<input style="width: 100%;" type="text"/> Land form		
<input style="width: 100%;" type="text"/> Land form unit		
<input style="width: 100%;" type="text"/> Slope		
<input style="width: 100%;" type="text"/> Vegetation		
<input style="width: 100%;" type="text"/> Land use		
Water		
Distance to permanent water source <input style="width: 50px;" type="text"/> metres		
Distance to temporary water source <input style="width: 50px;" type="text"/> metres		
Name of nearest permanent water source		
<input style="width: 100%;" type="text"/>		
Name of nearest temporary water		
<input style="width: 100%;" type="text"/>		

Feature recording form - shell		page 1
Site I.D. <input style="width: 50px;" type="text"/>	Site name <input style="width: 300px;" type="text"/>	
First recorded date <input style="width: 50px;" type="text"/>	Importance <input style="width: 100px;" type="text"/>	Aboriginal information recorded? <input style="width: 50px;" type="text"/>
No. of instances <input style="width: 50px;" type="text"/>	Recorded by <input style="width: 150px;" type="text"/>	
Feature context and condition		
Easting <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> Northing <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/> <input style="width: 40px;" type="text"/>		
Dimensions of whole feature <input style="width: 40px;" type="text"/> Length (m) <input style="width: 40px;" type="text"/> Width (m) <input style="width: 40px;" type="text"/> Depth (m)		
shell distribution		
<input type="checkbox"/> Surface scatter <input style="width: 40px;" type="text"/> Distance to high water mark (m)		
<input type="checkbox"/> Stratified deposit		
<input type="checkbox"/> Mounded		
Feature condition	General condition ctd	Recommended action
<input type="checkbox"/> Very good	<input type="checkbox"/> Fire damage	<input type="checkbox"/> Boardwalk
<input type="checkbox"/> Good	<input type="checkbox"/> Vehicle damage	<input type="checkbox"/> Cage/barrier/fencing
<input type="checkbox"/> Poor	<input type="checkbox"/> Insects/termites	<input type="checkbox"/> Closure to public
<input type="checkbox"/> General condition	<input type="checkbox"/> Erosion	<input type="checkbox"/> Continued inspection
<input type="checkbox"/> Weathered	<input type="checkbox"/> Stock damage	<input type="checkbox"/> Expert assessment
<input type="checkbox"/> Vandalised	<input type="checkbox"/> Unstable structure	<input type="checkbox"/> Fire hazard removal
<input type="checkbox"/> Surface water wash	<input type="checkbox"/> Exposed bone material	<input type="checkbox"/> Graffiti removal
<input type="checkbox"/> Mineralisation	<input type="checkbox"/> Exposed archaeological material	<input type="checkbox"/> Meeting with land manager
<input type="checkbox"/> Graffiti		<input type="checkbox"/> Insect/bird nest removal
		<input type="checkbox"/> Revegetation
		<input type="checkbox"/> Rubbish removal
		<input type="checkbox"/> Signage
		<input type="checkbox"/> Erosion control
		<input type="checkbox"/> Track closure/re-routing
		<input type="checkbox"/> Additional recording
Feature plan (Indicate scale, location of instances)		
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> </div> <div style="flex: 1; padding-left: 10px;"> <p>Feature environment <small>(Complete when feature environment differs to site environment, use attributes from cover card, p. 2)</small></p> <p><input style="width: 100%;" type="text"/> Land form</p> <p><input style="width: 100%;" type="text"/> Land form unit</p> <p><input style="width: 100%;" type="text"/> Slope</p> <p><input style="width: 100%;" type="text"/> Vegetation</p> <p><input style="width: 100%;" type="text"/> Land use</p> <p>Water</p> <p>Distance to permanent water source <input style="width: 50px;" type="text"/> metres</p> <p>Distance to temporary water source <input style="width: 50px;" type="text"/> metres</p> <p>Name of nearest permanent water source <input style="width: 100%;" type="text"/></p> <p>Name of nearest temporary water <input style="width: 100%;" type="text"/></p> </div> </div>		

APPENDIX THREE SECRETARY’S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SSD-10381)

Planning Secretary’s Environmental Assessment Requirements	
Section 4.12(8) of the <i>Environmental Planning and Assessment Act 1979</i> Schedule 2 of the Environmental Planning and Assessment Regulation 2000	
Application Number	SSD-10381
Project Name	Green Square Integrated Community Facility and School
Location	3 Joynton Avenue, Zetland
Applicant	NSW Department of Education
Date of Reissue	16 January 2020
General Requirements	<p>The environmental impact statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation).</p> <p>Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.</p> <p>Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include:</p> <ul style="list-style-type: none"> - adequate baseline data - consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); and - measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment. <p>The EIS must also be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV; - an estimate of jobs that will be created during the construction and operational phases of the proposed development; and - certification that the information provided is accurate at the date of preparation.
Key issues	<p>The EIS must address the following specific matters:</p> <p>1. Statutory and Strategic Context</p> <p>Address the relevant planning provisions, goals and strategic planning objectives in the following:</p> <ul style="list-style-type: none"> · <i>Biodiversity Conservation Act 2016</i> · State Environmental Planning Policy (State & Regional Development) 2011 · State Environmental Planning Policy (Infrastructure 2007) · State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

2

- State Environmental Planning Policy No. 64 – Advertising and Signage
- State Environmental Planning Policy No.55 – Remediation of Land
- Draft State Environmental Planning Policy (Remediation of Land)
- Draft State Environmental Planning Policy (Environment)
- South Sydney Local Environmental Plan 114
- South Sydney Local Environmental Plan 1998 and
- Royal South Sydney Hospital Master Plan 2013 (Hill Thalys)

Permissibility

Detail the nature and extent of any prohibitions that apply to the development.

Development Standards

Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.

Provisions

Adequately demonstrate and document in the EIS how each of the provisions in the listed instruments are addressed, including reference to necessary technical documents.

2. Policies

Address the relevant planning provisions, goals and strategic planning objectives in the following:

- NSW State Priorities
- The Greater Sydney Regional Plan, A Metropolis of three cities
- Future Transport Strategy 2056
- State Infrastructure Strategy 2018 – 2038 Building the Momentum
- Sydney's Cycling Future 2013
- Sydney's Walking Future 2013
- Sydney's Bus Future 2013
- Crime Prevention Through Environmental Design (CPTED) Principles
- Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)
- Eastern City District Plan
- Green Square Town Centre Development Control Plan 2012
- Design Guide for Schools – GANSW
- City of Sydney Access Development Control Plan 2004
- City of Sydney Heritage Development Control Plan 2006
- Green Square Town Centre Public Domain Strategy
- Green Square Community and Cultural Precinct Public Domain Coordination Plan
- Green Square Public Art Strategy 2012
- Sydney Landscape Code Volume 2: All development except for single dwellings

3. Operation

- Provide details of the proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services.
- Provide details of the community use of facilities including proposed activities, hours of operation and which areas are to be shared with the community and which areas are to be for exclusive use by the school.
- Provide a detailed justification of suitability of the site to accommodate the proposal.

4. Built Form and Design

- Address the height, density, bulk and scale, setbacks and interface of the

proposal in relation to the surrounding development, topography, streetscape and any public open spaces.

- Address design quality and built form, with specific consideration of the overall site layout, streetscape, open spaces, façade, rooftop, massing, setbacks, building articulation, materials and colours.
- Provide details of any digital signage boards, including size, location and finishes.
- Clearly demonstrate how design quality will be achieved in accordance with Schedule 4 Schools – Design Quality Principles of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* and the GANSW Design Guide for Schools.
- Detail how services, including but not limited to waste management, loading zones, and mechanical plant are integrated into the design of the development.
- Provide detailed site and context analysis to justify the proposed site planning and design approach including massing options and preferred strategy for future development.
- Provide a detailed landscape design, demonstrating consideration of the function, equity, biodiversity and amenity of outdoor play spaces, and integration with built form, security, shade structures, topography, canopy trees and other vegetation.
- Provide a visual impact assessment that identifies any potential impacts on the surrounding built environment and landscape including views to and from the site and any adjoining heritage items.
- Address CPTED Principles.
- Demonstrate good environmental amenity including access to natural daylight and ventilation, acoustic separation, access to landscape and outdoor spaces and future flexibility.
- Demonstrate that Aboriginal culture and heritage is considered and incorporated holistically in the design proposal.

5. Design Excellence

- Undertake an architectural design competition compliant with the *Architectural Design Competition Brief for the Green Square Integrated Community Facility and School (GSICFS)* dated October 2019 and prepared by Urbis for the NSW Department of Education and the City of Sydney.
- Provide the Architectural Design Competition Report prepared by the Jury that:
 - o summarises the competition process incorporating a copy of the competition brief;
 - o outlines the assessment of the design merits of each of the entries;
 - o sets out the rationale for the choice of the preferred design and how it best exhibits the potential to achieve design excellence in accordance with the provisions of Clause 6.9(4) Sydney Local Environmental Plan 2012 (Green Square Town Centre Stage 2) 2013; and
 - o outlines any recommended design amendments that are relevant to the achievement of design excellence.
- Set out how the design integrity of the preferred design will be maintained during design development and through to completion and occupation of the GSICFS.

6. Environmental Amenity

- Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing, view loss and acoustic impacts.
- Conduct a view analysis to the site from key vantage points and streetscape locations (photomontages or perspectives should be provided showing the building envelope and likely future development).
- Include a lighting strategy and measures to reduce spill into the surrounding sensitive receivers.

4

- Identify any proposed use of the school outside of school hours (including weekends) and community use and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures.
- Detail amenity impacts including solar access, acoustic impacts, visual privacy, view loss, overshadowing and wind impacts. A high level of environmental amenity for any surrounding residential land uses must be demonstrated.

7. Staging

Provide details regarding the staging of the proposed development (if any).

8. Transport and Accessibility

Include a transport and accessibility impact assessment, which details, but not limited to the following:

- accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development.
- details of estimated total daily and peak hour trips generated by the proposal for all modes of travel, including vehicle (car driver and car passenger), public transport, pedestrian and bicycle trips.
- the adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development with an appreciation of the cumulative impacts of proposed and approved developments in the area and identification of any upgrades required.
- the identification of infrastructure measures required to integrate the development with the existing/future public transport and active transport network.
- the impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years) to the satisfaction of Transport for NSW and Transport for NSW (Roads and Maritime Services). Specifically, the following intersections are to be examined/modelled:
 - o Joynton Avenue / Future Zetland Avenue
 - o Portman Street / Future Zetland Avenue
- the identification of infrastructure required to address any impacts on traffic efficiency and road safety impacts associated with the proposed development, including details on improvements required to affected intersections, additional school bus routes along bus capable roads (i.e. minimum 3.5m wide travel lanes), additional bus stops or bus bays.
- details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site.
- the proposed walking and cycling access arrangements and connections to public transport services and bicycle networks.
- the proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones.
- proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance.
- proposed number of car parking spaces that is consistent with modal targets for the site that prioritise Sustainable Transport such as Public Transport and Active Transport (cycling and walking) and reduce car dependence.

5

	<ul style="list-style-type: none">· an assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development.· an assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED.· emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).· details of existing and proposed freight and servicing vehicle access arrangements, including a Delivery Service Plan detailing loading dock and servicing provision, adequacy and management ensuring all servicing and loading occurs on-site and does not rely on kerbside controls.· in relation to construction traffic:<ul style="list-style-type: none">o detail vehicle routes, peak hour and daily truck movements, hours of operation, access arrangements, works zone location, haulage routes, construction program and traffic control measures for all demolition / construction activities;o an assessment of road safety at key intersections and locations subject to pedestrian / vehicle / bicycle conflicts;o details of temporary cycling and pedestrian access and end of trip facilities during construction;o an assessment of the likely construction traffic impacts, such as required road / lane closures and diversions, impacts on bus and 'point to point' transport, impacts on pedestrian and cycle movement, and taking into account other construction activities;o details of proposed mitigation measures should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified; ando preparation of a draft Construction Pedestrian and Traffic Management Plan to demonstrate the proposed management of impact. This Plan needs to include works zone location, vehicle routes, number of trucks, hours of operation, indicative construction program, access arrangements and traffic control measures for all demolition/construction activities. <p><u>Relevant Policies and Guidelines:</u></p> <ul style="list-style-type: none">· Guide to Traffic Generating Developments (Roads and Maritime Services)· EIS Guidelines – Road and Related Facilities (DoPI)· Cycling Aspects of Austroads Guides· NSW Planning Guidelines for Walking and Cycling· Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development· Australian Standard AS 2890.3:2015 Parking Facilities Part 3: Bicycle Parking Facilities.· 'Austroads Bicycle Parking Facilities: Guidelines for Design and Installation'· Green Square Town Centre DCP 2012. <p>9. Ecological Sustainable Development (ESD)</p> <ul style="list-style-type: none">· Detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design and ongoing operation phases of the development.· Include a framework for how the future development will be designed to consider and reflect national best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water
--	---

efficient design (including water sensitive urban design) and technology and use of renewable energy.

- Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance.
- Include an assessment against an accredited ESD rating system or an equivalent program of ESD performance. This should include a minimum rating scheme target level.
- Demonstrate how environmental design will be achieved in accordance with the GANSW Environmental Design in Schools Manual (<https://www.governmentarchitect.nsw.gov.au/guidance/environmental-design-in-schools>) and Section 5.15 of the Architectural Design Competition Brief for the GSICFS dated October 2019 and prepared by Urbis.
- Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically:
 - o hotter days and more frequent heatwave events.
 - o extended drought periods.
 - o more extreme rainfall events.
 - o gustier wind conditions.
 - o how these will inform landscape design, material selection and social equity aspects (respite/shelter areas).

Relevant Policies and Guidelines:

- NSW and ACT Government Regional Climate Modelling (NARCIIM) climate change projections.

10. Heritage

- Provide a statement of significance and an assessment of the impact on the heritage significance of the state and local heritage items in the vicinity and on the site and the adjoining heritage conservation areas in accordance with the guidelines in the NSW Heritage Manual.
- Address any archaeological potential and significance on the site and the impacts the development may have on this significance.

11. Social Impacts

- Prepare a social impact assessment, which:
 - o identifies and analyses the potential social impacts of the development, from the points of view of the affected community/ies and other relevant stakeholders, i.e. how they expect to experience the project.
 - o considers how potential environmental changes in the locality may affect people's: way of life; community; access to and use of infrastructure, services, and facilities; culture; health and wellbeing; surroundings; personal and property rights; decision-making systems; and fears and aspirations, as relevant and considering how different groups may be disproportionately affected.
 - o assesses the significance of positive, negative, and cumulative social impacts considering likelihood, extent, duration, severity/scale, sensitivity/importance, and level of concern/interest.
 - o includes mitigation measures for likely negative social impacts, and any proposed enhancement measures.
 - o details how social impacts will be adaptively monitored and managed over time.

12. Aboriginal Heritage

- Identify and describe the Aboriginal cultural heritage values that exist across the site and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation.

- Identify and address the Aboriginal cultural heritage values in accordance with the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW (OEH, 2010).
- Undertake consultation with Aboriginal people and document in accordance with Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values of Aboriginal people who have a cultural association with the land are to be documented in the ACHAR.
- Identify, assess and document all impacts on the Aboriginal cultural heritage values in the ACHAR.
- The EIS and the supporting ACHAR must demonstrate attempts to avoid any impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR and EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to EES Group at the Department.

13. Noise and Vibration

- Identify and provide a quantitative assessment of the main noise and vibration generating sources during demolition, site preparation, bulk excavation, construction. Outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.
- Identify and assess operational noise, including consideration of any public-address system, school bell, mechanical services (e.g. air conditioning plant), use of any school hall for concerts etc. (both during and outside school hours) and any out of hours community use of school facilities, and outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.
- an assessment of the likely vibration amenity and structural impacts of the project under the German Standard DIN 4150-3 Structural Vibration – Effects of vibration on structures, including consideration of impacts to the structural integrity and significance of heritage items.

Relevant Policies and Guidelines:

- NSW Noise Policy for Industry 2017 (EPA)
- Interim Construction Noise Guideline (DECC)
- Assessing Vibration: A Technical Guideline 2006
- Development Near Rail Corridors and Busy Roads – Interim Guideline (Department of Planning 2008)
- Australian Standard 2363: 1999 Acoustics – Measurement of noise from helicopter operations.

14. Contamination

- Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. A site audit statement will be required to demonstrate that the accompanying reports and any recommended actions are sufficient to satisfy SEPP 55.
- Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works.

Relevant Policies and Guidelines:

- Managing Land Contamination: Planning Guidelines - SEPP 55 Remediation of Land (DUAP).

15. Utilities

- Prepare an Infrastructure Management Plan in consultation with relevant agencies, detailing information on the existing capacity and any augmentation

and easement requirements of the development for the provision of utilities including staging of infrastructure.

- Prepare an Integrated Water Management Plan detailing any proposed alternative water supplies, proposed end uses of potable and non-potable water, and water sensitive urban design.

16. Contributions

Address Council's 'Section 7.11 Contribution Plan' and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.

17. Drainage

- Detail measures to minimise operational water quality impacts on surface waters and groundwater and to maximise on-site water infiltration.
- Stormwater plans detailing the proposed methods of drainage without impacting on the downstream properties. WSUD infrastructure and canopy tree planting must form part of the stormwater plans where appropriate.

Relevant Policies and Guidelines:

- Guidelines for development adjoining land and water managed by DECCW (OEH, 2013).

18. Flooding

Identify flood risk on-site (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the NSW Floodplain Development Manual (2005) and Council's Interim Floodplain Management Policy, including the potential effects of climate change, sea level rise and an increase in rainfall intensity. If there is a material flood risk, include design solutions for mitigation. The development is also required to consider Section 5.13 of the Architectural Design Competition Brief for the GSICFS dated October 2019 and prepared by Urbis.

19. Biodiversity Assessment

- Biodiversity impacts related to the proposed development (SSD 10224) are to be assessed in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method.
- The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method.
- The BDAR must include details of the measures proposed to address the offset obligation as follows:
 - o the total number and classes of biodiversity credits required to be retired for the development/project
 - o the number and classes of like-for-like biodiversity credits proposed to be retired
 - o the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules
 - o any proposal to fund a biodiversity conservation action
 - o any proposal to make a payment to the Biodiversity Conservation Fund.
- If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.
- The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method

	<p>Order 2017 under s6.10 of the <i>Biodiversity Conservation Act 2016</i>.</p> <ul style="list-style-type: none"> Where a Biodiversity Assessment Report is not required, engage a suitably qualified person to assess and document the flora and fauna impacts related to the proposal. <p><i>Note: Notwithstanding these requirements, the Biodiversity Conservation Act 2016 requires that State Significant Development Applications be accompanied by a Biodiversity Development Assessment Report unless otherwise specified under the Act.</i></p> <p>20. Sediment, Erosion and Dust Controls Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.</p> <p><i>Relevant Policies and Guidelines:</i></p> <ul style="list-style-type: none"> Managing Urban Stormwater – Soils & Construction Volume 1 2004 (Landcom) Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA) Guidelines for development adjoining land and water managed by DECCW (OEH, 2013) <p>21. Waste Identify, as per Section 5.16 of the Architectural Design Competition Brief for the GSICFS dated October 2019 and prepared by Urbis, quantify and classify the likely waste streams to be generated during construction and operation and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste. Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.</p> <p>22. Construction Hours Identify proposed construction hours and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.</p>
<p>Plans and Documents</p>	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents.</p> <p>In addition, the EIS must include the following:</p> <ul style="list-style-type: none"> A section 10.7(2) and (5) Planning Certificates (previously Section 149(2) and (5) Planning Certificate) Architectural drawings showing key dimensions, RLs, scale bar and north point, including: <ul style="list-style-type: none"> plans, sections and elevation of the proposal at no less than 1:200 showing indicative furniture layouts and program illustrated materials schedule including physical or digital samples board with correct proportional representation of materials, nominated colours and finishes details of proposed signage, including size, location and finishes detailed annotated wall sections at 1:20 scale that demonstrate typical cladding, window and floor details, including materials and general construction quality site plans and operations statement demonstrating the after hours and community use strategy Site Survey Plan, showing existing levels, location and height of existing, future and adjacent structures / buildings and site boundaries Site Analysis Plan including:

	<ul style="list-style-type: none"> o site and context plans that demonstrate principles for future development and expansion, built form character and open space network o active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links o site and context plans that demonstrate principles for future network, active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links · Sediment and Erosion Control Plan · Shadow Diagrams · View analysis, photomontages and architectural renders, including from those from public vantage points · Landscape architectural drawings showing key dimensions, RLs, TOW levels, scale bar and north point, including: <ul style="list-style-type: none"> o integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, tree canopy cover materials and finishes proposed including articulation of playground spaces o plan identifying significant trees, trees to be removed and trees to be retained or transplanted o details of any planting on structure, confirming sufficient soil volume, drainage, irrigation and easy access for maintenance · Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: <ul style="list-style-type: none"> o architectural design statement o diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal o detailed site and context analysis o analysis of options considered including building envelope study to justify the proposed site planning and design approach o visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage conservation areas and heritage items o demonstrate compliance with the City of Sydney Competitive Design Policy o community and response to any feedback provided. · Geotechnical and Structural Report · Accessibility Report · Arborist Report and · Schedule of materials and finishes.
<p>Consultation</p>	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, special interest groups including local Aboriginal land councils and registered Aboriginal stakeholders and affected landowners. In particular, you must consult with:</p> <ul style="list-style-type: none"> · City of Sydney Council · Government Architect NSW · Transport for NSW and · Transport for NSW (Roads and Maritime Services). <p>Consultation should commence as soon as practicable to agree the scope of investigation.</p> <p>The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>
<p>Further consultation</p>	<p>If you do not lodge a Development Application and EIS for the development within two</p>

11

after 2 years	years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.