



Environmental Impact Statement

State Significant Development

New Sport and Wellbeing Centre Development

Roseville College – 27-29 and 37 Bancroft Avenue, Roseville

PLANNING. URBAN DESIGN.

RETAIL AND ECONOMIC. HERITAGE

DECLARATION
ENVIRONMENTAL IMPACT STATEMENT

<p>Applicant Name:</p> <p>Applicant Address:</p> <p>Land to be developed:</p> <p>SSD Application Number:</p> <p>Proposed development:</p>	<p>Roseville College</p> <p>27 Bancroft Avenue, Roseville NSW 2069</p> <p>Lot 2003 DP1084428 (27-29 Bancroft Avenue) and Lot 18 Section C DP 5035 (37 Bancroft Avenue)</p> <p>SSD 9912</p> <p>New Sport and Wellbeing Centre</p>
<p>ENVIRONMENTAL IMPACT STATEMENT</p>	<p>This report is an Environmental Impact Statement which addresses all relevant matters required by Section 4.12(8) of the <i>Environmental Planning and Assessment Act 1979</i> and Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p>
<p>DECLARATION</p>	<p>The undersigned certify that we have prepared the contents of this Environmental Impact Statement and to the best of our knowledge it:</p> <ul style="list-style-type: none"> • addresses all relevant matters listed under Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>; • contains all available information that is relevant to the environmental assessment of the development to which the EIS relates; and • is not, by its presentation or omission of information, false nor misleading.
<p>PREPARED BY</p> <p>Name:</p> <p>Qualifications:</p> <p>Address:</p> <p>Signature:</p>	<p>Kendall Clydsdale</p> <p><i>DipBldgSurv, GradCertDevAssmt, GradDipBldgSurv, RPIA</i></p> <p>11 Dartford Road, Thornleigh NSW 2120</p> 
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<p>Date:</p>	<p>11 November 2019</p>

Contents

Executive Summary	x
1 Introduction	1
1.1 Purpose of this Report	1
1.2 Project Summary and Objectives	1
1.3 Response to SEARs	2
2 Background	13
2.1 Site History	13
2.2 Development Application History	13
3 Site Context	15
3.1 Location	15
3.2 Site Description	15
3.2.1 27-29 Bancroft Avenue, Roseville	16
3.2.2 37 Bancroft Avenue, Roseville	19
3.3 Surrounding Development	19
3.4 Surrounding Road and Transport Network	20
3.4.1 Road Network	20
3.4.2 Rail Network	22
3.4.3 Bus Network	22
3.4.4 Cycling Network	22
3.5 Current Operations	22
4 Project Description	23
4.1 Project Summary	23
4.2 Demolition and Site Preparation	24
4.3 Construction of New Sport and Wellbeing Centre	25
4.3.1 Design Analysis	26
4.4 Landscaping	26
4.5 Car Parking and Vehicular Access	28
4.6 Stormwater Management	29
4.7 Operation – Staff and Students and Hours of Operation	30
4.8 Ecologically Sustainable Development	30
4.9 Building Code of Australia and Accessibility	31
5 Consultation	32
5.1 General	32
5.2 Ku-ring-gai Municipal Council	32
5.3 Government Architects Office (GANSW)	32
5.4 Road and Maritime Service (RMS)	34

Contents

5.5	Transport for NSW (TfNSW)	34
5.6	Neighbouring Landowners and Relevant Community Groups	34
5.6.1	Consultation Activities – Stakeholder Meetings and Correspondence	35
5.6.2	Consultation Activities – Community Drop-in Sessions	35
5.6.3	Consultation Activities – Feedback Received	36
5.6.4	Consultation Activities – On-going	36
6	Environmental Assessment	38
6.1	General	38
6.2	Environmental Planning and Assessment Act 1979	38
6.2.1	Section 1.3 - Objects of the EP&A Act	38
6.2.2	Section 1.7 – Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994”	39
6.3	Biodiversity Conservation Act 2016	39
6.4	Planning Controls	40
6.4.1	State Environmental Planning Policy No.55 – Remediation of Land	40
6.4.2	State Environmental Planning Policy No. 64 – Advertising and Signage	41
6.4.3	State Environmental Planning Policy (Infrastructure) 2007	43
6.4.4	State Environmental Planning Policy (State and Regional Development) 2011	43
6.4.5	State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017	43
6.4.6	Ku-ring-gai Local Environmental Plan (Local Centres) 2012 (KLCLEP)	45
6.4.7	Ku-ring-gai Local Environmental Plan 2015 (KLEP)	47
6.5	Draft State Environmental Planning Policy (Remediation of Land)	55
6.6	Draft State Environmental Planning Policy (Environment)	56
6.7	Policies	56
6.7.1	State and Local Policies	56
6.7.2	Ku-ring-gai Local Centres Development Control Plan 2012	59
6.7.3	Ku-ring-gai Development Control Plan 2015	60
6.8	Likely Impacts of the Development	61
6.8.1	Built Form and Urban Design	61
6.8.2	Biodiversity and Environmental Amenity	62
6.8.3	Biodiversity and Natural Environment Impacts	62
6.8.4	Environmental Amenity	64
6.8.5	Aboriginal Heritage	65
6.8.6	Heritage (Built)	66
6.8.7	Transport and Accessibility	69
6.8.7.1	Existing Traffic Conditions	69
6.8.7.2	Public Transport	70
6.8.7.3	Traffic Generation	71
6.8.7.4	Access and Parking	71
6.8.7.5	Green Travel	71
6.8.7.6	Construction Traffic Management	71
6.8.8	Ecologically Sustainable Development (ESD)	73
6.8.9	Social Impacts	74

Contents

6.8.10	Economic Impacts	74
6.8.11	Crime, Security and Crime Prevention Through Environmental Design CPTED	74
6.8.12	Noise and Vibration	75
6.8.12.1	External Noise Intrusion	76
6.8.12.2	External Noise Emission	77
6.8.12.3	Construction Noise and Vibration	77
6.8.13	Visual Impact and Privacy	77
6.8.14	Stormwater Management, Drainage and Integrated Water Cycle Management	80
6.8.15	Solar Access	81
6.8.16	Erosion, Sediment and Dust Control	84
6.8.16.1	Erosion and Sediment Control	84
6.8.16.2	Dust Control	84
6.8.17	Structural	84
6.8.18	Waste Management	85
6.8.18.1	Operational Waste	85
6.8.18.2	Demolition Waste	85
6.8.18.3	Construction Waste	86
6.8.19	Construction Environmental Management	86
6.8.20	Contributions	87
6.9	Suitability of the Site for Development	87
6.9.1	Water and Soils	88
6.9.1.1	Acid Sulfate Soils	88
6.9.1.2	Rivers, Streams, Wetlands and Estuaries	88
6.9.1.3	Salinity	88
6.9.1.4	Groundwater	88
6.9.2	Contamination and Hazardous Materials	89
6.9.2.1	Contamination	89
6.9.2.2	Hazardous Materials	90
6.9.3	Natural Hazards (Bush Fire and Flooding)	90
6.9.4	Infrastructure and Utilities	90
6.9.4.1	Electrical and Telecommunication Utilities and Services	90
6.9.4.2	Hydraulic Utilities and Services (Water Related Infrastructure)	90
6.10	Public Interest	91
7	Other Statutory Approvals	92
7.1	General	92
7.2	Commonwealth Department of Environment and Energy	92
7.2.1	Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	92
7.3	NSW Department of Planning, Industry and Environment (DPIE) – Environment, Energy and Science (EES) Group	92
7.3.1	Heritage Act 1977	92
7.4	Natural Resource Access Regulator (NRAR)	93
7.4.1	Water Management Act 2000 (WM Act)	93
7.5	Transport for NSW (TfNSW) – NSW Roads and Maritime Services (RMS)	94

Contents

7.5.1	Roads Act 1993	94
8	Environmental Risk Assessment	95
8.1	Risk Assessment	95
8.2	Risk Management	96
9	Conclusion	98

Contents

Figures

Figure 1	Extract of Figure 32 from Heritage Impact Statement	13
Figure 2	Site Location	15
Figure 3	The Site	16
Figure 4	Aerial image 27-29 Bancroft Avenue, Roseville	16
Figure 5	Looking south-east from Bancroft Avenue towards existing sports courts to be demolished. Existing Joy Yeo Centre building in background on right.	17
Figure 6	Looking east along Bancroft Avenue frontage	17
Figure 7	Looking east towards 37 Bancroft Avenue. Southern end of sports courts to be demolished shown.	18
Figure 8	Existing Joy Yeo Centre on the Site whose basement parking will connect with the proposed developments basement car park.	18
Figure 9	Existing dwelling on 37 Bancroft Avenue. Source: DA0563/18 – KMC DA Tracker	19
Figure 10	Aerial image 37 Bancroft Avenue, Roseville	19
Figure 11	Surrounding Development Context	20
Figure 12	Aerial image of Surrounding Development	20
Figure 13	Surrounding Road Network	21
Figure 14	Broader road hierarchy. Source: Extract from TIA prepared by PTC	22
Figure 15	Extract of Site Plan	23
Figure 16	Photomontage of proposed development – looking south from Bancroft Avenue	24
Figure 17	Photomontage of proposed development – looking north to rear of proposed development from Recreation Avenue. Joy Yeo Centre building seen on left of image.	24
Figure 18	Presentation to Bancroft Avenue	26
Figure 19	Landscape masterplan for the proposed development	27
Figure 20	Eastern elevation	28
Figure 21	Photomontage showing rooftop planter and trellis screening.	28
Figure 22	Connection shown on Level 1 between existing and proposed car parks	29
Figure 23	Proposed signage	41
Figure 24	Proposed sign dimensions	41
Figure 25	Zoning map for 27-29 Bancroft Avenue under the Ku-ring-gai (Local Centres) Local Environmental Plan 2012	47
Figure 26	Zoning map for 37 Bancroft Avenue under the Ku-ring-gai Local Environmental Plan 2015.	49
Figure 27	Height of buildings map for 37 Bancroft Avenue under the Ku-ring-gai Local Environmental Plan 2015.	49
Figure 28	Extract of building height plan analysis from BHA architectural report.	50
Figure 29	Extract of building height plan analysis from BHA architectural report.	50
Figure 30	FSR map for 37 Bancroft Avenue under the Ku-ring-gai Local Environmental Plan 2015.	51
Figure 31	Riparian Lands and Watercourse Map. 37 Bancroft Avenue.	53
Figure 32	KDCP diagram of a typical Category 3a riparian corridor	54
Figure 33	Developed area within the mapped “Category 3a” riparian land. Source: NSW Government ePlanning Spatial Viewer	54
Figure 34	New landscaping and heat pump enclosure.	55
Figure 35	The ELA study area. Source: ELA	63
Figure 36	Urban exotic vegetation within the study area. Source: ELA	63
Figure 37	27-29 Bancroft Avenue outlined in Blue – heritage mapping from KLCLEP	66
Figure 38	37 Bancroft Avenue – heritage mapping from KLEP	67

Contents

Figure 39	Student transport survey results: from home to school (PTC)	70
Figure 40	Student transport survey results: from school to home (PTC)	70
Figure 41	Malicious damage hot spot map July 2019 – June 2019. Source: BOCSAR 2019.	74
Figure 42	Summary of measured noise levels and noise emission criteria. Source: Acoustic Dynamic Report	76
Figure 43	Maximum external noise levels	76
Figure 44	Proposal development looking down and south-east from Bancroft Avenue	78
Figure 45	Photomontage showing presentation to Bancroft Avenue	79
Figure 46	Proposed development show to the right of 39 Bancroft Avenue. Looking in a south-west direction	79
Figure 47	View of the rear of the proposed building from Recreation Avenue. Existing Joy Yeo Centre shown on the left.	80
Figure 48	Extract of shadow diagrams	82
Figure 49	Shadow at 3pm on the winter solstice	83
Figure 50	Photomontage showing presentation to Bancroft Avenue	83
Figure 51	Extract from PSI showing Ground water levels	89
Figure 52	Environmental Risk Matrix	95

Tables

Table 1	Location of Response to SEARs within this EIS	3
Table 2	Site Description	15
Table 3	Development Statistics	23
Table 4	Proposed Development's Consistency with the Objects of the EP&A Act	38
Table 5	Assessment under SEPP No. 64 – Advertising and Signage	42
Table 6	Assessment against relevant provisions of LEP 2012	45
Table 7	Assessment against relevant provisions of LEP 2015	47
Table 8	Response to Provisions, Goals and Objectives of State Policies	56
Table 9	Assessment against Relevant Provisions of the KLCDCP 2012	60
Table 10	Assessment against Relevant Provisions of the KDCP 2015	61
Table 11	Risk Assessment	95
Table 12	Risk Management Plan	96

Contents

Appendices

1. Secretary's Environmental Impact Assessment Requirements (SEAR's) – *Department of Planning, Industry and Environment (DPIE)*
2. Previous Development Consents - *Ku-ring-gai Municipal Council (KMC)*
3. Planning Certificates – *KMC*
4. Survey – *Rygate Surveyors*
5. Consultation Plan – *Australian Public Affairs (APA)*
6. Architectural Drawings – *Brewster Hjorth Architects (BHA)*
7. Architectural Design Analysis Report – *Brewster Hjorth Architects (BHA)*
8. Landscape Architecture Drawings – *sym.studio*
9. Arboricultural Impact Assessment – *ezi grow*
10. Geotechnical Report – *Douglas Partners*
11. Structural Engineering Report – *Cardno*
12. Accessibility Review – *Morris Goding*
13. Building Code of Australia Compliance Statement – *Group DLA*
14. Preliminary Site Investigation Report (Contamination) – *Douglas Partners*
15. Heritage Impact Statement – *Urbis Heritage*
16. Aboriginal Cultural Heritage Assessment Report (ACHAR) – *Urbis*
17. Civil/Stormwater and Drainage Plans/Erosion and Sediment Control Plan – *Acor Consultants*
18. Stormwater Management Report – *Acor Consultants*
19. Infrastructure Management (Electrical and Communications) – *Acor Consultants*
20. Infrastructure Management (Hydraulic Services) – *JHA*
21. Hazardous Materials Report (Asbestos Register) – *Safe Work & Environments*
22. Transport Impact Assessment – *ptc*
23. Green Travel Plan – *ptc*
24. Preliminary Construction Traffic Management Plan – *ptc*
25. Construction Environmental Management Plan – *EPM*
26. Ecological Sustainable Development (ESD) Report – *Umow Lai*
27. Waste Management Plan – *Waste Audit and Consultancy Services*
28. Acoustic Assessment – *Acoustic Dynamics*
29. Fire Engineering Strategy/Report – *Norman Disney Young (NDY)*
30. Biodiversity Development Assessment Report (BDAR) Waiver and Ecological Assessment – *DPIE and Eco Logical Australia*
31. Operational Management Plan – *EPM Projects*
32. Roads Act 1993 Approval – *Ku-ring-gai Municipal*

Contents

Abbreviations¹

AADT	annual average daily vehicle trips
AECG	Aboriginal Education Consultative Group
AEP	Annual Exceedance Probability
AS	Australian Standard
ASS	acid sulfate soils
BCA	Building Code of Australia
BC Act	<i>Biodiversity Conservation Act 2017</i>
CC	construction certificate
CIV	capital investment value
CMP	construction management plan
Council	Ku-ring-gai Municipal Council
CPTED	crime prevention through environmental design
DA	development application
DCP	development control plan
DDA	<i>Disability Discrimination Act 1992 (Cth)</i>
DFP	DFP Planning Pty Ltd
DP	Deposited Plan
DPIE	NSW Department of Planning, Industry and Environment
EEC	endangered ecological community
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	NSW Environmental Protection Authority
EPI	environmental planning instrument
ESCP	erosion and sedimentation control plan
ESD	ecologically sustainable development
FTE	full time equivalent
GANSW	Government Architect NSW
GFA	gross floor area
LALC	Local Aboriginal Land Council
LEP	local environmental plan
LGA	local government area
OSD	on site detention
PAD	potential archaeological deposit
RAP	remedial action plan
RL	reduced level
RMS	NSW Roads and Maritime Services
RC	Roseville College
SDRP	State Design Review Panel
SEPP	state environmental planning policy
SEARs	Secretary's Environmental Assessment Requirements
SRD SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
SSD	State Significant Development
SSDA	State Significant Development Application
TASC	The Anglican Schools Corporation
TfNSW	Transport for NSW
VENM	Virgin Excavated Natural Material
WSUD	water sensitive urban design

¹ This list of abbreviations is not exhaustive

Executive Summary

Roseville College proposes to construct a new fit-for-purpose Sport and Wellbeing Centre. The proposed development has been planned to align the College's facilities with their focus on the wellbeing of students. The proposed new development will result in a new purpose-built indoor swimming pool facility which is complimented by a strength and conditioning room. The development also features a nutrition and food technology space, flexible general learning areas, outdoor multi-purpose sports courts and underground car parking spaces for staff and students. The development will also accommodate the College's growing student population with 1,250 students to be attending the College by the year 2030.

The development site is known as, 27-29 Bancroft Avenue and 37 Bancroft Avenue, Roseville and is located in the Local Government Area of the Ku-ring-gai Municipal Council. 27-29 Bancroft Avenue is the existing Roseville College school campus, and 37 Bancroft Avenue is a recently purchased property that is proposed to be incorporated into the boundaries of the College as part of the proposed development.

The Project entails the follows works:

- Demolition of:
 - existing sports courts (Roseville College site);
 - dwelling house and ancillary structures (37 Bancroft Avenue); and
 - associated tree/vegetation removal.
- Construction of a part two (2) and part three (3) storey sport and wellbeing centre, comprising:
 - Two (2) levels of carparking, accessed via Recreation Avenue and through a new connection to be made to existing school basement carpark (existing building to south of proposed development);
 - Eight (8) lane swimming pool with associated grandstand, plant rooms, change facilities and amenities;
 - Strength and conditioning room (gymnasium);
 - General learning areas;
 - Food technology space and enclosed verandah/ breakout space adjacent;
 - Rooftop sports courts, sports equipment store and covered area adjacent to courts; and
 - Landscaping.

The proposal has a capital investment value exceeding \$20 million and therefore must be assessed as State Significant Development, pursuant to *State Environmental Planning Policy (State and Regional Development) 2011*.

This Environmental Impact Statement report has been prepared in accordance with the Secretary's Environmental Assessment Requirements for SSD-9912 issued by the NSW Department of Planning and Environment (now Department of Planning, Industry and Environment) pursuant to section 4.12(8) of the *Environmental Planning and Assessment Act 1979* and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. This Environmental Impact Statement provides the NSW Department of Planning, Industry and Environment and relevant NSW State Government Agencies with all relevant information necessary to assess the proposed development and for the Minister to determine the Development Application in accordance with Section 4.38 of the *Environmental Planning and Assessment Act 1979*.

The project team has carried out significant consultation with Roseville College, as well as a wide range of stakeholders, including neighbouring and surrounding landowners, State agencies, Local Government, the Aboriginal community and community groups. The advice received throughout the consultation process has informed the consideration of the localised amenity impact and heritage significance which has been incorporated into the current proposal where possible, reflecting a commitment to provide a quality and objective-driven outcome which is also sympathetic to the environment and the setting in which it is located.

Executive Summary

In addition, the proposed building works will provide high quality learning and teaching spaces with flexible layout arrangements and durable finishes ensuring the proposal operates as a long-life, high utility and low-maintenance educational establishment. The works proposed under this DA will be subject to the recommendations of specialist reports so as to ensure appropriate heritage, geotechnical, contamination, traffic and acoustic outcomes are achieved.

The proposed works have been designed to, and will be carried out in, the interests of the public. The Development Application will meet the project objectives to provide additional a high-quality built form which has safe and efficient access for children, teachers, visitors and service personnel.

Accordingly, it is recommended that the Minister for Planning and Public Spaces grant approval to the proposed State Significant Development application as set out in this report.

1 Introduction

1.1 Purpose of this Report

DFP Planning Pty Ltd (DFP) has been commissioned by The Anglican Schools Corporation and Roseville College, to prepare an Environmental Impact Statement (EIS) to accompany a development application (DA) to the NSW Department of Planning, Industry and Environment (DPIE) for the proposed 'sport and wellbeing centre' development (the proposed development) located at Roseville College, 27-29 & 37 Bancroft Avenue, Roseville (the Site).

The proposed development is for an *educational establishment* with a Capital Investment Value (CIV) of more than \$20 million and accordingly, is deemed to be State Significant Development (SSD) pursuant to Schedule 1 of *State Environmental Planning Policy (State and Regional Development) 2011* (the SRD SEPP).

On 21 March 2019, the Secretary of the then Department of Planning and Environment (now DPIE) issued Secretary's Environmental Assessment Requirements (SEARs) (see **Section 1.3** and **Appendix 1**).

This report has been prepared in accordance with the SEARs, Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) to provide the DPIE and relevant NSW State Government Agencies with all relevant information necessary to assess the proposed development and for the Minister to determine the DA in accordance with Section 4.38 of the EP&A Act.

1.2 Project Summary and Objectives

Roseville College (the School) was established in 1908 with humble beginnings at its current location consisting of a single building and small playing field. Over the past 111 years the School has grown to become a leading, non-selective Anglican day school for girls in Kindergarten to Year 12.

The Roseville College sport and wellbeing centre project has been planned to align the School's facilities with their focus on the wellbeing of its students. The School has a growing student population (see **Section 2.2**), and the proposed development will not only serve and accommodate the needs of School's expanding community but to also replace ageing infrastructure and facilities. The School's existing swimming pool (opened in 1973), has reached the end of its life and is costing the School a considerable amount of money to continually maintain. The swimming pool is also unable to be used by students in colder months of the year, leaving it unused for extended period of the year which is an unsustainable use of existing facilities.

Accordingly, the proposed development will feature a new purpose-built indoor swimming pool facility which is complimented by a strength and conditioning room. The development also features a leading-edge nutrition and food technology space, flexible general learning areas, outdoor multi-purpose sports courts and underground car parking spaces for staff and students.

The Project Objectives are as follows:

- To provide a modern, high quality and fit-for-purpose educational establishment to suit the needs to the School's students and Roseville College's focus on the wellbeing of its students;
- To provide a high-quality built form and open spaces that are adaptable and flexible to cater for future educational needs of the School;
- To provide specialist learning areas (nutrition and food technology) which will complement the student wellness mantra of the proposal;
- Replace ageing school facilities;
- Accommodate a growing school population;

1 Introduction

- Increase accessibility throughout the school campus; and
- Provide a safe on-site parking facility to alleviate traffic impacts on the surrounding road network.

The Project is detailed in **Section 4** of this EIS report and can be summarised as follows:

- Demolition of:
 - existing sports courts (Roseville College site);
 - dwelling house and ancillary structures (37 Bancroft Avenue); and
 - associated tree/vegetation removal.
- Construction of a part two (2) and part three (3) storey sport and wellbeing centre, comprising:
 - Level 1:
 - Carpark, accessed through new connection to be made to existing school basement carpark (existing building to south of proposed development);
 - Eight lane swimming pool with associated grandstand, plant rooms, change facilities and amenities;
 - Storage areas;
 - Mechanical plant room
 - Level 2:
 - Carpark accessed from Recreation Avenue;
 - Void to swimming pool below with surrounding balcony;
 - Strength and conditioning room (gymnasium);
 - General learning areas (GLAs);
 - Plant rooms and on-site detention tank (OSD);
 - Level 3:
 - GLA's, food technology space and enclosed verandah/ breakout space adjacent;
 - Rooftop sports courts, sports equipment store and covered area adjacent to courts; and
 - Landscaping.

1.3 Response to SEARs

Table 1 provides a summary of where a response to the SEARs for SSD-9912 issued by DPIE on 21 March 2019 (**Appendix 1**) can be found within this EIS report or accompanying documentation. The response to the SEARs and related assessment set out within this Environmental Impact Statement concludes that all assessment requirements have been met and addressed.

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
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 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 the 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 potential cumulative impacts due to other development in the vicinity (completed, underway or proposed) <p>measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.</p>	Section 8	N/A
<p>The EIS must 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 • an estimate of the jobs that will be created by the future development during the construction and operational phases of the development • certification that the information provided is accurate at the date of preparation. 	Section 6.4.4	Provided Separate to DA
<p>The EIS must address the following specific matters:</p> <p>1. Statutory and Strategic Context Address the statutory provisions contained in all relevant environmental planning instruments, including:</p> <ul style="list-style-type: none"> • Biodiversity Conservation Act 2016 • 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 • 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) • Ku-ring-gai Local Environmental Plan (Local Centres) 2012 and • Ku-ring-gai Local Environmental Plan 2015. <p><i>Permissibility</i> Detail the nature and extent of any prohibitions that apply to the development.</p> <p><i>Development Standards</i> Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.</p>	<p>Section 6.2</p> <p>Section 6.3</p> <p>Section 6.4</p>	Appendix 30
<p>2. Policies Address the relevant planning provisions, goals and strategic planning objectives in the following:</p>	<p>Section 6.4</p> <p>Section 6.7</p>	N/A

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<ul style="list-style-type: none"> • ²NSW 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) • North District Plan • Ku-ring-gai Local Centres Development Control Plan 2016 • Ku-ring-gai Development Control Plan 2016 • Ku-ring-gai Community Strategic Plan. 		
<p>3. Operation</p> <ul style="list-style-type: none"> • Provide details of the existing and proposed school operations, including staff and student numbers, school hours of operation, and operational details of any proposed before/after school care services and/or community use of school facilities. • Provide a detailed justification of suitability of the site to accommodate the proposal. • Provide details of how the school will continue to operate during construction activities of the new primary and secondary school, including proposed mitigation measures. 	<p>Section 3.5</p> <p>Section 4.7</p>	<p>Appendix 31</p>
<p>4. Built Form and Urban Design</p> <ul style="list-style-type: none"> • 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, colours 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 site-wide landscape strategy, including consideration of equity and amenity of outdoor play spaces, and integration with built form, security, shade, topography and existing 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. 	<p>Section 6.4.2</p> <p>Section 6.4.5</p> <p>Section 6.8.1</p> <p>Section 6.8.11</p> <p>Section 6.8.13</p> <p>Section 6.8.15</p>	<p>Appendix 6</p> <p>Appendix 7</p> <p>Appendix 8</p>

² Email correspondence from DPIE on 01/08/19 advised DFP to address the Current Premier’s Priorities in lieu of the former NSW State Priorities

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<ul style="list-style-type: none"> Demonstrate the incorporation of Aboriginal culture and heritage in the design proposal, to be developed in consultation with the local Aboriginal community and cultural groups The EIS should consider the incorporation of green walls, green roof and/or cool roof into the project design. 		
<p>5. Environmental Amenity</p> <ul style="list-style-type: none"> Assess amenity impacts on the surrounding locality, including solar access, visual privacy, visual amenity, overshadowing 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. Identify any proposed use of the school outside of school hours (including weekends) and assess any resultant amenity impacts on the immediate locality and proposed mitigation measures. Detailed outline of the nature and extent of the intensification of use associated with the increased floor space, particularly in relation to the proposed increase in staff and student numbers. 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. 	<p>Section 6.8.4</p>	<p>Appendix 10 Appendix 14 Appendix 25 Appendix 17 Appendix 28</p>
<p>6. Staging</p> <ul style="list-style-type: none"> Provide details regarding the staging of the proposed development (if any). 	<p>N/A</p>	<p>N/A</p>
<p>7. Transport and Accessibility Include a transport and accessibility impact assessment, which details, but not limited to the following:</p> <ul style="list-style-type: none"> accurate details of the current daily and peak hour vehicle (light and heavy), 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, including vehicle, public transport, pedestrian and bicycle trips based on surveys of the existing and similar schools within the local area, 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 measures to integrate the development with the existing/future public 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) the identification of infrastructure required to ameliorate 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 	<p>Section 3.4 Section 4.5 Section 6.8.7</p>	<p>Appendix 22 Appendix 23 Appendix 24</p>

1 Introduction

Table 1 Location of Response to SEARs within this EIS		
SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<ul style="list-style-type: none"> the proposed walking and cycling access arrangements and connections to public transport services 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 pedestrian facilities and School Zones to be investigated as a result of the development proposed number of on-site car parking spaces for teaching staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site 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 including compliance with the requirements of the relevant Australian Standards (i.e.: turn paths, sight distance requirements, aisle width, etc) and parking codes 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) the preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following: <ul style="list-style-type: none"> assessment of cumulative impacts associated with other construction activities (if any) an assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process details of anticipated peak hour and daily construction vehicle movements to and from the site details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle details of temporary cycling and pedestrian access during construction. <p>Relevant Policies and Guidelines:</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 Standards Australia AS2890.3 (Bicycle Parking Facilities). 		
<p>8. Ecologically 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 	<p>Section 4.8</p> <p>Section 6.8.8</p>	<p>Appendix 6</p> <p>Appendix 26</p>

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<p>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 Council's DCP flow management objectives) and technology and use of renewable energy.</p> <ul style="list-style-type: none"> • Include preliminary consideration of building performance and mitigation of climate change, including consideration of Green Star Performance. • Include details of the initiatives that would enable the future development to achieve a minimum of 4-Green Star rating in accordance with the rating system of the Green Building Council Australia. • Outline any sustainability initiatives that will minimise/reduce the demand for drinking water, including any alternative water supply and end uses of drinking and non-drinking water that may be proposed, and demonstrate water sensitive urban design (principles are used), and any water conservation measures that are likely to be proposed. This will allow Sydney Water to determine the impact of the proposed development on our existing services and required system capacity to service the development. • Provide a statement regarding how the design of the future development is responsive to the CSIRO projected impacts of climate change, specifically: <ul style="list-style-type: none"> ○ hotter days and more frequent heatwave events ○ extended drought periods ○ more extreme rainfall events ○ gustier wind conditions ○ how these will inform landscape design, material selection and social equity aspects (respite/shelter areas). <p>Relevant Policies and Guidelines:</p> <ul style="list-style-type: none"> • NSW and ACT Government Regional Climate Modelling (NARCIIM) climate change projections. 		
<p>9. Heritage</p> <ul style="list-style-type: none"> • Provide a statement of significance and an assessment of the impact on the heritage significance of the heritage items on, and in the vicinity of, the site in accordance with the guidelines in the NSW Heritage Manual. • The assessment must: <ul style="list-style-type: none"> ○ Identify all heritage items (state and local) within and near the site, including built heritage, landscapes and archaeology ○ include an assessment as to why the places are of heritage significance; and ○ set out detailed mitigation measures to offset potential impacts on heritage values. • Address any archaeological potential and significance on the site and the impacts the development may have on this significance. 	<p>Section 6.4 Section 6.8.6 Section 7.3</p>	<p>Appendix 15</p>
<p>10. Social Impacts Include an assessment of the social consequences of the schools' relative location and decanting activities if proposed.</p>	<p>Section 6.8.9</p>	<p>N/A</p>
<p>11. Aboriginal Heritage</p> <ul style="list-style-type: none"> • 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 	<p>Section 6.4 Section 6.8.5</p>	<p>Appendix 16</p>

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<p>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 OEH.</p>		
<p>12. Noise and Vibration</p> <ul style="list-style-type: none"> 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. <p>Relevant Policies and Guidelines:</p> <ul style="list-style-type: none"> 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). 	<p>Section 6.8.12</p>	<p>Appendix 28</p>
<p>13. Contamination</p> <ul style="list-style-type: none"> Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. Undertake a hazardous materials survey of all existing structures and infrastructure prior to any demolition or site preparation works. <p>Relevant Policies and Guidelines:</p> <ul style="list-style-type: none"> Managing Land Contamination: Planning SEPP 55 Remediation of Land (DUAP). 	<p>Section 6.4.1 Section 6.9 Section 6.9.2</p>	<p>Appendix 14 Appendix 21</p>
<p>14. Utilities</p> <ul style="list-style-type: none"> 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. In the Infrastructure Management Plan, make specific reference to the Ausgrid cables that are buried in front of 37 Bancroft Avenue and details of how these will be managed during the construction and operation of the facility. 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. 	<p>Section 6.9.4</p>	<p>Appendix 19 Appendix 20</p>
<p>15. Contributions</p> <p>Address Council's 'Section 94/94A Contribution Plan' and/or details of any Voluntary Planning Agreement, which may be required to be amended because of the proposed development.</p>	<p>Section 6.8.20</p>	<p>N/A</p>
<p>16. Drainage</p> <ul style="list-style-type: none"> Detail measures to minimise operational water quality impacts on surface waters and groundwater. Stormwater plans detailing the proposed methods of drainage (including use of OSD and rainwater harvesting) without impacting on the downstream properties. Include details of the method of treating stormwater runoff before discharging it into the riparian corridor. 	<p>Section 6.8.14</p>	<p>Appendix 17 Appendix 18</p>

1 Introduction

Table 1 Location of Response to SEARs within this EIS		
SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<ul style="list-style-type: none"> Include details of where/if any services are to be located within the riparian corridor(s). <p>Relevant Policies and Guidelines:</p> <ul style="list-style-type: none"> Guidelines for development adjoining land and water managed by DECCW (OEH, 2013). 		
<p>17. Water and Soils</p> <ul style="list-style-type: none"> Map the following features relevant to waters and soil including: <ul style="list-style-type: none"> Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method). Wetlands as described in s4.2 of the Biodiversity Assessment Method Groundwater Groundwater dependent ecosystems intake and discharge locations. Describe background conditions for any water resource likely to be affected by the development. The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased. A detailed and consolidated site water balance. Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian lands, and groundwater dependent ecosystems, and measures to proposed to reduce and mitigate these impacts. Proposed surface and groundwater monitoring activities and methodologies. <p>Relevant Policies and Guidelines</p> <ul style="list-style-type: none"> NSW Aquifer Interference Policy (2012) Relevant Water Sharing Plans (available at https://www.industry.nsw.gov.au/water) 	Section 6.9.1	Appendix 10 Appendix 14
<p>18. Water-related Infrastructure Requirements</p> <ul style="list-style-type: none"> determine service demands following servicing investigations and demonstrate that satisfactory arrangements for drinking water, wastewater, and recycled water (if required) services have been made. ensure that the proposed development does not adversely impact on any existing water, wastewater or stormwater main, or other Sydney Water asset, including any easement or property. 	Section 6.9.4.2	Appendix 20
<p>19. Integrated Water Cycle Management</p> <ul style="list-style-type: none"> Outline any sustainability initiatives that will minimise/reduce the demand for drinking water, including any alternative water supply and end uses of drinking and non-drinking water that may be proposed, and demonstrate water sensitive urban design (principles are used), and any water conservation measures that are likely to be proposed. This will allow Sydney Water to determine the impact of the proposed development on our existing services and required system capacity to service the development. 	Section 4.6 Section 6.4 Section 6.8.14	Appendix 17 Appendix 18
<p>20. Flooding</p> <ul style="list-style-type: none"> 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), 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. Consideration of Ku-ring-gai Council's flood study. Describe any flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% 	Section 6.9.3	Appendix 18

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<p>AEP, flood levels and probable maximum flood, or equivalent extreme event.</p> <ul style="list-style-type: none"> Model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios: <ul style="list-style-type: none"> Current flood behaviour for a range of design events. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change. Assess the impacts of the proposed development on flood behaviour. <p>Relevant Policies and Guidelines</p> <ul style="list-style-type: none"> NSW Floodplain Development Manual 2005 		
<p>21. Biodiversity Assessment</p> <ul style="list-style-type: none"> Biodiversity impacts related to the proposed development (SSD 9912) 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: <ul style="list-style-type: none"> the total number and classes of biodiversity credits required to be retired for the development/project the number and classes of like-for-like biodiversity credits proposed to be retired the number and classes of biodiversity credits proposed to be retired in accordance with the variation rules any proposal to fund a biodiversity conservation action 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 Order 2017 under s6.10 of the Biodiversity Conservation Act 2016. 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>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.</p>	<p>Section 6.3</p> <p>Section 6.8.2</p>	<p>Appendix 30</p>
<p>22. Sediment, Erosion and Dust Controls</p> <p>Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.</p> <p>Relevant Policies and Guidelines:</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>Section 6.8.16</p> <p>Section 6.8.19</p>	<p>Appendix 17</p> <p>Appendix 25</p>

1 Introduction

Table 1 Location of Response to SEARs within this EIS

SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<p>23. Waste Identify, 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>Section 6.8.18</p>	<p>Appendix 27</p>
<p>24. 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>Section 6.8.19 Section 8.1 Section 8.2</p>	<p>Appendix 25</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) & (5) Planning Certificates (previously Section 149(2) & (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 and adjacent structures / buildings and site boundaries • Site Analysis Plan including: <ul style="list-style-type: none"> ○ site and context plans that demonstrate principles for future development and expansion, built form character and open space network ○ active transport linkages with existing, proposed and potential footpaths and bicycle paths and public transport links ○ 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, scale bar and north point, including: <ul style="list-style-type: none"> ○ integrated landscape plans at appropriate scale, with detail of new and retained planting, shade structures, materials and finishes proposed including articulation of playground spaces ○ plan identifying significant trees, trees to be removed and trees to be retained or transplanted • Design report to demonstrate how design quality will be achieved in accordance with the above Key Issues including: <ul style="list-style-type: none"> ○ architectural design statement 	<p>Multiple Sections of EIS</p>	<p>Appendix 3 Appendix 4 Appendix 6 Appendix 7 Appendix 8 Appendix 10 Appendix 12 Appendix 17</p>

1 Introduction

Table 1 Location of Response to SEARs within this EIS		
SEARs Requirements	Response within this Report	Relevant Supporting Documentation
<ul style="list-style-type: none"> ○ diagrams, structure plan, illustrations and drawings to clarify the design intent of the proposal ○ detailed site and context analysis ○ analysis of options considered including building envelope study to justify the proposed site planning and design approach ○ visual impact assessment identifying potential impacts on the surrounding built environment and adjoining heritage items ○ summary of feedback provided by GANSW and NSW State Design Review Panel (SDRP) and responses to this advice ○ summary report of consultation with the community and response to any feedback provided ● Geotechnical and Structural Report ● Accessibility Report ● Arborist Report ● Acid Sulphate Soils Management Plan (if required) and ● Schedule of materials and finishes. 		
Consultation		
<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"> ● Ku-ring-gai Council ● Government Architect NSW ● Transport for NSW and ● 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>	Section 5	Appendix 5

2 Background

2.1 Site History

A detailed site history has been prepared by Urbis in the Heritage Impact Statement (**Appendix 15**) which sets out key steps in the history of the site. Notable steps in the history of the site include:

- Land currently comprising the Roseville College site formed part of the Roseville Park Estate and the Clanville Estate from the late nineteenth and early twentieth centuries, being originally developed as detached residential dwellings;
- Roseville College was founded by Isobel Davies in 1908 in a single building on Victoria Street known as 'Hinemoa' with a small playing field;
- The College site was first expanded in 1928 with the purchase of 29 Bancroft Avenue (Lot 13), upon which a school boarding house was constructed and completed in 1935, being the current Student Services Building (being the oldest purpose-built structure remaining on the College site);
- By 1943, single storey dwellings were constructed on every lot bordering Roseville College in Bancroft Avenue, Victoria Street and Recreation Avenue;
- Future acquisitions further expanded the site from the 1960's onwards, and the Isobel Davies Building and swimming pool was opened between 1971 and 1973;
- Expansion of the site continued through the 1980's and 1990's (**Figure 1**);
- 37 Bancroft Avenue was purchased by the College in 2016.

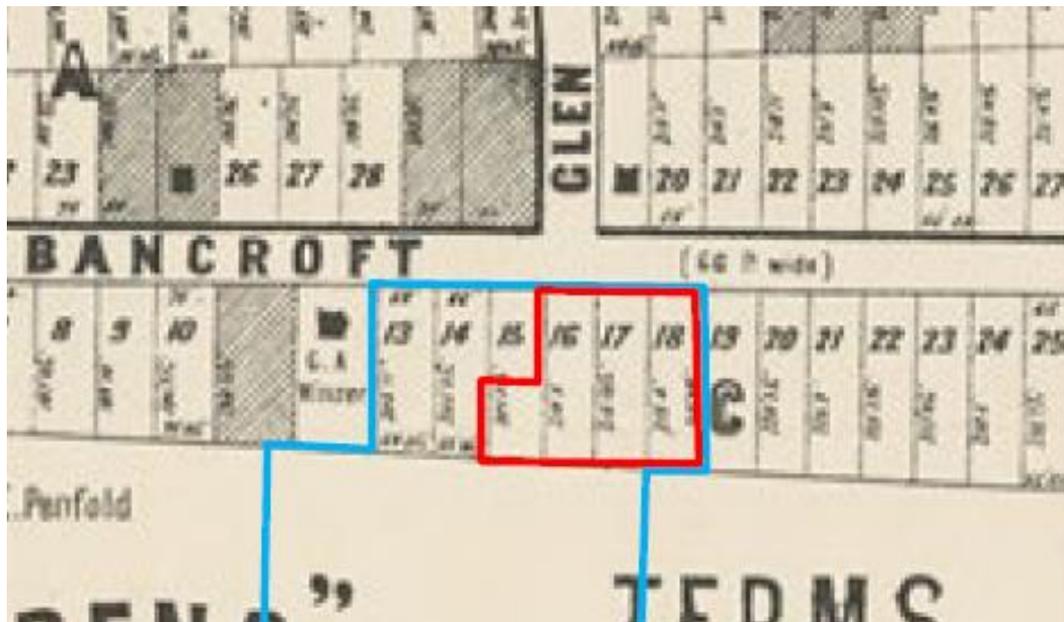


Figure 1 Extract of Figure 32 from Heritage Impact Statement

2.2 Development Application History

It is critical to put the proposal into context with the planning and approval history of the site as this history directly correlates to the development of the SSD proposal. Current development consents which relate to 27-29 Bancroft Avenue are:

- DA0261/16 – Progressive Increase of member of Students from 830 to a maximum of 1,250 from the year 2016 to 2030. Development consent issued by Ku-ring-gai Municipal Council on 12 April 2017 (**Appendix 2**).
- DA0262/16 – Demolish existing multi-purpose hardcourts, construct a building with one level of basement parking one level of semi-basement parking, roof level multi-purpose

2 Background

hardcourts, access and driveways and associated landscaping. Development consent issued by Ku-ring-gai Municipal Council (Council) on 3 February 2017 (**Appendix 2**).

It is the general intention of this State Significant Development Application (SSDA) to maintain the outcomes of these two (2) development consents and incorporate them into the terms of this consent.

The current proposal incorporates the car parking facilities approved under DA0262/16, however the design has required amendment to reflect the inclusion of a swimming pool, integrated circulation and other amendments such that it would not be “*substantially the same development*” that was approved by Council. In this regard, the pool cannot be considered as a separate project in complete isolation of the approved car park – i.e. the two projects must be combined. The provision of parking in the proposal is generally consistent with the project approved under DA0262/16.

The following DA was lodged with Council for their consideration in relation to 37 Bancroft Avenue, however it was subsequently withdrawn on 18 February 2019:

- DA0563/18 – Change of use from residential to an educational establishment (Roseville College) including minor alterations and additions. Lodged 5 December 2018.

Having regard to the requirements of these consents, the withdrawn DA, and the schools intention to also develop a swimming pool component on the site, the future SSDA for the proposal also serves to simplify the approach to the future development of the site by way of a single approval for the expansion of the school.

To remove the complexity of another DA for the swimming pool component of the proposal and modifying existing development consents, this proposed SSDA would supersede the above-mentioned development consents, incorporating the student population increase and carpark development as part of the SSD.

It is assumed that consent for this proposal would incorporate conditions of consent which would require the surrender of DA0261/16 & DA0262/16 prior to commencement of works. This approach is supported by the applicant, however it is the school’s preference to only surrender these consents once any subsequent SSD consent is issued. Therefore, timing of this requirement ‘prior to the commencement of works’ is a suitable milestone for DPIE to condition against.

Finally, as the SSDA incorporates 37 Bancroft Avenue and with a view to keep the overall development of the site consistent and to consolidate approvals, this included the withdrawal of DA0563/18 as mentioned above. The above approach has been discussed with Council.

In summary:

The approved car park cannot be developed under the current approval (DA0262/16) in isolation of the proposed pool due to the number of design changes required to integrate the two components. Therefore, the two projects must be combined, and this triggers the proposal as SSD with the following intended outcomes:

- The terms of earlier consents can be consolidated into the SSD consent;
- No change to the approved student caps is proposed; and
- DA0563/18 has been withdrawn from Council and will now form part of the SSD application.

The current approach means that what could have been four (4) consents (approved student numbers, approved car park, proposed change of use and proposed pool) can now be consolidated into one (1) concise SSDA. This removes confusion about the applicability of past consents to new land and clarifies both the timing and scope of work across the all relevant land. This approach is considered the most logical and which achieves the orderly and economic development of land.

3 Site Context

3.1 Location

The Site is located within the Ku-ring-gai Municipal Council Local Government Area (LGA) in the upper north shore of metropolitan Sydney. The Site is located approximately 300m east of the Roseville Train Station and 1.3km north of the Chatswood Train Station (**Figure 2**, note that 27-29 Bancroft Ave is outlined in blue and 37 Bancroft Ave is outlined in red).

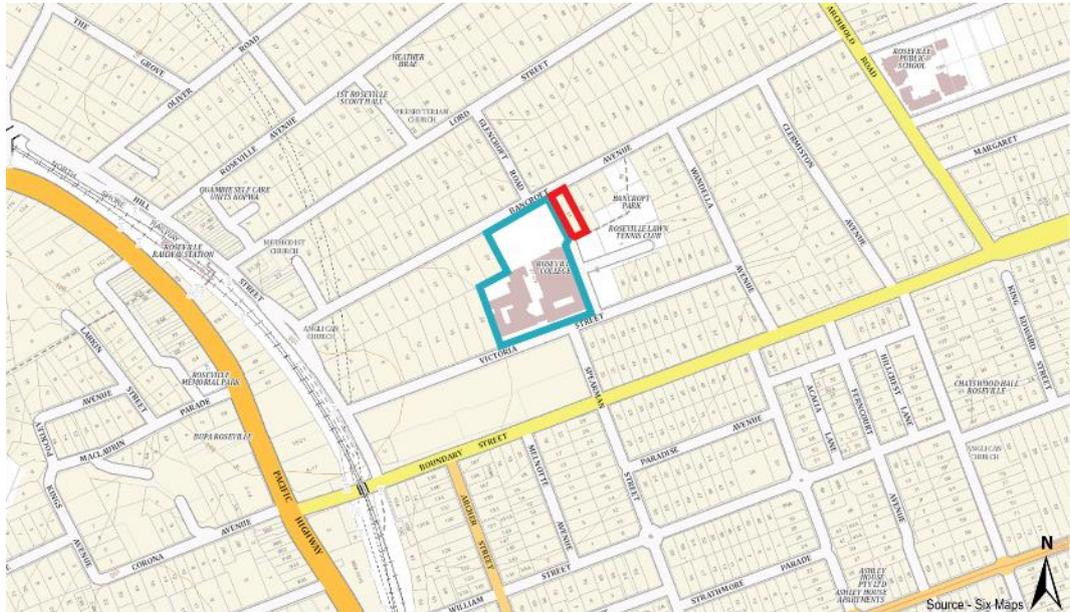


Figure 2 Site Location

3.2 Site Description

The development site is known as 27-29 Bancroft Avenue and 37 Bancroft Avenue Roseville (the Site). 27-29 Bancroft Avenue is the existing Roseville College school site, while 37 Bancroft Avenue is property purchased by the School that will be the subject of a change of use to incorporate it into the boundaries of the School. The site comprises of two (2) allotments as described in **Table 2** below and as illustrated in **Figure 3** (also see survey at **Appendix 4**).

Table 2 Site Description		
Street Address	Lot/Sec/DP	Area (m ²)
27-29 Bancroft Avenue, Roseville	2003/-/1084428	19,300m ² (approx.)
37 Bancroft Avenue, Roseville	18/C/5035	1,321m ²
TOTAL		20,621m² (2.1Ha approx.)

3 Site Context



Figure 3 The Site

3.2.1 27-29 Bancroft Avenue, Roseville

Existing on the Site is the Roseville College School Campus. As seen in **Figure 4**, the southern end of the site comprises the majority of the school's buildings, being primarily of two (2) storey construction. The original school buildings and newer developments are integrated through this end of the campus. The northern end of the Site contains three (3) former dwellings which form part of the school campus, one (1) of which is connected to the buildings to the south by a more recent development.



Figure 4 Aerial image 27-29 Bancroft Avenue, Roseville

The school's sports courts (i.e. tennis, basketball, netball etc) are located adjacent to the former dwellings in the north-eastern corner of the site.

Photos of the Site are shown in **Figures 5-8** below.

3 Site Context



Figure 5 Looking south-east from Bancroft Avenue towards existing sports courts to be demolished. Existing Joy Yeo Centre building in background on right.



Figure 6 Looking east along Bancroft Avenue frontage

3 Site Context



Figure 7 Looking east towards 37 Bancroft Avenue. Southern end of sports courts to be demolished shown.



Figure 8 Existing Joy Yeo Centre on the Site whose basement parking will connect with the proposed developments basement car park.

3 Site Context

3.2.2 37 Bancroft Avenue, Roseville

Existing on 37 Bancroft Avenue is a single storey dwelling-house, with a detached garage, swimming pool, tennis court and landscaped garden area. The dwelling house can be seen below in **Figure 9** with an aerial image seen in **Figure 10**.



Figure 9 Existing dwelling on 37 Bancroft Avenue. Source: DA0563/18 – KMC DA Tracker

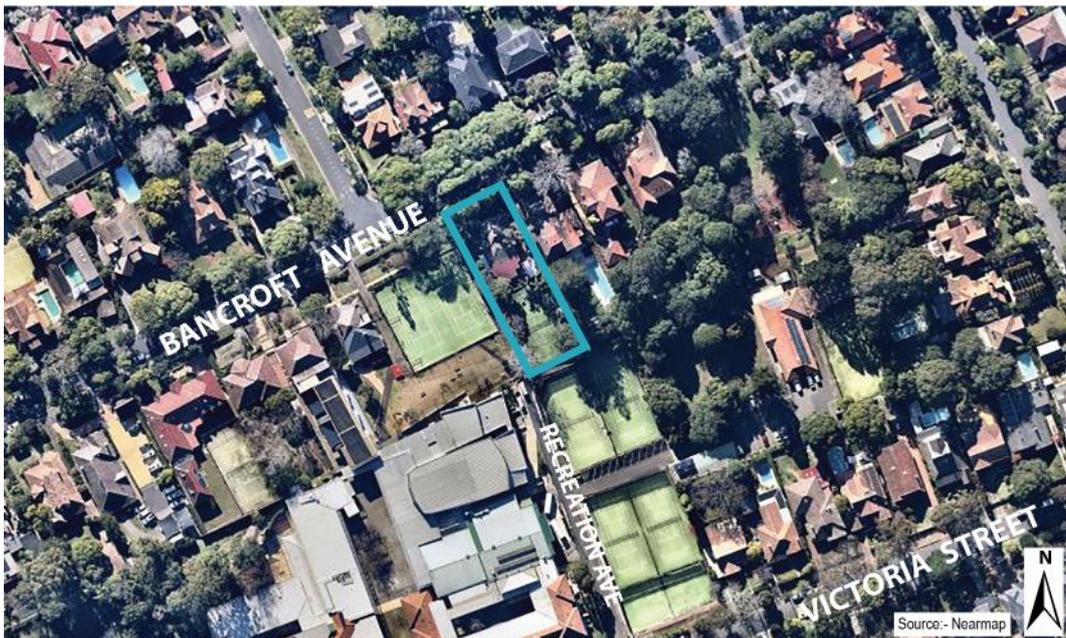


Figure 10 Aerial image 37 Bancroft Avenue, Roseville

3.3 Surrounding Development

The immediate surrounding locality is generally characterised by residential land uses in the form of single detached dwellings to the north, east and west (**Figure 11** and **Figure 12**). Opposite the southern end of the site across Recreation Avenue to the east is the Roseville Lawn Tennis Club, with development to the south of the site characterised by a mixed density of residential flat buildings and large dwelling houses. In a broader context, the Roseville commercial precinct (which runs along the Pacific Highway) is located approximately 400-500m to the west of the site.

3 Site Context

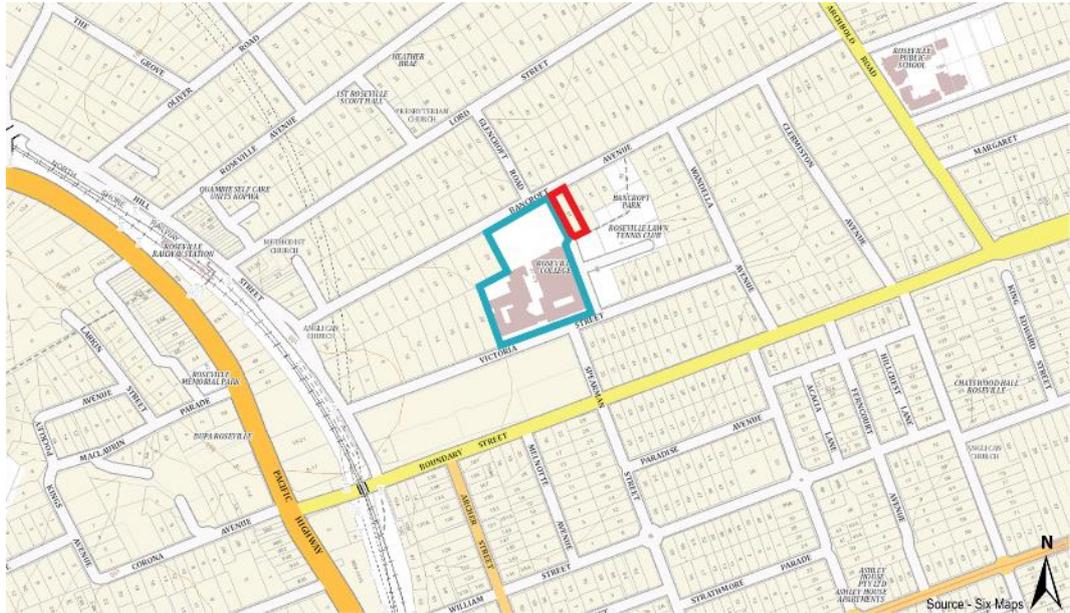


Figure 11 Surrounding Development Context

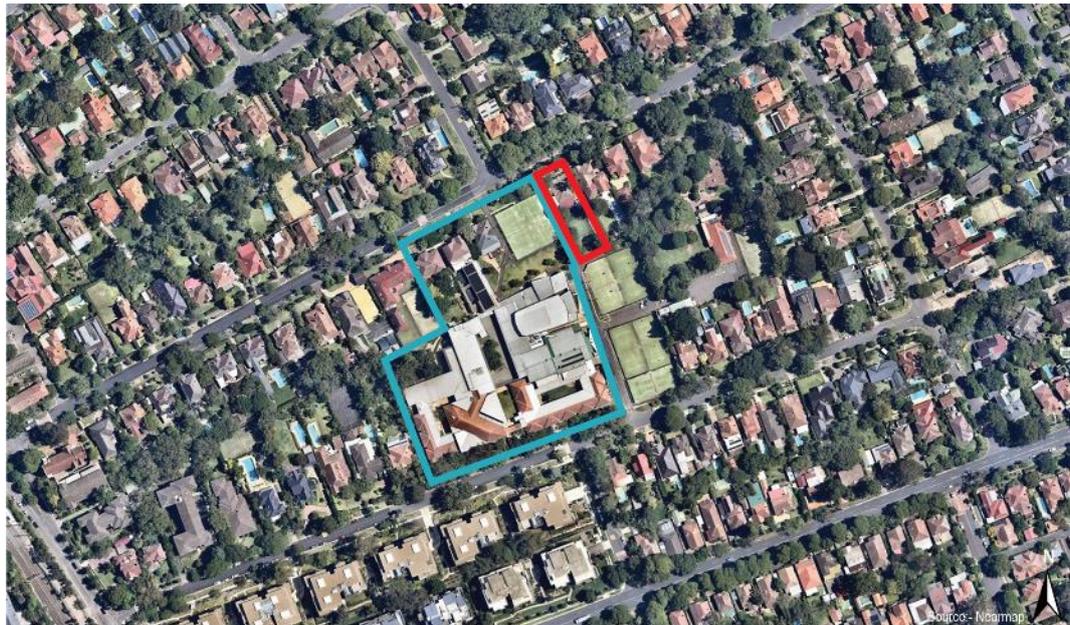


Figure 12 Aerial image of Surrounding Development

3.4 Surrounding Road and Transport Network

3.4.1 Road Network

The Site has frontage to Bancroft Avenue which runs parallel to the Site's northern boundary and Victoria Road which runs parallel to the Site's southern boundary (**Figure 13**). Recreation Avenue which is adjacent to the Site's eastern boundary (a no-through-road) provides vehicular access to the Site's existing basement car park and loading dock area. Recreation Avenue also services the Roseville Lawn Tennis Club and the Ku-ring-gai Art Centre located to the east of the Site.

3 Site Context



Figure 13 Surrounding Road Network

The hierarchy of the broader road network is shown at **Figure 14**, identifying that the site is well connected to surrounding regional and State road networks including the Pacific Highway (albeit limited by the North Shore Railway line).

In classification terms, the road network servicing the College includes:

- **The Pacific Highway:** Classified as a State Road in a north-south alignment. In the vicinity of the College site, the carriageway accommodates three (3) lanes in each direction with auxiliary turning lanes at major intersections;
- **Boundary Road:** Classified as a State Road providing a connection between the Pacific Highway to the west and Warringah Road to the east;
- **Recreation Avenue:** A Local Road providing vehicular access to the existing and future car park, and the car park of Roseville Tennis Club. It is a narrow carriageway with a cul-de-sac access only via Victoria Street;
- **Victoria Street:** A Local Road providing access to local properties, providing strategic access to the College frontage. This street has dedicated pi-up and drop-off areas for the College on the northern side of the carriageway during school hours. Most of the on-street parking spaces are unrestricted parking except for 1/2P on the opposite side of the College; and
- **Bancroft Avenue:** A Local Road parallel to Victoria Street to the north of the College providing access to local properties. The College's only driveway from Bancroft currently only provides garbage truck access for waste collection. In the vicinity of the College the carriageway accommodates single marked traffic lanes in each direction, with on-street parking available on both sides.

3 Site Context



Figure 14 Broader road hierarchy. Source: Extract from TIA prepared by PTC

3.4.2 Rail Network

The College is located approximately 300m walking distance east of the Roseville Train Station, which is situated on the T1 North Shore Railway line. This line provides access to the northern, southern and western suburbs via interchange at Sydney CBD stations.

Southbound (from Berowra and Hornsby), train services arrive/depart every 15 minutes during the morning peak and afternoon school peak on weekdays.

Northbound (from Parramatta via Central), train services arrive/depart every 6-9 minutes during the morning peak and afternoon school peak on weekdays.

3.4.3 Bus Network

The College is well-served by bus services providing connection to a broad catchment in the surrounds, via bus stops on Boundary Road, the Pacific Highway and Hills Street. The nearest bus stop is located an approximately 2-minute walk (120m) from the College at the corner of Boundary Road and Spearman Street.

3.4.4 Cycling Network

Ku-ring-gai Council has developed a detailed cycle network across the LGA, to which the College is well-connected. The cycle network provides on-road bicycle route and unmarked route options to the north, south and east of the site.

3.5 Current Operations

Roseville College's current core school hours are from 8.30am to 3.15pm. The current (as at October 2019) school population is as follows:

- 973 students;
- 135 full-time equivalent permanent staff members; and
- 160 casual staff (mainly sports and co-curricular coaches)

The College's existing outdoor swimming pool accommodates an after school Learn-to-Swim program from Spring to Summer and during the Christmas school holiday period.

The College has prepared an Operational Management Plan (OMP) which can be found at **Appendix 31**.

4 Project Description

4.1 Project Summary

Roseville College proposes to construct a new fit-for-purpose Sport and Wellbeing Centre. The proposed development has been planned to align the College's facilities with their focus on the wellbeing of students. The proposed new development will result in a new purpose-built indoor swimming pool facility which is complimented by a strength and conditioning room. The development also features a nutrition and food technology space, flexible general learning areas, outdoor multi-purpose sports courts and underground car parking spaces for staff and students. The development will also accommodate the College's growing student population with 1,250 students to be attending the College by the year 2030.

The key development statistics of the development are detailed in **Table 3**.

Table 3 Development Statistics	
Site Area	20,618m ²
Total proposed GFA	15,041m ²
Proposed Floor Space Ratio (FSR)	0.73:1
Building Height (Maximum)	9.57m
Existing Car Parking	127 spaces
Proposed Car Parking	182 spaces (existing + proposed)

BHA has prepared a suite of Architectural Plans and photomontages (**Appendix 6**) which detail the works proposed under this application. An extract of the Site Plan is provided at **Figure 15** with photomontages of the development proposal seen in **Figure 16** and **Figure 17**.

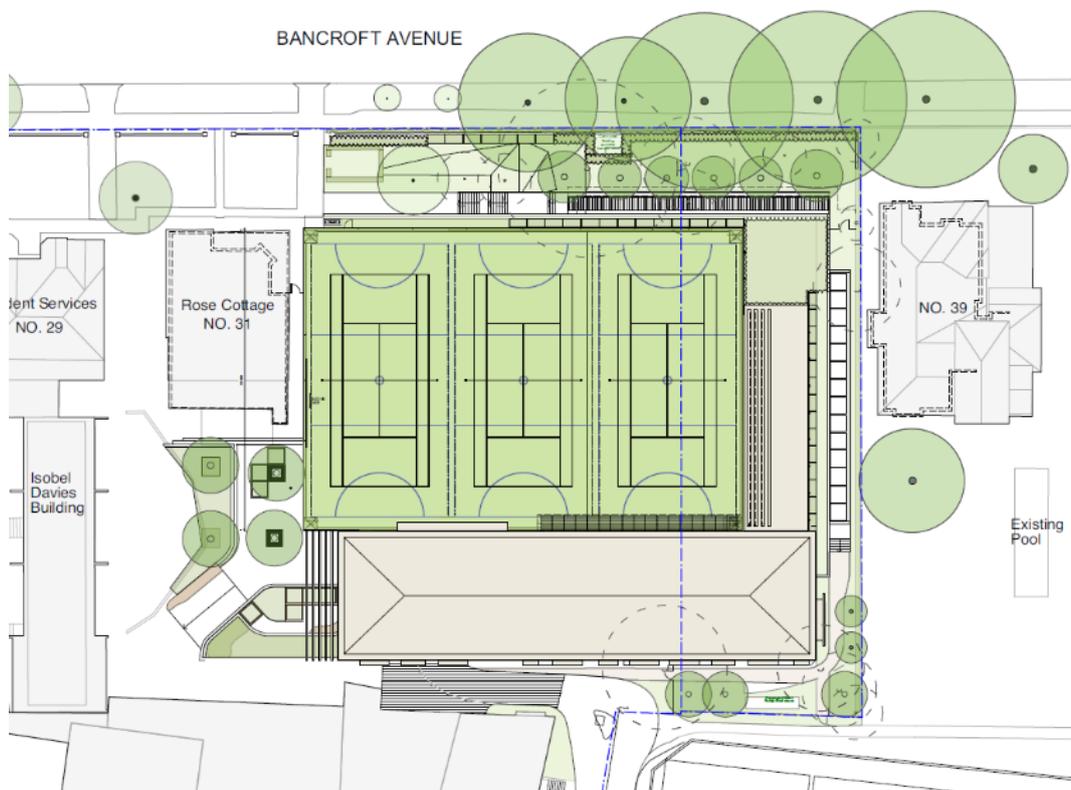


Figure 15 Extract of Site Plan

4 Project Description



Figure 16 Photomontage of proposed development – looking south from Bancroft Avenue



Figure 17 Photomontage of proposed development – looking north to rear of proposed development from Recreation Avenue. Joy Yeo Centre building seen on left of image.

4.2 Demolition and Site Preparation

A demolition plan is provided in the Architectural Plans set at **Appendix 6**. Demolition generally entails the following aspects:

- The existing sports courts on the Site and their associated fencing will be demolished. Surrounding paths, retaining walls and maintained lawns and gardens will also be removed;

4 Project Description

- All structures on 37 Bancroft Avenue will be removed, this includes the dwelling, outbuilding, tennis court, swimming pool, hardstand areas and landscaping.
- 26 trees are proposed to be removed across the development site. The project's Arborist (Ezi Grow) has assessed the trees to be removed and has determined that 22 are unimportant (low category) trees (See **Appendix 9**). The project's Ecologist (Eco Logical Australia) has also undertaken an assessment of the potential flora and fauna impacts associated with the tree removal (See **Section 6.8.3** and **Appendix 30**), where potential impacts arising have been found to be acceptable. The majority of trees to be removed are exotic species with only minor impacts arising on some non-remnant native vegetation;
- Earthworks will comprise of bulk excavation to remove soil up to a depth of approximately 8.2m will be required (within the vicinity of the proposed swimming pool) to cut and bench the site to the required depths. Shoring with piles will subsequently take place to retain the surrounding land and adjoining neighbours.

4.3 Construction of New Sport and Wellbeing Centre

The new sport and wellbeing centre building is best described as a part two (2) and part three (3) storey development comprising the following on each level:

Level 1:

- Carpark, accessed through new connection to be made to existing school basement carpark (existing building to south of proposed development);
- 25m, eight (8) lane swimming pool with associated grandstand, plant rooms, change facilities and amenities;
- Skylight (along the buildings eastern façade);
- Storage areas; and
- Mechanical plant room.

Level 2:

- Carpark accessed from Recreation Avenue;
- Void to swimming pool below with surrounding balcony;
- Strength and conditioning room (gymnasium);
- General learning areas (GLAs); and
- Plant rooms and on-site detention tank (OSD).

Level 3:

- GLA's, food technology space and enclosed verandah/breakout space adjacent;
- Rooftop sports courts, sports equipment store and covered area adjacent to courts; and
- Landscaping.

The front façade of the development which faces Bancroft Avenue presents as a 1-2 storey building, with a rooftop sports court area (**Figure 18**). A mixture of aluminium framed glazing which provides natural light to the buildings lowest level (swimming pool), earthy toned brickwork and landscaping all contribute to the visual aesthetics of the proposal.

4 Project Description



Figure 18 Presentation to Bancroft Avenue

The southern end of the development is a three (3) storey built form (see **Figure 17** photomontage previously). Levels 2 and 3 contain the proposal GLA's. On Level 3, the GLA's are complimented by an enclosed verandah/breakout space to provide a flexible learning environment for students. Sliding doors along the northern side of the area can be opened up for further interaction with the sports court area. A food technology teaching space on Level 3 of the development is a key design feature for the proposal (south-western corner). Adjacent to this area is an 'edible garden' to compliment student learning activities.

4.3.1 Design Analysis

BHA has prepared an Architectural Design Analysis Report (**Appendix 7**) which provides an analysis of the Site context, identifies the opportunities and constraints of the Site and details design strategies for the Site which support the proposed built form as well as providing an assessment of the proposal against the Design Quality Principles set out under the Education SEPP.

The BHA Report also provides details of the materials and finishes, landscape treatments, photomontages and other information that provides details of the design analysis which has informed the final design of the new sport and wellbeing centre building.

4.4 Landscaping

Landscaping is a key component of the proposed development and has been integrated into the design development including feedback from Council and the Government Architect NSW.

The proposal includes a range of landscaping works as detailed in the Landscape Plans prepared by sym.studio in **Appendix 8**. The landscape design has been undertaken in conjunction with the projects Architects, Heritage Consultants and consulting team in order to ensure an integrated design is achieved that respects the existing site and, more importantly the 'green' character and qualities of the surrounding heritage conservation area. The landscaping has also been designed to respond to the proposed new building and its uses. **Figure 19** below shown the proposed landscape masterplan.

4 Project Description

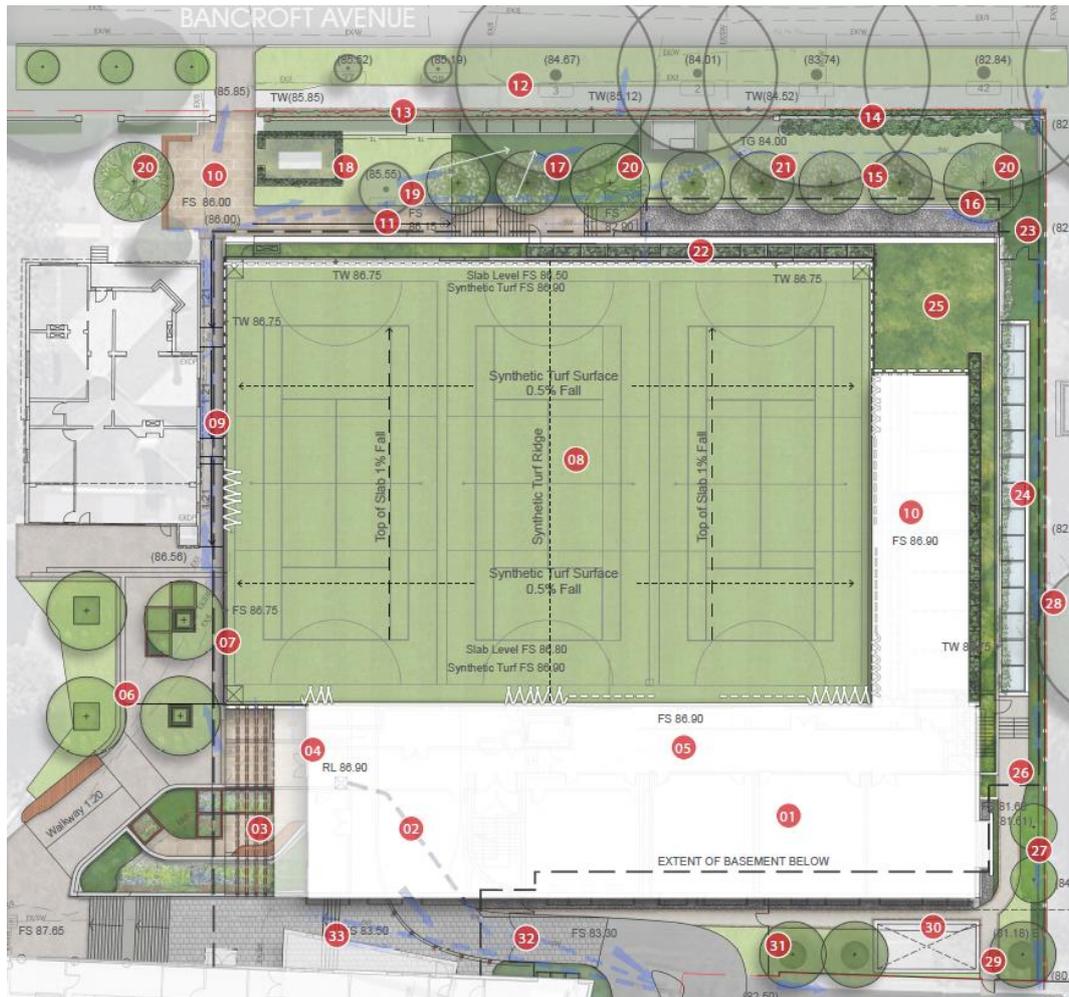


Figure 19 Landscape masterplan for the proposed development

The two primary landscape ‘treated’ areas are the Bancroft Avenue setback area and the area between the proposed development and the boundary to 39 Bancroft Avenue.

Public street trees along Bancroft Avenue will be retained as part of the proposal. Within the site adjacent to the Bancroft property boundary, three (3) new super-advanced Himalayan Cedars combined with six (6) deciduous pear trees will provide key features of the landscape design. The trees will be combined with a new low brick wall and hedging on the north-eastern corner which will complement the existing low brick wall and hedging along the College’s boundary.

The sports courts will be surrounded with a trellis which will accommodate plantings to provide a ‘green’ screen and soften any visual impact. Soft and hard ground covers will finish off the area, providing an overall ‘green’ presentation of the College ground when viewed from Bancroft Avenue.

On the 39 Bancroft Avenue side of the proposed development, the existing 1.8m high timber fence located on the property boundary will be retained and repaired as required. New mid-story columnar screen trees will be provided at the southern corner of the building with grasses generally covering the ground. The key landscape features along the eastern side of the development are the 400mm deep ‘rooftop’ planter provided at level 3 and trellis screening along the outside of the undercover area of the sports courts (see **Figure 20** and **Figure 21**).

4 Project Description

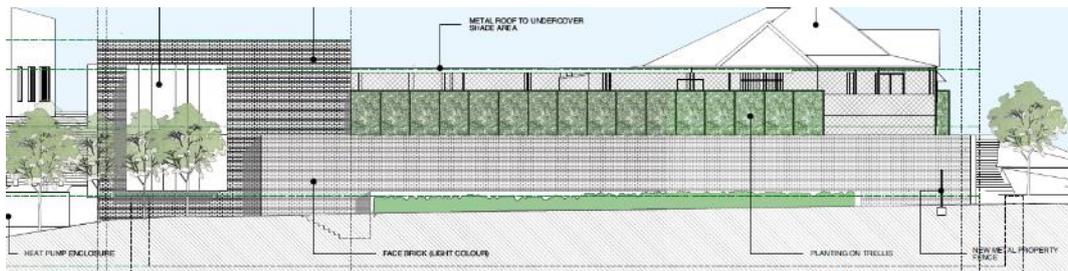


Figure 20 Eastern elevation



Figure 21 Photomontage showing rooftop planter and trellis screening.

Overall, the selected landscape elements are mostly exotic to compliment the established surrounding heritage conservation area's landscape character. This is also consistent with advice received from Council and Government Architect NSW during consultation.

4.5 Car Parking and Vehicular Access

56 additional parking spaces will be constructed on the site as part of the proposed development. This comprises 30 spaces within Level 1 (lowest level) and 29 spaces (plus two (2) bus spaces) in Level 2 above.

Vehicular access to the new parking areas has been designed to remove the need for vertical vehicular circulation space. Access to the Level 1 carpark will be provided via Recreation Avenue through the school's existing carpark located under the Joy Yeo Centre building. Works will be undertaken to provide connectivity between the existing car park and the new works (**Figure 22**).

4 Project Description

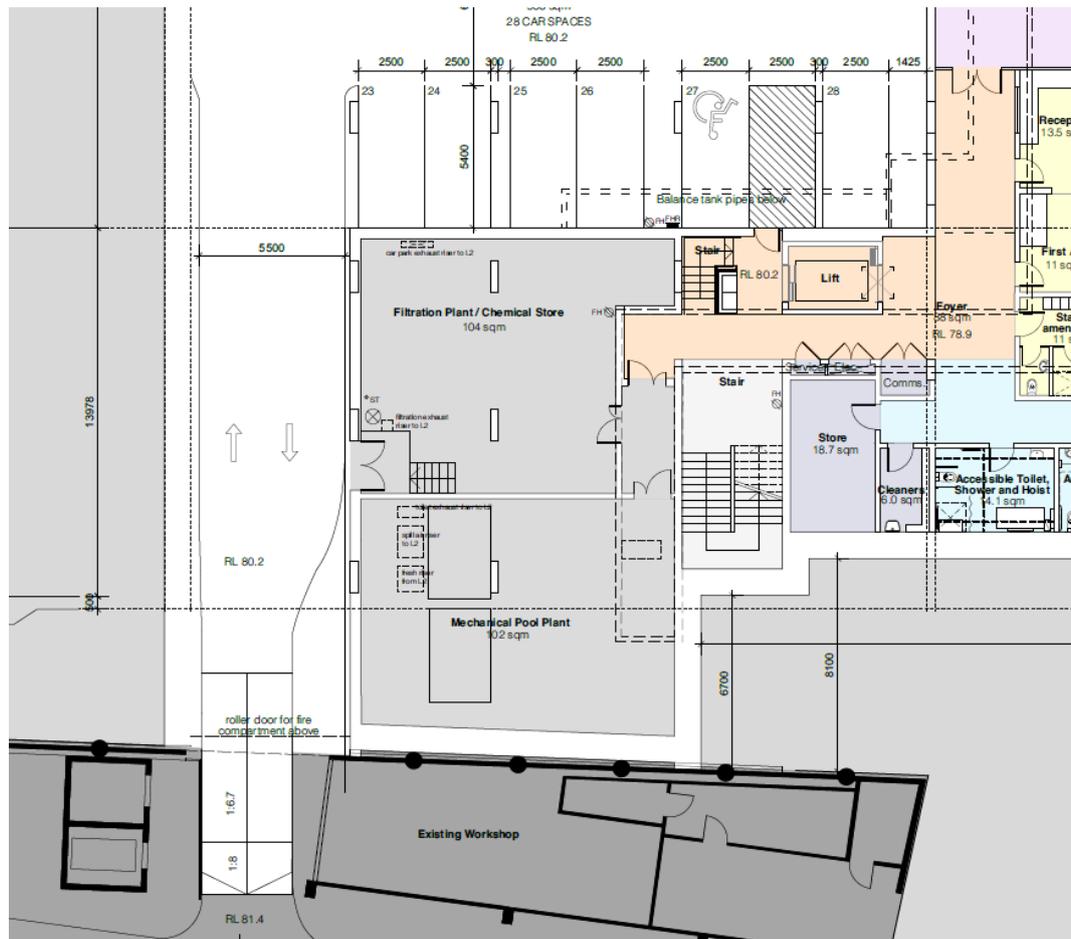


Figure 22 Connection shown on Level 1 between existing and proposed car parks

Access to the Level 2 parking will be via Recreation Avenue to the south of the site. A new access point to the road will be constructed with an internal driveway providing access to the 29 spaces and bus parking provided on Level 2.

Outside of standard school hours parking will be available to persons using the Sport and Wellbeing Centre.

4.6 Stormwater Management

Acor Consultants has prepared a comprehensive Civil Services/stormwater design package for the proposed development, accompanied by a stormwater management report. Civil designs are provided at **Appendix 17** with the stormwater management found in **Appendix 18**.

The stormwater run-off from the site (both pervious and impervious area) will generally be conveyed to an in-ground pit and gravity pipe system which has been designed to accommodate a 5% AEP storm event.

Roof water captured will be conveyed to a 20m³ rainwater tank. Roof water runoff from trafficable roof areas (i.e. proposed sports courts walkways etc) will be collected and discharged into the OSD system. Ultimately, captured stormwater will be piped to Recreation Avenue where an existing private stormwater pit connected to Council's system before draining to an existing Sydney Water stormwater channel.

A summary of key OSD system elements are:

- The proposed OSD tank will provide an OSD storage volume of 89.85m³, which meets the calculated requirements for the site; and

4 Project Description

- In the event of OSD tank overflow, water will rise through a grated opening located within the courtyard external to the proposed building envelope. Site grading will direct overflows safely away from the building entries and to the existing overland flow path to Bancroft Avenue.

Water sensitive urban design principles have been incorporated into the stormwater management system for the proposed development. Elements of the design include:

- A rainwater tanks for rainwater collection from non-trafficable roof areas for reuse in toilets and irrigation;
- OceanGuard pit inserts by Ocean Protect in all in-ground stormwater pits, to provide primary treatment of surface runoff; and
- A secondary filtration chamber will be provided downstream of the OSD tank.

Rainwater reuse and stream flow controls will be managed via the proposed 20m³ rainwater tank for which it can be used for landscaped areas and flushing of 12 toilets within the proposed development.

4.7 Operation – Staff and Students and Hours of Operation

The development will facilitate the schools currently approved student population increase from its current 973 students (as at October 2019) to 1,250 students by the year 2030. Consequently, the proposed development will also result in the employment of additional full time, part-time and casual staff.

The Operational Management Plan (OMP) prepared by Roseville College at **Appendix 31** advises that it is difficult to indicate the precise number of future teaching staff as this will happen organically with the student population growth. Notwithstanding this, PTC in their Traffic Impact Assessment (**Appendix 22**) have estimated that based on the current student population and staff numbers, an increase to the student population up to 1,250 by 2030 would result in an increase to 152 full-time equivalent staff (+27 from current numbers).

As the proposed development provides for a swimming pool which can be used year-round, the College's current learn-to-swim and swim squad programs can be extended to operate all year. Normal and curriculum-based sport and physical education activities (including on Saturday mornings) will be undertaken on the proposed sports courts, as they currently are with the existing two (2) courts proposed to be demolished.

Hours of operation of the school will generally remain unchanged, the current core school hours are from 8.30am to 3.15pm. The use of the proposed building (also considering outside of school hour use) will also remain unchanged from current practices of using school facilities. The hours are generally 7am to 6pm Monday to Friday and 7am to 2pm on Saturdays.

Loading and unloading facilities for the school will remain unchanged. An existing loading dock area is located adjacent to the existing Joy Yeo Centre building in Recreation Avenue to the south of the site.

4.8 Ecologically Sustainable Development

Umow Lai has prepared an ESD Report (**Appendix 26**) which supports the proposed development and outlines the sustainability initiatives proposed for the development in response to the SEARs and requirements of Schedule 2 of the EP&A Regulation. In addition, the ESD Report references the Green Building Council of Australia, Green Star Design & As-Built v1.3 Rating Tool, and CSIRO projected impacts of climate change.

4 Project Description

The proposed SWELL Centre development is expected to achieve a high level of environmental sustainability pursuant to the responses to the following environmental categories under the Green Star rating system:

- Management;
- Indoor environmental quality;
- Energy;
- Transport;
- Water;
- Materials;
- Land Use and Ecology;
- Emissions; and
- Innovation.

Umow Lai has identified that the proposal's informal rating (i.e. not yet formally certified by the Green Building Council of Australia) achieves 4-Stars, which is considered 'Best Practice' for equivalency outcomes. The ESD Report is supported by a Green Star Pathway, which provides a summary of how all available points are achieved and how compliance requirements are met across all of the environmental categories of the Green Star rating system. ESD related construction elements will be incorporated into any future Construction Certificate documentation

4.9 Building Code of Australia and Accessibility

A Building Code of Australia (BCA) compliance statement can be found in **Appendix 13** of this EIS which demonstrates the proposed development is capable of compliance with the relevant performance requirements of the BCA. The project's Fire Engineer has also provided a DA compliance statement (**Appendix 29**) which demonstrates that proposed/required performance solutions will be feasible and conform to BCA's performance requirements. 27-29 Bancroft Avenue and 37 Bancroft Avenue will also be required to be consolidated to remove the common allotment boundary.

Finally, an Access Review has been completed (**Appendix 12**) which confirm access requirements (BCA Part D3, E2 and F2 and the *Disability (Access to Premises – Buildings) Standards 2010*) can be readily achieved.

5 Consultation

5.1 General

In accordance with the SEARs issued by the Department of Planning, Industry and Environment, the project team has carried out consultation with the following stakeholders:

- Ku-ring-gai Municipal Council;
- Government Architects Office;
- Transport for NSW;
- NSW Roads and Maritime Services;
- Neighbouring landowners and relevant community groups.

Australian Public Affairs (APA) has prepared a Consultation Report (**Appendix 5**) which details all consultation carried out for the proposal. Details of the consultation carried out by the project team are set out in the following sections.

5.2 Ku-ring-gai Municipal Council

A meeting between the proposed development project team and Council was held at the Council Offices on 15 August 2019. DFP prepared minutes for the meeting (**Appendix 5**) a copy of which were provided to Council on 17 September 2019. Council's Team Leader Development Assessment – (Team South) confirmed via email on 17 October 2019 that the minutes were an accurate record of the meeting.

As discussed in the APA Consultation Report, key matters raised by Council were as follows:

- **Landscaping:** removal of Himalayan Cedar not supported; greater tree planting instead of green walls; provide large areas of fill to support tree canopy coverage; compatible draining structures; exotic plantings for consistency; landscaping to provide filtering views for 39 Bancroft Avenue.
- **Heritage:** demolition of 37 Bancroft Avenue not supported; consider greater setback from 39 Bancroft Avenue; consider reorienting the pool to create greater separation from 39 Bancroft.
- **Traffic:** clearly describe out of hours uses; clearly describe car park operation.
- **Stormwater:** Preferred captured stormwater to be used on site; realign fire service pipes; confirm ownership of stormwater assets.

Landscaping, Heritage, Traffic and Stormwater matters are discussed in **Section 6.8** of the EIS. Generally, the proposed development is considered to be acceptable in the context of the matters raised by Council. Consideration to these elements has been addressed by relevant specialist consultants in the preparation of their designs and reports.

5.3 Government Architects Office (GANSW)

An initial briefing was held with GANSW 17 April 2019 (see DFP minutes of the briefing in **Appendix 5**). GANSW queries and comments in relation to the proposed development were generally as follows:

- *Shadow impacts on tennis court – investigate further;*
- *Line of trees between 37 and 39 needs to be clarified;*
- *Strong landscape strategy required for future meetings to show how building will be supported;*
- *Current character is house/gap/house/gap – strongly recommend considering the response of building to character;*
- *Consider using bleachers/seating as part of external rhythm;*

5 Consultation

- *Character study of area should be carried out and included in future supporting documentation;*
- *Plans to have more light and shade to show layers/depth/articulation;*
- *Understand staging/decanting of site – show how fits into future stages; and*
- *More detail of what 39 Bancroft see – what can be offered to them in compensation for loss of view to cottage.*

A second formal meeting was held with GANSW on 7 August 2019. A copy of the minutes prepared by DFP are provided at **Appendix 5**. BHA provided an overview of the proposed development and how it had evolved from the initial design briefing meeting. A summary of comments from GANSW in the meeting were:

- *Great mix of elements;*
- *Amenity handled very well;*
- *Emphasis to be placed on learning integration and student health and wellbeing in the EIS;*
- *The design is be considered against the Premier's Priorities, in particular in relation to student wellness;*
- *Great opportunity to provide a solar energy system on the roof of the building;*
- *In terms of 'massing' consider if the south-eastern corner of the rear portion of the development can be reduced in height/further articulated;*
- *Also consider if the covered area adjacent to the tennis courts can be integrated into the southern wing of the building;*
- *Overall however, very pleased with the progress of the design documentation with the above design points not a significant issue or concern; and*
- *Brief dot point minutes will be provided to the project team which can be included in the EIS.*

In response to providing consideration of the design against the Premier's Priorities, this is set out in detail at **Section 6.7.1**.

Subsequently, the following comments were received via email from GANSW:

Thank you for the opportunity to review the updated design for this project. Below is a summary of the main points raised at the meeting.

Generally the design and approach to the project is supported, in particular:

- *The retention of trees across the site and integration of new landscaping into the proposed extensions;*
- *The rational planning and adaptation of existing vehicle circulation to support intensification of use with minimum impact;*
- *The internal relationships of functional spaces and efficient optimisation of interior/exterior space adjacencies;*
- *The scale, massing, articulation and materiality of the street façade, carefully relating to neighbouring residential properties;*

The following commentary provides advice and recommendations for the project and should be incorporated into the SSD submission:

- *Commit to the highest level of sustainability strategies for the project and provide details of how these have been incorporated.*

As can be seen above, GANSW were supportive of how the design had evolved and support the approach to the project.

In response to the recommendation provided by GANSW, the ESD Report prepared by Umow Lai (**Appendix 26**) outlines how the proposal is expected to achieve a high level of environmental sustainability, seeking to achieve a Green Star rating of 4-Stars, considered a 'Best Practice' equivalency outcome.

5 Consultation

5.4 Road and Maritime Service (RMS)

On 5 March 2019, RMS provided written input to DPIE as part of the SEARs consultation process, identifying five (5) matters to be included in the transport and traffic impact assessment of the proposal. These requirements were reflected in the SEARs issued by DPIE on 21 March 2019. These matters have been addressed in the assessment carried out under this EIS (refer to **Section 6.8.7**).

Notwithstanding, the SEARs required that consultation with RMS be carried out. RMS were contacted by email to request a meeting to discuss the proposal in response to the matters RMS had raised in submission to the SEARs. On 21 August 2019, a Land Use Planner at RMS provided the following response:

'I refer to your following e-mail, a meeting with RMS is not necessary at this point of time, as long as the issues raised in the attached RMS letter are addressed during DA submission.'

This submission has addressed the issues raised in the RMS letter and therefore further consultation with RMS is not required prior to submission of the SSDA. It is acknowledged that RMS will be consulted further via referral of the SSDA upon submission to DPIE.

5.5 Transport for NSW (TfNSW)

On 8 March 2019, TfNSW provided written input to DPIE as part of the SEARs consultation process, identifying that no further additions or modifications to the draft SEARs were requested.

Notwithstanding, the SEARs required that consultation with TfNSW be carried out. TfNSW were contacted by email to request a meeting to discuss the proposal in response to the matters RMS had raised in submission to the SEARs. On 21 August 2019, a Transport Planner at TfNSW provided the following response:

'Meeting shouldn't be required prior to EIS submission to DPIE based on my understanding of the proposal as detailed in the SEARs request. Comment will be provided upon review of EIS once exhibited and referred by DPIE.'

Therefore, further consultation with TfNSW is not required prior to submission of the SSDA. It is acknowledged that TfNSW will be consulted further via referral of the SSDA upon submission to DPIE.

5.6 Neighbouring Landowners and Relevant Community Groups

Australian Public Affairs (APA) were engaged by Roseville College to undertake community consultation in relation to the proposed development. APA have also prepared a Community Consultation Report (**Appendix 5**) which provides detail on the degree and level of community consultation which has been undertaken for the proposal.

Consultation objectives were first established for the project, they are:

- *Identify, target and inform stakeholders of the project to provide useful, relevant and timely information and create general community awareness and understanding of the project.*
- *Create opportunities for stakeholder engagement through multiple channels and at appropriate decision points of the project to obtain inputs and satisfy all statutory and regulatory community consultation requirements.*
- *Obtain stakeholder and community feedback for the use of the project team during planning, design and construction.*
- *Build positive relationships with stakeholders to obtain timely and meaningful inputs into the project and leave a legacy of goodwill.*

5 Consultation

5.6.1 Consultation Activities – Stakeholder Meetings and Correspondence

Roseville College issued letters by email to a range of key stakeholders to invite their feedback on the proposal, which resulted in a number of meetings. In addition to the consultation with Council and public authorities discussed in the sections above, the following key consultation took place, a summary of actions and/or key outcomes is also provided:

- Aboriginal Community – Government organisation contacts:
 - Correspondence issued to notify and register Aboriginal people who hold cultural knowledge relevant to determining the cultural significance of Aboriginal objects and/or places in the subject area; and identify Aboriginal people who may be interested in registering as Aboriginal parties for the project. Six (6) parties subsequently registered interest.
- Aboriginal Community – Six (6) registered parties:
 - Information pack issued. One response received with a request to be involved in the field survey, archaeological test excavations, topsoil removal and/or all other forms of works to be carried out on the site.
- Neighbours – adjoining property owner (meeting):
 - Raised concerns of building height and set back to boundary. Overshadowing and solar access. Noise and privacy. Placement of the proposed tennis court covered area and the vegetation screening.
- Neighbours – nearby property owners (meeting):
 - Raised concerns of existing operational matters, building design and visual amenity, vegetation screening, traffic and parking, operational hours and use type, construction management.
- Aboriginal Community – 6 registered parties:
 - Provided Draft Aboriginal Cultural Heritage Assessment Report for review. No comments received.

5.6.2 Consultation Activities – Community Drop-in Sessions

Two (2) community drop-in sessions were hosted by the College with the assistance of APA, the sessions were held on

- Tuesday 18 June 2019 from 6pm – 8pm and
- Saturday 22 June 2019 from 11am – 1pm.

Local residents and interested stakeholders were invited to ‘drop-in’ to the College’s Joy Yeo Centre at 27 Bancroft Avenue.

The drop-in sessions were advertised to the local community and key stakeholders as follows:

- Flyer letterbox-dropped to properties along Bancroft Avenue, Glencroft Avenue and Victoria Street;
- Flyer handed directly to residents (door knock) of neighbours along Bancroft Avenue, Glencroft Avenue and Victoria Street;
- Flyer delivered to Roseville Lawn Tennis Club and Ku-ring-gai Arts Centre;
- Project page created on Roseville College’s website;
- Notification phone and email to community engagement representative at Ku-ring-gai Council;
- Phone calls made to stakeholders including the Mayor’s Office at Ku-ring-gai Council, the Bradfield Federal Electorate Office and the Davidson NSW Electorate Office; and

5 Consultation

- Advertisement placed in the North Shore Times.

Copies of all notification material referred to above can be found in the appendices of the Community Consultation Report (**Appendix 5**).

Information about the proposal development and the SSD planning pathway was presented on display boards at the sessions. Representatives from Roseville College were available to discuss the proposal, answer questions and explain the SSD process.

A total of 28 people attended the sessions, providing feedback directly to the College and via feedback forms. The key issues raised during the sessions and via the feedback forms

Communication with Roseville College regarding the project was further made available through:

- Roseville College's news webpage and project webpage (refer Appendix B)
- Roseville College's telephone number 9884 1100 and email address enquiries@roseville.nsw.edu.au.

These communication channels provided stakeholders with access to project staff who could provide information about the proposal and record feedback

5.6.3 Consultation Activities – Feedback Received

Feedback received from the consultation activities generally raised the following key issues:

- Demolition of house at 37 Bancroft Avenue;
- Height, bulk and scale of building;
- Proximity to and overshadowing of 39 Bancroft Avenue;
- Noise impacts from the use of the Centre and courts;
- Detail of uses, hours of operation, and public accessibility of the Centre;
- Vegetation screening along Bancroft Avenue;
- Traffic and parking impacts on local streets;
- Pedestrian safety on local streets;
- Construction impacts, including noise and traffic; and
- Existing traffic congestion, noise and general disturbances from school drop off and pick up.

The above matters have subsequently been taken into consideration in the design and evolution of the proposed development. Table 2 of Section five (5) in the Community Consultation Report (**Appendix 5**) summaries the project's response to each key issue raised. Generally, it is considered that the development, as evolved, addresses each of the concerns and/or issues raised.

5.6.4 Consultation Activities – On-going

Community consultation will continue throughout the assessment and construction phases of the project. Future consultation will include:

- Ongoing management of content for the dedicated Project website;
- Ongoing management of Consultation Manager Database;
- Ongoing project information dissemination to provide timely, clear and factual information including newsletters, media releases, factsheets, community updates, letterbox drops; and
- Presentation of 3D models of new school.

5 Consultation

The College continues to meet regularly with its internal stakeholders, including The Anglican Schools Corporation, the College Council and Executive, teachers, parents and students to discuss the proposal and seek feedback.

6 Environmental Assessment

6.1 General

This section provides an environmental assessment of the proposed development in respect of relevant State policies and matters for consideration under the EP&A Act.

6.2 Environmental Planning and Assessment Act 1979

6.2.1 Section 1.3 - Objects of the EP&A Act

Section 1.3 of the EP&A Act sets out the Objects of the Act and **Table 4** provides an assessment of the proposed development's consistency with these Objects.

Table 4 Proposed Development's Consistency with the Objects of the EP&A Act		
Object of the EP&A Act	Assessment	Consistent
(a) <i>To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,</i>	The proposed development will provide a significant improvement to the social and economic welfare of the community through provision of high quality recreation facilities that are utilised by the school and also the community. Better environment is achieved through the management of impacts from the works and significant improvement of the landscape setting of the property.	Yes
(b) <i>To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,</i>	The objectives of ecologically sustainable development (addressed in detail in Section 6.8.8) are satisfied by the proposal through the integration of the triple-bottom-line factors in the assessment of the work, together with the adoption of ESD initiatives such as achieving 4-Star Green Star performance.	Yes
(c) <i>To promote the orderly and economic use and development of land,</i>	The College has formed part of the residential and community fabric of Roseville since 1908 and the acquisition of additional land to cater for adequate school facilities is considered to promote the orderly and economic use and development of land. The design responds to the opportunities and constraints of the site with a built form that is predominantly one (1) to two (2) storeys in height, with design outcomes specifically mitigating potential adverse impacts such as overshadowing, overlooking and noise.	Yes
(d) <i>To promote the delivery and maintenance of affordable housing,</i>	This object is not relevant to the proposed development, as it will have no impact on the delivery and maintenance of affordable housing.	N/A
(e) <i>To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,</i>	The proposed development will not result in adverse impacts on sensitive biodiversity on or around the site. This is evidenced through the issuing of a BDAR waiver by DPIE (Appendix 30) which confirms that "the proposed development is not likely to have any significant impact on biodiversity values".	Yes
(f) <i>To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),</i>	A Heritage Impact Statement and Aboriginal Cultural Heritage Assessment Report (ACHAR) have been prepared by Urbis Heritage for the project (Appendix 15 and Appendix 16 respectively). In terms of built heritage, it has been found that the proposed development will not detract from the surrounding HCA and is considered to result in sympathetic development which will contribute to the 'green' character of the locality. The ACHAR has found that there are no registered Aboriginal objects and/or archaeological sites within the area and that no landscape features with potential for Aboriginal objects or archaeological deposits are located within the Site.	Yes

6 Environmental Assessment

Table 4 Proposed Development's Consistency with the Objects of the EP&A Act

(g) <i>To promote good design and amenity of the built environment,</i>	<p>The proposed development will provide new architecturally designed fit-for-purpose buildings with associated parking spaces which serve the needs of Roseville College and provide improved health, safety, amenity and accessibility for students, teachers and the overall school community. Consultation has been undertaken with the GANSW office throughout the design of the proposed development with positive feedback received.</p> <p>The proposal satisfies the design principles of the Education SEPP (see Appendix 7) and provides for a positive contribution to the built environment within the locality whilst maintaining the low to medium scale residential amenity currently enjoyed occupants of the locality.</p>	Yes
(h) <i>To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,</i>	<p>The proposed development is designed to achieve compliance with the deemed to satisfy provisions of the BCA, address relevant Australian standards and achieve consistency with the design quality principles of the Education SEPP.</p>	Yes
(i) <i>To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, and</i>	<p>The proposed development has been assessed against the various Commonwealth and State statutes and local policies and has involved consultation with relevant levels of government.</p>	Yes
(j) <i>To provide increased opportunity for community participation in environmental planning and assessment.</i>	<p>The proponent has actively engaged with relevant government agencies and further consultation will be undertaken during the statutory assessment process.</p>	Yes

6.2.2 Section 1.7 – Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994”

Section 1.7 states that this Act has effect subject to the provisions of Part 7 of the *Biodiversity Conservation Act 2016* (we note that the Fisheries Management Act does not apply to the site) that relate to the operation of this Act in connection with the terrestrial and aquatic environment. The *Biodiversity Conservation Act 2016* is addressed in **Section 6.3** of this EIS.

6.3 Biodiversity Conservation Act 2016

Part 7 of the *Biodiversity Conservation Act 2016* (BC Act) sets out provisions relevant to biodiversity assessment and approvals under the EP&A Act. Specifically, Section 7.9 applies to an application for development consent under Part 4 of the EP&A Act for SSD, it states

7.9 Biodiversity assessment for State significant development or infrastructure

(1) *This section applies to:*

(a) *an application for development consent under Part 4 of the Environmental Planning and Assessment Act 1979 for State significant development, and*

(b) *an application for approval under Division 5.2 of the Environmental Planning and Assessment Act 1979 to carry out State significant infrastructure.*

(2) *Any such application is to be accompanied by a biodiversity development assessment report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.*

Additionally, General Requirements No. 21 ('Biodiversity Assessment') of the SEARs states the following:

'Biodiversity impacts related to the proposed development (SSD 9912) 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

6 Environmental Assessment

detailed in the Biodiversity Conservation Act 2016 (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method.'

The last dot point and note of General Requirement number 21 also states:

'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.'

'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'

In light of the above, Section 7.9(2) of the Biodiversity Conservation Act 2016 (the BC Act) provides that an SSD application is to:

'.....be accompanied by a biodiversity development assessment report unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values.'

To this end, Roseville College engaged Eco Logical Australia (ELA) to undertake an assessment of the site, titled 'Ecological Constraints Assessment and Biodiversity Development Assessment Report Waiver'. The assessment demonstrated that the site does not contain biodiversity values in accordance with Clause 1.5 of the BC Act and Clause 1.4 of the BC Regulation 2017. ELA determined that the proposed development "*is not likely to have any significant impact on biodiversity values, as such, a BDAR would not be required*". This assessment was submitted to DPIE on 11 October 2019.

On 29 October 2019, DPIE granted a waiver for the requirement to prepare a BDAR for SSD 9912 (**Appendix 30**). Accordingly, a BDAR has not been prepared for this project.

6.4 Planning Controls

The following subsections assess the proposal against the relevant provisions of applicable Environmental Planning Instruments (EPIs), Draft EPIs, Policies (including Development Control Plans (DCPs)), Planning Agreements and matters prescribed by the Regulation in accordance with Section 4.15(1)(a) of the EP&A Act, and as required by the SEARs.

6.4.1 State Environmental Planning Policy No.55 – Remediation of Land

SEPP 55 relates to remediation of contaminated land and requires, amongst other things, investigations to be undertaken as part of the development assessment process, to determine whether the subject land is likely to be contaminated and if so, what remediation work is required.

The site is not identified by Council or any other authority as being subject to or potentially subject to contamination and multiple development consents have previously been granted for school related developments on the Site, all of which determined that the Site was suitable for this form of development.

A preliminary site investigation (PSI) report has been prepared by Douglas Partners (**Appendix 14**) which has found the site is suitable for the proposed development, subject to conditions.

Laboratory testing of soils samples taken during site investigations found that concentrations of copper above the site assessment criteria were found in borehole number BH405/0.2. No further investigation of the soils was considered warranted however as the vegetation within the vicinity of the borehole was found to be in good health (i.e. had adapted to the environmental conditions). However, if site soils in the vicinity of BH405 are to be reused in landscaped areas as part of the proposed development, then further assessment of the soil physiochemical properties is recommended.

The following conditions relating to the site's suitability are as follows:

- *Data Gaps Assessment – Following demolition of the existing house, a data gaps assessment should be undertaken within the building footprint;*

6 Environmental Assessment

- *Unexpected Finds* – DP recommends the incorporation of an UFP to establish a strategy / management procedure to be followed during construction works, should unexpected finds of contamination be uncovered; and
- *Waste Classification* – A detailed waste classification assessment should be undertaken during construction works to classify surplus soils for off-site disposal or potential off-site re-use, if required.

Further recommendations are also made in relation to groundwater on the site (not contamination related). Groundwater is discussed in further in **Section 6.9.1**.

No further assessment of the site under the provisions of SEPP 55 is therefore considered to be required and the site is considered to be suitable for the proposed development, including the change of use of 39 Bancroft Avenue from a residential use to an educational establishment use.

6.4.2 State Environmental Planning Policy No. 64 – Advertising and Signage

The proposal includes the erection of business identification signage in the form of lettering suspended on the Bancroft Avenue boundary which will state 'ROSEVILLE COLLEGE', as seen in **Figure 23** and **Figure 24**.

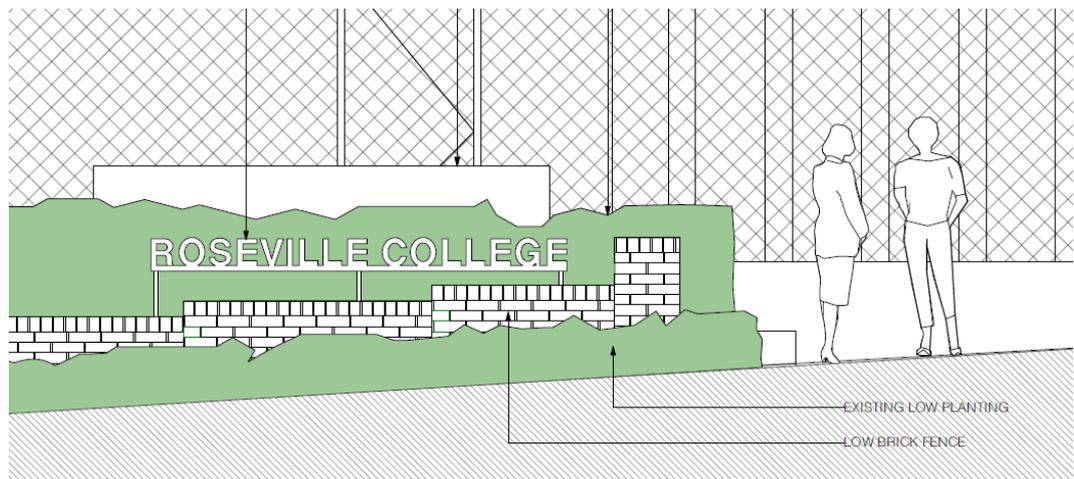


Figure 23 Proposed signage

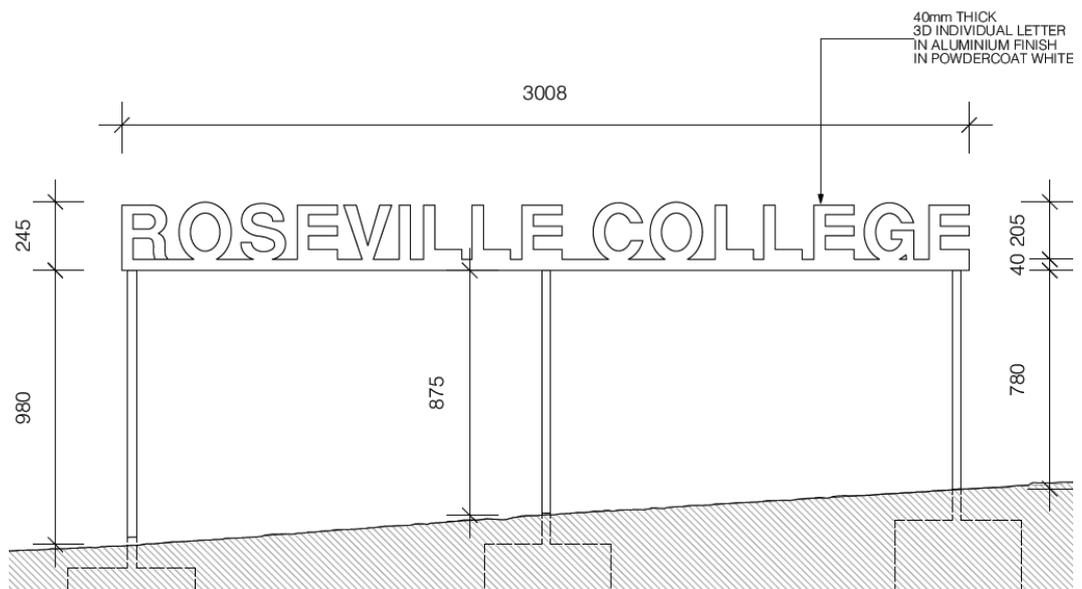


Figure 24 Proposed sign dimensions

6 Environmental Assessment

The sign is deemed to be “*business identification signs*” which is permissible within the SP2 zone (as it relates to the use of the site). The signage is required to comply with the aims of clause 3(1)(a) of SEPP 64 and the assessment criteria in Schedule 1 to the SEPP. Part 3 ‘*Advertisements*’ of SEPP 64 does not apply to Business Identification Signage.

An assessment of the proposed signage against these objectives and assessment criteria is provided in **Table 5**. Details of the proposed signage can be seen in the Architectural drawings in **Appendix 6**.

Table 5 Assessment under SEPP No. 64 – Advertising and Signage		
Provision	Assessment	Consistent
Clause 3 – Aims, Objectives		
(a) to ensure that signage (including advertising): (i) is compatible with the desired amenity and visual character of any area, and (ii) provides effective communication in suitable locations, and (iii) is of high quality design and finish, and	The character of the locality in the vicinity of the Site consists primarily of residential uses. The proposed sign is of a very low scale which is considered suitable not only for the development but the establishment residential locality. It will not dominate the streetscape and is complimentary to the established built form. The proposed sign is simple in its design providing the name of the school only. The proposed signs will be of a high-quality design and finish (aluminium with a white powdercoat finish).	Yes
(b) to regulate signage (but not content) under Part 4 of the Act	An assessment of the proposed signage in respect to Part 4 of the EP&A Act, in particular the relevant matters for consideration under Section 4.15 is provided within this SEE.	Yes
(c) to provide time-limited consents for the display of advertisements in transport corridors, and	N/A	N/A
(d) to regulate the display of advertisements in transport corridors, and	N/A	N/A
(e) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.	N/A	N/A
Schedule 1 Criteria		
Character of the Area	The character of the locality in the vicinity of the Site consists primarily of residential uses. The proposed sign is of a very low scale which is considered suitable not only for the development but the establishment residential locality. It will not dominate the streetscape and is complimentary to the established built form. The proposed sign is simple in its design providing the name of the school only. Accordingly, the proposed signage is considered to be consistent with the visual character of the area.	Yes
Special Areas	N/A	N/A
Views and Vistas	No views or vistas will be adversely affected by the proposed signage.	Yes
Streetscape, Setting or Landscape	The proposed signs are of a scale which is considered suitable for the length and height of the building and will not dominate the streetscape.	Yes

6 Environmental Assessment

Table 5 Assessment under SEPP No. 64 – Advertising and Signage

Provision	Assessment	Consistent
Site and Building	The extent of the signage is reasonable having regard to the scale, number and distribution of existing signs on the site.	Yes
Associated devices and logos with advertisements and advertising structures	No associated devices are proposed.	Yes
Illumination	The proposed sign will not be illuminated.	Yes
Safety	The signage proposed will not adversely impact public safety or the safety of pedestrians, cyclists or motorists within the area. In addition, the proposed signs will not obscure or interfere with road traffic signs and signals.	Yes

The signage is considered to be minor in nature and of an appropriate scale for the development. Accordingly, the proposal is considered to be consistent with the objectives of the SEPP as it is compatible with the character of the locality, provides effective communication and will be of high design quality and finishes.

6.4.3 State Environmental Planning Policy (Infrastructure) 2007

The Infrastructure SEPP does not contain any provisions relevant to the proposed development. Traffic generation resulting from educational establishments is considered via clause 57 of *State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017* (see **Section 6.4.5**).

The site also does not have access to a classified road or to road that connects to classified road within 90 metres. The Pacific Highway is situated over 400m to the west of the site with Boundary Street approximately 100m to the south.

Therefore, the provisions of Division 17 Subdivision 2 of the Infrastructure SEPP do not apply to the proposal.

6.4.4 State Environmental Planning Policy (State and Regional Development) 2011

Clause 15 of Schedule 1 of the SRD SEPP identifies development for an educational establishment that has a CIV of more than \$20 million as SSD.

Blue Stone Management has prepared a Capital Investment Value (CIV) Cost Plan which confirms that the CIV of the proposed development will be greater than \$20 million. For confidentiality purposes, the CIV Report will be submitted to DPIE separate to the DA submission.

Being SSD, Clause 11 of the SRD SEPP will apply to the proposal which outlines that DCPs (whether made before or after the commencement of the SEPP) do not apply to SSDs.

6.4.5 State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017

Part 4 of the Education SEPP sets out specific development controls for schools. Clause 35(1) provides that development for the purpose of a school may be carried out by any person with development consent on land in a 'prescribed zone' (as defined within Clause 33 Education SEPP). The SP2 Special Uses Zone and the R2 Low Density Residential Zone are identified as prescribed zones for the purposes of Clause 35(1), and as discussed at **Section 6.4.7** this makes the proposal permissible with consent on both properties.

Clause 35(6) sets out the following provisions:

- (6) *Before determining a development application for development of a kind referred to in subclause (1), (3) or (5), the consent authority must take into consideration:*

6 Environmental Assessment

- (a) *the design quality of the development when evaluated in accordance with the design quality principles set out in Schedule 4, and*
- (b) *whether the development enables the use of school facilities (including recreational facilities) to be shared with the community.*

In response to Clause 35(6)(a), BHA has prepared an Architectural Report which assesses the proposal against the 7 design quality principles set out under Schedule 4 of the Education SEPP (see **Appendix 7**). In light of the assessment provided by BHA in regard to the design quality principles it is reasonable to conclude that, pursuant to the evaluation in the Architectural Report, the proposal represents a high level of design quality, as required by Clause 35(6)(a) of the Education SEPP.

In response to Clause 35(6)(b), the proposed development will also facilitate the use of the College's facilities by community groups (primarily a 'learn-to-swim school' which currently operates at the College's existing swimming pool), including after-hours use.

The potential impacts of the use of school facilities by the community are addressed in the documentation supporting this EIS, in particular the Acoustic Assessment (**Appendix 28**) and Traffic Impact Assessment (**Appendix 21**).

Clause 35(9) outlines that the provisions of a development control plan that applies to a development of a kind referred to in Clause 35(1) (including this proposal) is of no effect.

Clause 42 'State significant development for the purpose of schools—application of development standards in environmental planning instruments' states the following in relation to the application of development standards to SSD:

'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'

This clause is particularly pertinent to consideration of the proposed development against the *Ku-ring-gai Local Environmental Plan 2015* height of building and floor space ratio controls (applicable to 37 Bancroft Avenue only). Clause 42 has the effect of removing the requirement for a Clause 4.6 variation, however a detailed assessment of potential impacts is carried out in this EIS to enable a full and proper assessment. See **Section 6.4.7** for further details.

Part 7 of the Education SEPP sets out general development controls for traffic-generating development as follows:

- (1) *This clause applies to development for the purpose of an educational establishment:*
 - (a) *that will result in the educational establishment being able to accommodate 50 or more additional students, and*
 - (b) *that involves:*
 - (i) *an enlargement or extension of existing premises, or*
 - (ii) *new premises,*

on a site that has direct vehicular or pedestrian access to any road.
- (2) *Before determining a development application for development to which this clause applies, the consent authority must:*
 - (a) *give written notice of the application to Roads and Maritime Services (RMS) within 7 days after the application is made, and*
 - (b) *take into consideration the matters referred to in subclause (3).*

The proposed development aims to facilitate the progressive increase of the student population from 830 (2016 figures, approximately 1,000 students currently) to 1,250 by 2030. It is noted that this increase has already been granted consent by Council, however pursuant to the discussion in **Section 2.2**, this SSDA seeks to consolidate the terms of the two earlier DAs together with the terms of approval for the proposed change of use of 39 Bancroft

6 Environmental Assessment

Avenue and also for the proposed pool. Therefore, it is considered the proposal is defined as traffic-generating development and the SSDA must be referred to the RMS.

A Traffic Impact Assessment (TIA) prepared by PTC is provided at **Appendix 21** with Transport and Accessibility matters discussed in further detail at **Section 6.8.7**.

6.4.6 Ku-ring-gai Local Environmental Plan (Local Centres) 2012 (KLCLEP)

Table 6 provides a summary assessment of the proposed development against the relevant provisions of the KLCLEP. **Note the KLCLEP applies only to 27-29 Bancroft Avenue.**

Table 6 Assessment against relevant provisions of LEP 2012	
Provision	Assessment
2.2 – Zoning of land to which Plan applies	The site is located within <i>Zone SP2 Infrastructure</i> (the SP2 zone). See Figure 25 below.
2.3 – Zone objectives and land use table	<p>The objectives of the SP2 zone are:</p> <ul style="list-style-type: none"> • <i>To provide for infrastructure and related uses.</i> • <i>To prevent development that is not compatible with or that may detract from the provision of infrastructure.</i> <p>As the proposed development relates to an existing <i>education establishment</i>, it is considered to be consistent with the zone objectives.</p> <p>Development for the purpose of an <i>educational establishment</i> is a permissible land use with consent in the SP2 zone by virtue that the land use table permits development as shown on the land use zoning map, which in this instance is '<i>educational establishment</i>'.</p>
5.10 – Heritage Conservation	<p>Whilst 27-29 Bancroft Avenue is not located within a heritage conservation area (HCA) nor contains an item of environmental heritage, it is surrounded by a HCA (known as the Clanville Conservation Area) and within the vicinity of several items of environmental heritage (see Section 6.8.5 below for detailed discussion on Aboriginal heritage and Section 6.8.6 for built heritage).</p> <p>A Heritage Impact Statement and Aboriginal Cultural Heritage Assessment Report (ACHAR) have been prepared by Urbis Heritage for the project (Appendix 15 and Appendix 16 respectively). These documents also satisfy subclause (6).</p> <p>In terms of built heritage, it has been found that the proposed development will not detract from the surrounding HCA and is considered to result in sympathetic development which will contribute to the 'green' character of the locality.</p> <p>The ACHAR has found that there are no registered Aboriginal objects and/or archaeological sites within the area and that no landscape features with potential for Aboriginal objects or archaeological deposits are located within the Site.</p> <p>Subsequently, the proposed development is considered to be consistent with clause objectives, which are:</p> <ul style="list-style-type: none"> (a) <i>to conserve the environmental heritage of Ku-ring-gai,</i> (b) <i>to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,</i> (c) <i>to conserve archaeological sites,</i> (d) <i>to conserve Aboriginal objects and Aboriginal places of heritage significance.</i>
6.1 – Earthworks	<p>Bulk earthworks will be required on Site to accommodate the proposed basement parking and swimming pool (shown as level 1 in the Architectural plan set in Appendix 6). Approximately 8.2m of cut will be required (within the vicinity of the proposed swimming pool)</p> <p>This clause provides that before granting development consent for earthworks, the consent authority must consider the following matters:</p> <ul style="list-style-type: none"> (a) <i>the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,</i>

6 Environmental Assessment

Table 6 Assessment against relevant provisions of LEP 2012

Provision	Assessment
	<p>(b) <i>the effect of the development on the likely future use or redevelopment of the land,</i></p> <p>(c) <i>the quality of the fill or the soil to be excavated, or both,</i></p> <p>(d) <i>the effect of the development on the existing and likely amenity of adjoining properties,</i></p> <p>(e) <i>the source of any fill material and the destination of any excavated material,</i></p> <p>(f) <i>the likelihood of disturbing relics,</i></p> <p>(g) <i>the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area</i></p> <p>In relation to each of the above:</p> <p>(a) The disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development is highly unlikely. A fully integrated stormwater management system is proposed as part of the development and works do not impact upon any identified waterway, overland flow paths or the like (see also Section 6.4.7). The stormwater and drainage works include management of site drainage during construction via suitable erosion and sediment controls, to be maintained until the site is established. A geotechnical investigation has been undertaken for the site (Appendix 10) which does not indicate that the site will be subject to soil instability. Additionally, preliminary structural engineering analysis (Appendix 11) will inform the future detailing of structural engineering for the works so as to ensure exposed cut is suitably retained;</p> <p>(b) The proposed earthworks will not preclude any future development on the site. They are necessary to accommodate the proposed development however due to the large allotment area, will not impact on any future development opportunities which might be available to the school;</p> <p>(c) As per the PSI (Appendix 14), some area of the site may contain soils with higher than normal levels of copper. Should these soils be reused in landscaped areas as part of the proposed development, then further assessment of the soil physiochemical properties will take place. Prior to the removal of any spoil from the site, a waste classification assessment will be undertaken to classify surplus soils for off-site disposal or potential off-site re-use;</p> <p>(d) The excavation of the site allows for the proposed development to be nestled into the site resulting in a low-scale built form which significantly reduces amenity impacts on adjoining land. In the context of the effect of the actually earthworks, appropriate recommendations have been made in the geotechnical investigation (Appendix 10) to ensure the development on the existing and likely amenity of adjoining properties,</p> <p>(e) Excavated material removed from site (post waste classification) will be either re-used on other sites or disposed of at an appropriately licensed facility able to accept the spoil (see Section 6.8.18); and</p> <p>(f) The ACHAR (Appendix 16) has concluded that there is minimal likelihood of disturbing relics, notwithstanding the unexpected find protocol will be adopted through excavation works on site.</p> <p>(g) Potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area is minimal. The very south-eastern corner of 37 Bancroft Avenue is identified as partially comprising land mapped as "Category 3a" riparian land, on the Riparian Lands and Watercourses Map under the Ku-ring-gai Local Environmental Plan 2015 (KLEP). The mapped vegetation is not part of a formal mapped creek-line, and thus does not trigger the need for a Controlled Activity Approval under the <i>Water Management Act 2000</i>. However, the provisions of Clause 6.4 of KLEP must be taken into account to ensure riparian, stormwater and flooding measures have been adequately addressed. Accordingly, please refer to Section 6.4.7 below where it has been assessed that the proposal will not adversely impact the mapped riparian area.</p> <p>Overall, the assessment finds that the proposed earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land and is therefore consistent with the clause objectives.</p>

6 Environmental Assessment

Table 6 Assessment against relevant provisions of LEP 2012

Provision	Assessment
6.2 – Stormwater and water sensitive urban design	<p>A stormwater management report has been prepared by Acor Consultants (Appendix 18) which details the developments overall stormwater management strategy. A detailed assessment can also be found in Section 6.8.14.</p> <p>The site is not subject to flooding (see Section 6.9.3) and there will not be any impacts to riparian lands</p> <p>Water sensitive urban design principles have been incorporated into the stormwater management system for the proposed development. Elements of the design include:</p> <ul style="list-style-type: none"> • A rainwater tanks for rainwater collection from non-trafficable roof areas for reuse in toilets and irrigation • <i>OceanGuard</i> pit inserts by Ocean Protect in all in-ground stormwater pits, to provide primary treatment of surface runoff. • A secondary filtration chamber will be provided downstream of the OSD tank. <p>The Acor strategy also confirms that the treatment strategy satisfies Council's DCP requirements. In conclusion, the consent authority can be satisfied that the development incorporates appropriate WSUD principles and satisfies the requirements of this clause.</p>



Figure 25 Zoning map for 27-29 Bancroft Avenue under the Ku-ring-gai (Local Centres) Local Environmental Plan 2012

6.4.7 Ku-ring-gai Local Environmental Plan 2015 (KLEP)

Table 7 provides a summary assessment of the proposed development against the relevant provisions of the *Ku-ring-gai Local Environmental Plan 2015 (KLEP)*. **Note the KLCLEP applies only to 39 Bancroft Avenue.**

Table 7 Assessment against relevant provisions of LEP 2015

Provision	Assessment
2.2 – zoning of land to which Plan applies	The site is located in <i>Zone R2 Low Density Residential</i> (the R2 zone) (see Figure 26).
2.3 – Zone objectives and Land Use Table	Development for the purpose of an educational establishment is a prohibited land use in the R2 Zone under KLEP, by virtue that the land use table specifies any other

6 Environmental Assessment

Table 7 Assessment against relevant provisions of LEP 2015

Provision	Assessment
	<p>development not listed as 'permitted without consent' or 'permitted with consent' is prohibited.</p> <p>The R2 zone however is a 'prescribed zone' under the Education SEPP and accordingly the proposal is permissible by virtue of clause 35(1) of the Education SEPP.</p> <p>Notwithstanding, the proposed development is consistent with the zone objectives, in particular <i>'to enable other land uses that provide facilities or services to meet the day to day needs of residents.'</i></p>
4.3 – Height of Buildings	Please refer to detailed discussion at the end of this table.
4.4 – Floor Space Ratio	Please refer to detailed discussion at the end of this table.
5.10 – Heritage Conservation	<p>37 Bancroft Avenue is located within the Clanville HCA. A Heritage Impact Statement and Aboriginal Cultural Heritage Assessment Report (ACHAR) have been prepared by Urbis Heritage for the project (Appendix 15 and Appendix 16 respectively). These documents also satisfy subclause (6) (See Section 6.8.3 below for detailed discussion on Aboriginal heritage and Section 6.8.4 for built heritage).</p> <p>In terms of built heritage, it has been found that the proposed development will not detract from the surrounding HCA and is considered to result in sympathetic development which will contribute to the 'green' character of the locality.</p> <p>The ACHAR has found that there are no registered Aboriginal objects and/or archaeological sites within the area and that no landscape features with potential for Aboriginal objects or archaeological deposits are located within the Site.</p> <p>Subsequently, the proposed development is considered to be consistent with clause objectives, which are:</p> <ul style="list-style-type: none"> (a) <i>to conserve the environmental heritage of Ku-ring-gai,</i> (b) <i>to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,</i> (c) <i>to conserve archaeological sites,</i> (d) <i>to conserve Aboriginal objects and Aboriginal places of heritage significance.</i>
6.1 – Acid Sulfate Soils	37 Bancroft Avenue is mapped as containing Class 5 acid sulfate soils (ASS), accordingly there is a low risk of ASS being encountered during proposed works. This is supported by the geotechnical investigation report prepared by Douglas Partners which discusses that ASS are usually on found in low lying areas (i.e. below RL 5m AHD) and as the site is above RL 82m AHD, encountering ASS at the site is highly unlikely.
6.2 – Earthworks	Earthworks have been addressed at length in the KLCLEP assessment at Section 6.4.6 . The same outcomes apply under clause 6.2 of KLEP.
6.4 – Riparian lands and adjoining waterways	Please refer to detailed discussion at the end of this table.
6.5 – Stormwater and water sensitive urban design.	These provisions have been addressed at length in the KLCLEP assessment at Section 6.4.6

6 Environmental Assessment



Figure 26 Zoning map for 37 Bancroft Avenue under the Ku-ring-gai Local Environmental Plan 2015.

KLEP Clause 4.3 – Height of Buildings

37 Bancroft Avenue has a maximum height of building (HOB) of 9.5m as shown in **Figure 27**. There is no HOB control under the KLCLEP applicable to the remainder of the site.



Figure 27 Height of buildings map for 37 Bancroft Avenue under the Ku-ring-gai Local Environmental Plan 2015.

The proposed development is largely compliant with the 9.5m HOB control with the exception of a minor +700mm encroachment on the south-eastern corner of the building. **Figure 28** and **Figure 29** below are extracts from BHA's height plane analysis (**Appendix 7**) which shows the +700mm encroachment at point A1. The remainder of the development can be seen to be below 9.5m in height.

6 Environmental Assessment

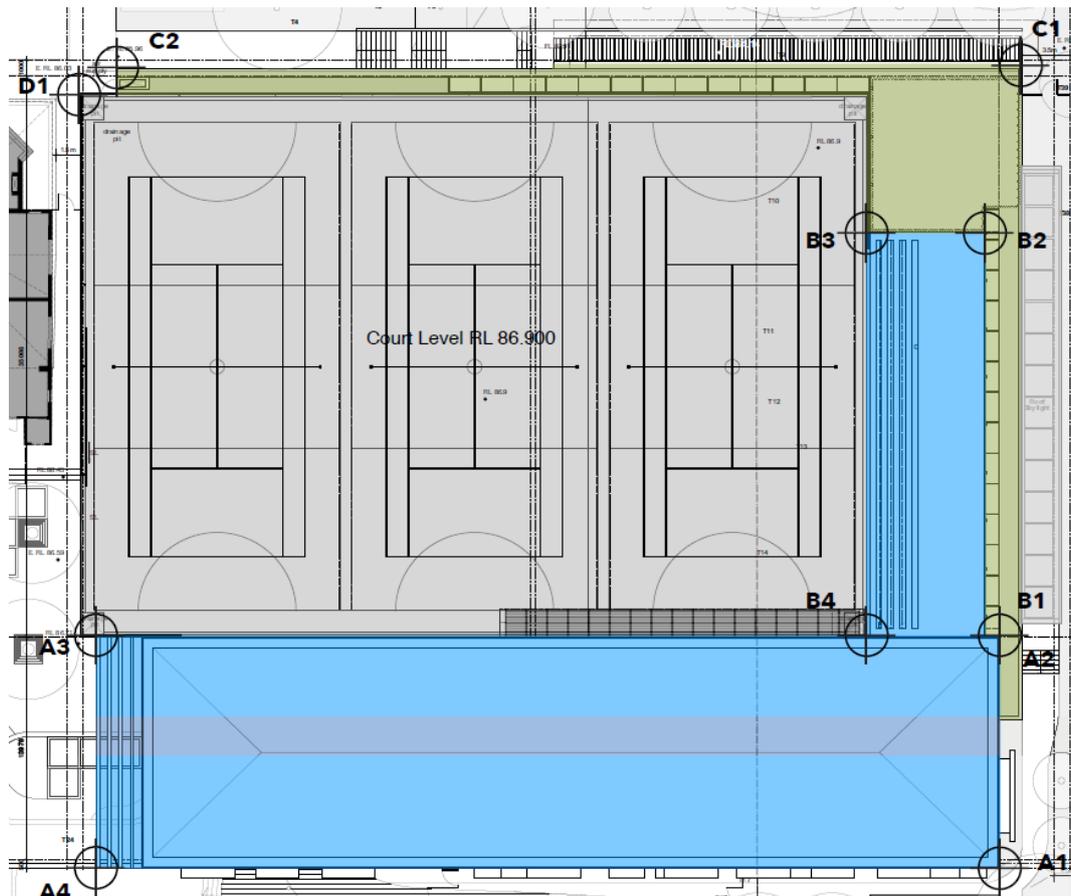


Figure 28 Extract of building height plan analysis from BHA architectural report.

Point	Description	Top RL	Ex Gnd RL	Height
A1	Roof Parapet	91.900	82.33	9.57
A2	Roof Parapet	91.900	82.54	9.36
A3	Roof Parapet	91.900	86.72	5.18
A4	Roof Parapet	91.900	86.00	5.9
B1	Roof to Shaded Area	89.750	82.54	7.21
B2	Roof to Shaded Area	89.76	82.54	7.22
B3	Roof to Shaded Area	89.77	83.26	6.51
B4	Roof to Shaded Area	89.78	82.52	7.26
C1	Top to Garden Bed	86.400	82.74	3.66
C2	Top to Garden Bed	86.400	85.92	0.48
D1	Top to Court Fence	90.250	86.04	4.21

Figure 29 Extract of building height plan analysis from BHA architectural report.

It is noted that there is no HOB control applying to the current College site, and therefore the HOB control only applies to the 37 Bancroft Avenue property, and the development situated therein. The minor HOB exceedance of +700mm at point A1 shown above will not create any unacceptable environmental impacts, such as overshadowing or amenity impacts. The proposed development is of a consistent scale with the existing built form on the Site and is

6 Environmental Assessment

compatible with the established scale and built form of the locality. To this end, the proposal is considered to also be consistent with the clause objectives, which are:

- (a) to ensure that the height of buildings is appropriate for the scale of the different centres within the hierarchy of Ku-ring-gai centres,
- (b) to establish a transition in scale between the centres and the adjoining lower density residential and open space zones to protect local amenity,
- (c) to enable development with a built form that is compatible with the size of the land to be developed.

In relation to each of the above:

- (a) The minor non-compliance occurs in the KLEP applicable portion of the site. 27-29 Bancroft Avenue (the majority of the development site) is subject to the KLCLEP which does not have any HOB applying to the site. In light of this, it is not unreasonable to conclude that the buildings proposed height is at a scale appropriate for the Roseville locality and is consistent with the established built form of the site;
- (b) Residential amenity is considered throughout this assessment. Specifically, overshadowing impacts are considered in detail at **Section 6.8.15** where it has been assessed that 39 Bancroft Avenue will retain a high degree of solar access; and
- (c) The proposal's skilful design to create a low-scale built form which is compatible with the adjoining residential character is considered well-suited with the size of the Roseville College campus and the development site.

It is reasonable to consider that achieving compliance with the building height development standard would not result in a better planning outcome given the minor extent of the variation (+700mm) and the absence of any discernible adverse impacts arising from the variation, in contrast to the positive built form, environmental and social outcomes of the proposal. Therefore, it is considered unreasonable and unnecessary to uphold compliance with the development standard in this instance.

KLEP Clause 4.4 – Floor Space Ratio

37 Bancroft Avenue has a maximum floor space ratio (FSR) of 0.3:1 as shown in **Figure 30**. There is no FSR control under the KLCLEP applicable to the remainder of the site.



Figure 30 FSR map for 37 Bancroft Avenue under the Ku-ring-gai Local Environmental Plan 2015.

6 Environmental Assessment

With a site area of 1,321m², the maximum allowable gross floor area (GFA) permissible on 37 Bancroft Avenue is 396.3m². The GFA across the three (3) levels of the development which are located upon 37 Bancroft Avenue have been calculated in accordance with clause 4.5 of the LEP to be approximately 1,197m². This results in an FSR of approximately 0.9:1.

A GFA calculation for the entire development has been undertaken by BHA and can be found in the Architectural Report at **Appendix 7**. The total FSR for the development (including the Roseville College campus and its established buildings) equates to 0.73:1.

As the majority of the Roseville College site is not subject to an FSR control, therefore compliance with the 0.3:1 FSR control applicable to 37 Bancroft Avenue is considered to be unnecessary in the context of the overall development as compliance with the standard would not result in any change to the built form across the remainder of the College site.

37 Bancroft Avenue is owned by the school and it will form part of the entire Roseville College Campus. Overall, the school will still maintain an FSR well below 1:1 at 0.73:1, which is an acceptable FSR considering the scale of the school's built-form, the proposed development and the 2Ha allotment area.

Whilst the FSR of 37 Bancroft Avenue is 0.9:1, the design of the proposal results in the majority of the GFA being located below existing ground level, this in turn creates a development of minimal bulk and scale which, when viewed from the public domain and adjoining properties is of a capable scale with acceptable environmental impact.

To this end, the proposal is considered to be consistent with the clause objectives, which are:

- (a) *to enable development with a built form and density that is compatible with the size of the land to be developed, its environmental constraints and its contextual relationship,*
- (b) *to provide for floor space ratios compatible with a range of uses*

In relation to the above:

- (a) The proposal's skilful design to create a low-scale built form which is compatible with the adjoining residential character is considered well-suited with the size of the overall proposed Roseville College campus, the development site and the minimal environmental constraints of the site; and
- (b) The 0.3:1 FSR is not compatible with the R2 zone objective *'to enable other land uses that provide facilities or services to meet the day to day needs of residents.'* Schools are an important part of the social fabric of any residential precinct, and an FSR of 0.3:1 does not provide for sufficient GFA to *'to enable other land uses that provide facilities or services to meet the day to day needs of residents'*. Considering the low-scale design of the development in the context of the overall site FSR, the proposal is satisfactory.

It is therefore, reasonable to consider that achieving compliance with the FSR development standard would not result in a better planning outcome given the minimal impact this outcome would have across the remainder of the College site which is not subject to an FSR development standard, and having regard to the response of the proposal to the opportunities and constraints of the land to minimise adverse impacts on adjoining properties. Therefore, it is considered unreasonable and unnecessary to uphold compliance with the FSR development standard in this instance.

KLEP Clause 4.6 – Exceptions to Development Standards

As previously discussed in **Section 6.4.5**, Clause 42 of the Education SEPP states the following in relation to the application of development standards to SSD:

'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'

6 Environmental Assessment

This clause is particularly pertinent to the consideration of the proposed development against the HOB and FSR controls (applicable to 37 Bancroft Avenue only) as discussed above. Clause 42 has the effect of removing the requirement for a Clause 4.6 variation, however as seen above, a detailed assessment of potential impacts has been carried out to enable a full and proper assessment.

On balance, the proposed HOB and FSR variations are considered to be minor with compliance with the HOB and FSR development standard assessed to be unreasonable and unnecessary for the development proposal. There are sufficient environmental planning grounds to justify contravening the development standard, as expressed above and throughout this EIS.

KLEP Clause 6.4 – Riparian Land and Adjoining Waterways

37 Bancroft Avenue is identified as being slightly encroached in its south-eastern corner by an area mapped as “Category 3a” riparian land, on the KLEP *Riparian Lands and Watercourses Map (Figure 31)*. The mapped vegetation is not part of a formal mapped creek-line, and thus does not trigger the need for a Controlled Activity Approval under the *Water Management Act 2000* (see Section 7.4). “Category 3a” is a riparian category within the Kur-ring-gai Development Control Plan 2015, it is defined as ‘*Category 3a Riparian Land includes the area 10m on each side of a discontinuous or piped watercourse.*’



Figure 31 Riparian Lands and Watercourse Map. 37 Bancroft Avenue.

6 Environmental Assessment

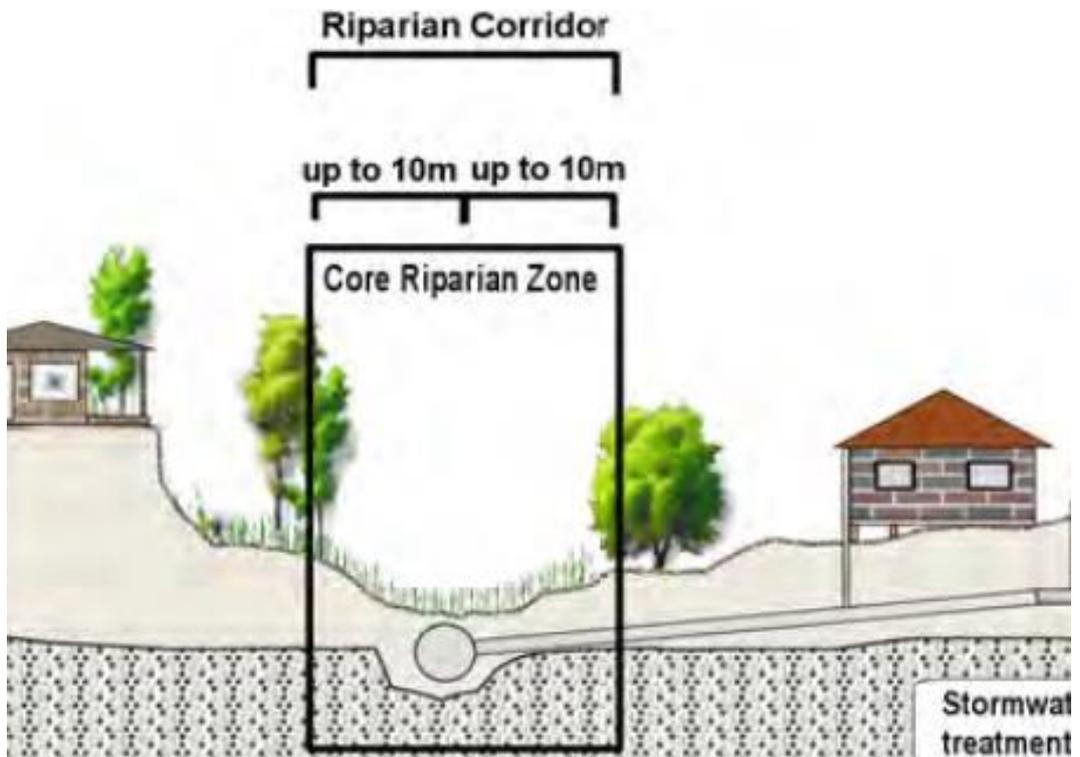


Figure 32 KDCP diagram of a typical Category 3a riparian corridor

As can be seen in **Figure 33** below, the “Category 3a” riparian corridor is generally encroached by established urban development, including tennis courts, swimming pools, dwellings, fences and vehicular circulation spaces, and is not consistent with the typical corridor as shown in **Figure 32** above. On 37 Bancroft Avenue (outlined in yellow), the existing vegetation which can be seen in the south-eastern corner is proposed to be removed. This area will be landscaped upon the completion of works with a proposed heat-pump enclosure also within the vicinity of the mapped area (**Figure 34**).



Figure 33 Developed area within the mapped “Category 3a” riparian land. Source: NSW Government ePlanning Spatial Viewer

6 Environmental Assessment

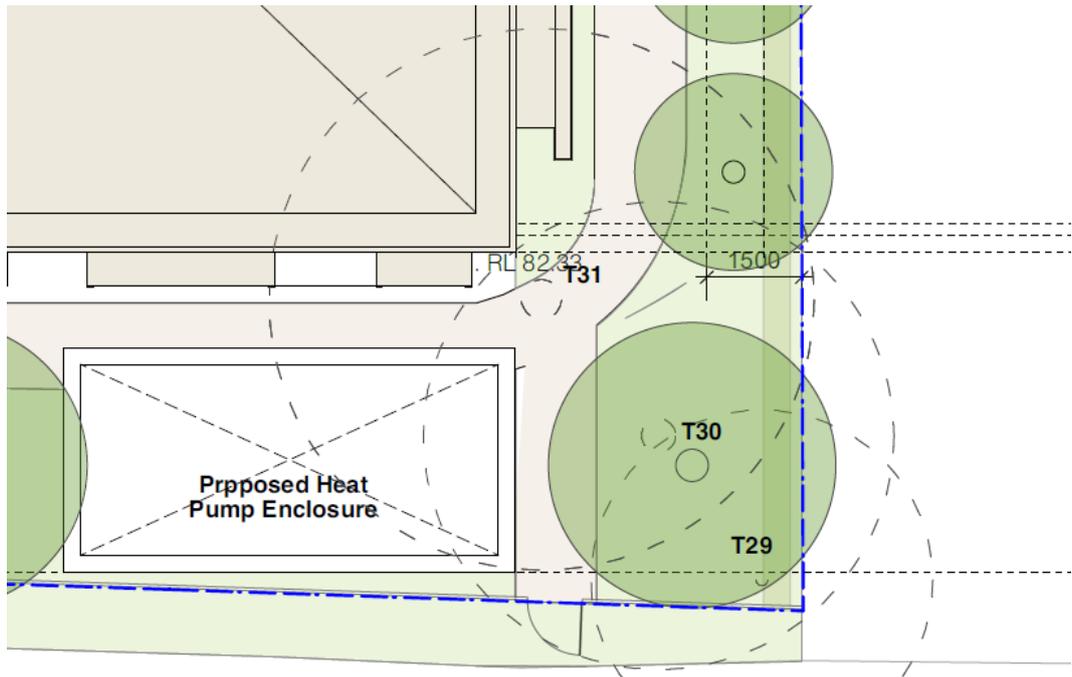


Figure 34 New landscaping and heat pump enclosure.

The provisions of Clause 6.4 of the KLEP state the following:

- 'Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development—*
- (a) integrates riparian, stormwater and flooding measures, and*
 - (b) is sited, designed and managed to avoid potential adverse environmental impacts, and*
 - (c) if a potential adverse environmental impact cannot be avoided by adopting feasible alternatives, the development mitigates any adverse environmental impact, to a satisfactory extent, through the rehabilitation or remediation of any existing disturbed or artificially modified riparian land on the site.'*

In relation to the above:

- (a) The stormwater and flooding are addressed in **Sections 6.8.14** and **6.9.3** respectively. The stormwater system proposed includes an on-site detention system and WSUD devices to improve stormwater disposal quality and satisfy Council's DCP requirements. Stormwater collected will be discharged to infrastructure in Recreation Avenue. The site is not identified as flood prone land to this there are no other impacts arising. The piped and/or irregular riparian corridor essentially commences at the corner of 37 Bancroft Avenue (as mapped) however as shown above, existing vegetation will be removed, and the area re-established through new soft landscaping. This is a suitable treatment to the otherwise highly disturbed corridor.
- (b) The proposed development is sited and designed to generally be clear of the corridor in a manner which avoids the potential for any adverse environmental impacts; and
- (c) It is considered that there will not be any adverse impacts arising on the corridor. The area will be fully landscaped post works with the development proposal sited in a manner to also avoid potential impacts.

6.5 Draft State Environmental Planning Policy (Remediation of Land)

The Department of Planning and Environment (now DPIE) exhibited the proposed SEPP from 1 January to 13 April 2018. It is proposed the new land remediation SEPP will:

6 Environmental Assessment

- Provide a state-wide planning framework for the remediation of land maintain the objectives and reinforce those aspects of the existing framework that have worked well;
- Require planning authorities to consider the potential for land to be contaminated when determining development applications and rezoning land;
- Clearly list the remediation works that require development consent; and
- Introduce certification and operational requirements for remediation works that can be undertaken without development consent.

In light of the above, it is considered that the assessment of the proposed development within this report and the environmental assessment within **Section 6.4.1** satisfactorily considers relevant matters and that the proposal is acceptable in these regards.

6.6 Draft State Environmental Planning Policy (Environment)

DPIE exhibited the proposed SEPP until 31 January 2018 which seeks to protect and management the natural environment and proposes to simplify the planning rules for a number of water catchments, waterways, urban bushland, and Willandra Lakes World Heritage Property

It proposes consolidating the following seven existing SEPPs:

- State Environmental Planning Policy No. 19 – Bushland in Urban Areas
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
- State Environmental Planning Policy No. 50 – Canal Estate Development
- Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
- Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No.2-1997)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- Willandra Lakes Regional Environmental Plan No. 1 – World Heritage Property.

It is considered that the previous SEPP assessments within this report and the environmental assessment within **Section 6.8** satisfactorily considers relevant matters and that the proposal is acceptable in these regards.

6.7 Policies

6.7.1 State and Local Policies

Table 8 provides a summary assessment of the proposed development against the relevant provisions, goals and objectives of relevant State and local policies.

Table 8 Response to Provisions, Goals and Objectives of State Policies	
State Policy	Response
<p>Premiers Priorities:</p> <ul style="list-style-type: none"> • Bumping up education results for children • Increasing the number of Aboriginal young people reaching their learning potential • Protecting out most vulnerable children • Increasing permanency for children in out-of-home care • Reducing domestic violence reoffending • Reducing recidivism in the prison population 	<p>The proposal is consistent with Premier Priorities (as relevant to the proposal) as it will:</p> <ul style="list-style-type: none"> • Create new jobs for construction workers, teachers, support staff and maintenance workers • New jobs will be created over the construction period, including construction personnel and consultant team; • Additional staff for the College; • Support growing population in the locality • Provide education to children to help reduce domestic violence now and in the future; • Provide intellectual and physical education to children with the aim of reducing reliance on health services in the future;

6 Environmental Assessment

Table 8 Response to Provisions, Goals and Objectives of State Policies

State Policy	Response
<ul style="list-style-type: none"> Reducing homelessness Improving service levels in hospitals Improving outpatient community care Towards zero suicides Greener public spaces Greening out city Government made easy World class public service 	<ul style="list-style-type: none"> Provide physical education programmes to children to encourage active living and reduce obesity; Provide a balanced education in line with prevailing public education curriculum; Provide a safe learning environment and education regarding personal protection and welfare; Provide support to our youth and education to enable them to transition to meaningful employment or high education post school; Provide employment opportunities for people of all backgrounds, races or religions; Promote, through educational programmes, protection of our environment; and Provide a high-quality environment to enable a high quality publicly funded education.
<p>The Greater Sydney Regional Plan, A Metropolis of Three Cities (the Plan)</p>	<p>The Greater Sydney Region Plan, A Metropolis of Three Cities:</p> <ul style="list-style-type: none"> Sets a 40-year vision (to 2056) and establishes a 20-year plan to manage growth and change for Greater Sydney in the context of social, economic and environmental matters Informs district and local plans and the assessment of planning proposals Assists infrastructure agencies to plan and deliver for growth and change and to align their infrastructure plans to place-based outcomes Informs the private sector and the wider community of the growth management and infrastructure investment intentions of government. <p>The Plan applies to the Greater Sydney Region and sets the planning framework for five districts which make up the region. The Ku-ring-gai LGA is located in the Northern District and is generally consistent with the North District Plan (as discussed in this table below). By being generally consistent with the North District Plan, it can be considered that the proposal is also consistent with the aims, objectives and visions of the Plan.</p> <p>Notwithstanding, the Proposal is consistent with the Plan's directions for 'Liveability' by assisting in providing infrastructure (i.e. improved school facilities) 30-minute walking distance from residential and commercial precincts, supporting predicted population growth to support in the creation of strong communities.</p>
<p>Future Transport Strategy 2056</p> <p>Relevant vision outcomes:</p> <ul style="list-style-type: none"> Successful places Accessible services Sustainability 	<p>The strategy sets six (6) state-wide outcomes to guide investment, policy and reform and service provision. The proposal will support the relevant vision outcomes identified in the NSW Future Transport Strategy 2056 as follows:</p> <ul style="list-style-type: none"> Roseville College is established in close proximity to the Roseville CBD, where public transport options (buses and trains) are provided. Additionally, by also being located within a well-connected residential precinct, students and staff are provided ease of access by walking and cycling. Active travel to the school, is further encouraged through the provision of, amenities, change areas and showers within the proposed development. Public transport options are readily available for use by staff and students, all within close proximity (easily walkable) locations which will enable students to be transported over longer distances where walking and cycling are less likely; and A Green Travel Plan (Appendix 23) assists to supporting more environmentally sustainable travel by recommending green travel initiatives to discourage private car use in favour of more sustainable means.

6 Environmental Assessment

Table 8 Response to Provisions, Goals and Objectives of State Policies

State Policy	Response
State Infrastructure Strategy 2018 – 2038 Building the Momentum	<p>This 20-year Strategy sets out Infrastructure NSW's independent advice on the current state of NSW's infrastructure and the needs and priorities over the next 20 years.</p> <p>A strategic objective of the Strategy relating to education is to <i>'deliver infrastructure to keep pace with student numbers and provide modern, digitally-enabled learning environments for all students.'</i></p> <p>The proposed development is designed to accommodate an increase to student numbers and will be a modern, digitally-enabled, fit-for-purpose facility with flexible and adaptable learning spaces. The proposal is consistent with the Strategy for education infrastructure.</p>
Sydney's Cycling Future 2013	<p>The Site is located within a well-connected bicycle network with the Council also planning upgrade works (see Appendix 23). This will assist in the promotion of cycling as an option of transport for students and staff which is a healthier, lower cost and environmentally-friendly method of travel. Overall, the proposal is generally consistent with the policy.</p>
Sydney's Walking Future 2013	<p>The Green Travel Plan prepared by PTC (Appendix 23) has found that the Site have excellent connectivity to pedestrian networks, with the Site having sealed paths surrounding it which provide connectivity to the surrounding residential precincts and public transport options such as buses and trains, located just 400m to the west in Roseville. Overall, the proposal is generally consistent with the policy.</p>
Sydney's Bus Future 2013	<p>Whilst there is no public bus service which stops at the Site, surrounding road networks do provide public bus services. Boundary road located to the south, Hill Street, Victoria Street and the Pacific Highway to the West all provide relatively frequent public bus services within a short (5 minute) walk of Roseville College. The Green Travel Plan in Appendix 23 shows that on average approximately 20% of current students use buses to get to school. Overall, the proposal is generally consistent with the policy.</p>
Crime Prevention Through Environmental Design (CPTED) Principles	<p>CPTED principles are addressed in detail within Section 6.8.10 of the EIS. CPTED principles are also addressed in the Architectural Report prepared by BHA (Appendix 7). Generally, the proposal is consistent with CPTED principles.</p>
Better Placed: An integrated design policy for the built environment of New South Wales (GANSW, 2017)	<p><i>Better Placed: An integrated design policy for the built environment of New South Wales</i> (Better Placed) is the GANSW's policy detailing the aspirations of the GANSW for the design of future buildings, infrastructure, public spaces and environments within NSW.</p> <p>Consultation has been undertaken with the GANSW office throughout the design of the proposed development with positive feedback received (see Section 5.3). The Architectural Report in Appendix 7 prepared by BHA also provides analysis against the design principles of the Education SEPP to this end (see Section 6.4.5), the proposal can be seen as generally consistent with the aims and objectives of 'Better Placed'.</p>
North District Plan	<p>The Site is located within the North District Plan (the ND Plan) area which covers the City of Ryde, Hornsby, Hunters Hill, Ku-ring-gai, Lane Cove, Mosman, North Sydney, Northern Beaches and Willoughby Local Government Areas (LGAs). The ND Plan seeks to manage growth in the context of economic, social and environmental matters. It contains the planning priorities and actions for implementing the Greater Sydney Region Plan, A Metropolis of Three Cities, at a district level and is a bridge between regional and local planning.</p> <p>The proposed development is considered to be generally consistent with the ND Plan, in particular the following Planning Priority under the themes of 'Liveability'.</p>

6 Environmental Assessment

Table 8 Response to Provisions, Goals and Objectives of State Policies

State Policy	Response
	<p><i>Planning Priority N3 – Providing services and social infrastructure to meet people’s changing needs</i></p> <p>The NSW Department of Education predicts that 5,733 students in the Ku-ring-gai LGA will need to be accommodated in government and private schools over the next 20 years. The proposed development will assist in achieving that target through the provision of high quality recreation facilities.</p> <p>With out-of-school hours community use of the site also available through the use of the proposed pool with swimming schools/programs, this provides for the efficient use of facilities within the LGA.</p> <p>The proposed design is considered to be innovative in its response to the growth and changing demands for schools, specifically through the efficient use of the site, its contemporary design, greater sharing of spaces and facilities for the community, and the concept of flexible learning spaces.</p>
Ku-ring-gai Local Centres Development Control Plan 2012	See Section 6.7.2 below for an assessment of the proposal against the relevant provisions of the Ku-ring-gai Local Centres Development Control Plan 2012
Ku-ring-gai Development Control Plan 2015	See Section 6.7.3 below for an assessment of the proposal against the relevant provisions of the Ku-ring-gai Development Control Plan 2015
Ku-ring-gai Community Strategic Plan (CSP).	<p>The Community Strategic Plan is the long term strategic plan for the future of the Ku-ring-gai local government area. It reflects the aspirations, vision and long term objectives of the Ku-ring-gai community. The proposal is considered to be generally consistent with the following Themes of the CSP:</p> <p><i>THEME 1: Community, people and culture</i> With a strong population growth in all younger ages groups up to age 24, the provision of a development which increases student capacity is critical to accommodate this growing population.</p> <p><i>THEME 2: Natural environment</i> The proposal will not result in any significant impact on the natural environment.</p> <p><i>THEME 3: Places, spaces and infrastructure</i> The proposal is of a high-quality design, which is sympathetic to the environment and character in which it is located. The quality of the proposed development and its non-obtrusive scale results in minimal impacts arising on the heritage values of the surrounding heritage conservation</p> <p><i>THEME 4: Access, traffic and transport</i> As largely addressed throughout this table and the EIS in general. The proposal will provide adequate parking for staff and the Site is well connected to public transport options in addition to being ideally located near residential areas to encourage active travel.</p> <p><i>THEME 5: Local economy and employment</i> Increased student numbers will result in additional teaching employment opportunities in the Ku-ring-gai LGA.</p>

6.7.2 Ku-ring-gai Local Centres Development Control Plan 2012

It is noted that Clause 11 of the State and Regional Development SEPP and Clause 35(9) of the Education SEPP exclude the application of Development Control Plans to SSD DAs. Notwithstanding, **Table 9** provides a summary assessment of the proposed development against provisions of Ku-ring-gai Development Control Plan 2012 (KLCDCP) that may otherwise be deemed relevant. **Note: The KLCDCP applies only to 27-29 Bancroft Avenue.**

6 Environmental Assessment

Table 9 Assessment against Relevant Provisions of the KLDCP 2012

Provision	Assessment	Consistent
Part 2 – Site Analysis	A site analysis which satisfies the requirements of this clause can be found in BHA's Architectural Report in Appendix 7 .	Yes
Part 12 – Signage and Advertising	A minor business identification sign is proposed as part of the development, as discussed in the SEPP 64 assessment at Section 6.4.2 . The signage is consistent with Part 12 of the KLDCP.	Yes
Part 15 – Land Contamination	An assessment of the proposed development against the provision of SEPP 55 has found the site to be suitable in the context of contamination (see Section 6.4.1). To this end the provisions of this part of the KLDCP are considered to be satisfied.	Yes
Part 19 Heritage Conservation Areas	<p>The site is located within the Clanville Heritage Conservation Area (HCA) under the KLEP and several items of environmental heritage are located within the vicinity of the site.</p> <p>The HIS addresses each applicable clause of Part 19, where the development has been found to be compliant with development controls and/or their objectives. This includes consideration of the development's setbacks, form, massing, landscaping and subsequent impacts which may arise.</p> <p>The development's proposed siting, form and scale is supported from a heritage perspective. The proposal has been found subsequently to result in an acceptable impacts impact on the HCA or the heritage significance of the site.</p> <p>Heritage matters are addressed in detail at Section 6.8.6 of this EIS. A Heritage Impact Statement (HIS) prepared by Urbis Heritage can be found in Appendix 15. Overall the proposed heritage impact methodology is sound and the development is consistent with the KLDCP.</p>	Yes
Part 22 – General Access and Parking	<p>Parking and access requirements for the proposed development are addressed in detail in Section 6.8.7 of the EIS.</p> <p>A Transport Impact Assessment prepared by PTC provided at Appendix 22 has analysed the surrounding road network, car parking demands and subsequently the proposal is supportable from a traffic perspective. The controls and/or objectives of this clause are satisfied by the proposal.</p>	Yes
Part 24 – Water Management	Stormwater is addressed a Sections 6.8.12 of this EIS. The stormwater system proposed includes an on-site detention system and WSUD devices to improve stormwater disposal quality and satisfy Council's DCP requirements. Stormwater collected will be discharged to existing stormwater infrastructure in Recreation Avenue. The proposed developments stormwater discharge, and on-site management systems is considered to satisfy the requirements of the KDCP.	Yes

6.7.3 Ku-ring-gai Development Control Plan 2015

It is noted that Clause 11 of the State and Regional Development SEPP and Clause 35(9) of the Education SEPP exclude the application of Development Control Plans to SSD DAs. Notwithstanding, **Table 10** provides a summary assessment of the proposed development against the provisions of Kur-ring-gai Development Control Plan 2015 (KDCP) that may otherwise be deemed relevant. **Note: the KDCP applies to only 37 Bancroft Avenue.**

It should also be noted that much of the application provisions between the KLDCP and the KDCP are replicated. To avoid repetition the table below makes reference to **Table 9** where appropriate.

6 Environmental Assessment

Table 10 Assessment against Relevant Provisions of the KDCP 2015

Provision	Assessment	Consistent
Part 2 – Site Analysis	As discussed in Table 9 above.	Yes
Part 15 – Land Contamination	As discussed in Table 9 above.	Yes
Part 17 – Riparian Lands	<p>The assessment of the proposed development against Clause 6.4 of the KLEP at Section 6.4.7 largely addresses this Part of the KDCP.</p> <p>37 Bancroft Avenue is slightly encroached by a mapped category 3A watercourse/riparian corridor. The development proposal will not impact upon the corridor, the landscape and stormwater management improvements to the site are considered to be appropriate.</p>	Yes
Part 19 – Heritage Conservation Areas	<p>The site is located within the Clanville heritage conservation area (HCA) under the KLEP and several items of environmental heritage are located within the vicinity of the site.</p> <p>The dwelling house proposed for demolition which located upon 37 Bancroft Avenue has been supported by Urbis Heritage in their HIS at Appendix 15. The dwelling has been found to be a federation style dwelling which has undergone unsympathetic alteration. As such it's demolition will not adversely impact the heritage value of the Clanville HCA.</p> <p>The HIS recommends that a 'Photographic Archival Recording of 37 Bancroft Avenue is undertaken prior to any works on the site.' This recommendation would be suitably enforced via a condition of any subsequent development consent issued by DPIE</p> <p>Heritage conservation areas provisions are also discussed in Table 10 above.</p>	Yes
Part 22 – General Access and Parking	As discussed in Table 9 above.	Yes
Part 24 – Water Management	As discussed in Table 9 above.	Yes

6.8 Likely Impacts of the Development

The following subsections assess the likely impacts of the development in accordance with Section 4.15(1)(b) of the EP&A Act.

6.8.1 Built Form and Urban Design

Built environment considerations are largely addressed throughout this EIS. The proposed development will provide new architecturally designed fit-for-purpose buildings with associated parking spaces which serve the needs of Roseville College and provide improved health, safety, amenity and accessibility for students, teachers and the overall school community.

The minimised bulk and scale of the development, in particular when viewed from Bancroft Avenue is considered to be sympathetic to the existing built form of Roseville College and the surrounding heritage conservation area. A detailed discussion in response to heritage matters is provided in **Section 6.8.6**.

The proposal satisfies the design principles of the Education SEPP (see **Appendix 7**) and provides for a positive contribution to the built environment within the locality whilst maintaining the low to medium scale residential amenity currently enjoyed occupants of the locality.

6 Environmental Assessment

A detailed assessment of HOB and FSR is provided in **Section 6.4.7**, where it is concluded that on balance, the proposed variations are considered to be minor with compliance with the HOB and FSR development standard assessed to be unreasonable and unnecessary for the development proposal. There are sufficient environmental planning grounds to justify contravening the development standard, as expressed above and throughout this EIS.

6.8.2 Biodiversity and Environmental Amenity

6.8.3 Biodiversity and Natural Environment Impacts

As discussed in **Section 6.3**, on 29 October 2019, DPIE granted a waiver for the requirement to prepare a BDAR for SSD 9912 (see **Appendix 30**). Accordingly, a BDAR has not been prepared for this project. Notwithstanding, Eco Logical Australia (ELA) has prepared an ecological constraints assessment for the project, which is also found at **Appendix 30**.

A literature and database search and field survey work has informed ELA's assessment. Key findings of the literature review are:

- The study area (portion of 27 – 29 Bancroft Avenue and 37 Bancroft Avenue - **Figure 35**) does not contain any areas identified on the Biodiversity Values Map;
- The study area does not contain any areas identified as Biodiversity under the *Ku-ring-gai Local Environment Plan 2015*;
- There are no BioNet records of threatened flora and fauna species previously recorded within the study area;
- A total of 35 threatened flora species and 38 threatened fauna species listed under Biodiversity Conservation Act 2016 were previously recorded within a five km radius of the study area;
- No riparian corridors are contained within the study area; and
- Mapping undertaken by the former Office of Environment and Heritage has identified vegetation within the study area as 'Urban exotic /native' (**Figure 36**).

The field work survey completed by ELA has revealed that the Site contain no remnant native vegetation, with the area of planted vegetation of site to be impacted by the proposed development being 0.09Ha. No hollow bearing trees were identified. Additional key finding of the field work survey are:

- No threatened flora and fauna species were identified;
- No microbat activity was observed or recorded;
- No habitat was identified for threatened flora species;
- Limited marginal foraging resources were considered to be present for the highly mobile species the Grey-headed Flying-fox.

In light of ELA's findings, it is clear that the proposed development poses minimal impacts to flora and fauna.

Two native trees, which do not form part of a remnant vegetation community, are proposed for removal along with other planted exotic and native species.

It is also considered unlikely that any habitat for threatened fauna species other than limited foraging resources for the highly mobile Grey-headed Flying-fox is provided for on the site. This is considered to be negligible on a local scale and would not result in a long-term decline of any threatened species.

Subsequently, the removal of vegetation from the study area would not result in a significant impact on any threatened species or ecological community under the *Biodiversity Conservation Act 2016* or *Environment Protection and Biodiversity Conservation Act 1999*.

6 Environmental Assessment



Figure 35 The ELA study area. Source: ELA

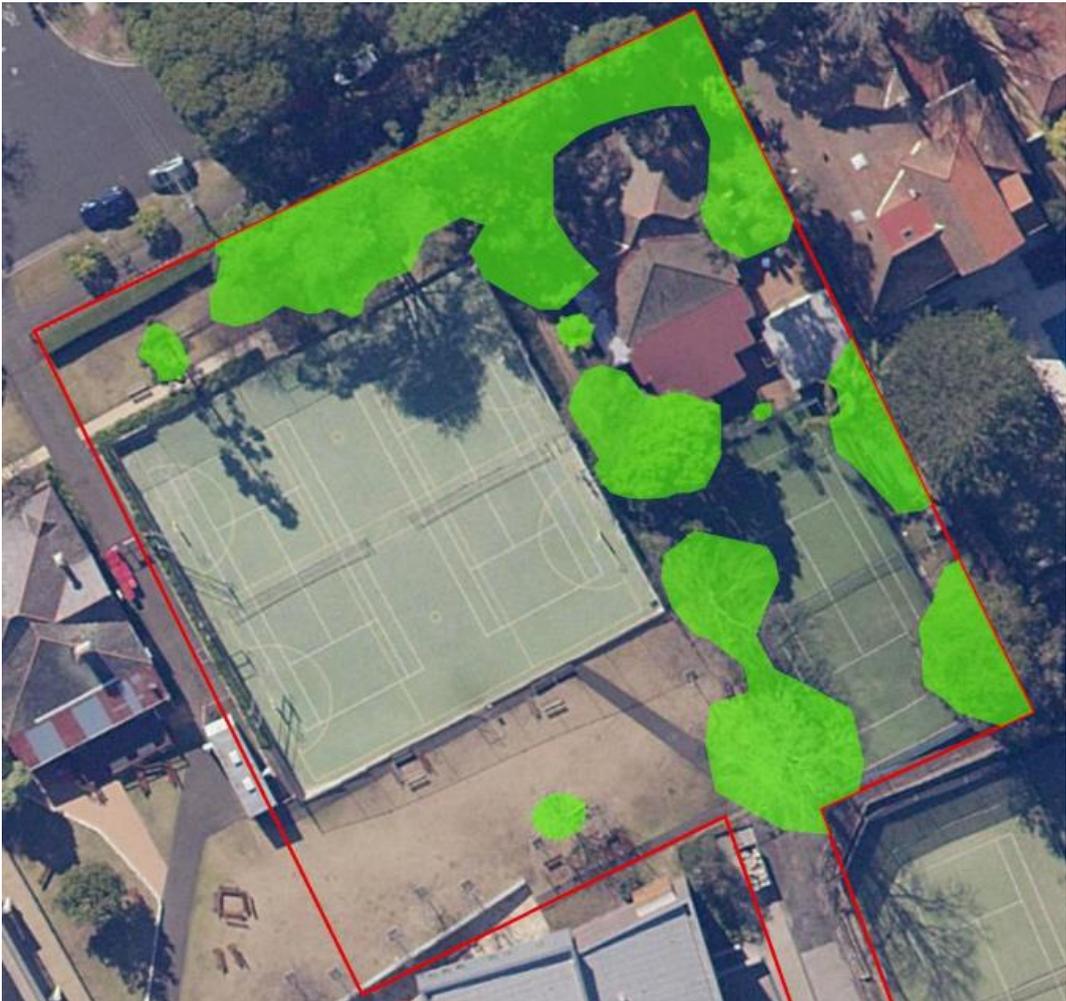


Figure 36 Urban exotic vegetation within the study area. Source: ELA

6 Environmental Assessment

6.8.4 Environmental Amenity

The proposed development has been designed with the objective to uphold and improve the environmental amenity of the site and surrounds as part of the building works and throughout the operation of the school.

During the Carrying Out of Works

With regard to the protection of environmental amenity throughout construction, appropriate sediment and erosion control measures have been incorporated to ensure that the stormwater runoff and movement of vehicles across and out of the site does not result in unacceptable sedimentation or dust impacts. Details are provided in the Sediment and Erosion Control Plan prepared by Acor Consulting (**Appendix 17**).

In addition, the head contractor will implement a final comprehensive Construction Environmental Management Plan (CEMP) to ensure compliance with all relevant statutory requirements. A preliminary CEMP is provided at **Appendix 25**.

As discussed throughout the EIS, Douglas Partners undertook a PSI (**Appendix 14**), where it has been found that the site is suitable for the proposed development from a contaminants perspective.

Tree removal is proposed for 26 trees in total, 22 of which have been assessed a 'low category' and appropriate protection measures are proposed by Ezi Grow Arborists (**Appendix 9**) to ensure the protection of the remaining trees within the development area. The relevant protection measures are set out having regard to the requirements of Australian Standard AS:4970-2009 Protection of Trees on Development Sites.

Waste handling and management throughout construction will be carried out in accordance with the Waste Management Plan (**Appendix 27**) which aims to avoid the generation of unnecessary waste, minimise the volume to be collected and recycle, reuse and recover waste which is generated.

The potential impacts of noise during the site preparation, earthworks and construction phases of the development have been considered and addressed within the Acoustic assessment prepared by Acoustic Dynamics (**Appendix 28**). With the inclusion of recommendations throughout the acoustic report (which can be detailed in future Construction Certificate documentation and enforced via conditions of any subsequent development consent), the proposed development is able to achieve an acceptable level of acoustic performance the construction period. See **Section 6.8.12** also for further discussion on noise and vibration impacts.

During the Operation of the School

With regard to the protection of environmental amenity during the operation of the school, Umow Lai has prepared an ESD Report (**Appendix 26**) which outlines how the proposal has been designed in accordance with the ESD principles under Schedule 2 of the EP&A Regulation. The ESD Report discusses the various sustainability initiatives incorporated into the proposed development, including energy conservation, water conservation and other initiatives.

The Acoustic Assessment Report (**Appendix 28**) demonstrates that the proposal will not give rise to unacceptable noise, subject to the implementation of a number of recommendations which can be incorporated into future Construction Certificate documentation.

Shadow diagrams prepared by BHA (**Appendix 6**) confirm that the proposed built form will not significantly overshadow any surrounding residential development and will not result in unacceptable impacts upon the solar access of surrounding development or the adjacent Roseville Tennis Club facilities.

6 Environmental Assessment

The Stormwater Management Report prepared by Acor Consultants (**Appendix 18**) incorporates Integrated Water Management principles into the design to improve environmental amenity through the reuse collection and reuse of rainwater along with the use of WELS start rated fittings.

The proposal will not result in adverse impacts relating to visual privacy due to its low-scale design, skilfully arranged fenestration and orientation on the site. A visual impact analysis (See **Section 6.8.13**) also confirms the development will not create adverse visual impact with the locality.

In summary, the proposed development achieves the objective to uphold and improve the environmental amenity of the Site and surrounds through both the construction and operational phases of the project.

6.8.5 Aboriginal Heritage

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared for the proposal (**Appendix 16**) by Urbis Heritage. The objectives of the ACHAR are as below:

'The objective of this assessment has been to investigate and confirm the absence, or presence, of Aboriginal objects and places and whether they would be impacted by the proposed development. It also documents consultation with the local Aboriginal community, which aimed to identify any spiritual, traditional, historical or contemporary associations or attachments to Aboriginal sites or objects or to the subject area itself.'

The ACHAR also explicitly identifies the proposal's SEAR's requirements (item 11 Aboriginal Heritage) and ensures each matter has been addressed and considered, and was prepared in accordance with the following guidelines:

- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (Department of Environment, Climate Change and Water (DECCW), 2010) (the Consultation Guidelines);
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (Office of Environment and Heritage 2011) (the Assessment Guidelines);
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010).
- The Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter, 2013 (Burra Charter)

As a result of the ACHAR analysis and findings, Urbis concluded that:

- *There are no registered Aboriginal objects and/or archaeological sites within the subject area;*
- *There are no landscape features with potential for Aboriginal objects or archaeological deposits located within the subject area;*
- *The subject area has been the subject of high levels of disturbance since at least the 1950s by the residential subdivision of Roseville and the subsequent development of Roseville college; and*
- *No Aboriginal cultural heritage values have been identified by the RAPs.*

The ACHAR subsequently determines that the proposed development (activity) can proceed on the Site subject to the proposal adhering to four (4) recommendations, including:

1. Aboriginal cultural heritage induction material be prepared and provided to all contractors on the site;
2. Implementation of archaeological chance find procedures should any deposits be uncovered during site works;
3. Implementation of human remains procedure in the unlikely event that human remains are uncovered during the site works; and

6 Environmental Assessment

4. Carry out ongoing consultation with Registered Aboriginal Parties (RAPs).

Having regard to the assessment carried out by Urbis Heritage in accordance with the relevant guidelines and findings of the subsequent analysis with input from RAPs, it is reasonable to consider that the recommendations made in the ACHAR are a suitable response to the proposals potential to impact on an item of Aboriginal cultural heritage. The recommendations detailed above should be suitably enforced via conditions of any subsequent development consent issued by DPIE

6.8.6 Heritage (Built)

27-29 Bancroft Avenue is not located within a heritage conservation area (HCA) nor does it contain any items of environmental heritage under the KLCLEP. Notwithstanding, it is surrounded by a HCA to the north and north-west and is located within the vicinity of several items of environmental heritage (see **Figure 37** below).



Figure 37 27-29 Bancroft Avenue outlined in Blue – heritage mapping from KLCLEP

37 Bancroft Avenue is located within the 'Clanville' HCA, but does not contain any items of environmental heritage as per the KLEP and as seen in **Figure 38**.

6 Environmental Assessment

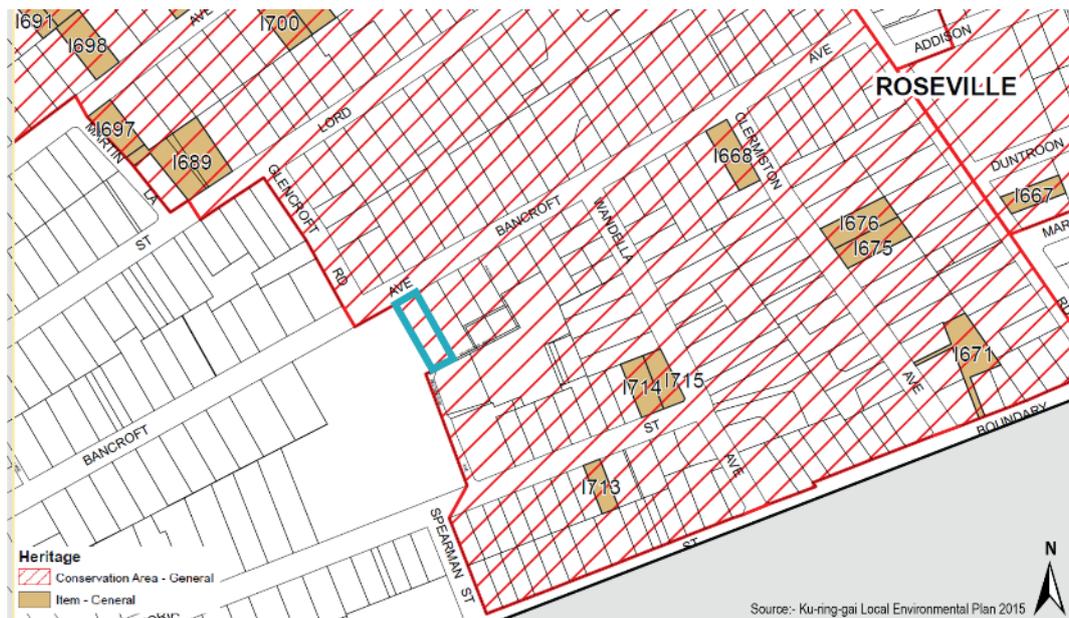


Figure 38 37 Bancroft Avenue – heritage mapping from KLEP

A Heritage Impact Statement (HIS) has been prepared by Urbis Heritage (**Appendix 15**). The HIS has assessed the proposed demolition of the dwelling house on 37 Bancroft Avenue and the proposed new works in the context of Clanville HCA and potential impacts arising on its heritage significance.

Urbis Heritage has prepared the HIS in accordance with the NSW Heritage Division guidelines 'Assessing Heritage Significance', and 'Statements of Heritage Impact'. The HIS also outlines that the philosophy and process adopted in the report is that guided by the Australia ICOMOS Burra Charter 1999 (revised 2013). The methodology of the HIS is sound and considered appropriate for the assessment of this proposal.

The HIS identifies the statements of significance for the Clanville HCA and the Lord Street/Bancroft Avenue HCA (as set out in Council's publications) and provides an assessment of the historical potential of the site, noting that the subject area has a very low historical archaeological potential as early uses of the land are unlikely to have left archaeological traces. Within this context, the HIS has established the basis for assessment, relating primarily to the significance of the HCAs.

The assessment includes consideration of the proposed development against applicable provisions from the KLCLEP, KLEP, KLCDCP and KDCP as well as the Heritage Division guidelines. The assessment of most relevance is provided under Section 6.3 of the HIS against the relevant provisions of KDCP, which applies to 37 Bancroft Avenue (identified as a contributory item in the Clanville HCA).

In response to the DCP controls relating to demolition with HCAs, Urbis Heritage outlines that the proposed demolition has been assessed as acceptable as:

- This site is located on the boundary of the HCA;
- The building is an unrefined example of a Federation dwelling that has undergone modifications including the painting of the brickwork which heavily degrades the contribution of the building to the aesthetic qualities of the HCA;
- As the proposed development would facilitate the upgrading of facilities within a local school which has operated since 1908 and thus represents the ongoing and historic use of the site, being a positive heritage outcome; and

6 Environmental Assessment

- The removal of landscape features or and plantings would be acceptable and would have no adverse impact on the Clanville HCA, in part because extensive landscape works are proposed which would ensure the retention of the 'green' character of the locality.

This EIS supports the findings of Urbis Heritage in regard to demolition works within HCAs as the removal of a building with low contribution values to the HCA and replacement with a high quality built form with extensive landscape works will continue the established presence of the College within the HCA dating back to 1908.

In response to the DCP controls relating to built form, the HIS outlines that the proposed development has been assessed as acceptable as:

- The scale and massing of the proposed development is sympathetic to the established character of the HCA in its one and two storey form, which also responds to the topography of the site including the provision of a basement level and flat roof form;
- Extensive landscaping will retain and enhance the 'green' character of the locality and provide a landscaped buffer mitigating visual impacts of the development, including a continuation of the existing streetscape character of Bancroft Avenue through the use of brick wall, hedge plantings and brick garden edgings;
- The design of the development is clearly discernible as contemporary while being sympathetic to the established qualities of the proximate HCAs and individual heritage items;
- The proposed development is not residential however the proposed scale of the development is sympathetic to the established one and two storey scale of the locality;
- The proposed setback and siting of the building is consistent with the established setback pattern of Bancroft Avenue;
- The setback from the common boundary with 39 Bancroft Avenue has been responded to through a stepped façade and landscaping, and would not detract from the heritage significance of the site; and
- The new building will not disrupt or diminish significant views to and from any locations within the HCA.

This EIS supports the findings of the HIS in regard to the proposed built form as the site planning, bulk, scale, setbacks, façade treatment and landscaping are all sensitive to the context of the proposal and seek to minimise impacts while achieving a design that is clearly discernible as contemporary. The front and side setbacks have been the focal point of design and impact mitigation, and this is reflected in the heritage assessment by Urbis Heritage.

The HIS concludes that while the demolition of buildings within HCAs is not common, this proposal should be considered on its site-specific merits. The dwelling provides a diminished contribution to the HCA and its removal would not detract from the identified heritage significance of the Clanville HCA. Further Urbis Heritage outlines that as the school has operated on this site since 1908, "*the ongoing and historic use of the site is a positive heritage outcome as it is understood demolition would facilitate the requirement to provide upgraded facilities*".

The HIS recommends that a '*Photographic Archival Recording of 37 Bancroft Avenue is undertaken prior to any works on the site.*' This recommendation would be suitably enforced via a condition of any subsequent development consent issued by DPIE.

Therefore, this EIS finds that the assessment methodology, findings and recommendations are supportable. The proposed heritage impacts are acceptable in the circumstances of the proposal.

6 Environmental Assessment

6.8.7 Transport and Accessibility

A Transport Impact Assessment (TIA) has been prepared by PTC, which is provided at **Appendix 22**. PTC has undertaken extensive analysis and appropriate modelling of existing transport facilities within the vicinity of the Site along with Roseville College's travel characteristics in the context of the development proposal. The subsections below assess and discuss PTC's findings which have been prepared in response to the SEAR's requirements for Transport and Accessibility.

6.8.7.1 Existing Traffic Conditions

PTC conducted traffic count surveys between 7am and 9am as well as between 2:30pm and 4:30pm at the following intersections to establish traffic conditions on the local road networks surrounding the school:

- Victoria Street and Spearman Street;
- Victoria Street and Recreation Avenue;
- Victoria Street and Wandella Avenue; and
- Bancroft Street and Glencroft Avenue.

Peak hours at the intersections were identified to be from 7:30am to 8:30am (morning peak) and from 3:15pm to 4:15pm (afternoon peak). Therefore, the traffic count surveys have picked up the entirety of the school's peak hours at the key intersections.

The College currently has an existing drop-off/pickup located along Victoria Street in front of the College with a capacity for approximately 13 vehicles, this area also formed part of the traffic condition survey. Demand for use of the drop off areas was found to be reasonably low in the morning period as drop-offs occurred promptly.

In the afternoon period, demand was found to be much higher as vehicles parked prior to school finish time. For the afternoon, there were generally two (2) separate collection times being 3:10pm (younger students) and a 4:30pm for mostly senior students engaged in extracurricular activities after school. The pickup/drop-off surveys indicate the following findings:

- A peak demand of 4 vehicles for student being dropped off during morning school time, with the spare capacity of 9 spaces; and
- A peak demand of 10 vehicles for student being picked up in the afternoon school time, with the spare capacity of 3 spaces.

In terms of staff and their travel arrangements, an online survey completed by 132 staff members shows that 92% travel to the College by car.

For student travel, of the 970 students currently enrolled, 657 completed an online survey on their mode of transport to and from school. The results are displayed in the graphs at **Figure 39** and **Figure 40** below:

6 Environmental Assessment

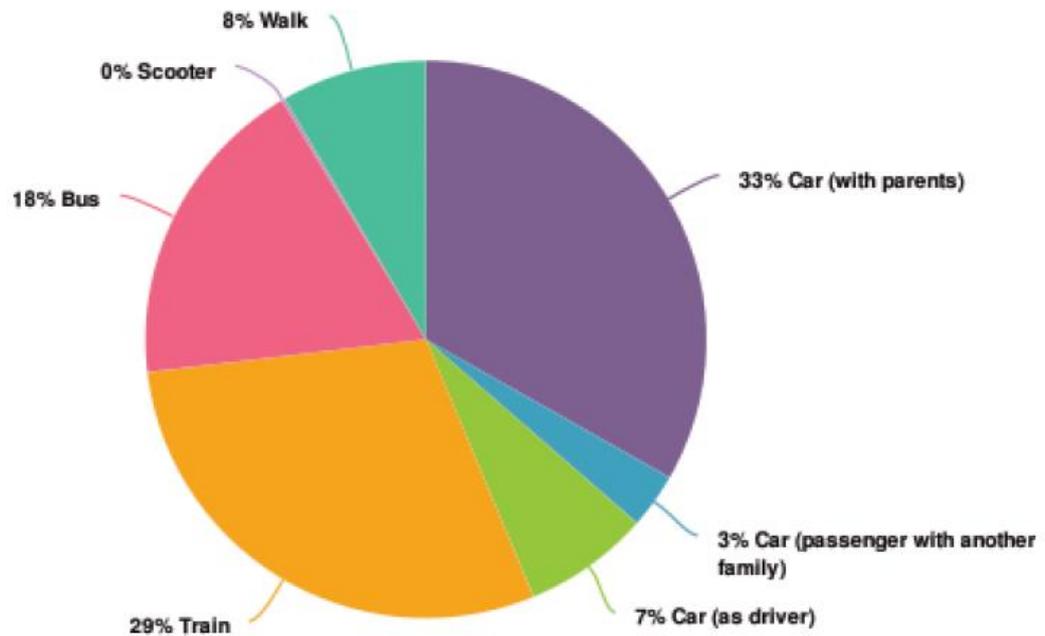


Figure 39 Student transport survey results: from home to school (PTC)

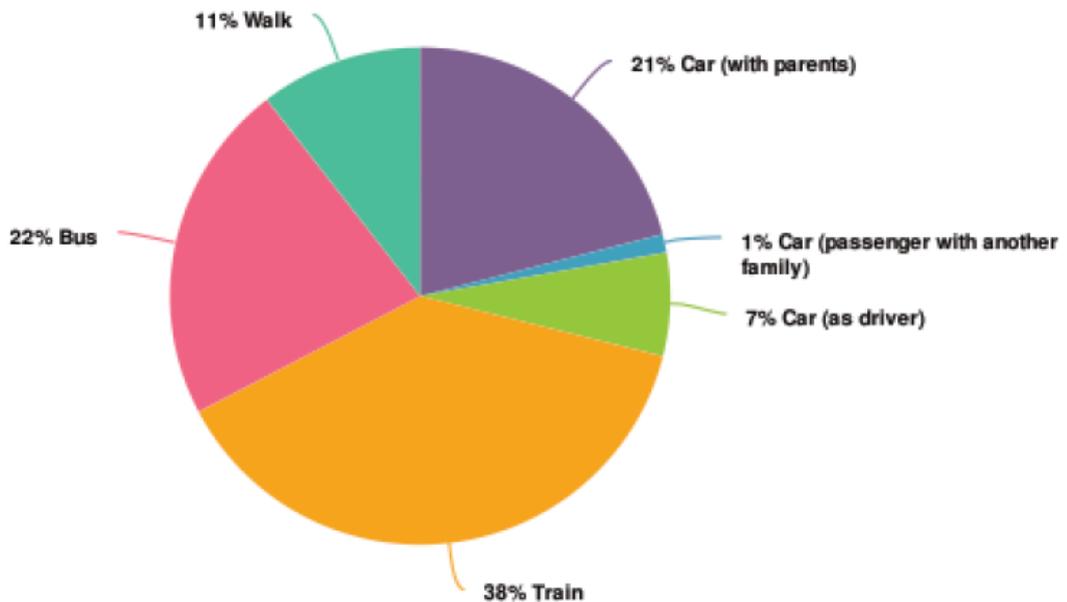


Figure 40 Student transport survey results: from school to home (PTC)

This information provides data and a sound 'baseline' from which to assess potential traffic generation impacts associated with the proposed development.

6.8.7.2 Public Transport

The College is well serviced by public transport options. The Roseville Train Station is located approximately 300m walking distance (at an easy walking gradient) to the west of the site, which is situated on the T1 North Shore Railway line. This line provides access to the northern, southern and western suburbs via interchange at Sydney CBD stations.

Southbound (from Berowra and Hornsby), train services arrive/depart every 15 minutes during the morning peak and afternoon school peak on weekdays.

Northbound (from Parramatta via Central), train services arrive/depart every 6-9 minutes during the morning peak and afternoon school peak on weekdays.

6 Environmental Assessment

Similarly, the College is also well-served by bus services providing connection to a broad catchment in the surrounds, via bus stops on Boundary Road, the Pacific Highway and Hills Street. The nearest bus stop is located an approximately 2-minute reasonably level walk (120m) from the College at the corner of Boundary Road and Spearman Street.

6.8.7.3 Traffic Generation

With a student population of up to 1250 students by 2030 (an increase of approximately 250 students from the current enrolment), traffic generation is expected, pursuant to the approval granted by Council under DA0261/16 (refer **Appendix 2**).

For private vehicles transporting students to and from school (focusing on the drop-off/pick-up area in Victoria Street), it is predicted that an additional 50 vehicles per hour will drop-off students in the morning period with 28 vehicles per hour picking-up students in the afternoon period. Staff vehicle trips would also increase, from the survey data PTC has calculated, arrival and departure trips would translate to a net increase of 33 trips

PTC has also analysed the traffic generated (and subsequent parking demand) by private vehicles transporting participants to the College for learn to swim and swimming squad. They have noted that:

- 40% of the attendees are students of Roseville College, thus their trips have already been incorporated in the existing survey data; and
- 15% of the attendees have siblings that are also attending the swim class, and thus arriving and leaving in one car.

The classes and squads typically operate outside of school hours (5.15am-8.15am and 3.15pm-7.15pm). PTC recommend that traffic should be monitored to ascertain if a management is required (should participant numbers increase), however based on current conditions a management plan is not required.

Modelling of intersections surrounding the school has also taken place. The results show that in 2030 when the school reaches 1,250 students, all the intersections will continue to operate sufficiently with significant spare capacity to accommodate additional traffic activity. The average vehicular delay and queuing will also be reasonable without affecting the non-development related traffic.

6.8.7.4 Access and Parking

The existing site accommodates 127 parking spaces. The proposed development will provide an additional 56 spaces within the new development. Based on Council's parking requirements in the KLDCP, 2030 student numbers and projected staff figures, PTC has calculated that a total of 170 spaces will be required to be provided by the College. With a total of 182 spaces to be provided on site as part of the proposed development (127 plus 56, less an accessible space which will be encroached by the proposed development) the proposed parking exceeds Council's DCP requirements.

6.8.7.5 Green Travel

A Green Travel Plan (GTP) prepared by PTC (**Appendix 23**) has found that the Site has excellent connectivity to pedestrian networks, with sealed paths at easily walkable gradients providing connectivity to the surrounding residential precincts and public transport options such as buses and trains located just 300-400m to the west in Roseville. The GTP will be continually monitored to ensure it is up-to-date with Roseville College's transport needs and that targets and actions on the plan are being achieved.

6.8.7.6 Construction Traffic Management

A preliminary construction traffic management plan (PCTMP) has been prepared by PTC, which is provided at **Appendix 24**. The PCTMP has been prepared with an aim to ensure the

6 Environmental Assessment

safety of all workers and road users in the vicinity of the construction site. The following matters are the PCTMP's objectives:

- To minimise the impact of the construction vehicle traffic on the overall operation of the road network;
- To ensure continuous, safe and efficient movement of traffic for both the general public and construction workers;
- Installation of appropriate advance warning signs to inform users of the changed traffic conditions;
- To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site;
- To provide information regarding the changed access arrangement and also a description of the proposed external routes for vehicles including the construction vehicles accessing the site; and
- Establishment of a safe pedestrian environment in the vicinity of the site.

The PCTMP addresses the following critical components in light of the above objectives:

- General Requirements;
- Staging and Program;
- Hours of Work;
- Construction Vehicle Types;
- Construction Vehicle Routes;
- Construction Vehicle Site Access and Egress;
- Works Zone;
- Pedestrian Access;
- Special Deliveries;
- Staff Parking;
- Work Site Security;
- Staff Induction;
- Emergency Vehicle Access;
- Access to adjoining properties;
- Occupational Health and Safety;
- Method of Communicating Traffic Changes; and
- Contact Details for On-Site Enquiries and Site Access.

The PCTMP also provides swept path analysis of the local road network to ensure construction vehicles are able to manoeuvre safely through the local streets.

Overall, PTC's comprehensive plan is considered to be suitable to improve the safety of the public and site workers alike. The plan will be required to be updated upon the appointment of a principal contractor for the project with on-going updates made as required throughout the construction process. Conditions of any subsequent development consent issued by DPIE would be able to enforce these requirements.

6 Environmental Assessment

6.8.8 Ecologically Sustainable Development (ESD)

Umow Lai has prepared an ESD Report which supports the proposed development and outlines the sustainability initiatives proposed for the development in response to the SEARs and requirements of Schedule 2 of the EP&A Regulation. In addition, the ESD Report references the Green Building Council of Australia, Green Star Design & As-Built v1.3 Rating Tool, and CSIRO projected impacts of climate change.

The proposed SWELL Centre development is expected to achieve a high level of environmental sustainability pursuant to the responses to the following environmental categories under the Green Star rating system:

- Management;
- Indoor environmental quality;
- Energy;
- Transport;
- Water;
- Materials;
- Land Use and Ecology;
- Emissions; and
- Innovation.

Umow Lai has identified that the proposal's informal rating (i.e. not yet formally certified by the Green Building Council of Australia) achieves 4-Stars, which is considered 'Best Practice' for equivalency outcomes. The ESD Report is supported by a Green Star Pathway, which provides a summary of how all available points are achieved and how compliance requirements are met across all of the environmental categories of the Green Star rating system.

In addition to the assessment carried out by Umow Lai, the principles of ESD (as set out under Clause 7(4) of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*) are addressed below:

- **The Precautionary Principle:** The proposal does not present any threat of serious or irreversible environmental damage, as detailed within this assessment. In this regard, the precautionary principle does not need to be exercised in regard to the proposed works.
- **Inter-Generational Equity:** The works proposed as part of this DA will ensure that the health, diversity and productivity of the environment are maintained and enhanced to the benefit of future generations, having regard to the ESD initiatives discussed above and environmental outcomes achieved through architectural and engineering design.
- **Conservation of Biological Diversity and Ecological Integrity:** The Site does not present any issues of biological diversity or ecological integrity as the land is already managed and in the majority developed, and impacts external to the site (such as noise, shadowing, stormwater) have been assessed and the outcomes determined to be supportable.
- **Improved Valuation, Pricing and Incentive Mechanisms:** As discussed above the proposal will adopt a number of ESD initiatives. All up front and ongoing costs associated with the environmental performance of the proposed development have been considered in the design of the proposal, and are considered reasonable and acceptable.

6 Environmental Assessment

6.8.9 Social Impacts

The proposed improvements to Roseville College provides for a positive social impact within the area and more broadly across the greater Ku-ring-gai LGA. The replacement of aged facilities with new and improved school facilities with in-built capacity to accommodate the already approved student numbers (up to 1250 by 2030) results in a 'built-for-purpose' educational which will better service the current and future Roseville College school community, provide increased local school opportunities for nearby families and contribute to a high-quality and more accessible spread of social services across the LGA.

The development proposal is seen to also respect the character of the area and will not impact on the quality of life for residents surrounding the site or in nearby residential precincts. The amenity of neighbouring properties in the context of privacy, solar access, views and noise will not be compromised.

6.8.10 Economic Impacts

During construction, the proposal will provide for construction industry employment which will result in a local economic benefit during the construction period. Upon completion of the development, additional teaching opportunities student places will also be available within the school which flows onto an overall positive economic impact for the area through employment opportunities and future students being able to remain and be part of the local community. Overall the economic impacts of the proposal are positive.

6.8.11 Crime, Security and Crime Prevention Through Environmental Design CPTED

The NSW Bureau of Crime Statistics and Research (BOCSAR) online crime mapping tool generally shows the suburb of Roseville has a relatively low occurrences of crime. **Figure 41** below shows the Site in relation to mapped incidents of malicious property damage over a period from June 2018 to July 2019. Note the location of these events centres around the Roseville Train Station.

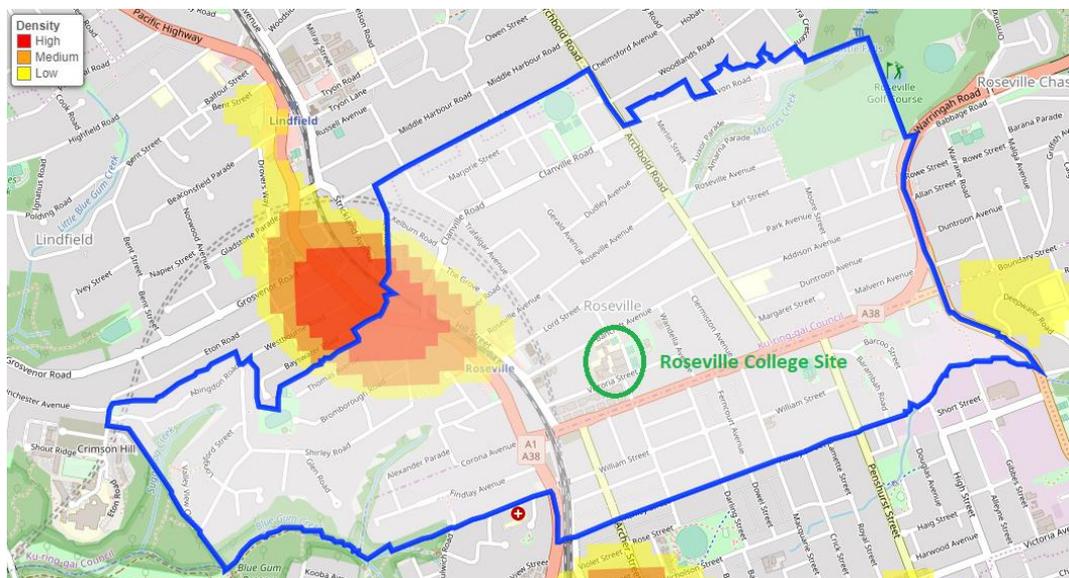


Figure 41 Malicious damage hot spot map July 2019 – June 2019. Source: BOCSAR 2019.

CPTED consists of four (4) universal design principles which are aimed at assessing crime risk and reducing preventable risk before a development is approved. The proposed development has been designed having regard to the CPTED principles, an assessment of which is provided below. In addition, a detailed assessment of the proposal against the CPTED principles has been prepared by BHA in their Architectural Report (**Appendix 7**).

Surveillance: This principle provides that crime targets can be reduced by effective surveillance, both natural and technical. In this regard, the development has frontage to

6 Environmental Assessment

Bancroft Avenue with direct surveillance from the public domain and surrounding residential land uses. Security patrols by the schools preferred security contractor after school hours will also provide for additional surveillance.

Access Control: This principle provides that barriers to attract/restrict the movement of people minimises opportunities for crime and increases the effort required to commit crime. The site's boundaries are, and will be provided with a combination of landscaped elements and fencing with delineated access points for pedestrian and vehicular entry. After school hours, access to the site will only be available to school staff and Roseville College authorised persons. Overall access control to the site is considered to be appropriate.

Territorial Reinforcement: This principle provides that well-used places reduce opportunities for crime and increase risk to criminals. During school days and hours, the school will be heavily used by staff and students. After hours and during school holiday periods, the school's surrounding barrier will be locked and security patrols by the schools preferred security contractor after will also provide for additional surveillance during these periods.

Space Management: This principle provides that space which is appropriately utilised and well cared for reduces the risk of crime and antisocial behaviour. Strategies to implement this principle include, site cleanliness, rapid repair of vandalism and graffiti, the quick replacement of broken light fixtures/globes and the removal or refurbishment of decayed physical elements.

Presentation of the school is managed by the school itself, generally repairs and maintenance of the site occurs when needed. The proposed works will assist in improving the presentation of the premise, which will improve the amenity, casual surveillance and ultimately public safety and sense of security within the site and surrounding area.

6.8.12 Noise and Vibration

Acoustic Dynamics has undertaken a comprehensive acoustic analysis of the proposed development, including construction noise and vibration impacts (**Appendix 28**).

The assessment initially establishes applicable noise assessment criteria with the most rigorous having utilised in the assessment of acoustic impacts and design requirements for the development. An assessment of noise emission at sensitive receivers (i.e. residential uses) within the vicinity of the development has been undertaken using the NSW Environmental Protection Authorities (EPA's) Noise Policy for Industry 2017, this has been used to inform and establish the *project intrusive noise level* and *project amenity noise level* for the development.

To initially establish the current acoustic environment, two (2) noise loggers were placed in the front yard of 26 Bancroft Avenue and on the eastern boundary of 37 Bancroft Avenue (adjacent to 39 Bancroft Avenue). Additional short-term noise logging was also undertaken by 'operator-attended' method at various locations around the development site to compliment the stationary and unattended loggers, providing a more comprehensive background noise level assessment. The table below in **Figure 42** shows a summary of the measured noise levels along with relevant project noise emission criteria (note this includes internal noise level criteria for the proposed new classrooms).

6 Environmental Assessment

Location	Time of Day	L _{A90} Rating Background Noise Level (RBL) [dB]	Measured L _{Aeq} [dB]	Project Intrusive Noise Level [dB]	Project Amenity Noise Level ² L _{Aeq} [dB]	Project Noise Trigger Level L _{Aeq} [dB]
Location 1 Southern Boundary of 26 Bancroft Ave	Daytime ¹ (7am to 6pm)	38	53	43	58	43
	Evening (6pm to 10pm)	36	52	41	48	41
	Night time (10pm to 7am)	31	47	36	43	36
Location 2 Eastern Boundary of 37 Bancroft Ave	Daytime ¹ (7am to 6pm)	36	50	41	58	41
	Evening (6pm to 10pm)	37	47	42	48	42
	Night time (10pm to 7am)	31	43	36	43	36
School Classroom (Internal)	Daytime	-	-	35	-	35³

Figure 42 Summary of measured noise levels and noise emission criteria. Source: Acoustic Dynamic Report

Additional acoustic criteria and standards which have been considered in the assessment of the project and use to inform recommendations include:

- Protection of the Environment Operations Act 1997 (POEO Act);
- EPA's Noise Guide for Local Government (specifically in the context of sleep disturbance);
- The Association of Australian Acoustical Consultants (AAAC) Guideline for Educational Facilities;
- Australian Standard AS2107 – Acoustics-Recommended Design Sound Levels;
- Australian Standard AS3674 – Acoustics-Road Traffic Noise Intrusion-Building Siting and Construction; and
- Department of Education's, 'Educational Facilities, Standards and Guidelines'

6.8.12.1 External Noise Intrusion

Based on the information recorded and established in **Figure 42**, maximum external noise levels have been determined as per **Figure 43**. This subsequently has informed detailed acoustic recommendations throughout the report for the proposed developments building elements to achieve required noise attenuation and maintain appropriate internal amenity for students.

Measurement Location	Time of Day	Maximum Measured L _{Aeq(1hr)} Noise Level ¹ [dB]
26 Bancroft Ave (Southern Fence)	Daytime (7am – 10pm)	57
	Night-time (10pm – 7am)	56
37 Bancroft Ave (Eastern Fence)	Daytime (7am – 10pm)	57
	Night-time (10pm – 7am)	50

Figure 43 Maximum external noise levels

6 Environmental Assessment

6.8.12.2 External Noise Emission

External noise emission from the proposal is likely to be resultant from mechanical plant equipment, staff and student ingress/egress from the site, sporting activities on the proposed sports courts and vehicle movements in and out of the site. The assessment shows that the calculated noise emission levels are capable of compliance with the projects established noise criteria, subject to external noise emission mitigation recommendations (as detailed in Section 6 of the report).

6.8.12.3 Construction Noise and Vibration

Typically, noise and vibration results from demolition and construction activities and the use of powered and pneumatic tools/equipment, including vehicles and machinery. At this development application stage, expected noise and vibration likely experienced during construction is difficult to establish without detailed construction plans.

Notwithstanding, once detailed construction details have been prepared for the project an analysis is able to be undertaken which can predict likely expected noise emissions and sources of vibration along with consequent recommendations that ensure construction processes and procedures can comply with the requirements of the EPA's *Interim Construction Noise Guidelines*, their document titled, *Assessing Vibration: A technical Guideline* and any relevant Australian standards.

Additionally, the Geotechnical report prepared by Douglas Partners (**Appendix 10**) provides commentary regarding vibration and possible appropriate mitigation methods. The report recommends that a vibration trail be undertaken at the commencement of any rock vibration of the site, this can inform if alternative (smaller) equipment or methods should be adopted to reduce vibration to acceptable levels. This recommendation can be incorporated into the future construction and vibration report which will be prepared prior the commencement of any works and provided to the certifying authority for their approval as part of Construction Certificate documentation.

Dilapidation surveys of surrounding properties will also be completed prior to the commencement of any works. This can be enforced via the conditions of any subsequent development consent.

With the inclusion of recommendations throughout the acoustic report (which can be detailed in future Construction Certificate documentation and enforced via conditions of any subsequent development consent), the proposed development is able to achieve an acceptable level of acoustic performance for internal and external amenity and during the construction period.

6.8.13 Visual Impact and Privacy

The proposed development is considered to result in minimal visual impact on the locality. Photomontages of the proposed development can be found in **Appendix 6** and are also replicated below for ease of reference in **Figure 44 - Figure 47**.

The locality is generally characterised by lower scale residential developments (with the exception of the school site) within a 'leafy' and 'green' landscape setting. Due to the topography of the locality, there are no prominent views or vistas that can be potentially obstructed by the proposal.

The 'green' characteristics of the locality are a key feature of Bancroft Avenue in particular. The proposed development has been skilfully designed to present to Bancroft Avenue as a 1-2 storey building (see **Figure 45** and **Figure 46**), subsequently resulting in the building not being a visually prominent features of the streetscape. The building maintains the front setback established by existing developments along the street and when combined with the development's proposed landscaping elements (as shown) the result is a built form which is in harmony with character of the area, non-obtrusive in the streetscape, complimentary and contributory to the established 'green' character of Bancroft Avenue.

6 Environmental Assessment

The proposed new development will be largely obscured from Victoria Street to the south of the site, this is due to the existing College buildings, street trees and simply the 110m physical separation which is provided. Notwithstanding this, as seen in **Figure 44** below the proposed building is of a lower scale than the existing Joy Yeo Centre development on the College site. The earthy tone brick selected for the exterior is sympathetic to the locality and compliments the existing structures on the College site. There are no view corridors, scenic outlooks or vistas obscured by the development from any areas of the surrounding public domain or existing residential developments.

The HIS (**Appendix 15**) has also found that the proposed development's height, form and scale is sympathetic to the characteristics of the locality and that it will not detract from the heritage significance of the locality (refer to **Section 6.8.6**).

On balance, it can be concluded that the proposed development does not pose a significant visual impact on the locality.



Figure 44 Proposal development looking down and south-east from Bancroft Avenue

6 Environmental Assessment



Figure 45 Photomontage showing presentation to Bancroft Avenue



Figure 46 Proposed development show to the right of 39 Bancroft Avenue. Looking in a south-west direction

6 Environmental Assessment



Figure 47 View of the rear of the proposed building from Recreation Avenue. Existing Joy Yeo Centre shown on the left.

In terms of visual privacy, the proposal will not result in adverse impacts due to its low-scale design, arrangement of fenestration and orientation on the site.

There are no windows on the elevation facing Bancroft Avenue and the windows which are provided on the southern elevation only overlook the already highly visible Roseville Lawn Tennis Club Courts, public spaces and the internal grounds of Roseville College itself.

6.8.14 Stormwater Management, Drainage and Integrated Water Cycle Management

Acor Consultants has prepared a comprehensive Civil Services/stormwater design package for the proposed development, accommodated by a stormwater management report. Civil designs are provided at **Appendix 17** with the stormwater management found in **Appendix 18**.

The stormwater run-off from the site (both pervious and impervious area) will generally be conveyed to an in-ground pit and gravity pipe system which has been designed to accommodate a 5%AEP storm event. In-ground blockage potential has also been considered in the design of the system with overland flow paths provided around the proposed development, this includes:

- Overflow from the on-site detention (OSD) tank (draining to Bancroft Avenue);
- Site grading of the landscaped area to the east of the building to promote overland flows towards Bancroft Avenue and Recreation Avenue;
- Overland surcharge flows from the northern landscaped area to Bancroft Avenue; and
- Overland flows from southern hardstand and landscaped areas to Recreation Avenue.

Roof water captured will be conveyed to a 20m³ rainwater tank. Roof water runoff from trafficable roof areas (i.e. proposed sports courts walkways etc) will be collected and discharged into the OSD system. Ultimately, captured stormwater will be piped to Recreation Avenue where an existing private stormwater pit connected to Councils system before draining to an existing Sydney Water stormwater channel.

The proposed stormwater system will store and release stormwater so that the post-developed flows leaving the site achieve the Permitted Site Discharge (PSD) and Site Storage

6 Environmental Assessment

Requirement (SSR) nominated by the KDCP. The proposed OSD system will consist of a storage tank within the proposed building's envelope, located above the Level 2 floor slab.

The OSD tank has been incorporated within the building as there is limited availability for an in-ground detention tank within the landscape setbacks to Bancroft Avenue and Recreation Avenue.

A summary of key OSD system elements are:

- The proposed OSD tank will provide an OSD storage volume of 89.85m³, which meets the calculated requirements for the site;
- In the event of OSD tank overflow, water will rise through a grated opening located within the courtyard external to the proposed building envelope. Site grading will direct overflows safely away from the building entries and to the existing overland flow path to Bancroft Avenue.

Water sensitive urban design principles have been incorporated into the stormwater management system for the proposed development. Elements of the design include:

- A rainwater tanks for rainwater collection from non-trafficable roof areas for reuse in toilets and irrigation
- OceanGuard pit inserts by Ocean Protect in all in-ground stormwater pits, to provide primary treatment of surface runoff.
- A secondary filtration chamber will be provided downstream of the OSD tank.

The Acor Consulting report also confirms that the treatment strategy satisfies Council's DCP requirements.

Rainwater reuse and stream flow controls will be managed via the proposed 20m³ rainwater tank for which it can be used for landscaped areas and flushing of 12 toilets within the proposed development. Acor calculations also show that the proposed system will result in a 74% reduction in runoff days from the non-trafficable roof catchment area, ensuring compliance with the KDCP. Subsequently, the DPIE can be satisfied that the development's proposed stormwater drainage and integrated water cycle management arrangements has been duly calculated and designed to meet the site conditions and Council's stormwater management requirements.

6.8.15 Solar Access

Shadow diagrams are provided in the Architectural plan set prepared by BHA at **Appendix 6** with a solar and shadow impact study provided within BHA's Architectural report at **Appendix 7**. **Figure 48** shows the diagrams prepared by BHA.

6 Environmental Assessment

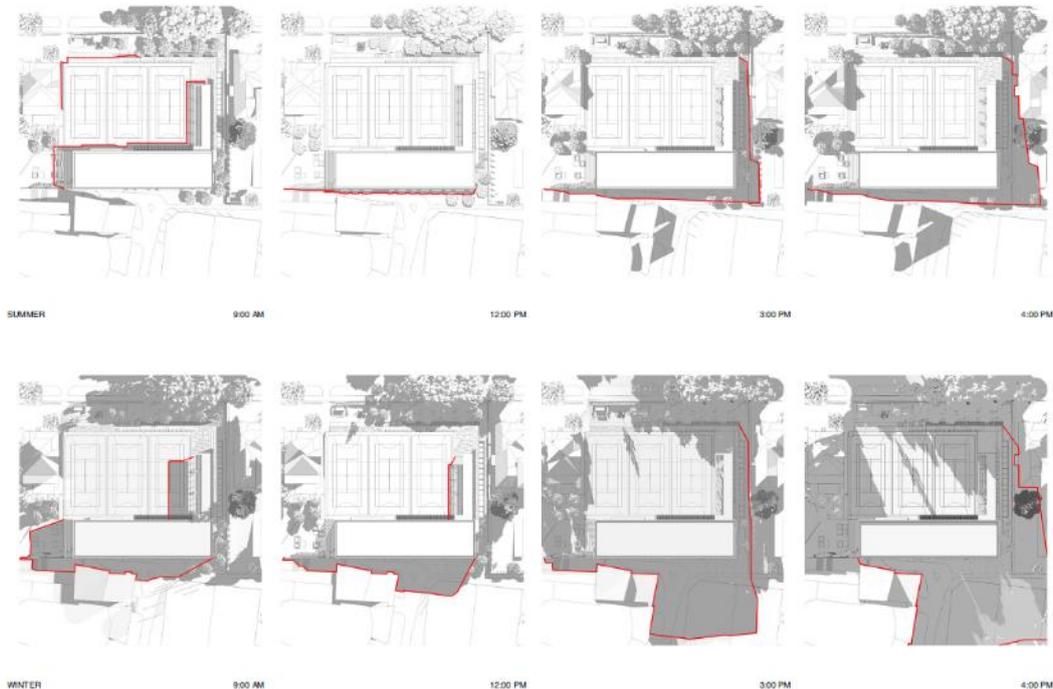


Figure 48 Extract of shadow diagrams

Properties most susceptible to solar access impacts by the proposed development are 39 Bancroft Avenue adjoining to the north-east of the site and the tennis courts of the Roseville Lawn Tennis Club opposite the site in Recreation Avenue to the south-east.

The orientation of the subject site and the adjoining properties is favourable to minimising adverse solar access impacts, in particular the long axis of 39 Bancroft Avenue being orientated north-west to south-east with its dwelling located in the north-western half of the allotment results in minimal overshadowing.

With the proposed development, most of the built form 'bulk' is located at the rear (south-western) corner of the site where it becomes a three (3) storey development. During the winter solstice, 39 Bancroft Avenue will maintain a high degree of solar access throughout the day due to the positioning of the proposed building and the orientation of the allotments. With the development presenting to Bancroft Avenue as a one (1) – two (2) storey building, this results in minimal (almost nil) overshadowing on the dwelling at 39 Bancroft Avenue at 3pm on the winter solstice and minor overshadowing to a small portion of the private open space of the allotment. In consideration of the allotment area, this impact is considered minor. The vast majority of the site (including the existing swimming pool located adjacent to the eastern most boundary) will still receive sunlight (see **Figure 49**). Throughout summer solstice, the property maintains a high level of solar access.

Overall, 39 Bancroft Avenue will experience minor overshadowing impacts. The skilful design of the proposed development with its low 'residential-like' scale adjacent to the dwelling house results in sunlight still being provided to the site throughout the vast majority of the year.

During the winter solstice the development will overshadow a small portion of the tennis courts located upon the Roseville Lawn Tennis Club at 3pm. Being a non-residential and intermittently used site, the overshadowing impact as seen in **Figure 49** is considered acceptable. Furthermore, the site will maintain a high degree of solar access throughout summer and the majority of the winter solstice.

Finally, it must also be noted that Roseville College and the Roseville Tennis Club have a good relationship which often results in the tennis club utilising the College's tennis court

6 Environmental Assessment

facilities. This relationship will continue with the redevelopment of Roseville College providing for additional facilities the tennis club can utilise.



Figure 49 Shadow at 3pm on the winter solstice



Figure 50 Photomontage showing presentation to Bancroft Avenue

6 Environmental Assessment

6.8.16 Erosion, Sediment and Dust Control

6.8.16.1 Erosion and Sediment Control

A detailed project specific erosion and sediment control plan has been prepared by Acor Consultants (**Appendix 17**). Prior to the commencement of works, all erosion and sediment control measures will be implemented on-site in accordance with the Acor plan and the document *Managing Urban Stormwater – Soils & Construction Volume 1 2004 (prepared by Landcom)*. All measures will be subsequently maintained throughout works. The installation and maintenance of the erosion and sediment control measures is reinforced via the Construction Environmental Management Plan (CEMP) provided at **Appendix 25**.

6.8.16.2 Dust Control

Some dust is anticipated (and is common of any building site) during the construction period; however, this can be managed through measures such as wetting down work areas/stockpiles, stabilising exposed areas, preventing material tracking out onto public roadways, covering loads on all departing trucks and working to weather conditions. Notwithstanding, full dust control details are provided in a Dust Management Plan which forms part of the CEMP provided at **Appendix 25**.

The principal contractor for the works will be responsible for the monitoring, reporting and providing necessary corrective dust control actions in accordance with the requirements of the CEMP. This will ensure the protection of workers on-site, the public, the environment and minimising the potential for air pollution within the locality. The proposal is however not expected to give rise to any long term or adverse impacts on local or regional air quality

6.8.17 Structural

A structural engineering report with preliminary structural designs have been prepared by Cardno (**Appendix 11**). The report establishes the structural engineering design parameters and considerations for the proposal, taking into account the established geotechnical profile of the site.

The final structural design of the proposed development will be undertaken in accordance with recommendations within the report, the relevant provisions of the BCA and the following Australian Standards (versions as in force and referenced by the BCA at the date when a future Construction Certificate is lodged with a certifying authority):

- AS 1170.0 Structural Design Principles;
- AS 1170.1 Structural Design Actions (Dead and Live);
- AS 1170.2 Structural Design Actions (Wind);
- AS 1170.4 Structural Design Actions (Earthquake);
- AS 2159 Piling Code;
- AS 3600 Concrete Structures Code;
- AS 3700 Masonry Structures;
- AS 4100 Structural Steel Code;
- AS 4678 Earth Retaining Structures;
- BCA Australia – Structural Provision;
- BCA –Section B – Structure; and
- BCA – Section C – Fire Resistance.

Structural design certification pursuant to Part A5 of the BCA will also be required to be provided to the certifying authority as part of any future Construction Certificate documentation.

6 Environmental Assessment

6.8.18 Waste Management

An Operational, Demolition and Construction Waste Management Plan (WMP) prepared by Waste and Audit Consultancy Services is provided at **Appendix 27**. The WMP is anchored by the following three (3) objectives:

- Ensure waste is managed to reduce the amount of waste and recyclables to land fill by assisting staff to segregate appropriate materials that can be recycled; displaying signage to remind and encourage recycling practices; and through placement of recycling and waste bins to reinforce these messages;
- Recover, reuse and recycle generated waste wherever possible; and
- Compliance with all relevant legislation, codes and policies.

6.8.18.1 Operational Waste

The operational waste assessment has taken into consideration the increased school population of 1,250 students by 2030. Regular waste generation typically will be recycling (i.e. paper/cardboard, glass and plastic), general waste and green (garden waste). To manage volumes generated, the school currently has the following waste collections arrangements in place:

- 20 x 240 litre Mobile Garbage Bins (MGB) for general waste
- 20 x 240 litre MGB for recycling; and
- There is a 6m³ skip bin for larger maintenance and other wastes.

Private waste contractors are utilised by the school to collect general waste and recyclables five (5) times a week with additional collections arranged as required. This is considered to be an acceptable service arrangement. Additionally, the skip bin is collected on a monthly basis.

Recommended waste and recycling systems and procedures are detailed in Section 2.4 of the WMP as shown below:

- MGB for waste and recyclables are located around the College grounds for use by staff and students and in the driveway of 31 Bancroft Avenue (for servicing by the contractor);
- All MGB and bins are managed by College cleaning staff;
- Servicing of waste and commingled recycling MGB is undertaken prior to 7.00 am on collection days; and
- All waste and recycling 240 litre MGB are serviced from Bancroft Avenue and Recreation Avenue for skip bin. All MGB are transported to the collection area from their locations on the College grounds by College cleaning staff and then emptied by the contractor. This occurs in the morning prior to any staff/students arriving, with bins returned to the storage rooms.

In addition to the above, classrooms are provided with 15L bins. Staff and students will be educated/trained on the school's waste management processes with instructional signage also to be displayed around the school's grounds.

Overall, there will be minimal impacts arising from an operational waste perspective.

6.8.18.2 Demolition Waste

Demolition waste will comprise primarily of excavated earth material, bricks, tiles, concrete, plasterboard, timber, metals, hard plastics, glazing (glass), green waste, mixed recyclables and general waste. The WMP provides details of estimated quantities and disposal points will be confirmed once a principal contractor for the project is appointed. Generally, however there will not be any materials disposed of at landfill. All materials will be either reused on-site or recycled off-site.

6 Environmental Assessment

During demolition of the existing dwelling at 37 Bancroft Avenue, asbestos containing materials will be encountered. Accordingly, a Hazardous Materials Report has been prepared by Safe Work (**Appendix 21**). The report identifies the cladding and 'base-cover' of existing shed on the site contains asbestos, as does the dwelling's electrical fuse box. Accordingly, prior to any demolition taking place a suitably qualified, competent and licenced contractor will be appointed to remove all asbestos containing materials.

6.8.18.3 Construction Waste

Construction waste will comprise primarily of concrete, plasterboard, timber, metals, carpets, hard plastics, glazing (glass), soil/sand/gravel, mixed recyclables and general waste. The WMP provides details of estimated quantities and disposal points will be confirmed once a principal contractor for the project is appointed. The contractor's appointment will be on the proviso that they will be required to provide details on their proposed disposal methods and disposal locations (e.g. materials, volumes and final disposal destination). The appointed contractor(s) will also be responsible for locating recycling facilities for any materials that cannot be reused on site. A final construction management plan will therefore be prepared upon the appointment of the contractor and provided to the certifying authority as part of Construction Certificate documentation. The head contractor will subsequently be charged with the task of ensuring all sub-contractors adhere to the final WMP.

6.8.19 Construction Environmental Management

A comprehensive preliminary Construction Environmental Management Plan (CEMP) has been prepared by EPM Projects (**Appendix 25**). The CEMP will guide the appointed principal contractor for the proposed development to ensure works progress on the site in an orderly manner which protects workers, the environment, adjoining land, the public and mitigates impacts of the locality. The comprehensive plan explicitly addresses and contains the following site management matters:

- Construction methodology & project plan;
- Site accommodation & temporary services;
- Security;
- Environmental management and conditions;
- Construction traffic management;
- Work health and safety;
- Community information;
- Pre-commencement matters, including:
 - Planning for emergencies (accident or major incident requirements);
 - Restriction of entry to site;
 - Protective equipment requirements;
 - Specific environmental protection methods required for project;
 - Hazardous materials and dangerous goods;
- Emergency contact numbers;
- Environmental incidents and emergencies;
- Environmental training;
- Review of the CEMP;
- Dust management;
- Community consultation and complaints handling; and

6 Environmental Assessment

- Waste management.

The plan serves as a precursor to the development of a final CEMP which will be completed with input from the appointed contractor for the works to ensure a robust and development specific CEMP is in place prior to the commencement of works. The final CEMP will form part of documentation submitted to the certifying authority when a construction certificate is applied for.

6.8.20 Contributions

The *Ku-ring-gai Contributions Plan 2010* (s.7.11 plan) came into effect on 19 December 2010 and has been subsequently amended in 2011, 2013 and 2017. This contributions plan was prepared as part of the strategic planning for the LGA's local centres. The s.7.11 plan applies to residential, retail and business developments. Accordingly, the plan does not apply to the proposed development.

Council's *Ku-ring-gai S94A Contributions Plan 2015* (s.7.12 plan) applies to all development not which is not captured by the s.7.11 plan. Accordingly, it applies to the proposal. Under the s.7.12 plan (also known as an 'indirect' plan or a 'percentage levy' plan), contributions are payable based on a percentage of the proposed cost of the development. As works which are the subject of this consent exceed \$200,000, the maximum contribution payable will be 1% of the cost of works (see maximum percentage of contributions as adopted by the s.7.12 plan replicated below).

Proposed cost of the development	Maximum percentage of the levy
<i>Up to \$100,000</i>	<i>Nil (0%)</i>
<i>\$100,001 - \$200,000</i>	<i>0.5 percent (0.5%)</i>
<i><u>More than \$200,000</u></i>	<i><u>1.0 percent (1%)</u></i>

It is acknowledged that a condition of any subsequent consent issued may impose the payment of contributions to Council in accordance with the s.7.12 plan.

6.9 Suitability of the Site for Development

In the assessment of site suitability, there are two key questions to consider:

- Does the proposal fit within the locality?
- Are the sites attributes conducive to the proposed development?

Q1: Does the proposal fit within the locality?

The proposed school development is considered to fit well within the locality, having regard to the assessment carried out in **Section 6.8** of this EIS. Consideration of the compatibility of the proposal and its surroundings can be undertaken with regard to the Land Environment Court Planning Principle on "compatibility with context" in *Project Venture Developments v Pittwater Council [2005] NSWLEC 191*. In order to test whether a proposal is compatible with its context, the following two (2) questions can be asked:

Are the proposal's physical impacts on surrounding development acceptable? The physical impacts include constraints on the development potential of surrounding sites.

The proposed development will not create any significant physical impacts on adjoining land or established developments in the locality. The majority of the proposed development's minimal bulk is located at the rear (southern) end of the site, with the development presenting to Bancroft Avenue as a 1-2 storey building, this results in minimal overshadowing to adjoining land (See **Figure 49** and **Figure 50** previously).

Subsequently, there will not be any reduction in the development potential of surrounding properties as a result of the proposal. Roseville College (an educational establishment) is a long-established land use within the area (since 1908), educational establishments in general

6 Environmental Assessment

are also common land uses within and outside of these HCAs, which make up the fabric of any residential area. Therefore, the potential for land use conflict is minimal with constraints on the development potential of surrounding sites considered to be minor (if any).

Is the proposal's appearance in harmony with the buildings around it and the character of the street?

The proposed development of the site has been designed in consideration of surrounding properties and will contribute positively to the streetscape. In particular the proposed building is generally consistent with the established building line of Bancroft Avenue with the low bulk and scale appearance of the development's built-form representing a high-quality architectural design. Combined with high-quality landscaping, the development is sympathetic to the residential and historic character of the area whilst being aesthetically pleasing and improving visual amenity. Materials and colours are considered to be in harmony with the residential and natural character of the street and locality. Additionally, the Heritage Impact Statement (**Appendix 15**) concludes that the proposed development has been assessed to have an acceptable heritage impact.

Q2: Are the sites attributes conducive to the proposed development?

The site is able to physically cater for the proposed development without detriment to the natural or built environment. The site is not subject flooding or bush fire and has been found to be suitable from a contamination perspective. All relevant essential services and infrastructure are existing and/or available to the site. The site attributes are therefore considered to be more than conducive to accommodating the proposed development.

The following subsections further assess the suitability of the Site in accordance with Section 4.15(1)(c) of the EP&A Act.

6.9.1 Water and Soils

The information provided in the subsections below are aimed at addressing the applicable matters as contained within item 17 of the SEARs, 'Water and Soils'.

6.9.1.1 Acid Sulfate Soils

As discussed in the KLEP assessment, 37 Bancroft Avenue is mapped as containing Class 5 acid sulfate soils (ASS), accordingly there is a low risk of ASS being encountered during proposed works. This is supported by the geotechnical investigation report prepared by Douglas Partners (**Appendix 10**) which discusses that ASS are usually on found in low lying areas (i.e. below RL 5m AHD) and as the site is above RL 82m AHD, encountering ASS at the site is highly unlikely.

6.9.1.2 Rivers, Streams, Wetlands and Estuaries

There are no rivers, streams, wetlands or estuaries within the vicinity of the site, therefore no impacts are arising.

6.9.1.3 Salinity

Salinity has not been identified as an issue for the proposed development within the Geotechnical Report or PSI, both prepared by Douglas Partners. The Geotechnical report provided at **Appendix 10**, includes detailed site history information obtained via 'Lotsearch'. This site history information shows there are no records of the site being subject to dryland salinity.

6.9.1.4 Groundwater

The Geotechnical Report and PSI, both prepared by Douglas Partners discuss and analysis groundwater. Groundwater was encountered within two (2) monitoring wells on-site at approximate depths of 3.8 m (RL 78.3 m), which is below the proposed developments basement level, and 3.3 m (RL 83.1 m).

6 Environmental Assessment

The water encountered is considered to be likely groundwater seepage rather than a transient water table. Douglas Partners experiences show that the water within Hawkesbury Sandstone and Ashfield Shale can also have moderate concentrations of dissolved solids including iron.

Groundwater level measurements taken by Douglas Partners are shown in **Figure 51** below:

Well Sampling				
Well ID	Location of Monitoring Well	Ground Level* (m AHD)	SWL (m bgl)	SWL (m AHD)
MW401	Down-gradient	82.1	3.8	78.3
MW406	Up-gradient	86.4	3.3	83.1

Notes: *surveyed using a dGPS
 AHD – Australian Height Datum
 SWL – standing water level
 bgl – below ground level

Figure 51 Extract from PSI showing Ground water levels

During the PSI, samples of groundwater were taken. Concentrations of all contaminants (with the exception of zinc) were either below the laboratory limit of reporting or the established site assessment criteria. Douglas Partners advise however the results are considered to be typical of groundwater conditions in urban settings.

Douglas Partners has discussed in the PSI the likely need for the development to incorporate passive dewatering (i.e. sump-and-pump system) due to the proposed excavation depths and the measured standing water as part of the PSI process. The groundwater can be discharged into stormwater or sewer subject to dewatering testing/monitoring of groundwater quality prior to/during dewatering and approval from the relevant authorities. This is a matter which is considered able to be suitably addressed via conditions of any subsequent development consent issued for the development.

In the context of proposed surface and groundwater monitoring, as there was no natural surface water observed on site during Douglas Partners investigations, surface water monitoring has been deemed to not be required. Douglas Partners groundwater investigations comprised of one round of groundwater sampling event; subsequently long-term monitoring is not recommended. This usually only required where there is a significant finding of groundwater contamination. Groundwater monitoring activities and methodologies required for dewatering should be addressed in a dewatering management plan.

6.9.2 Contamination and Hazardous Materials

6.9.2.1 Contamination

Site contamination matters have been largely addressed in the SEPP 55 assessment provided at **Section 6.4.1** of the EIS. A PSI has been prepared by Douglas Partners (**Appendix 14**) which has determined that the site is suitable for the proposed development in the context of contamination (subject to conditions). Further details are provided in the **Section 6.4.1** discussion.

In addition, the Site is not identified by Council or any other authority as being subject to or potentially subject to contamination and multiple development consents have previously been granted for school related developments on the Site, all of which determined that the Site was suitable for this form of development.

Planning certificates obtained for 27-29 Bancroft Avenue and 37 Bancroft Avenue (**Appendix 3**) also states Council's records do not show the site is contaminated.

Accordingly, contamination matters are considered to have been adequately addressed for the development proposal.

6 Environmental Assessment

6.9.2.2 Hazardous Materials

During demolition of the existing dwelling at 37 Bancroft Avenue, asbestos containing materials will be encountered. Accordingly, a Hazardous Materials Report has been prepared by Safe Work (**Appendix 21**). The report identifies the cladding and 'base-cover' of existing shed on the site contains asbestos, as does the dwelling's electrical fuse box. Accordingly, prior to any demolition taking place a suitably qualified, competent and licenced contractor will be appointed to remove all asbestos containing materials

6.9.3 Natural Hazards (Bush Fire and Flooding)

No part of the Site is identified as bushfire prone land on Council's Bushfire Prone Land Map nor is the Site in close proximity to Bushfire Prone Land such that a detailed assessment in this regard is warranted.

Additionally, the site is not identified as being flood prone land in either of Council's LEPs or DCPs. The stormwater Management Report prepared by Acor (**Appendix 18**) states that there is no available flood study documenting overland or mainstream flood affectation to the subject site. Therefore, in the absence of any reporting by Council, further assessment of potential flood affectation is not warranted.

6.9.4 Infrastructure and Utilities

Acor Consultants and JHA Consulting Engineers have prepared an Infrastructure Management Plan and Hydraulic Services Report (**Appendix 19** and **Appendix 20**) in consultation with relevant agencies, detailing information on the existing capacity and augmentation requirements of the development for the provision of utilities (see subsections below for further details).

6.9.4.1 Electrical and Telecommunication Utilities and Services

An assessment of existing electrical and communication services (and any augmentation considered to be required) for the proposed development has been undertaken by Acor Consultants (**Appendix 19**).

The College currently has connection to electrical services from Bancroft Avenue (a 200A service) and an 800A supply from a kiosk substation on Victoria Street to the south. Ausgrid (the electrical distributor) has advised Acor that the 200A service from Bancroft Avenue will be insufficient to service the proposed development, as service of 800A will be required. Subsequently, works to Ausgrid's network will be required to supply a proposed new pad mounted electrical kiosk in Bancroft Avenue. These works will be undertaken in consultation with Ausgrid. Generally, high-voltage cabling will reticulate from an existing kiosk substation in Glencroft Avenue to the new dedicated kiosk substation in Bancroft Avenue.

All designs associated with the proposal will be completed by a level 3 Accredited Service Provider and comply with Ausgrid's requirements. Particular caution will be undertaken through the design and subsequent construction process to ensure existing 132kV cables in Bancroft Avenue are not impacted. A detailed survey will be undertaken to locate the 132kV services.

For communications services, existing infrastructure within the school will be utilised and extended as required with no additional services from the surrounding street network required. It has been found that no augmentation of communications services outside of the school's property boundary will be required.

6.9.4.2 Hydraulic Utilities and Services (Water Related Infrastructure)

JHA has prepared a report addressing the hydraulic services (sewer and potable water) which are available to the site (**Appendix 20**).

It has been found that the existing sewer services in Recreation Avenue have sufficient capacity to service the proposed development. A Sydney Water 225mm sewer main will be utilised to service the proposed development. A pump out system will be used for services

6 Environmental Assessment

from level 1 of the development as its finished level is below that of the sewer main (i.e. gravity drainage not possible). Relevant sewer disconnection and capping will take place in relation to the existing sewer connection at 37 Bancroft Avenue.

In terms of potable water, the school has access to Sydney Water, water main s in Victoria Street to the south, Bancroft Avenue to the North and also in Recreation Avenue. It has been found that the College's existing connection point to Sydney Waters potable water system is suitable for use with the proposed development. The 100mm main in Recreation Avenue has suitable capacity to service the proposal.

The proposal includes a component of rainwater harvesting and re-use with water collected to be used for toilet flushing throughout the development. Fixtures and fittings will be selected which meet minimum WELS (Water Efficiency Labelling) of five (5) stars for basin taps and urinals, three (3) stars for showers and four (4) stars for toilets.

Water saving measures are consistent with a 4-star, Green Star rating which the proposed development seeks to achieve, as detailed in the ESD Report prepared by Umow Lai Consulting Engineers (**Appendix 26**).

6.10 Public Interest

Section 4.15(1)(e) of the EP&A Act requires the consent authority to consider the public interest. The public interest is an overarching requirement, which includes the consideration of the matters discussed in this report. The proposed development is considered to generally meet the provisions of relevant environmental planning instruments and subsequently, as these instruments have been created having regard to the objects of the Act following community consultation, they are considered to express planning controls that seek to protect the public interest. Accordingly, it is considered that the proposal is not prejudicial to the public interest.

7 Other Statutory Approvals

7.1 General

The proposed development may require, or may be construed as requiring, several approvals, consents, licences, permits or permissions from various government departments, pursuant to legislation other than the EP&A Act and accordingly, this section provides a brief assessment of relevant other legislation.

7.2 Commonwealth Department of Environment and Energy

7.2.1 Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)

Part 3 Division 1 Subdivision C of the EPBC Act provides, amongst other things, that a person must not take an action that has, will have or is likely to have a significant impact on:

- a listed threatened species included in the extinct in the wild, critically endangered, endangered or vulnerable categories; or
- a listed threatened ecological community included in the critically endangered or endangered categories;

unless a '*controlled action*' approval has been granted under Part 9 Section 133 of the EPBC Act. The Commonwealth Minister for the Environment and Energy is responsible for the decision on such an approval.

Pursuant to Section 45 of the EPBC Act, a bi-lateral agreement has been signed between the Commonwealth Department of Environment and Energy and the NSW DPIE which authorises the DPIE to undertake the environmental assessment required pursuant to the EPBC Act and to furnish the Commonwealth Minister with an assessment report which may recommend whether approval should be granted and conditions that may be imposed on any approval. The Commonwealth Minister is responsible for the final decision.

The site does not contain any Endangered Ecological Community (EEC) under the EPBC Act and accordingly, a controlled action approval is not required under Section 133. Please refer to **Section 6.8.2** for discussion of natural environment impacts.

7.3 NSW Department of Planning, Industry and Environment (DPIE) – Environment, Energy and Science (EES) Group

7.3.1 Heritage Act 1977

The *Heritage Act 1977* contains provisions relating to the protection of items of State heritage significance or items of potential significance.

Section 57 relates to items listed in the State Heritage Register or to which an interim heritage order applies and development relating to such items triggers the integrated development provision of the EP&A Act. There are no such items on the Site.

Section 139 of the Act requires that an Excavation Permit is required prior to undertaking any development which involves excavation of land where there is reasonable cause to expect that a relic³ will be discovered or disturbed. Pursuant to Section 4.41(1)(c) of the EP&A Act, granting of development consent to an SSD exempts a proponent from the requirement to obtain a Section 139 permit. Notwithstanding, the ACHAR prepared by Urbis Heritage (**Appendix 16**) has considered the potential for significant Aboriginal objects and/or archaeological deposits and concluded:

- *There are no registered Aboriginal objects and/or archaeological sites within the subject area;*

³ *relic* means any deposit, artefact, object or material evidence that:

(a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
(b) is of State or local heritage significance.

7 Other Statutory Approvals

- *There are no landscape features with potential for Aboriginal objects or archaeological deposits located within the subject area;*
- *The subject area has been the subject of high levels of disturbance since at least the 1950s by the residential subdivision of Roseville and the subsequent development of Roseville college; and*
- *No Aboriginal cultural heritage values have been identified by the RAPs.*

Therefore, it is considered that the potential risk of encountering significant Aboriginal objects can be mitigated through the inclusion of relevant stop-work conditions of consent.

7.4 Natural Resource Access Regulator (NRAR)

7.4.1 Water Management Act 2000 (WM Act)

The object of the WM Act is the “*sustainable and integrated management of the State's water for the benefit of both present and future generations*”.

Part 3 of Chapter 3 of the WM Act relates to Approvals and Section 91(2) requires a ‘controlled activity approval’ (CAA) for works at a specified location in, on or under ‘waterfront land’.

Pursuant to Section 89J(1)(g) of the EP&A Act, granting of development consent to a SSD exempts a proponent from the requirement to obtain a CAA.

As discussed in **Section 6.4.7**, 37 Bancroft Avenue is identified as slightly encroached by land mapped as ‘Category 3a’ riparian land, on the KLEP Riparian Lands and Watercourses Map (refer to **Figure 31**). The KLEP mapped riparian land is not part of a mapped creek-line, and thus does not trigger the need for a CCA.

Section 91(3) requires an ‘aquifer interference approval’ (AIA) for an aquifer interference activity. Granting of development consent to an SSD does not exempt a proponent from the requirement to obtain a AIA.

‘aquifer interference activity means an activity involving any of the following:

- (a) the penetration of an aquifer,*
- (b) the interference with water in an aquifer,*
- (c) the obstruction of the flow of water in an aquifer,*
- (d) the taking of water from an aquifer in the course of carrying out mining, or any other activity prescribed by the regulations,*
- (e) the disposal of water taken from an aquifer as referred to in paragraph (d).’*

The Geotechnical Investigation report prepared by Douglas and Partners (see **Appendix 10**) indicates that groundwater was encountered approximate depths of 3.8 m (RL 78.3 m, which is below the proposed basement level) and 3.3 m (RL 83.1 m). In relation to this encountered groundwater, the report states:

‘The water measured is expected to be groundwater seepage within the bedrock rather than a transient water table. Groundwater seepage is expected to enter the excavation at the soil/rock interface and through rock joints and defects in the basement floor and walls, particularly after periods of rainfall’

Further discussion on groundwater is also provided in the Preliminary Site Investigation report prepared by Douglas Partners at **Appendix 14**:

‘Considering the floor of the pool concourse level is proposed between RL 76.40 and 76.90 m AHD and the measured standing water level during the PSI is between RL 78.3 and 83.1 m AHD, passive dewatering (i.e. sump-and-pump system) is likely to be required. Groundwater can be discharged into stormwater or sewer subject to dewatering testing/monitoring of groundwater quality prior to/during dewatering and approval from the relevant authorities.’

To this end, based on the information in the geotechnical report an AIA is not considered to be required as the ground water encountered ‘*is expected to be groundwater seepage within the*

7 Other Statutory Approvals

bedrock rather than a transient water table’ with management of any seepage in the basement of the proposed development achievable.

7.5 Transport for NSW (TfNSW) – NSW Roads and Maritime Services (RMS)

7.5.1 Roads Act 1993

Section 138(1) of the *Roads Act 1993* relates to works associated with public roads and provides that a person must not:

- (a) *erect a structure or carry out a work in, on or over a public road, or*
- (b) *dig up or disturb the surface of a public road, or*
- (c) *remove or interfere with a structure, work or tree on a public road, or*
- (d) *pump water into a public road from any land adjoining the road, or*
- (e) *connect a road (whether public or private) to a classified road,*
otherwise than with the consent of the appropriate roads authority.”

The proposed development entails the construction of a new access way to the new car park via Recreation Avenue. An approval for upgrading works in Recreation Avenue made pursuant to Section 139 of the *Roads Act 1993* has previously been issued by Council (copy with plans provided in **Appendix 32** for information), relating to prior development consents DA0261/16 and DA0262/16 (see **Section 2.2** of the EIS).

The College is seeking to undertake these upgrade and access works pursuant to the approved terms of the above DAs and is in discussions with Council as the road authority regarding implementation of this existing approval.

8 Environmental Risk Assessment

8.1 Risk Assessment

A risk assessment of the potential environmental impacts associated with the proposed development has been undertaken in **Table 11** as required by the SEARs, using the matrix in **Figure 52** based on likelihood (chances the outcome will occur) and consequence (severity of the outcome) to identify the level of risk.

			Likelihood					
			1	2	3	4	5	6
			Remote	Highly Unlikely	Unlikely	Possible	Likely	Highly Likely
Consequence	A	Catastrophic						
	B	Massive					Critical	
	C	Major				High		
	D	Moderate			Medium			
	E	Minor		Low				
	F	Slight						

Figure 52 Environmental Risk Matrix

Table 11 Risk Assessment				
Potential Impact	Level/Scale of impact	Consequence	Likelihood	Risk
Construction Phase				
Spillage of fuel or oils from or for use in Machinery	Limited to small capacity fuel tanks of on-site machinery	Minor	Highly Unlikely	Low
Excessive noise or vibration resulting from use of construction machinery	Subject to machinery used, level of impact is limited to school site and immediate surrounds.	Minor	Likely	Medium
Increase in construction traffic	Limited to roads immediately surrounding the site, including Bancroft Avenue.	Moderate	Likely	High
Safety of the public	Personal injury due to construction practices/materials	Moderate	Highly Unlikely	Medium
Potential identification of items of archaeological significance during construction phase	Disturbance of archaeological artefacts (unexpected finds) (see Section 6.8.5 and Appendix 16)	Minor	Highly Unlikely	Low
Potential identification of acid sulfate soils during construction phase	Geological ASS are not expected to occur at the site (see Appendix 10)	Minor	Highly Unlikely	Low
Potential identification of contaminated materials during construction phase	PSI indicates the site is suitable to accommodate the proposed development subject to recommendations See section 6.4.1 .	Minor	Unlikely	Medium

8 Environmental Risk Assessment

Table 11 Risk Assessment

Potential Impact	Level/Scale of impact	Consequence	Likelihood	Risk
Potential for reduced air and water quality during construction phase	Movement of vehicles and construction material (particularly at early stages) will disturb and displace earth/dust, potentially impacting surrounding development.	Moderate	Possible	High
Visual or amenity impacts resulting from new built form	Limited to public domain (of Bancroft and Recreation Avenue) and surrounding residential development.	Minor	Likely	Medium
Operational Phase				
Noise - Traffic	Increase in noise due to vehicular traffic (Appendix 21)	Slight	Unlikely	Low
Noise – School (Play Spaces)	Increase in noise due to children’s use of outdoor play spaces (Appendix 28)	Minor	Unlikely	Medium
Reduction in solar access	Limited, acceptable overshadowing will occur as a result of the proposal (Appendix 6)	Slight	Likely	Low
Increase in parking demands on local roads during operation phase	Limited to surrounding road network, DCP compliant parking provided as part of the proposal (Appendix 21).	Minor	Possible	Medium

8.2 Risk Management

A Risk Management Plan has been prepared in respect of any impacts identified above as carrying Medium, High or Critical environmental risk. **Table 12** sets out these potential impacts, the level of control/s required and a control strategy for each risk.

Table 12 Risk Management Plan

Potential Impact	Level of Control	Control Strategy
Construction Phase		
Excessive noise or vibration resulting from use of construction machinery	Isolation Reduction	Acoustic Dynamics has prepared an Acoustic Assessment (Appendix 28) which includes consideration of construction noise and vibration. It is acknowledged that a condition of consent will be included that requires preparation of a Construction Noise and Vibration Management Plan, however at this SSDA stage expected noise and vibration likely experienced during construction will be difficult to establish without consecution plans. Notwithstanding, once construction plans are prepared, a detailed assessment of expected noise emissions and sources of vibration along with consequent recommendations can be carried out. Expected measures to minimise and mitigate noise and vibration include limiting hours of construction, implement community liaison procedure, implement reporting programmes etc.

8 Environmental Risk Assessment

Table 12 Risk Management Plan

Potential Impact	Level of Control	Control Strategy
Increase in construction traffic	Engineering controls, Procedures and training	A Preliminary Construction Traffic Management Plan has been prepared by PTC (Appendix 24) which details the controls and procedures relevant to the minimising of risk associated with construction traffic movements resulting from the proposed development. These include clear identification of entry/exit crossings, traffic management and awareness of conflict with students, parents and staff of the school. Additional measures are outlined in the Preliminary Construction Environmental Management Plan prepared by EPM (Appendix 25).
Safety of the public	Isolation Procedures and Training	<ol style="list-style-type: none"> 1. Site fencing and hoarding to be used. 2. Secure fences/gates to prevent unauthorised site entry 3. Training of workers responsible for use of heavy machinery/cranes or the like.
Potential identification of contaminated materials during construction phase	Engineering controls, procedures and training	A PSI has been prepared by Douglas and Partners (Appendix 14) which details the site is generally suitable for the development subject to recommendations concerning data gaps analysis, unexpected finds, recommends additional testing of soils for the purposes of waste classification if to be removed off site.
Potential for reduced water quality during construction phase	Engineering controls, procedures and training	The development will be the subject of sediment and erosion management practices as detailed in the Plans at Appendix 17 , as well as site preparation works which minimise the disturbance and transport of earth/dust within and outside of the site, including the use of water trucks, wheel wash bays and other measures as appropriate.
Potential for reduced air quality during construction phase	Elimination Reduction Engineering Controls	<ol style="list-style-type: none"> 1. Construction Hours to be limited to: <ul style="list-style-type: none"> - 7am to 7pm Monday to Friday - 8am to 5pm Saturdays - No work on Sundays or Public Holidays without permission 2. Haulage trucks to be covered 3. Earthworks to be restricted during high wind periods 4. Watering down of exposed soils; 5. Truck shaker grids to be installed at exit points
Visual or amenity impacts resulting from new built form	Planning Assessment and Design Response	The potential for visual or amenity impacts resulting from the new built form has been the subject of comprehensive consultation (Section 5), detailing (refer Appendix 6 and Appendix 7) and assessment (Section 6.8). Further detailed assessment of the proposal will be carried out by DPIE where visual and amenity impacts will be considered. The terms of a DA approval will represent an outcome that has mitigated potential visual and amenity impacts such that they are supportable pursuant to the provisions of the EP&A Act.
Operational Phase		
Noise – School (Play Spaces)	Isolation Procedures and Training	<ol style="list-style-type: none"> 1. Proposal to incorporate screens/barriers along perimeter of rooftop sport area to mitigate noise impacts (Appendix 28); 2. Outdoor activities to be undertaken primarily in the designated play spaces located within the Site to minimise the impacts of noise on neighbours. 3. Staff and students to be informed regularly of residential neighbours and advised to keep noise to a minimum. 4. Public announcement systems not to be used outside of core school hours.
Increase in parking demands on local roads during operation phase	Reduction Procedures and Training	PTC has prepared a Transport Impact Assessment (Appendix 21) which provides an assessment of the existing on-street parking conditions. A Green Travel Plan (Appendix 23) and recommends promotion of sustainable travel methods to reduce the dependence on private vehicle transport within the school catchment.

9 Conclusion

Roseville College proposes the construction of a new Sport and Wellbeing Centre, which aligns the College's facilities with their focus on the wellbeing of students. The proposal will involve the demolition of existing facilities (including the dwelling at 37 Bancroft Avenue), and the construction of new facilities including a new indoor pool, strength and conditioning facilities, teaching facilities and underground parking.

In 2017 the College obtained development consent from Council for both the increase in students from 830 to 1,250 (DA0261/16) and the demolition of existing sports courts and construction of a building comprising basement parking and roof-top sports courts (DA0262/16). This submission seeks to incorporate the parameters of both these consents where relevant, as well as extend the site onto 37 Bancroft Avenue (with a change of use) and also incorporate a new pool as part of the overall development. As the proposal has a CIV exceeding \$20 million it is classified as SSD.

The project team has carried out consultation with a wide range of stakeholders in accordance with the SEARs, including State agencies, local government, community and experts in the design of schools. The advice received throughout the consultation process has informed the consideration of the localised amenity impact and heritage significance which has been incorporated into the current proposal where possible, reflecting a commitment to provide a quality and objective-driven outcome which is also sympathetic to the environment and the setting in which it is located.

The proposal achieves acceptable environmental amenity outcomes, including desirable outcomes for acoustic amenity (both internal and external to the site), traffic movements, stormwater drainage and waste management. Furthermore, the proposal will incorporate a wide range of ESD initiatives.

The works proposed under this SSDA will be subject to the recommendations of specialist reports so as to ensure appropriate heritage, geotechnical, contamination, archaeological, traffic and acoustic outcomes are achieved.

The proposed works have been designed to and will be carried out in the interests of the public, by virtue of demonstrating compliance and/or meeting the aims and objectives of applicable legislative requirements, environmental planning instruments, development control plans, policies and guidelines. The Development Application will meet the project objectives to providing a fit-for-purpose educational establishment in a high-quality built form which improves the health and wellbeing of students and staff and has safe and efficient access for children, teachers, visitors and service personnel.

Accordingly, it is recommended that the Minister for Planning and Public Spaces approves the proposed SSD DA.